Rural Acute Care Nursing Certificate: Researching Practice-Driven, Reality-Based Curriculum in British Columbia

Year End Report 2007-2008

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In collaboration with the Chief Nursing Officer (CNO) Council of BC: This project is under the auspices of the British Columbia CNO Council, led by Tom Fulton (Interior Health) and Suzanne Johnston (Northern Health).

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MAIN MESSAGES

The Rural Acute Care Nursing Certificate is part of a three-phase pilot project aimed at assessing and meeting the learning needs of rural RNs to ultimately improve rural practice and patient outcomes. The project represents a unique partnership between practice and the academy, and has been jointly driven by the Chief Nursing Officer Council (the CNOs) led by the CNOs of the Interior and Northern Health Authorities and, beginning in Phase III, the University of Northern British Columbia (UNBC). This report summarizes the findings of the action research evaluation of the RACNC during its first year of implementation: 2007 – 2008. It is based on an analysis of surveys, course enrollment statistics, course reviews and interviews.

• The partnership model, in which practice and university work together to develop and deliver nursing education is, indeed, a new way of working. It is apparent that the partnership driving the Rural Acute Care Nursing Certificate is showing preliminary effectiveness and is critical to the program's success in terms of relevance, accessibility and sustainability.

• The action research approach has allowed the Rural Acute Care Nursing Certificate to be responsive to feedback and make necessary adjustments and improvements to the program, thereby meeting the needs of the university and the Health Authorities, as well as the students and instructors. It is critical that the action research evaluation continues over the planned three-year pilot.

• As with all new programs, there have been “bumps” in the first year; however, the students have given many examples of how the curriculum has positively influenced their practice. This is a key goal of the program, and illustrates the effectiveness of the practice-driven, reality-based curriculum approach in prompting change.

• The demand for this kind of program (i.e., relevant and accessible) is high. Stable and committed funding is necessary for the Rural Acute Care Nursing Certificate to be sustained.
EXECUTIVE SUMMARY

INTRODUCTION
The Rural Acute Care Nursing Certificate is the culmination of a three-phase pilot project aimed at assessing and meeting the learning needs of rural Registered Nurses (RNs) to ultimately improve rural practice and patient outcomes. The project represents a unique partnership between practice and the academy, and has been jointly driven by the Chief Nursing Officer Council (the CNOs) led by the CNOs of the Interior and Northern Health Authorities and, beginning in Phase III, the University of Northern British Columbia (UNBC).

During Phase I (2005-2006), the learning needs of rural RNs across BC were assessed to determine what kind of curriculum would prepare nurses for confident, competent and safe rural practice. In Phase II (2006-2007), seven courses were developed that reflected the findings of the Phase I research. The project is currently in Phase III, which began in 2007, and involves implementing and evaluating the Rural Acute Care Nursing Certificate (RACNC), the post-RN certificate program developed during Phases I and II.

The RACNC is a provincial program offered through the University of Northern British Columbia, which aims to address the challenges of delivering practice-driven curriculum via e-learning modes and practical experiences to RNs in rural communities. It is being implemented through an action research approach over three years.

An important part of Phase III is evaluating the program to determine whether the learning needs that were identified in Phase I are being met, and, moreover, whether the program has achieved its ultimate goal of positively influencing nursing practice and university nursing education. This report summarizes the findings of the action research evaluation of the RACNC during its first year of implementation: 2007 – 2008. It is based on an analysis of surveys, course enrollment statistics, course reviews and interviews.

RESEARCH QUESTION
Has the implementation of the practice-driven model of Rural Acute Care Nursing education influenced 1) nursing practice, 2) university nursing education and 3) the relationship between nursing practice and university nursing education?

METHODS
This is an action research project. The iterative process of action research begins with an initial analysis of a problem followed by the planning and delivery of a suitable intervention, or program. Based on the evaluation of the intervention, actions are then taken to improve outcomes with the purpose of meeting the program's goal(s).

FINDINGS
Data were collected through the use of surveys, interviews and the general administrative data related to the implementation of the program. The findings from the 2007 – 2008 academic year are related to enrollment, student satisfaction, course/program delivery and relevance of curriculum, and feedback from nurse managers, Health Authority Leads, practice and academic administrators, and the Implementation and Evaluation Team.
Enrollment:
The following table summarizes enrollment, withdrawals and deferrals by Health Authority during the 2007-2008 academic school year.

Table 1: Enrollment by Health Authority

<table>
<thead>
<tr>
<th>Health Authority</th>
<th>Enrollment at start of Fall 2007 Semester</th>
<th>Number of Students who Withdrawed in Fall 2007 Semester</th>
<th>Number of Students who Deferred Winter 2008 Semester</th>
<th>Enrollment as of January 2008</th>
<th>Number of Students who Withdrew in Winter 2008 Semester</th>
<th>Number of Students who Completed Winter Semester</th>
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<tr>
<td>NH</td>
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Program Entrance Survey:
Students completed a Program Entrance Survey at the beginning of the semester. The results showed that most RACNC students are female, over the age of forty, and diploma-prepared. In general, satisfaction in terms of dealings with UNBC and the Health Authorities was high. Most students heard about the RACNC from their supervisor or a colleague in the work place.

General Survey:
General Surveys were completed midway through each semester. It asked the students to comment on what was working and not working for them in the program. Most frequently mentioned were challenges with becoming familiar with online learning, and challenges with the demands of returning to school. In the first semester, study participants mentioned that the workload was very demanding. The students also indicated that the content of courses was enjoyable and relevant to their practice. There were many positive comments about the instructors and the support provided by program personnel.

Course-Specific Surveys:
Course-specific surveys were completed at the start and end of each semester and asked students to comment on their expectations and their learning outcomes related to their courses. At the start of the first semester, most students rated their confidence and competence in health assessment as somewhat high, and indicated that they were expecting to relearn certain skills and update their knowledge. Students’ confidence and competence in nursing practice with older persons increased over the course of the semester. The most significant improvement in confidence and competence was reported in the second semester, and occurred during the course NURS 454 Perinatal Care.

Workshop and Practicum Surveys
Students completed workshop and practicum surveys that assessed their satisfaction with content relevance and site accessibility related to workshops and clinical placements. Preceptors also completed surveys related to their experience with the RACNC practicums. Overall, student satisfaction with workshops and practicums was
high, and preceptor satisfaction with student preparation and communication was satisfactory.

Course Reviews – Instructional Designer and Instructor Interviews:
At the end of each semester, instructors were interviewed along with the Instructional Designer to determine specific challenges and opportunities related to each course. The instructors of all courses had very similar recommendations. These included:

• Coordinate workload between the courses better
• Provide better orientation for students which covers Blackboard, academic requirements and behavioral expectations
• Provide orientation for instructors
• Use Elluminate, videoconferencing and teleconferencing to connect with students
• Maintain the level of instructional support provided by Instructional Designer and student assistant.

Interviews:
The Implementation and Evaluation Team, nurse managers, Health Authority Leads, senior management in practice and academic administrators were interviewed. The key findings were that the new model of practice-academic partnership is a successful and innovative new way of working, and that sustainability of the partnership and the program will require defining processes related to the partnership, improving marketing and securing ongoing funding. This model is characterized by an egalitarian working partnership between nursing practice and education that ensures that the concerns and interests of both parties are addressed.

CONCLUSION
The first year of RACNC implementation was challenging for the students. They struggled with steep learning curves related to study skills and computer skills, and they found the program very demanding. Program coordination in terms of liaising with Health Authorities and UNBC student services, such as the Registrar’s Office, helped students to adjust to distance education, and the support provided by the Instructional Designer and student assistant was seen as essential by both students and instructors. Several strategies have been implemented in order to decrease attrition, and effectiveness will be assessed during the second year. Despite challenges, students said that the program’s course content has been relevant and applicable to their practice and many students gave examples of how the learning that took place in the program translated into positive changes in practice. The partnership model of the RACNC has successfully ensured that, through every step of implementation and evaluation, the program is practice-driven and reality-based. The action research method of evaluating this program has further enabled timely responses to emerging issues trends and challenges with effective changes made to the program when necessary.
INTRODUCTION

In British Columbia (BC), Registered Nurses (RNs) in rural communities are increasingly working in diverse practice roles within small healthcare facilities. Practicing RNs require relevant, reality-based education opportunities to support them in providing the best healthcare possible in rural settings. However, the location and content of existing education programs can be inaccessible and unsuitable to the context of rural nursing practice. In response to this challenge, the Chief Nursing Officers (CNOs) of the six BC Health Authorities launched a new, innovative partnership between nursing practice and nursing education. A proposal was submitted to the BC Nursing Directorate, which funded a three-phase pilot project to create a rural nursing education program that is “practice-driven” and “reality-based.” The project is currently in Phase III, which began in 2007, and involves implementing and evaluating the Rural Acute Care Nursing Certificate (RACNC), a post-RN certificate program developed during Phases I and II (for more information, see Appendix I). The RACNC is a provincial program offered through the University of Northern British Columbia (UNBC), which aims to address the challenges of delivering practice-driven curriculum via e-learning modes and practical experiences to RNs in rural communities. It is being implemented through an action research approach over three years.

The following report summarizes the findings of the action research evaluation of the RACNC during its first year of implementation: 2007 - 2008. It is based on an analysis of surveys, course enrollment statistics, course reviews and interviews. The following two sections review the research objectives and questions and provide context through a brief overview of program implementation and enrollment. An outline of the methods employed for data collection during this period follows, and a summary of findings is next. A short discussion with recommendations concludes the report.

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4 Also known as the Rural Acute Care Nursing Program (RACNP).
RESEARCH OBJECTIVES

The following key principles underscore the RACNC and reflect the goals of the program:

1. **Confidence** – The program should promote rural nurses’ confidence in their nursing practice
2. **Competence** – The program should increase the competence levels of rural nurses
3. **Safety** – The program should promote safe practice and improve quality of care
4. **Relevance** – The program must remain practice-driven and reality-based within the practice-academic partnership
5. **Accessibility** – The program must be accessible to rural acute care nurses
6. **Responsiveness** – The program and the practice-academic partnership must be responsive and adaptive to the findings of the research
7. **Change agent** – The program should produce positive changes in:
   a. Nursing practice
   b. Nursing education
   c. The relationship between nursing practice and university nursing education
8. **Sustainability** – The program must become embedded in basic and graduate nursing education (i.e., not continuing education), as well as health authority education processes, in order to retain professional practice integrity

The overarching goal of the Phase III research is to examine if and how the RACNC influences outcomes in three key areas:

1. Nursing practice
2. Nursing education
3. The relationship between nursing practice and university nursing education

This research asks three questions:

1. What are the key structures and processes that characterize the practice-driven, reality-based model of rural acute care nursing education?
2. What are the key facilitators and barriers to the implementation of the Rural Acute Care Nursing Program (RACNP)?
3. In what ways has the implementation of this practice-driven model of nursing education influenced 1) nursing practice 2) nursing education and 3) the relationship between nursing practice and nursing education?
PROGRAM IMPLEMENTATION AND ENROLLMENT

Phase III is a three-year project that involves the implementation and evaluation of the RACNC. The first part of Phase III involved executing a transition plan to move the provincial curriculum into the UNBC School of Nursing as an undergraduate certificate program. The program was approved by the UNBC Senate in June 2007; implementation activities included preparing for online delivery of the courses, recruiting instructors and managing the student application and admission processes. During the first year of implementation there were twenty-five pilot-funded seats and additional RNs were funded by their respective Health Authorities to enroll in the RACNC. The program also accepted applications from self-funded nurses.

In the Fall 2007 semester, NURS 451-3 Health Assessment Across the Lifespan and NURS 453-3 Nursing Practice with Older Persons were offered. Each course was divided into two sections of 15-20 students. For each section of Health Assessment, there was an instructor and teaching assistant (TA) who facilitated the online component and 4-day workshop. Nursing Practice with Older Persons had an instructor for each section, but did not require the extra support of a TA. The Health Assessment sections were split based on geography, providing students with easier access to their workshops and ensuring that students would have the same instructor who taught them online leading them in their workshop. The northern students’ workshop was located in Prince George, and students from the interior and south went to Kelowna.

In the Winter 2008 semester, NURS 454-6 Perinatal Care was offered. There were two sections of 13 and 14 students: one for interior and southern students and one for northern students. The theory was delivered over ten weeks, and a 2-day workshop followed. UNBC organized two additional days at the Kelowna and Prince George workshops for Fetal Health Surveillance (FHS) and the Neonatal Resuscitation Program (NRP) for students who needed these prerequisite courses. The last part of the course was a 5-week practicum period during which students completed preceptored clinical placements of 4-10 shifts in maternity.

Online delivery of all course materials took place via Blackboard Learning, a group of software and tools for online teaching and learning. Blackboard allows students to log in to a “shell” where their course material is stored, including instructions, readings, links and assignments. Tools for submitting assignments, marking assignments, engaging in discussion and communicating by email are just a few of the features that enable students to complete their coursework from a distance. The program’s Instructional Designer (ID) built the courses in Blackboard and, with the help of a student assistant, monitored and solved problems as they arose throughout the semester. The ID and student assistant were also available to provide support to students and instructors who were experiencing technical difficulties.

Forty-eight students applied to the RACNC in August 2007 for a September 2007 start, and all applicants were accepted to the program. Three did not register, and therefore, the maximum number of students ever enrolled in the program was forty-five. On or before the first add/drop date of September 17, 2007, nine students chose to deregister from their courses, and thus withdraw from the program. Two more students withdrew before the last add/drop date of October 16, 2007 and one requested a backdated withdrawal. Thirty-four students – thirty-three RACNC students and one Post-Diploma
student – completed their first semester and twenty-six RACNC students and one Post-Diploma student continued the program in the January 2008 semester. The seven students who chose not to register in the January 2008 semester are considered “deferred” rather than “withdrawn,” because students who complete their first semester can register within three semesters without reapplying to UNBC. There were no withdrawals in the January semester. The following table summarizes enrollment, withdrawals and deferrals by Health Authority.

Table 1: Enrollment of RACNC students by Health Authority

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There are several contributing factors to student attrition: rushed recruitment and admission process; miscommunication of delivery mode; and, workload and time management. The recruitment and admission process occurred over a very short period of time (i.e., one month), and students were encouraged to enroll by their employers. As a result, students were unable to take sufficient time to consider whether they were ready to take on university education. Another factor was miscommunication regarding the delivery mode, as several students reported that they had been told the program was “self-paced.” Finally, the workload of part-time university studies in addition to full-time employment as nurses was challenging for most of the participants. Thus, some students who decided to take the RACNC changed their minds shortly after enrolling in the program.

In order to decrease attrition several strategies have been implemented. First, the recruitment and admission process is started much earlier. Recruitment materials are disseminated in January and the application deadline is in June giving prospective students more time to decide whether to enroll. Students who apply for sponsorship through their Health Authorities are interviewed to more accurately assess student readiness and to provide clearer information regarding program expectations and time requirements.

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5 The RACNC courses are available as electives to students in UNBC’s Post-Diploma program.
METHODS

The goal of this action research project is to examine how the RACNC influences nursing practice, nursing education and the relationship between nursing practice and nursing education. Specifically, the research aims to understand responsiveness, change and sustainability in the context of the RACNC. Therefore, participants were selected based on their proximity to, and knowledge of, nursing practice, nursing education and/or their participation in the relationship between the two. The study participants included students, instructors, preceptors, nurse managers, Health Authority Leads and selected members from practice and academia. All participants received a detailed information sheet and gave consent prior to being interviewed or completing a survey.

This research is descriptive and primarily qualitative in its approach; however, it includes surveys that have both qualitative and quantitative components. Data were collected through three sources: 1) online surveys; 2) small group and individual interviews; and, 3) normal administrative data related to the program. Table 2 outlines the schedule of student surveys posted online throughout the semester.

Table 2: Timeline for survey data collection, September 2007 – April 2008

<table>
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<th>When</th>
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<tr>
<td>Oct. 5-19</td>
<td>Program Entrance Survey</td>
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<td>Oct. 5-19</td>
<td>NURS 451 Pre-Course Survey</td>
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<td>NURS 453 Pre-Course Survey</td>
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<tr>
<td>Nov. 2-16</td>
<td>General Survey</td>
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<td>Nov. 30-Dec. 14</td>
<td>NURS 451 Post-Course Survey</td>
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<td>NURS 453 Post-Course Survey</td>
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<tr>
<td>Nov. 30 (Section 1)</td>
<td>NURS 451 Workshop Survey</td>
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<td>Dec. 7 (Section 2)</td>
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<tr>
<td>Jan. 11-25/2008</td>
<td>NURS 454 Pre-Course Survey</td>
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<td>Feb 8-22/2008</td>
<td>General Survey</td>
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<tr>
<td>Mar. 9/2008 (Section 2)</td>
<td>NURS 454 Workshop Survey</td>
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<td>Mar. 17/2008 (Section 1)</td>
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<td>Mar. 21-Apr. 25/2008</td>
<td>NURS 454 Practicum Survey</td>
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<td>Apr. 25/2008</td>
<td>Preceptor Survey (mailed out)</td>
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The instructors, teaching assistants (TAs) and ID were invited to participate in course reviews at the end of the Fall 2007 and Winter 2008 semesters. Course reviews took place as a small group interview with the course instructor and the ID, and were facilitated by the ID and Research Associate. No TAs were available to participate in course reviews. Four course reviews were conducted via teleconference and two took place face-to-face. Each course review was audio-recorded and covered topics around course content and delivery.

During the spring of 2008, interviews were conducted with academic administrators, Health Authority senior managers, nurse managers, Health Authority Leads and the

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6 Surveys are available on request from Jessica Place (place@unbc.ca).
Implementation and Evaluation Team (IET). The findings of the student surveys, course reviews and preceptor surveys are summarized in the next section. This is followed by a summary of findings from all other interviews.

7 Health Authority Leads support the RACNP mainly through student recruitment, funding and support.
FINDINGS – STUDENTS, INSTRUCTORS AND PRECEPTORS

This section first reports on the findings of data collected in the fall semester. This includes: Program Entry Survey; General Survey; course-specific student surveys for NURS 451 Health Assessment Across the Lifespan and NURS 453 Nursing Practice with Older Persons; NURS 451 workshop survey; and, course reviews for NURS 451 and NURS 453. The findings from the winter semester follow, which are based on another General Survey, course-specific surveys for NURS 454 Perinatal Care, workshop, preceptor and practicum surveys, and course reviews for NURS 454.

FALL:

Program Entry Survey

Twenty-three out of 34 students completed the Program Entry survey for a response rate of 68%. According to the Program Entry Survey, the majority of students enrolled in the RACNC are female. Fifty-two percent (n=12) are over the age of forty and 87% (n=20) are older than 30. Thirty-six percent (n=8) of RACNC students gained their RN over twenty years ago and 13% (n=3) within five years of commencing the program. The highest level of education attained by 78% (n=18) of the students is Diploma, and most indicate that they intend to complete their Bachelor’s degree in nursing.

Figure 1 shows the distribution of survey participants by Health Authority. Most students are primarily employed in small hospitals, the size of which is almost evenly split between less than twenty beds and greater than twenty beds. Twenty-two percent (n=5) have been in rural practice for more than 20 years, 61% (n= 14) for more than 10 years, and 13% (n=3) have less than one year of experience working as a rural nurse.

Figure 1: Distribution of Survey Participants by Health Authority

![Number of Participants](image)

Students were asked to rate their satisfaction in terms of their dealings with UNBC related to the RACNC, and overall, satisfaction levels were high. When asked about access to academic advising, 35% (n=8) were extremely satisfied and 61% (n=14) were somewhat satisfied, leaving only 4% (n=1) somewhat dissatisfied. The same pattern followed when asked about satisfaction related to respect shown in assessing academic standing. Satisfaction with UNBC computing services related to the RACNC was
generally high as well: 35% (n=8) were extremely satisfied, 48% (n=11) were somewhat satisfied, 13% (n=3) were somewhat dissatisfied and 4% (n=1) were extremely dissatisfied. Sixty-seven percent indicated that they were somewhat satisfied (n=16) and 26% (n=6) extremely satisfied with access and orientation to the UNBC library.

Students were also asked about their satisfaction in terms of their Health Authorities, and again, satisfaction levels were generally high. When asked about the ease with which they were able to obtain information about the RACNC from their employer, 78% (n=18) were somewhat satisfied, 17% (n=4) were somewhat dissatisfied and 4% (n=1) were extremely dissatisfied. In terms of support provided by employers of RACNC students, 83% (n=19) indicated that they were extremely satisfied or somewhat satisfied.

Most students heard about the RACNC from their supervisor or a colleague in the work place. Direct advertising only reached 26% (n=6) of the students. One participant stated that there was poor delivery of information from the employer, indicating that recruitment material and program information should be better distributed. Several factors contributed to individuals’ decisions to enroll, primarily that the courses provide credit towards a bachelor’s degree. Student desire to improve competence as a rural practitioner and to prepare for advanced practice also factored highly. All students felt that the planned curriculum would be extremely relevant or somewhat relevant to their practice, and most ranked the expected value of the RACNC program to personal and career goals as above average or excellent.

**Fall Semester General Survey**

The General Survey was posted at mid-semester and asked the students to comment on what aspects of the program were working and not working for them. Nineteen out of 34 students completed the survey for a response rate of 56%.

Students were asked to list aspects of the RACNC program that they were feeling confident about. Fifty-three percent (n=10) of participants indicated being confident using Blackboard, learning the course content, and getting support when having technical difficulties with the online courses. Forty-seven percent (n=9) expressed having adequate access to the instructor for guidance regarding course work, 32% (n=6) of the students were confident about writing essays and 21% (n=4) of the students were comfortable about preparing citations in the correct format. Only 16% (n=3) of the students were comfortable with doing library research and being able to work effectively while studying and 11% (n=2) of the students were confident about managing time and dealing with pressures from family or other commitments.

The survey provided students with space to give more details about what was challenging them in the program. Most frequently mentioned were challenges with becoming familiar with online learning, and challenges with the demands of returning to school. Although over 50% (n=10) of participants had indicated feeling confident using Blackboard, there were also many comments about the difficulties they had experienced with online learning. A steep learning curve related to computer use in general was reported, and particularly at the start of the semester, students felt they lacked the computer skills to effectively use Blackboard. Students said that they would like Blackboard to be more reliable and consistent, and that better orientation would have helped them navigate technical problems.
Several challenges related to time management and program expectations were mentioned by students. Fifty-three percent (n=10) of participants mentioned that the workload was very demanding. Specifically, NURS 451 Health Assessment Across the Lifespan was overwhelming and many students indicated that they would prefer to take this course by itself. Some students stated that more time to take the course would have helped them to better retain information and feel more confident in their assessment skills upon completion of the course. NURS 453 Nursing Practice with Older persons was considered more manageable than NURS 451, but students still found the workload of the two courses together to be more intense than they had expected. Overall, many students found it difficult to manage their time and to complete the assignments and tasks required due to other commitments, such as work and family.

Students were asked to comment on what was working for them in the program and they overwhelmingly said that the content of both courses was enjoyable and relevant to their practice. There were many positive comments about the instructors and the support provided by program personnel. Participants also said that despite difficulties early in the semester, they now preferred using an online learning system because of its flexibility. Mid term, changes were applied to NURS 451 (scaling it back to better reflect requirements of rural acute care practice) and several students reported this action had been positive and made their workload more manageable overall.

**NURS 451-3 Health Assessment Across the Lifespan**

Surveys were posted at the beginning and end of the semester that asked course-specific questions about NURS 451 Health Assessment Across the Lifespan. The response rate was 62% (n=21) for the Pre-Course Survey and 48% (n=16) for the Post-Course Survey. At the beginning of the semester, most students rated their confidence and competence in health assessment as somewhat high (see Figure 2). Most students indicated that they were expecting to relearn certain skills and update their knowledge in order to ensure that they were practicing their nursing skills at levels needed for current standards of care. Participants wanted to be able to follow evidence-based practice to improve the quality of care for patients. Some were also hoping to improve their assessment skills to increase their confidence and competence, particularly when communicating with doctors or other health care professionals. All participants rated the expected relevance of NURS 451 to their practice as extremely relevant (76%, n=12) or somewhat relevant (24%, n=4).

Figure 2: Level of Confidence and Competence in Health Assessment at the Beginning of Fall 2007 Semester
At the end of semester, students were given the opportunity to say what they would like to see changed or improved in NURS 451. Many participants stated that expectations regarding the course were unclear. An example was given by a student who wrote about the final exam: “Questions were way too vague for the short answer section. I had no idea how much detail to give for an answer and what exactly they were asking.” Another noted that “more advice on exactly what is expected from the assignments” would have been better. A related issue raised was the text book chosen for the course, which many students found too difficult. As one student explained, “[h]aving a physician textbook was overwhelming without direction as to what parts of each chapter we specifically needed to learn.”

Many participants also suggested changes to the discussion format, such as more flexibility around which discussions they could participate in. One student said that the “need to watch the discussion board […] was very time consuming” and another also expressed frustration: “the weekly posts were difficult because most people posted after the due date – I was already working on the next unit – and was tired of having to go back.”

When asked what features of the course should remain the same, many said that they liked the template assignment because it was a tool that they could apply at the workshop and in their practice. As one student explained, “I found this a valuable way of condensing our knowledge and was a great tool to use during the workshop.” Many also responded favorably to the workshop, saying that it “was very beneficial” and well organized. Several students also said that the course was well laid out and that the instructors were “excellent.”

A workshop survey was also distributed. There was a 64% (n=7 out of 11) response rate for the Kelowna workshop and a 90% (n=18 out of 20) response rate at the Prince George workshop. Both groups rated their satisfaction with the workshop content, accessibility, venue and equipment as high (see Figures 3, 4 and 5). When asked what features of the workshop should stay the same, the students overwhelmingly agreed that the level of organization and instruction was excellent. Specifically, students enjoyed the use of PowerPoint, demos and practice, as well as the catered breaks and lunches and relaxed learning atmosphere. The following quotes are reflective of the overall success of both workshops:

“I felt that management and the instructors were so helpful, and was impressed at how honest and interested they were. There has been a sincere effort on their part to encourage and be supportive and know our background in rural health. I feel very much that we have been treated as equals with experiences that make us who we are.”

“The open learning atmosphere allowed us to be comfortable to learn. Very knowledgeable. The experience of instructors with practical knowledge, which helped us bring experiences and knowledge back to our work sites.”

“The room was great. So many supplies and references. Lots of room to move around and work on exams and test. I like the PowerPoint – example/demo, exam, and after time to practice assessments. Also the sharing of the experiences and stories. Coffee and lunch provided was great.”
Students were asked what features of the workshop should be changed or improved and the most common response was that decreasing the student group size or increasing the number of instructors or TAs would improve the learning experience. The instructor/TA to student ratio was approximately 1:10. As well, the space at the Prince George workshop was considered noisy and distracting by some students. Students also suggested that PowerPoint handouts should be given out prior to the presentation and that more practice time be spent on physical assessments. Finally, many students
suggested holding the workshop earlier in the semester, or dividing it into two shorter workshops.

In summary, NURS 451 was considered a heavy course that should be worth more credits or taken alone. However, the content was deemed to be relevant and the overall experience valuable and applicable to practice. According to the participants, the Blackboard (theory) section of the course should be better organized to reduce the amount of time spent on discussions, and to help students understand what to focus on in readings and assignments.

Overall, students indicated that their knowledge and confidence in health assessment increased as a result of the course and reported that they were able to apply the tools they learned to their own practice. When asked if and how NURS 451 has influenced their practice, students gave the following examples:

“"I ask far more specific questions during health history and am finding out some very important information.""

“"My personal [and] professional knowledge has improved tremendously.""

“"My confidence level in assessing a patient from head to toe has drastically improved!""

“"This course specific to body system assessments should help in everyday practice for all patients visiting our ER.""

“"I feel more confident in being able to assess the patient, use SBAR, and be able to describe what I am seeing and am [now] feeling confident in what I relay back to my health team.""

**NURS 453-3 Nursing Practice with Older Persons**

A survey was posted at the beginning and end of the semester that asked course-specific questions about NURS 453 Nursing Practice with Older Persons. The response rate was 65% (n=22) for the Pre-Course Survey and 55% (n=18) for the Post-Course Survey. At the beginning of the semester, most students rated their confidence and competence of nursing practice with older persons as somewhat high; however, 32% (n=7) of participants rated their confidence and competence as somewhat low in the NURS 453 Pre-Course Survey (see Figure 6). Overall, students were taking this course to increase their knowledge about gerontology and related care to meet the demands of the growing elderly population in their communities. The students were also hoping to increase their level of comfort and confidence when providing care to older persons. Thirty-two percent of the students specifically wanted to learn about the normal and abnormal changes which occur in the aging process, as well as to learn about various illnesses and disorders which commonly affect the elderly population. Other students expressed a desire to become better advocates for their elderly patients, and to serve as role models for their co-workers. All participants rated the relevance of NURS 453 to their practice as extremely relevant (86%, n=19) or somewhat relevant (14%, n=3).
At the end of the semester, all students were rating their confidence and competence as somewhat high or extremely high, an improvement from the start of the course. When asked what features of the course should stay the same, students responded that the content was thorough, relevant and informative. Many students commented on the readings, calling them “interesting” and “eye-opening.” Participants particularly enjoyed the sections on Delirium and Dementia, and found this learning to be most applicable to their practice. Most students noted that their awareness of the risks and complications affecting the elderly population had increased, and that they had gained tools for conducting thorough assessments and identifying complications. Following the course, they expressed confidence about implementing appropriate interventions specific to the needs of their elderly patients.

The students were also asked what features of the course should be changed or improved, and many responded that the online discussions were too time-consuming. Many felt overwhelmed by the amount of readings, assignments and discussions, particularly in a semester with NURS 451. Participants requested that the expectations for the assignments be more clearly laid out, and that the number of assignments be reduced or the amount of time for assignment completion be increased.

Nearly every participant rated the course content as extremely relevant, and all students said that NURS 453 had positively influenced their practice. The following are examples of this given by the students:

“I am looking at the older person in a new and exciting way and [I] feel that my practice with older persons has been rejuvenated. The information really made me think about what I have learned and it had so much relevance to my setting.”

“I found the delirium section particularly helpful. I have seen people who are suffering from this, but [I] did not have a very good understanding of what [it was] or why they were that way. It was usually chalked up to a stage of dementia.”

“I plan to do staff education on delirium.”

“…had a patient return from hip surgery in a delirium state. We knew the patient was not like this when transferred out, so got on it quickly with the family GP and the delirium was resolved in less than 48 hours.”
“I look at the older person in a different light now; understanding them better allows me to assess and intervene more effectively. I am more aware of my resources outside and inside the hospital setting.”

Instructor Feedback – NURS 451 and 453 Course Reviews

Each instructor who taught a course in the Fall 2007 semester participated in a small group interview with the RACNC Research Associate and Instructional Designer. The instructors and Instructional Designer provided insight into what worked in each course and what would need improvement for the next iteration.

The instructors for NURS 451 agreed that the Bates textbook and videos were good, although one instructor warned that the Bates text could lead students towards diagnosis (rather than assessment) and suggested that instructors needed to be very clear when guiding students through the chapters. Instructors felt that the workshops were successful, and allowed students to consolidate their learning. The instructors found that the program coordination (e.g., workshop planning) allowed them to focus on teaching, and that regular communication with the ID provided a high level of support. However, the learning objectives of the program did not fit with the original course content, and last minute reworking was necessary, resulting in course content being unavailable to students in advance. Finally, the anatomy and physiology text was deemed redundant and not advanced enough to meet the students’ learning needs.

The instructors of NURS 453 felt that Blackboard was easy to navigate. The units were well done, and readings and course content were excellent. The instructors found the assignments to be good because they encouraged students to investigate their own communities and create useful tools (e.g., Dementia Assessment tool). It also worked well to have instructors who had experience working in rural communities. For example, one instructor commented that because all of the RACNC instructors were experienced rural practitioners, it was easier for them to understand the students’ learning needs and address them appropriately. However, it was mentioned that if maximum enrollment of 25 had occurred, it would have been impossible for instructors to effectively manage their courses. Grading participation was a challenge, and there was a lack of consistency between the two instructors regarding assignment due dates and grading strategies. This resulted in some students feeling that the expectations of the two sections were unfair.

There was similar feedback from all four instructors regarding several aspects of the program and course delivery. The instructors generally thought that having a lead instructor was helpful, and that the support from the program was good. Blackboard was a challenge, mainly because of intermittent unavailability due to weekend shutdowns and system crashes. Discussions were problematic, as there were too many posts and it was often unclear to students which discussion questions were for marks and which were not. Blackboard also lacks the functionality to summarize individual student’s postings, making marking student participation very challenging for instructors. Furthermore, students had difficulty understanding that the discussion board was their classroom, and thus, the tool failed to fully engage students. Finally, the instructors found that students were not prepared for academic work and had very poor writing skills, making it very time-consuming for instructors to provide feedback.
The instructors of all four courses had very similar recommendations. These included:

- Coordinate workload between the two courses better
- Provide better orientation for students which covers Blackboard, academic requirements and behavioral expectations
- Provide orientation for instructors
- Use Elluminate, videoconferencing and teleconferencing to connect with students
- Maintain the level of instructional support provided by Instructional Designer and student assistant.

Recommendations specific to NURS 451 included:

- Revise course to ensure that the workload is more manageable and to ensure that each component of the course focuses on assessment and not diagnosis
- Revise course with particular attention to instructions and assignments to make expectations and requirements more clear to students
- Add articles on best practice for each system
- Add unit on peripheral vascular system or include this system in the cardiovascular unit
- Add unit on special populations (e.g., pediatrics and geriatrics)

Recommendations specific to NURS 453 included:

- Give students an opportunity to share the tools they have developed with each other
- Reduce or remove discussion assignments – they require too much work for too little grade

WINTER:

Winter Semester General Survey

The General Survey was also posted during the winter semester, and asked the students to comment on what was working and not working for them in the program. Nineteen out of 27 students completed the survey for a response rate of 70%.

Students were asked to list aspects of the RACNC program that they were feeling confident about. Seventy-nine percent (n=15) of participants indicated being confident using Blackboard and having adequate access to the instructor for guidance regarding course work. Seventy-four percent (n=14) were confident about getting support when having technical difficulties with the online courses and sixty-eight percent (n=13) about learning course content. Forty-seven percent (n=9) felt positive about time management and forty-two percent (n=8) were able to successfully deal with pressures from family and other commitments. Only 36% (n=7) of the students were confident of being able to work effectively while studying, and writing essays, preparing citations in the correct format and doing library research were the areas students were least confident.

When asked to list aspects of the RACNC program that were working well in the winter semester, five of the nineteen respondents said that the course content was excellent, describing it as “up-to-date” and “very pertinent to rural OB.” The timing and layout of the assignments were seen as an improvement, and overall, the semester was described as being “less demanding time-wise.”
Students were also asked about the aspects of the program that were challenging them during the winter semester. Seven of the nineteen respondents said that there was too much to read, and six mentioned APA formatting and essay writing as being challenging. Although the semester was less demanding for many students, there were still some students who felt that doing work and school at the same time was very difficult to manage. Finally, students wanted to have their practicums organized earlier.

**NURS 454-6 Perinatal Care**

Surveys were posted at the beginning and end of the winter semester that asked course-specific questions about NURS 454 Perinatal Care. Seventeen out of 27 students responded to the Pre- and Post-Course Surveys for a response rate of 63%. At the start of the semester, no students described themselves as extremely confident and competent in perinatal care, and only 35% (n=6) reported being somewhat confident and competent. Sixty-five percent (n=11) described their confidence and competence in perinatal care as somewhat low or extremely low (see Figure 7). Seventy-one percent (n=12) rated the course as being extremely relevant to their practice.

Figure 7: Level of Confidence and Competence in Perinatal Care at the Beginning of Winter 2008 Semester

At the end of the winter semester, the students were again asked to rate their confidence and competence. This time, 94% rated their confidence and competence as somewhat or extremely high (see Figure 8).

Figure 8: Level of Confidence and Competence in Perinatal Care at the End of Winter 2008 Semester
When asked what features of the course should remain the same, 65% (n=11) suggested that the workshop was a valuable part of the course. The following comments are related to the workshop and practicum:

“The workshop and practicum really brought everything together for me.”

“The weekend workshop […] was excellent, but the practicum reinforced all.”

“I found the workshop valuable and imagine that it would be even more valuable for a beginning perinatal practitioner.”

The respondents remarked positively on the relevance of the course content. Students were also asked what they thought should be improved, and overwhelmingly it was the amount of reading and number of assignments that students wanted reduced.

Figure 9 reflects students’ perception of the relevance of Perinatal Care to their practice and 76% of the respondents reported that this course has positively influenced their practice. The following are specific examples of this provided by the students:

“My first two shifts back after my practicum experience involved caring for two labouring mothers. My level of competence and confidence were much improved from before. I used to dread caring for maternity patients because I did not feel that I had sufficient knowledge and skills in this area. Now I look forward to caring for them and using the knowledge and skills that I have acquired.”

“Increased my knowledge [and] showed me places to look for info. Opened my eyes to services available in my area.”

“I was unaware of the references available to parent’s whose infant was being transferred to a tertiary centre such as B.C. Women’s etc. The information on what they can expect, where they can stay etc. is extremely helpful to now have available to give to these families who are often overwhelmed with what is suddenly happening.”

“I feel that I can explain the physiological changes much better and can address areas that will challenge my coworkers. We do things that are not always based on researched methods so this gives more tools and information that is consistent with what other areas are doing. It does not mean that we are maternity nurses but that we understand maternity a bit better and can introduce concepts to our coworkers.”

“I won’t run from mat patients”
Students were given a workshop survey that asked for their perspectives on the content, accessibility and venue of the Perinatal Care workshops that were held in Kelowna and Prince George. The response rate for the Kelowna group was 100% and for Prince George it was 93% (13/14). Overall, the satisfaction with workshop content was high. The Prince George group was less satisfied with their venue and equipment than the Kelowna group. Figure 10, 11 and 12 illustrate the level of satisfaction in these areas by location and Figure 13 shows how students perceived the relevance of the workshop content.
Figure 11: Satisfaction with Workshop Accessibility

Figure 12: Satisfaction with Workshop Venue and Equipment

Figure 13: Relevance of Workshop to Students' Practice
When asked what aspects of the workshop the student’s would like to stay the same, the instructors and the venue were most often mentioned. For example, a student who attended the Kelowna workshop wrote, “The teachers are very knowledgeable” and another who went to Prince George said, “The instructors were great. Very easy to talk to [and] made learning opportunity extremely comfortable.” Students also said they enjoyed learning from each other’s experiences and that practice stations and role-playing were helpful. Being able to watch PowerPoint presentations prior to practicing was another feature that students responded positively to.

Students were also asked what they would like to see improved. Most responded that there was nothing they would like to see changed (65%). The most common suggestion was that more equipment be supplied so that more practice stations could be set up. Several participants commented that the two prerequisite courses, Fetal Health Surveillance and Neonatal Resuscitation Program should be included in the course.

**Instructor Feedback – NURS 454 Course Reviews**

Course reviews for NURS 454 were conducted following the Winter 2008 semester. Each of the two instructors for Perinatal Care and the ID participated in a small group interview, or course review. In each course review, the instructor and ID were asked to talk about what had worked well and what needed improvement in terms of curriculum and course delivery.

When asked about what worked well, both instructors identified the online discussions as being an effective learning tool. The instructors and ID agreed that the ICARE model\(^8\) of online delivery was simple and clear for students and instructors to navigate. One instructor used the course updates tool while the other preferred the home page for regular communication with students, and both seemed to work well for keeping their students informed. The high level of support provided by the ID and the student assistant was important to the instructors, both of whom had not used Blackboard Learning or the ICARE model previously.

The workshop, including lab space, equipment and TA support, also worked well according to the two instructors. Both felt that there was plenty of time in the two-day workshop to cover all the material, but having extra equipment would have allowed for a greater number of stations, and subsequently even quicker completion of learning objectives. The class size (13-14 students) was considered manageable, and the instructors felt that they were able to effectively support learning through all stages of the course. The instructors also received feedback from preceptors that the students in Perinatal Care were well prepared for their clinical placements.

The instructors and ID were also asked to identify components of the course that could be improved. One instructor said that student feedback about the textbook was negative, and that she subsequently focused more on articles and online resources. Both instructors felt that the expectations around writing and APA formatting were not clear

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8 The ICARE model of course organization is a method of arranging learning modules when using online learning software, such as Blackboard Learning. ICARE uses five pages per learning module: Introduction, Connect, Apply, Reflect and Extend. The model originated with San Diego State University, and was introduced to the School of Nursing at UNBC by Dr. Vince Salyers who used it in his courses while working in California.
enough, and that as a result, students had trouble in this area. It was also suggested that there could be clearer communication of student responsibilities.

Both instructors recommended that larger, regional hospitals be consistently used for clinical placements to ensure that learning objectives could be met in a timely fashion. The instructor of one section had seven sites to manage and many of the students had multiple preceptors. While it was necessary that the placements be organized in a flexible way, it was challenging for instructors to manage large numbers of placements that were geographically widely dispersed across multiple sites. The instructors also recommended that all students be scheduled for the maximum ten shifts to ensure that their learning objectives would be met.

For future offerings of Perinatal Care, the two instructors recommend keeping the content focused on low-risk obstetrics. Maintaining regular contact with students and using consistent methods of communication is important when using distance delivery methods. The instructors and ID each noted minor aspects of the course that should be revised before it is offered again, such as updating the naming and numbering system. Finally, the instructors recommended that practicums be arranged much earlier and that each student be scheduled for ten shifts at a regional site (i.e., 500 births/year). Multiple preceptors and smaller sites should be reserved for extenuating circumstances in which the normal placement procedure is not possible, or would not meet the needs of a particular student.

**NURS 454 Practicum Survey**

Students were given a practicum survey to complete online. Seventeen of the 27 students in the course completed the survey for a response rate of 63%. Figures 14, 15 and 16 illustrate the students’ responses regarding their satisfaction with their practicum experience, site accessibility and the practicum site itself. Students gave positive feedback overall, specifically with regards to the preceptors and staff at their practicum sites, the ability to do their practicum close to home and the flexibility in terms of number of shifts. For example:

“"The preceptors and team I got to work with were amazing and supportive."

“I enjoyed that my experience was in the same town that I live, and I think that it is an important feature as I am still working 3 out of 4 of my regular full time shifts at the same time.”

“I really liked the fact that I was able to stay close to home.”

Sites that had high numbers of births per year seemed to provide better experiences overall, however some students said that the smaller sites worked well too, and provided them with maternity experience that more closely matched their rural practice needs. The following quotes are examples of what students said about this:

“"The hospital in which I had my practicum has approximately 1000 births per year. I think that the volume of births that they have helped to make my experience so beneficial."
“[The regional hospital I was at] was a good place as it does do advanced and complicated deliveries, but has mainly low risk and referrals form outlying areas, which is what we in rural hospitals have.”

Figure 14 Overall Satisfaction with Practicum Experience

Figure 15 Satisfaction with Accessibility

Figure 16 Satisfaction with Venue/Location
When asked what could be improved, students most frequently responded that they would like to have notice of their practicum dates and locations much earlier. The following quote reflects this common theme:

“Practicums definitely need to be arranged much further in advance than it was this time around. It was very stressful to be getting to close to the time and not knowing where or when I was going to have the practicum.”

Some students said they would have preferred having their practicum at a larger sites, and it was also suggested that multiple preceptors interrupted the “flow” of the practicum. Despite challenges with short notice and smaller sites, the overall feedback was positive. The practicum was seen as an important and relevant experience, and as one student remarked:

“This course and practicum [are] extremely relevant for rural nursing and it would be very helpful to have this course available for learning even if a nurse is not enrolled in the whole program of RACNC. It should be accessible to whoever works in rural just as a one-off course.”

**NURS 454 Preceptor Survey**

A survey was mailed out to all 36 preceptors and 11 completed the survey for a response rate of 31%. The majority of the practicums took place in Northern Health and Interior Health, but there were also a few placements in Fraser Health. Subsequently, the respondents were mainly from Northern Health and Interior Health. Figures 17, 18, 19 and 20 summarize the preceptors’ satisfaction with the RACNP practicums. Positive feedback included:

- Good student preparation (i.e., completed FHS and NRP prior to practicum)
- Enjoyed being a preceptor for an RN (as opposed to a pre-licensure nursing student) because better able to focus on maternity
- The CAPE tool (student evaluation tool): “Throughout all the maternity mentoring that I’ve done, this tool is the best I’ve seen.”

**Figure 17 Satisfaction with Student Preparation**

![Figure 17 Satisfaction with Student Preparation](image)
Figure 18 UNBC’s Organization

Figure 19 Communication with RACNC Staff

Figure 20 Communication with Perinatal Care Instructor
The preceptors who completed the survey suggested that communication be improved, both with UNBC staff and the instructors. For example, a better outline of the program expectations and student evaluation could be provided. One preceptor also suggested that it would be helpful to get a student evaluation of the practicum and preceptor that could be shared with the preceptors. Another survey respondent noted that the number of births that students were required to attend (5) was difficult to achieve during shorter practicums and at smaller sites. One noted that it was important that students go to a larger facility and do the full 10 shifts in order to get the maximum benefit, while another thought that it was more important to be present for the entire birth including pre- and post-partum care. Finally, one respondent suggested that the university provide funding for the preceptors to meet with students prior to the practicum outside of work hours.
FINDINGS – IMPLEMENTATION AND EVALUATION TEAM (IET)

The Implementation and Evaluation Team (IET) is a committee of six members representing both practice and academia. Two Practice Leads and an Academic/Research Lead provide oversight and direction to the group, and two support personnel from UNBC – a Research Associate and Instructional Designer – who are involved in RACNP coordination and implementation are also members. The sixth member is the Program Advisor, a private consultant who conducted Phase I and II, has expertise in RACNP curriculum and who provides guidance to the partnership and to the evolution of the program. The IET has been the body primarily responsible for conceptualizing, planning and carrying out the implementation of the Phase III pilot project and the action research evaluation of the RACNP.

An individual from outside the RACNP interviewed the IET as a group; the Academic/Research Lead and Practice Leads were also interviewed separately. The interview guide focused on the RACNP’s first year of implementation (i.e., what is working and what needs improvement), the practice-academic partnership, and sustainability of the partnership model and of the program. The findings from this group of study participants is presented in three sections: 1) Program Implementation; 2) The Practice-Academic Partnership; and, 3) Sustainability.

Program Implementation

The IET interview participants were asked to comment on what they thought had worked well in the first year of the RACNP’s implementation. One participant noted that the program used a “state-of-the-art” online format that facilitated the successful delivery of the first three RACNP courses to be offered, and the support given to students to get them launched into web learning, particularly in view of the short timeframe between admittance and semester start, was also very important. The evaluation process was identified as being effective and efficient in facilitating ongoing improvements to the program based on participant feedback. For example, the courses have been modified and improved over the first year of implementation based on feedback from students, instructors and the Instructional Designer. Interviewees felt that hiring instructors experienced in rural practice was valuable, and the high level of support provided to instructors teaching the online material was also mentioned as being an aspect of the program that worked very well. It enabled the RACNP to engage experienced clinicians with sometimes limited teaching experience to deliver upper level nursing courses while maintaining both academic and practice rigour within the program.

When asked to comment on what could be improved in terms of implementation, several suggestions were given. The first was to develop within the program a heightened awareness of the diverse contexts that students come from and to explore ways of providing better support to students based on this information. For example, understanding issues related to various rural sites such as lack of access to high speed Internet or staff shortages would help RACNP personnel plan for better support strategies, such as providing information in alternative file formats or ensuring that sites have sufficient notice to replace students traveling to workshops. A second suggestion was that Health Authority Leads could find ways to improve communication “linkages” with students that would enable Health Authority Leads to provide students with better support throughout the year. Finally, it was recommended that the proposed Provincial
Steering Committee be implemented to promote program sustainability and provincial focus over the long-term.

**The Practice-Academic Partnership Model**

Overwhelmingly, the IET interviewees viewed the practice-academic partnership positively, and all agreed that the partnership was working well. It was noted that while there were no rules to guide the evolution of the partnership, it was “the group itself” that made it work. All six IET members identified trust, communication and commitment as key components of the partnership’s success. The program was seen as responsive to the concerns of practice, and as one Practice Lead said: “I feel the voice of practice is being heard.”

Many benefits of working in partnership were identified. For example, the practice and academic partners shared the implementation workload related to all aspects of program planning and student recruitment. Most importantly, however, working collaboratively produced more accurate identification of priority areas and the development of more appropriate strategies for targeting these areas. For example, the Practice Leads identified Perinatal Care as a course with high demand and recommended that it be offered more than once in the 2008-2009 academic year. The academic partners were then able to focus their resources where they were most needed. Joint trouble-shooting was also seen as a benefit of working in partnership because the merging of multiple perspectives and experiences promoted creative problem solving. For example, Practice Leads were a constant source of assistance and advise in all areas, including: facilitating communication with practicum sites; suggesting alternative ways of meeting practicum requirements while maintaining practice rigour; and, assessing courses for transfer credit. As one interviewee pointed out, developing a relationship with practice means that you have people who have a vested interest you can call on when you need assistance.

Having one “point” person (i.e., the Research Associate) at the university was viewed as an effective way to promote communication between the academic and practice personnel involved in program implementation and evaluation. The Program Advisor role, which encourages continued focus on practice and the partnership, was also viewed as critical to the successful evolution of the practice-academic partnership model. Furthermore, it was noted that having more than one “practice person” on the IET is important and ensures that practice is well represented. As one interviewee pointed out, adding a “token practice person” to a team is not an effective partnership.

The practice-academic partnership for practice-driven education is an innovation, a new way of developing and delivering nursing education. Given that the practice-academic partnership was viewed by the IET as working well, the interviewees were asked what they thought might be the key to its success. Four main facilitators were identified: 1) the understanding that the vast majority of knowledge development and learning happens in practice; 2) the understanding that practice is imbued with theory and that theory emerges from practice; 3) trust; and, 4) effective structures and processes to support the continuance of joint leadership and participation. In other words, the innovative practice-academic partnership that enables the RACNP to function as a practice-driven and reality-based program relies on the fundamental belief in the scholarship inherent in practice.
Barriers to partnership exist when any of the four facilitators are missing. According to the interviewees, academic culture can be inflexible to different education and research perspectives. As one interviewee pointed out: “There is a duality. Practice and academia are two different worlds.” For example, the timing, pacing, reward structures and priorities differ between practice and academia, and in order to partner effectively, practice perspectives and priorities must be valued and respected by the academic partners. There also needs to be an acknowledgement of the demands on academics by the practice partners. One interviewee expressed her perspective on effective partnership thus: “The key is to involve practice proactively. When I think about the importance of practice, it’s at the table where decisions are made, where the planning takes place, not a retrospective report on how things have gone.” In other words, practice plays far more than an advisory role; the practice-academic partnership is about working jointly at all phases: conceptualization, planning, implementation and evaluation.

Sustainability

Two themes related to sustainability were raised by the IET: sustainability of the program and sustainability of the practice-academic partnership. According to the interviewees, costs and efficacy of the program following the pilot should be addressed early on to ensure that the program is sustainable in the long-term. Student recruitment was seen as a crucial part of sustainability, and interviewees suggested that marketing would be essential to ensure sufficient student enrollment over time. Suggestions were given for targeting different groups of potential students. For example, advertising single courses could be a way of recruiting nurses who already have a degree, or who are interested in “topping up” their education in one area. It was also recommended that the Health Authorities start recruiting more broadly (i.e., not just for pilot-sponsorship) to include nurses who may, for example, be interested in taking one course per semester or only part of the program. The distance delivery of the courses was viewed as a valuable feature to keep, and that maintaining the accessibility of the program would be an important part of recruiting students in rural areas. Retention of students was also seen as a central part of program sustainability. Interviewees suggested that continued improvement of student support and clearer communication of program expectations prior to registration would play a key role in retention. Furthermore, according to interviewees, sustaining the practice-driven, reality-based (i.e., relevant and responsive) nature of the curriculum would contribute to student retention and positive “word of mouth” about the program.

The interviewees agreed that Health Authorities should include the RACNP in overall education planning and funding. Cost sharing between students and Health Authorities was mentioned as a potential way to support nurses on an ongoing basis to take the program. It was also recommended that processes within the university to promote stable and ongoing funding after the pilot be sought out and mobilized. This would include communicating with university administration regarding strategies for program sustainability such as securing financial resources.

A strategy for sustainability currently being undertaken is to embed the RACNP in the routine operations of UNBC’s School of Nursing. This transition would take advantage of the experience and expertise of School of Nursing personnel, and stable positions that are not reliant on research funds to continue. While this move would make the program more sustainable, there are concerns that it could have implications for the sustainability of the practice-academic partnership. Several interviewees suggested that a cultural shift
would have to occur within the School of Nursing if the practice-driven nature of the program is to persist.

It was generally agreed that sustaining the practice-academic partnership would be a challenge. One interviewee noted that it could not be assumed that the practice side would be sustained, and that unless there was a strategic approach taken to sustain the practice-driven nature of the program, it would easily be lost. In other words, structures and processes for ensuring that both practice and academia remain meaningfully involved in the implementation and evaluation should be created and monitored. An example of this would be the formation of committee structures that include practice and academic representatives with clearly outlined roles and responsibilities that formalize the imperative of joint decision-making. One suggestion that was supported by all participants was to continue the evaluation over the long-term as a way of ensuring ongoing responsiveness to and engagement of practice. Interviewees strongly recommended that reflecting on and recording how the partnership works, and the subsequent routinization of structures and processes for sustaining the partnership, would be critical to its sustainability over the long-term.

Beyond sustaining the partnership within the RACNP, the importance of advancing the partnership model to other arenas and organizations across the province was also deemed important. The RACNP is viewed as a proto-type that could be taken up provincially, and, it was suggested, the proposed Provincial Steering Committee should play a lead role in disseminating the model. As the practice-academic partnership model becomes more widely accepted and utilized, it will also become easier to sustain, as academic cultures shift towards collaboration and responsiveness to become practice-driven.
FINDINGS – HEALTH AUTHORITY LEADS

All six Health Authority (HA) Leads participated in an interview. Health Authority Leads support the RACNP mainly through student recruitment, funding and support. The processes for recruitment vary among Health Authorities; for example, some Health Authority Leads interview prospective students prior to selection and some do not. One HA Lead noted that interviews with prospective students were an effective way to reduce attrition and also to build relationships with the students, which contributed to the HA Lead’s ability to provide effective student support. The role of the HA Lead also involves evaluation, and keeping track of what is working and what needs improving in the program.

HA Leads support of students in the RACNP varies. Most HA Lead interviewees indicated that they tended not to communicate directly with students on a regular basis. They organize the funding for the student, and can get involved if a problem arises, but generally it is seen as the nurse manager’s role to provide ongoing support. Some HA Leads reported that they have worked to foster relationships with the students from their Health Authority, and in some cases, HA Leads are contacted by students who need assistance. According to the HA Leads, good communication with the university is critical to providing effective student support. One HA Lead noted that student issues were easier to address when the university contact provided her with contextual information, particularly regarding the steps being taken by the university to solve problems. The HA Lead was then better able to answer student concerns by explaining what was being done. However, it was noted that while information release agreements were in place, more detailed agreements would provide better clarity around the issue of student confidentiality, and allow the university and the HA Leads to work more effectively to support students.

Sustainability was a primary concern of the HA Lead interviewees. Recruitment and retention were seen as critical components of the ongoing viability of the RACNP. Barriers to recruitment and retention included workload and difficulties around being able to provide sufficient time off to students for study and to attend workshops and practicums. As one HA Lead suggested, “there are a lot of tired nurses out there and they are working overtime.” Subsequently, adding education to a busy nurses schedule, particularly if the program is lengthy (i.e., the RACNP takes two and a half years to complete), is a challenge for recruitment and retention. It is also difficult for small sites to send more than one nurse to the program when there are workshop, practicum and education leaves to cover.

The HA Leads identified ways of addressing these barriers. In terms of recruitment, better marketing was seen as a priority area. Advertising should target not only potential Certificate students, but also undergraduate students and nurses interested in taking individual the RACNP courses (rather than the whole certificate). One lead suggests moving away from the term “acute” in order to attract mental health, home and community health professionals to take the particular RACNP courses that are applicable to these areas. Ensuring that the degree completion option remained available was also seen as important. According to the HA Leads, retaining students in the program could be improved through better support and continued funding to take the program and to have education leave for study time.
Sustainability of the RACNP was also discussed in terms of provincial and Health Authority education funding and planning. The HA Leads reported that the RACNP fits well into their overall education needs. However, interviewees reported that program sustainability would depend largely on Health Authorities embedding the RACNP into regular education planning processes, such as scheduling and funding. One HA Lead commented that this would involve encouraging nurse managers to be more proactive in their planning around education needs for their nurses. The HA Leads also noted that it would be necessary to define rural practice as a specialty so that specialty education funding within the Health Authorities could continue to be used towards the RACNP. Otherwise, the RACNP would be included in continuing education, and would not receive sufficient funding. One HA Lead suggested that a provincial specialty education committee could reduce duplicated programs among Health Authorities and align efforts to coordinate specialty education for nurses more effectively.

Clinical placements were identified as an ongoing challenge to program sustainability. One lead suggested that clinical placements be approached differently in order to open up more opportunities. For example, one-to-one preceptor-student ratios were not seen as sustainable. It was suggested that clinical placements take place on night shifts, and that the number of clinical hours be more flexible (i.e., make placement length contingent on meeting learning objectives rather than on completing a set number of hours). Finally, it was suggested that utilizing simulation more frequently in clinical courses could contribute to practicum requirements.

Sustainability of the continued involvement of HA Leads and of practice in general was also discussed. It was recommended that clear definitions of practice roles and processes be developed and that succession planning be undertaken for HA Leads. According to the interviewees, it is important that the program remain responsive provincially, and therefore consider improving communication among the HA Leads, as well as between the HA Leads and the university. As several interviewees pointed out, having one point person was critical to ensuring effective communication and good relationship between HA Leads and University, and this particular process should remain in tact.
FINDINGS – NURSE MANAGERS

All nurse managers of nurses in the Rural Acute Care Nursing Program (n=27) were invited to participate in an interview. Six nurse managers from Northern Health, four from Interior Health, one from VIHA, and one from Fraser Health participated (participation rate = 44%). The findings from this set of interviews are divided into three topic areas: 1) Student Support and Workplace Challenges; 2) Perspectives on the RACNP; and, 3) Sustainability.

Student Support and Workplace Challenges

Nurse manager respondents reported varied levels of involvement with the nurses enrolled in the RACNP. Three nurse managers reported playing an active role in recruiting nurses to take the program, and most reported being only peripherally involved in supporting their nurses once they were in the program. Most of the interviewees talked about providing support in terms of giving RACNP students time off for study, workshops and practicum experiences and managing the required back filling while the students were away. The nurse managers generally were not directly involved in the students’ learning, however, some reported that they had been available to answer questions related to assignments and learning activities.

Overwhelmingly, nurse managers reported that finding ways to give RACNP students time off to study or attend workshops and practicums was the biggest challenge. As one interviewee noted, it was difficult to replace even one nurse, so having three from one site in the program was a huge problem. Nurse managers also gave their perspectives on student experiences with the program. Generally, the interviewees reported that the course work was intensive and the workload heavy for their nurses. One interviewee suggested that deadlines for assignments were too tight. Other respondents noted that students initially had difficulties with computer learning which for some was a barrier to remaining in the program. With staffing shortages, overtime hours and subsequent difficulties granting time off, nurse managers felt that going back to school while working full time was very challenging.

Perspectives on the RACNP

1. Promoting positive change:
Every nurse manager agreed that the RACNP was relevant to their nurses’ practice and many specific examples were provided. The assessment assignment from Nursing Practice with Older Persons was mentioned several times as being very relevant to practice, and one nurse brought the assignment to the workplace to incorporate into an orientation program at her facility. In another similar example, a student incorporated her assignment from the Perinatal Care course into her workplace routine, which the nurse manager reported to have “lifted up a lot of dust.” Several nurse managers noted positive changes in their nurses related to their learning, such as “being more open to sharing her learning and really enjoying it” and “bringing enthusiasm and learning to the workplace.”

2. Meeting diverse learning needs:
Two nurse managers suggested that there was such a diversity of nursing experience and education among RACNP students that one course might not be equally suited to all participants. For example, one interviewee noted that the Health Assessment course
may have been redundant for a new graduate, and another mentioned that her nurse found the information to be “too basic.” However, these interviewees had a very positive view of the RACNP overall.

3. Improving competence and confidence:
According to the nurse managers, the RACNP has been successful in improving competence and confidence for many of the nurses in the program. For example, one interviewee described how a nurse at her site was able to learn and practice a skill at the Perinatal Care workshop; the nurse had previously lacked confidence in this area, but following the workshop her confidence and competence with the particular skill had noticeably increased. Two other nurse managers reported noticing improved assessments and charting from nurses in the RACNP and another credited the RACNP for the increased confidence in a nurse at her site who had recently applied for a supervisory position. In a final example, a nurse manager described how one of her nurses would not do maternity prior to completing Perinatal Care, because she lacked confidence and competence in this area. However, after completing Perinatal Care, this nurse has been able to work in maternity because her confidence and competence was improved through her participation in the RACNP.

4. Perspectives on the practice-academic partnership:
When asked to comment on the practice-academic partnership, several nurse managers gave neutral responses, noting that they did not feel qualified to answer or that they had not noticed anything specific to the partnership. However, several did express their appreciation at being asked for their input (i.e., being invited to be interviewed). It was also recommended by many interviewees that communication with nurse managers could be better, thus allowing them to participate more meaningfully in their nurses’ education.

Sustainability

The nurse manager interviewees were asked for their thoughts on program sustainability, and most expressed concern, saying that it was very important that the RACNP continue to be available in the long term. Several interviewees suggested that the rural nurses should be promoted as a specialty area and built into health authority education planning and funding. Other suggestions for improving recruitment included making single courses available (as opposed to the whole Certificate), offering courses to undergraduate nursing students and increasing marketing efforts across the province. One interviewee felt that positive word of mouth about the RACNP is on the rise, and suggested that this method of recruitment can be very effective. There was overwhelming agreement among the nurse manager interviewees that the RACNP is critically important for rural nurses and must be sustained. One interviewee said she was very pleased about the RACNP because she viewed it as an “acknowledgement that rural nursing is different and is a specialty.” Furthermore, most nurse managers felt that access to the RACNP could contribute to keeping nurses in rural sites.
FINDINGS – SENIOR MANAGEMENT PRACTICE

Interviews were conducted with six senior management personnel from Health Authorities who have been involved in and who have knowledge of the Rural Acute Care Nursing Program (RACNP). This group of study participants includes members of BC’s Chief Nursing Officer (CNO) Council and a Health Authority Chief Executive Officer (CEO). Semi-structured interviews with individuals and groups from this set of participants were focused on evaluating the first year of implementation of the RACNP, as well as understanding the broader implications for nursing practice and nursing education of the practice-academic partnership and practice-driven model represented by the RACNP. The findings are presented below based on the two main themes that emerged from the analysis of the data: 1) Identification of a New Model; and, 2) Sustainability.

Identification of a New Model

The Rural Acute Care Nursing Certificate Program has been driven by practice through Phase I (needs assessment), Phase II (curriculum/course development) and Phase III (program implementation and evaluation). The CNOs were responsible for the initial conceptualization and management of this new model of practice-driven nursing education (Phases I and II) and are now responsible for the on-going adherence of the inherent principles of this model that are represented by the RACNP. This model is characterized by an egalitarian working partnership between nursing practice and education that ensures that the concerns and interests of both parties are addressed. According to the Health Authority managers this partnership model ensures program responsiveness and promotes the enactment of practice-driven education. The interviewees noted that because the RACNP is based on this new model it is responsive to practice, and therefore the program has been successful in delivering a relevant curriculum that will effectively prepare nurses for safe, competent and confident rural practice. Furthermore, this group of interviewees sees this program as the model, or “prototype,” for future post-basic nursing education in the province.

1. Importance of practice-driven education:
The interview respondents noted that practice environments throughout the province now demand that nurses are provided with post-basic education that meets the specific needs of practice, thus requiring a “new way of doing business” that is practice-driven and reality based. Rural acute care nurses work in highly complex and diverse practice environments and require post-basic education that is tailored to fit their specific needs. According to these interviewees, the RACNP has been successful in promoting and maintaining a practice-driven, reality-based approach to post-basic nursing education and is therefore well positioned to continue to meet the needs of rural nursing practice. These interviewees gave examples of post-basic nursing education offered in the province that is not practice-driven and reality-based, and noted that these programs are no longer meeting the needs of rural nursing practice.

2. Responsiveness of post-basic nursing education to practice:
During Phases I and II, the RACNP was entirely driven by practice, and a partnership with a university was not fully established until Phase III. However, the RACNP has, according to these senior managers, remained responsive even with the addition of a
university partner. Thus, the partnership model of the RACNP has successfully ensured that, through every step of implementation and evaluation, the program is practice-driven and reality-based. The action research method of evaluating this program has further enabled timely responses to emerging issues, trends and challenges with effective changes made to the program when necessary. According to the interviewees, this high level of responsiveness is a positive and desired direction that the CNO Council intends to be taken up provincially. These respondents noted that in the past, a disconnect has existed between clinicians and academics involved in post-basic education resulting in a lack of understanding of the dynamic and rapid changes now experienced in practice. However, according to these interviewees, the RACNP has been successful in overcoming institutional challenges and is responsive to the needs of practice.

**Sustainability**

Sustainability in the context of the RACNP was described by the Health Authority managers as referring to two main concerns: 1) maintaining the practice-driven model over time; and, 2) securing adequate human and financial resources necessary for the continuance of the program.

The recommendation heard most frequently regarding maintaining the practice-driven model over time was to build “checks and balances into the process that will ensure that the program remains practice-driven.” This includes developing committee structures for program implementation and curriculum development that has both practice and academic representation.

The interviewees had many recommendations regarding securing adequate human and financial resources necessary for the continuance of the program. The first was to develop sustainability plan with CNOs and UNBC. This plan would encourage Health Authorities to fit the RACNP into their education budgets and planning, and to support their staff to take the program. The second recommendation was to reframe the notion of specialty education to include rural acute care in order to secure stable government funding; there is very little funding available for continuing education. The third recommendation was to ensure that the program remains available provincially, and that there be marketing strategies put in place to increase student recruitment.
FINDINGS – ACADEMIC ADMINISTRATION

Interviews were conducted with two academic administrative personnel – one mid-level and one senior – who have been involved in and/or who have knowledge of the Rural Acute Care Nursing Program (RACNP). Semi-structured interviews with these individuals were focused on understanding the broader implications for university nursing education of the practice-academic partnership and practice-driven model represented by the RACNP. The findings are presented below based on the three main themes that emerged from the thematic analysis of the data: 1) Identification of a New Model; 2) The Practice-Academic Partnership; and, 3) Sustainability.

Identification of a New Model

The academic administration participants were clear in their identification of the Rural Acute Care Nursing Program as an innovation in which UNBC has been able to play a lead role. The interviewees both gave examples of other collaborative projects between ministries or communities and UNBC, and noted that UNBC has an institutional culture that fosters partnerships. However, one interviewee pointed out that the RACNP “takes [collaboration] a step further: one [partner] couldn’t function without the other.” In other words, the RACNP partnership model is unique in that both practice and academia are intimately involved and contributing at every step of the implementation process. According to one interviewee, this new way of working is recognized provincially as a positive innovation: “The reputation of the RACNP is out there. They speak highly of it at the meetings. It’s a model they refer to.”

The Practice-Academic Partnership

The interviewees were asked to comment on the practice-academic partnership model that they had identified, and to give their perspectives as administrators on the challenges and opportunities associated with it. One of the interviewees noted that successful partnerships are relationships based on trust. This interviewee recommended that all parties be open to possibilities and to avoid stereotypes in which the academic is seen to provide theoretical knowledge and legitimacy to the project while practice is seen to contribute only experiential knowledge. As this interviewee pointed out, many practitioners are very knowledgeable about research, and academics themselves are participants in their communities and can bring more than theory to the table. “Everybody brings a suite of skills and knowledge.”

In terms of sustaining successful partnerships, one interviewee stated that the partnership should be a real relationship, and tokenism should be avoided. Clearly articulated committee structures and continued monitoring to ensure that the partnership is functioning is important. Furthermore, both interviewees recommended strategies for maintaining the effective participation of practice in a partnership with a university. One recommended that non-university members could sit on a senate committee and thus have significant power over curriculum and program decisions. Another recommendation was to continue having practice leads on implementation and curriculum committees, even as the program transitions beyond the pilot stage.
Sustainability

Sustainability was an important topic raised by the academic management participants. The recommendations for the program's ongoing sustainability are related to funding and to strategies within the university for integrated program delivery. One of the interviewees suggested that support, or buy-in, from the university administration would be important for long-term planning. The university administration could potentially help to secure stable funding and facilitate agreements between the funding agencies, the Health Authorities and UNBC that would outline each party’s commitment to the program, thus acquiring resources for the ongoing support of the RACNP. An important part of this, according to the senior administrator, would be assessing whether there is sufficient and continuing need for the program, as well as estimating the costs of regular faculty and university "overhead" resources that would made be available to the program.

The interviewees noted the importance of the transition from “pilot” to “ongoing” and the shift in funding that would be required in order for this to happen. Both interviewees recommended that the RACNP be integrated into the regular operations of the School of Nursing and the broader university unit as well. This would help the program be more efficient in terms of both human and financial resources, as personnel could have responsibilities that extend across several programs. According to these participants, programs that are “siloed” (i.e., stand-alone and not integrated) are more costly, and opportunities to avoid duplication are missed. Furthermore, the program would have a better chance of moving away from being supported by research funds, which are “one-off,” thus making it more stable.
RECOMMENDATIONS

Student Satisfaction and Success

• Workload – students struggle with the demands of school and work, so every effort to streamline the course content and delivery to save time should be made. Providing paid leave for study should also be undertaken when necessary.
• Practicum placements and workshop dates need to be provided to students sooner, ideally prior to the semester start. This will help nurse managers and students plan for time off more effectively.
• Orientation to Blackboard and student skills (i.e., writing, APA formatting) should be provided prior to program start.
• Support for students should include a counselor or advisor at the university
• Continued funding to support nurses to take this program is necessary.
• Continue hiring practice experts to teach, as the findings show that they are best able to understand student practice and experience.

Instructors

• Provide better orientation to Blackboard and UNBC processes
• Continue providing instructional design and student assistant support throughout course delivery
• Limit sections to 15 students and continue to provide teaching assistants for workshops

Courses

• The instructors and ID have noted aspects of each course that should be revised before being offered again. Ongoing evaluation and modification of courses should continue through team approach (i.e., lead instructor and ID).

NURS 454 Practicums

• When possible, avoid multiple preceptors, but continue to be flexible and allow more than one preceptor per student when necessary
• Larger, regional hospitals should be consistently used for clinical placements to ensure that learning objectives could be met in a timely fashion.
• All students should be scheduled for the maximum ten shifts to ensure that their learning objectives would be met. If instructor, preceptor and student agree that learning objectives have been met the practicum can be completed in fewer than 10 shifts.
• Multiple preceptors and smaller sites should be reserved for extenuating circumstances in which the normal placement procedure is not possible, or would not meet the needs of a particular student.

Practice-Academic Partnership

• The practice-academic partnership is critical to success of program and therefore must remain a key principle of the RACNC
• Define the structures and processes of RACNC, as well as the roles and responsibilities of practice and academic partners to ensure that egalitarian involvement in implementation and evaluation continues.

Sustainability

• Increase marketing
• Advertise single courses as well as whole Certificate
• Open courses to undergraduate students
• Work with university administration and CNOs to secure ongoing funding
• Promote rural nursing as a specialty; recommend that Health Authorities embed the RACNP into regular education planning processes, such as scheduling and funding.
CONCLUSION

As with all new programs, there have been “bumps” in the first year; however, the students have given many examples of how the curriculum has positively influenced their practice. This is a key goal of the program, and illustrates the effectiveness of the practice-driven, reality-based curriculum approach in prompting change. The partnership model, in which practice and university work together to develop and deliver nursing education is, indeed, a new way of working. It is already apparent that the partnership driving the Rural Acute Care Nursing Certificate is critical to the program’s success in terms of relevance, accessibility and sustainability.

The action research approach has allowed the Rural Acute Care Nursing Certificate to be responsive to feedback and make necessary adjustments and improvements to the program, thereby meeting the needs of the university and Health Authorities, as well as the students and instructors. This research is both timely and relevant to inform rural nursing practice and education in BC. Lessons learned from this project have the potential to influence nursing education provincially, nationally and internationally. It is critical that the action research evaluation continues over the planned three year pilot.

The RACNC is an innovative provincial program, developed and delivered through a unique partnership between practice and academia; its evaluation and subsequent evolution could revolutionize practice and education by providing accessible and relevant education for nurses. The “new” way of providing post-basic education is already increasing nurses’ confidence and competence, and as a result, is well positioned to improve patient outcomes, and contribute to the recruitment and retention of nurses in rural hospitals.
APPENDIX I – DETAILED STUDY CONTEXT

The Rural Acute Care Nursing Certificate is part of a three-phase pilot project aimed at assessing and meeting the learning needs of rural RNs to ultimately improve rural practice and patient outcomes. The project represents a unique partnership between practice and university nursing education, and has been jointly driven by the Chief Nursing Officer Council (the CNOs) led by the CNOs of the Interior and Northern Health Authorities and, beginning in Phase III, the University of Northern British Columbia (UNBC).

During Phase I (2005-2006), the learning needs of rural RNs across BC were assessed to determine what kind of curriculum would prepare nurses for confident, competent and safe rural practice. The participants of this research were 234 nurses in 51 rural communities representing four health authorities. The research asked the rural nurse participants about their everyday practice, their needs for continuing education, appropriate educational delivery methods and core content required as additional learning to effectively practice as rural acute care nurses. The results of this Phase I research indicated that rural RNs in BC are in need of new educational opportunities that are both accessible and relevant to their practice.

In Phase II, seven courses were developed that reflect the findings of the Phase I research. Course development took place through an innovative team-based approach that partnered course writers with practice experts and academic advisors. The team approach ensured that the curriculum remained relevant to rural practice while maintaining academic integrity. The seven courses that make up the RACNC are:

- NURS 451-3 Health Assessment Across the Lifespan
- NURS 452-6 Chronic Disease Management, Palliative Care and Wound Care
- NURS 453-3 Nursing Practice with Older Persons
- NURS 454-6 Perinatal Care
- NURS 455-6 Critical Care, Emergency and Trauma
- NURS 456-3 Mental Health and Addictions
- NURS 457-3 Living and Working in a Rural Community

Phase III is a three-year project that involves the implementation and evaluation of the RACNC. The first part of Phase III involved executing a transition plan to move the provincial curriculum into the UNBC Nursing Program as an undergraduate certificate program. The program was approved by the UNBC Senate in June 2007; implementation activities included preparing for online delivery of the courses, recruiting instructors and managing the student application and admission processes. In the Fall 2007 semester, NURS 451-3 Health Assessment Across the Lifespan and NURS 453-3 Nursing Practice with Older Persons were offered. NURS 454-6 Perinatal Care was offered in the Winter 2008 semester. There are twenty-five pilot-funded seats and additional RNs are being funded by their respective Health Authorities to complete the RACNC. The program also accepts applications from self-funded nurses.