

Three-Partner Collaborative Evaluation of Student Transition, Performance, Experience, and Outcomes in Practical Nursing (PN) – Nursing Degree (BScN) Bridging Education

Phase I Report

A Research Project Funded by the College University Consortium Council (CUCC) and Collaboratively Conducted by:

University of Ontario Institute of Technology (UOIT) Durham College (DC) Georgian College (GC)

Research team members directly Involved in this phase of the project include:

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Status Report, Phase 1

We are pleased to submit the following report on behalf of the research team for this Research Related to Post-Secondary Student Mobility Project. We have experienced a very productive period of project set-up activities and data analysis, leading to both the identification of very interesting and relevant findings, as well as clear questions for future exploration (including in subsequent phases of this research). We are pleased to report that we have made excellent progress in Phase 1 of this project. Data mining and analysis related to student tracking information will continue over the next several months, necessitated in part by our delay in receiving ethical approval and in part by the complexity of the data and the need to fill in data gaps. However, all other deliverables have been met, each of which will be described in this report.

This report consists of an overall summary of our project status in relation to Phase 1 deliverables (Table 1), as well as summaries of data analysis findings (qualitative- Tables 3-4; quantitative- Tables 5 - 17) related to each of the research questions posed. Finally, we have attached our financial report from January-March 28, 2012. As per our feedback from CUCC (Mar 13, 2012), given the pace at which this project needed to evolve and our delay in receiving ethical approval at all three institutions, a portion of funds from Phase 1 activities will be reported on the Phase 2 financial report.

In addition to the deliverables outlined in the proposal, our research team is happy to report that we have submitted abstracts to present these findings to two upcoming conferences (one hosted by the Registered Practical Nurses of Ontario focussing on educational innovations and one hosted by Windsor University focussing on evidence-based nursing education).

Should you have any questions or desire clarification or additional information, please feel free to contact me anytime.

Warm regards,

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Table 1: Update on Deliverables for Phase 1

PHASE I Jan 1, 2012 – Mar 28, 2012										
Project Activity	Required Action/Description	Status	Notes							
Hire and train research coordinator and research assistants	 Create job positions and post through UOIT, DC, and GC Hire 1 part-time research coordinator and 2 part-time research assistants Train research coordinator in role, data analysis, reporting requirements, etc. Train research assistants in activities related to their role 	Completed	 Research coordinator and research assistants hired in early February with weekly hours modified slightly Research assistants and research coordinator oriented to their roles and trained as needed 							
Undertake qualitative data analysis from student focus group data already collected	 Install Nvivo Train research coordinator, research assistants, and any members of the research team not familiar with use of this version of the qualitative data analysis software Transcribe any tapes not yet transcribed Identify categories and themes related to research questions identified for Phase I from the data 	Completed See Tables 3-4	 A 1 yr site license for NVivo was purchased and installed 9 members of the research team have undergone NVivo data analysis training, with 5 members taking both introductory and advanced level training All tapes transcribed Categories and themes related to research questions for Phase 1 identified 							
Undertake quantitative data analysis based on student tracking	 Install Robinson Nursing Program Data Tracker program Train research team Input any necessary data run data files based on defined student behavior/performance indicators and comparisons undertake statistical analyses of quantitative style data 	Partially completed with data mining to continue through Phase 2 See Tables 5 - 17	 Approval received from CUCC to use allocated funds for internal processes to collect and analyze data rather than purchase Robinson Nursing Program Data Tracker (Feb 17, 2012) 2 members of the research team undertook SPSS training Preliminary data mining has taken place, with continued plans for data analysis over the upcoming months Preliminary statistical analysis completed with continued plans for data analysis over the upcoming months 							

Project Activity	Required Action/Description	Status	Notes
Triangulate data from quantitative and qualitative	 Work with qualitative and quantitative data analysis results to determine: The potential for generating further insight through the development of additional questions/hypotheses to be tested (i.e., additional data runs based on newly developed indicators) The potential to create a meaningful composite analysis (numbers and story) providing insight into the behaviours and performance of students undertaking PN-BScN bridging 	Partially completed with additional data mining to continue through phase 2	 The qualitative and quantitative data cannot be "triangulated" in the traditional sense in that the data sources are not completely common. Each presents a "snapshot" of student behaviours and performance in our bridging program. Looking at the data in a composite way led us to ask directed questions around supports and barriers when we collect data in Phase 2 of this study. In particular, we will be examining in more specific terms financial implications of undertaking this educational program, and the importance of elements such as workplace supports, academic supports, and social support.
Report to CUCC	 Provide a full report to CUCC based on defined deliverables, including at minimum cross-comparisons looking at: Comparative entrance GPA and ongoing program GPA Range of transfer credit granted to students (standard credit built into program, additional transfer review) Range of time for program completion Rate of graduation/attrition Impact on success indicators of time between completion of college program and start of bridging program Impact of demographic factors/life circumstances on successful transition (i.e., work/family responsibilities, previous university experience, English as a second language, type/length of college program completed) Student perception of preparedness for, transition into, barriers within, and impact of entering the program. 	Completed- report provided March 28, 2012 See Tables 3-17	 Approval received from CUCC for an extension on our reporting deadline until March 28, 2012 (Mar 13, 2012) See Tables 3-17 for summary of data analysis with interpretation of findings and suggestions for next steps

Overview of the RPN-BScN Bridging Program

In order to appreciate the results of the data analysis presented in this report, it may be helpful to have some familiarity with the history and structure of the Collaborative RPN-BScN program offered by the University of Ontario Institute of Technology (UOIT) in collaboration with Durham College (DC) and Georgian College (GC). This is the longest running RPN-BScN bridging program in Ontario, beginning in September of 2005 with an initial intake of 35 students. From 2005 through 2008, this program was offered collaboratively by UOIT and DC, with face to face classes held on the shared UOIT/DC campus in Oshawa. In 2009, GC joined the collaboration, and we began offering the program on the GC Barrie campus as well. In 2009, the RPN to BScN Program received a full seven year accreditation through the Canadian Association of Schools of Nursing (CASN).

Students apply to the program through the Ontario University Admissions Centre, designating whether they are applying for the Durham or Georgian site. All courses in the program, including the "bridge" term, are offered at the university level. Two different models for this "bridge" term have been piloted. The first model involves offering all 3 required bridge courses (nursing bridge, science bridge, and an academic writing course) in one term and the second involves extending the 3 required courses over two terms to enable students to master academic writing, a challenge identified by both students and program faculty, prior to moving into the final two required bridge courses. In order to remain in the program beyond the bridge, students must earn a minimum grade of 60% in each of these 3 required courses.

If successful in the bridge, students complete a program of study that is offered in two formats: a) full time consisting of eight consecutive semesters (course load varies from 6-15 credits in each of these terms), and b) part time, which runs over 12 non-consecutive semesters. Students at DC-UOIT's Oshawa campus take a large portion of their program in integrated classrooms with other university nursing students (collaborative BScN) and Health Sciences students from a variety of programs. Students at GC's Barrie campus take courses largely in a cohort model, with very little opportunity for integration with other nursing students or other university students. Additionally, students completing their coursework through the DC-UOIT Oshawa campus are part of the university "laptop program", where all students are required to pay a yearly laptop fee and are provided with a common model laptop for use in the program, along with extensive information technology support. There is not the capacity to currently extend this program to students taking the program at the GC Barrie campus at this time.

Students enrol in courses focused on nursing, health, and the biological sciences as well as elective courses which broaden their exposure to disciplines outside of the nursing profession. Throughout the program students are immersed in practicum courses which focus on their role transition from RPN to RN in the direct practice environments. These placements are offered in a variety of settings across the Central East Local Health Integrated Network (LHIN). An overview of the current program map (full-time progression) is provided in **Table 2**.

Year	Fall	Winter	Summer
	 HLSC 1300 Info Comm Tech NURS 0420 Nursing Bridge HLSC 0880 Science Bridge 	 HLSC 2202 Comprehensive Anatomy & Physiology HLSC 3601 Interprofessional Health Care Teams NURS 2820 Comprehensive Pharmacotherapeutics PSYC 2010 Devel Psychology Elective 	 NURS 2705 Health & Healing Child & Family Nursing Theory & Practicum
	 HLSC 2460 Pathophysiology I HLSC 3710 Ethics HLSC 3800 Statistics & CA NURS 2420 Knowledge Through Inquiry Elective 	 BIOL 2830 Microbiology HLSC 2461 Pathophysiology II HLSC 2820 Nutrition for HS HLSC 3910 Research for HCP Elective 	 NURS 3700 Health & Healing: Healthy Communities Nursing Theory & Practicum
	 NURS 4100 Nursing Leadership NURS 4700 Health & Healing: Synthesis Professional Practice Elective 	 NURS 4505 Professional Practice VIII 	

Table 2: Program Map (2011) for Full-Time Study RPN-BScN Bridging Program

Project Activity: Hire and train research coordinator and research assistants

As outlined in Table 1, set-up activities to support this 3-phase study have been accomplished, including developing job descriptions and hiring both research assistants and a research coordinator. Because the research assistants and research coordinator did not begin their roles until the first week in February, weekly hours have been adjusted very slightly to the end of the calendar year (e.g., research assistants are contracted to work 8.5 hrs per week rather than the original allocation of 8 hrs per week). This will have no net impact on the overall budget request for salaries for research assistants or research coordinator for the duration of the project. Space has been allocated in the UOIT Faculty of Health Science for a research office for this project until January, 2013.

Project Activity: Undertake qualitative data analysis from student focus group data

Between 2008 and 2009, focus groups were held with 110 students enrolled in this program at the DC-UOIT Oshawa campus. Data was collected to determine student perceptions of the program, facilitators and barriers, as well as transition into the program and role transition. This focus group data was transcribed and analyzed (basic thematic analysis) using Nvivo software. Responses were coded and themes were identified and collapsed to three levels of abstraction. **Table 3** provides an overview of the themes that were identified. **Table 4** provides a more detailed overview of themes identified at each level of analysis.

It is important to note that while this data analysis provided us with some important insight into student perceptions, the quality of the data, initially collected for program evaluation purposes as opposed to in-depth qualitative analysis, was such that we plan to continue this area of exploration over the next 24 months with current students.

Finally, through dialogue and reflection on student responses, identification of patterns and emerging themes, and exploration of experience with RPN-BScN students over the past 7 intakes of the program, the research team has suggested the following over-arching transition description:

Transition into the RPN-BScN program is characterized by a process of progression from being: a) reactive/resistant, to b) responsive, to c) proactive.

As a result of the identification of this possible descriptive statement, future plans to undertake qualitative research using grounded-theory methodology to determine the basic sociological process of role transition for RPN-BScN students are under development.

Table 3: Overview of Themes Related to RPN-BScN Student Perceptions of theirExperience of the Program

Research Question	Analysis to 3 Levels of Abstraction						
What is the student perception of	Students perceive they enter the program:						
preparedness for the program?	a) familiar with content they expect to encounter, but						
	b) upprepared for the demands of a university						
	program and sometimes the "actual" focus of						
	learning						
What is the student perception of	Transition is characterized by:						
transition?	a) frustration, often rooted initially in resistance to						
	accepting new expectations						
	 b) challenges associated with finances, logistics, and work-life balance 						
	c) internalization of university expectations and						
	associated sense of accomplishment						
	d) newfound appreciation for not only expecting						
	flexibility, but being flexible						
	e) role transition that is most apparent to students in						
	practicum or workplace settings						
What do students perceive as	Student perceptions of facilitators included:						
facilitators?	a) support within the program (from faculty and						
	peers)						
	b) academic resources and components						
	c) the design of the courses and program						
W/bet de studente regesius es	d) communication of clear expectations						
what do students perceive as	student perceptions of barriers included:						
barriers?	a) initialitia inipilitations b) workload						
	c) lack of flexibility						
	d) associated requirements (e.g., transportation and						
	technology)						
	e) challenges associated with developing a peer						
	support network to meet academic and personal						
	needs						
What do students perceive the	Students perceive entering the program to have:						
impact to be of entering the	a) positively impacted their experience of their nursing						
program on multiple dimensions of	practice (new opportunities, new knowledge, and						
their lives?	newfound confidence and professional impact);						
	b) negatively impacted their financial situation; and						
	c) led to a general change in the source of social support						
	from outside the program to within the program						

Table 4: Qualitative Analysis of Student Perceptions of Preparedness for, Transition into, Barriers and Facilitators within, and Impact of Entering the Program

Deliverables	Questions from focus	Themes (nodes) identified	Collapsed to (i.e., 2 nd	3 rd level of abstraction		
	groups		level of abstraction)			
Student perception of preparedness for the program	How well did you feel prepared for the program	 Generally well-prepared (particularly DC) – but that presents an issue of overlap and frustration Unprepared for workload Unprepared for level of difficulty and marking compared to college and high school Unprepared for online learning Unprepared for scholarly writing Unprepared for university workload and courses 	 Academically prepared in terms of familiarity with content [1] Unprepared for university standards (including scholarly writing) [3,5] Unprepared for University workload [2,6] 	Students perceive they enter the program: a) familiar with content they expect to encounter, but b) unprepared for the demands of a university program and sometimes the "actual" focus of learning		
Student perception of transition	Think back to your first few weeks in the program, what was your first impression?	 Challenge to balance work, life and school Not everything learned seemed applicable to practice Challenging commute Challenging workload Concerns regarding scheduling and timing of courses Course placement concerns Different expectations 	 Challenges associated with logistics of going back to school [3,5,6,10] Challenges associated with university level expectations and requirements [2,7, 15] 	Transition is characterized by: a) frustration, often rooted initially in resistance to accepting new expectations b) challenges associated with finances, logistics, and work-life		

8. 9. 10. 11. 12. 13. 14. 15. 16. 17. How has your first impression changed during your first semester? 19. 20. 21. 22. 23.	 between conege and university Financial challenges and concerns about value for money Lack of communication about and within the program Lack of flexibility Frustration with laptops Overall frustration Overwhelming Review/overlap with previous learning Scholarly writing an issue Smaller than expected class size Well-organized Able to bring new knowledge and skills into practice Feeling of accomplishment No change More difficult than initially anticipated Learning to balance work and life 	•	challenges to balance work, life, and school workload [1,4] Financial challenges and concern over value for money [8,11] Frustration (communication, laptops, general, repetition)[9,11,12, 14] Transition to understanding of university focus and expectations [16,17,21,23,25,26,2 8,29] Sense of accomplishment [19] Role transition occurs in practicum and when RPN returns to	c) d) e)	internalization of university expectations and associated sense of accomplishment newfound appreciation for not only expecting flexibility, but being flexible role transition that is most apparent to students in practicum or workplace settings
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		 26. Recognizing the required preparation for upcoming courses 27. Scheduling and convenience 28. Scholarly writing 29. Skills based learning vs theory 	work and life (both students and the program are learning to do this) [22,24,27]	
	Are you feeling and/or seeing a role transition from RPN to RN? How and why?	30. Role transition experienced in clinical31. Greater use of knowledge to support practice32. No change in skills		
Student perception of facilitators	What did you like best about your first year in the RPN to BScN program?	 Academic success centre Clear expectations Focus on transition Group work Laptops Peer support Being respected as an RPN Course scheduling Science courses Support from professors Consideration in the program for balancing work and life Facilities Learning and new learning Participation marks Pediatric placements Small assignment weighting 	 Clear expectations [2] Academic resources, components [1,5,9,12,14] Support within the program [6,7, 10,11] Academic focus & structures – design of courses and program [3,4,8,9,13,15,16] 	 Student perceptions of facilitators included: a) support within the program (from faculty and peers) b) academic resources and components c) the design of the courses and program d) communication of clear expectations

Student perception of	What barriers can we	1.	Extra tuition frees (ancillary,	٠	Financial barriers and	Studer	nt perceptions of
barriers	help to eliminate to		laptop, etc)		value for money	barrier	s included:
	make completing the	2.	Accommodation for off-		[1,17]	a)	financial
	first year of the		campus testing	•	Perception of lack of		implications
	program easier (access	3.	Accommodation for working		flexibility [2,3,4,19]	b)	workload
	to the program,		RPNs	•	Workload [5,23,25]	c)	lack of flexibility
	transportation issues,	4.	Flexibility/availability of	•	Transportation[7,2,	d)	associated
	balancing work/home		courses		19]		requirements
	life, etc)?	5.	Workloads	•	Technology [6,16]		(e.g.,
		6.	Computer incompatibilities	•	Academic challenges		transportation
		7.	Transportation		including diversity in		and technology)
		8.	Managing group work		university	e)	challenges
					expectations and		associated with
					college preparation		developing a peer
	What did you like least	9.	Academic writing		[9,10,12,13,20,21,22,		support network
	about your first year in	10.	Lack of timely feedback		24]		to meet academic
	the RPN to BScN Bridge	11.	Group work	•	challenges associated		and personal
	program?	12.	Inconsistency in diploma		with developing peer		needs
			program preparation		support system		
		13.	Inconsistent expectations		[11,14,18]		
			from professors				
		14.	Lack of familiarity with other				
			students				
		15.	Lack of preparation for clinical				
		10	placement				
		16.	Laptops				
		17.	Minimal use of required texts				
		18.	Negative peer comments				
		19.	Lack of placement flexibility				
		20.	Plaglarism anxiety				
		21.	Presentations				
		22.	Repetition in content				

Student perception of impact of entering the dimensions of their livesIn what way is your life different because of your participation in the program?1. able to accomplish academic goals• academic accomplishment[1]Students perceive entering the program on multiple dimensions of their lives• academic accomplishment[1]Students perceive entering the program?Image: Note their livesIn what way is your life different because of your participation in the program?1. able to accomplish academic goals• academic accomplishment[1]Students perceive entering the program to have: a) positively impacted their experience of their nursing actionsImage: Note their livesImage: Note their lives• academic goals• academic accomplishment[1]Image: Note their livesImage: Note their lives• academic goals• academic accomplishment[1]Image: Note their livesImage: Note their lives• academic goals• academic accomplishment[1]Image: Note their livesImage: Note their lives• academic accomplishment[1]• application of new knowledge to practice [2,3]Image: Note their livesImage: Note their lives• new job• new practice responsibilities• new practice responsibilities• new found confidence and responsibilitiesImage: Note their livesImage: Note their lives• new found confidence and responsibilities• new found confidence and responsibilitiesImage: Note their livesImage: Note their lives• new found confidence and responsibilities• new found confidence and <b< th=""><th></th><th></th><th></th><th></th><th></th></b<>					
program on multiple dimensions of their livesyour participation in the program?2.deeper understanding of use of theory in practice• application of new knowledge to practicehave: a) positively impacted their3.knowledge to understand nursing actions• application of new knowledge to practicehave: a) positively impacted their4.new job• new job• new practice opportunities and responsibilities• new practice (1,3)5.more responsibilities 6.• greater ability to work in[4,5,6,7,11]• newfound confidence and	Student perception of impact of entering the	In what way is your life different because of	 23. Schedule and workload 24. Weighting of course work 25. Workload 1. able to accomplish academic goals 	academic accomplishment[1]	Students perceive entering the program to
 selected practice settings 7. able to work in a field I love 8. able to impact others at work 9. increased confidence 10. increased social support from program 11. now planning for my nursing future 12. more financially stressed 13. change in location of residence 14. loss of all social life increased confidence increased confidence increased confidence increased confidence increased confidence increased social support from program 11. now planning for my nursing future 12. more financially stressed 13. change in location of residence 14. loss of all social life 	program on multiple dimensions of their lives	your participation in the program?	 deeper understanding of use of theory in practice knowledge to understand nursing actions new job more responsibilities greater ability to work in selected practice settings able to work in a field I love able to impact others at work increased confidence increased social support from program now planning for my nursing future more financially stressed change in location of residence loss of all social life 	 application of new knowledge to practice [2,3] new practice opportunities and responsibilities [4,5,6,7,11] increased confidence and influence in practice [8,9] financial stress[12] gain in social support within program[10] loss of social support outside of program [14] 	have: a) positively impacted their experience of their nursing practice (new opportunities, new knowledge, and newfound confidence and professional impact), b) negatively impacted their financial situation, and c) led to a general change in the source of social support from outside the program to within the program.

Project Activity: Undertake quantitative data analysis based on student tracking

The data results provided in this section of the report should be considered preliminary only. Even as such, many very interesting and likely significant findings are emerging. However, given the time required to do justice to the quantity of data that must be analyzed and the gaps in data that require manual verification through multiple offices at the university (including seeking archived documents stored at an off-site location), we will be providing largely descriptive analysis in this report, with more systematic and sophisticated statistical analysis to follow with our Phase 2 report (June 30, 2012).

<u>Enrolment</u>

To date, we have admitted 432 students to the program through 7 program intakes. Of these, 299 were admitted to take classes at the DC-UOIT Oshawa campus (including 14 students from the Lindsay area who completed practicum courses in their home community), and 119 were admitted to take classes at the GC Barrie campus. Annual enrolment in this program has grown steadily since its inception in 2005, now accounting for approximately 42%-45% of total nursing student enrolment annually. Please see **Table 5** for a summary of this data.

Table 5: Enrolment									
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nursing (Collaborative)	145	120	123	100	112	101	121	122	112
Nursing (RPN-BScN) Oshawa			36	34	31	39	55	52	52
Nursing (RPN-BScN) Georgian							44	38	37
Nursing (RPN-BScN) Lindsay						14			
Total	145	120	159	134	143	154	220	212	201
RPN-BScN students as % of			220/	350/	220/	3 4 6 /	450/	400/	
total nursing admits			23%	25%	22%	34%	45%	42%	44%

Additionally, it's relevant to consider the enrolment pattern for RPN-BScN students in comparison to collaborative students, and specifically, full-time vs part-time study options.

Table 6 provides a summary of full-time and part-time enrolment in all nursing programs since 2003. Because of the program design, for intakes in 2005, 2008 (Lindsay cohort), 2009, and 2010, the first two terms of their program of study (the 'bridge') were offered only on a part-time basis as the program was piloting a model whereby the academic writing course was offered as a stand-alone course prior to undertaking the rest of the bridging course. This circumstance impacts the distribution of full-time to part-time status. However, not surprisingly, the distribution of students completing part-time program options in the RPN-BScN program varies dramatically from that of the collaborative program.

	20 20	03-)04	200 200)4-)5	2005	-2006	2006	-2007	2007	-2008	2008	-2009	2009	-2010	2010	-2011	2011-	2012	2012	-2013
Program	FT	РТ	FT	РТ	FT	РТ	FT	РТ	FT	РТ	FT	РТ	FT	РТ	FT	РТ	FT	РТ	FT	РТ
Nursing (Collaborative)	144	1	247	4	356	3	429	7	415	12	420	10	433	11	449	8	443	12	440	12
Nursing (RPN- BScN) Oshawa					3	33	51	17	78	17	88	17	57	66	55	72	106	34	111	35
					8%	92%	75%	25%	82%	18%	84%	16%	46%	54%	43%	57%	76%	24%	76%	24%
Nursing (RPN) Georgian													1	38	32	37	86	5	98	6
													3%	97%	46%	54%	94%	6%	94%	6%
Nursing (RPN) Lindsay											1	13	1	6	1	6	5		4	0
											7%	93%	14%	86%	14%	86%	100%		100%	
Nursing (Post- RN)							4	9	1	7		11		4		2		3	0	2
Grand Total	144	1	247	4	359	36	484	33	494	36	509	51	492	125	537	125	640	54	653	55
Total	14	45	25	1	3	95	53	17	53	30	56	50	61	17	6	52	69	4	70	08
% FT	99.	.3%	98.4	4%	90	.9%	93.	6%	93.	2%	90.	9%	79.	7%	81.	1%	92.2	2%	92.	2%
%РТ	0.	7%	1.6	%	9.	1%	6.4	4%	6.8	8%	9.:	1%	20.	3%	18.	9%	7.8	%	7.8	8%

Table 6: Official HEADCOUNTS

Entrance GPA and Ongoing Program GPA

Analysis of entrance and ongoing program GPA provides important insight into student performance in this program. Entrance GPA going back to 2005 requires some additional data location and will be analyzed along with our Phase 2 findings in our June report. Table 7 provides a summary of RPN-BScN student performance in required courses compared to collaborative BScN student performance in the same courses. The results of this analysis are extremely significant, given the continued resistance in some circles to seeing RPN-BScN bridging students as academically equivalent to collaborative BScN students. To the contrary, this data reveals consistently, over 7 years, that the RPN-BScN bridging students perform not only at a comparable level, but in almost all cases at a significantly superior level. Of interest, and worthy of further investigation, is the fairly weak difference seen in relation to HLSC 3710 (ethics) and NURS4100 (leadership). These are arguably the two courses with the greatest degree of practice exposure in 'informal' ways for the RPN-BScN bridging students. Determining if there is a relationship between what RPNs learn about ethics and leadership in their practice experience and their performance in these academic content areas will be important. It may enable us to tailor our approach to more effectively help students not only to learn new material, but also to unlearn old ideas. Since the first graduating class of RPN-BScN bridging students in 2008, on two occasions (i.e., 2 out of 4 possible years) graduates of this program have been awarded the Faculty Medal for the highest grade point average throughout the entire Health Sciences Faculty.

PNs								
Subject	Course	2006/07	2007/08	2008/09	2009/10	2010/11	2011	Total
HLSC	2460U	2.75	2.87	2.90	2.99	2.92	2.87	2.89
	2461U	2.92	3.13	3.03	2.91	3.15	1.89	3.01
	3710U	2.56	2.83	2.92	2.98	2.96	2.96	2.89
	3800U	2.80	2.92	2.94	2.89	2.85	2.95	2.90
	3910U	3.19	3.06	3.13	3.15	3.20	2.80	3.15
NURS	2420U			2.99	3.04	2.88	3.03	2.98
	4100U		3.02	3.43	3.58	3.17	3.07	3.22
Total		2.82	2.97	3.04	3.06	3.00	2.96	2.99

Table 7: Comparative GPA

Collaborative Nursing

Subject	Course	2006/07	2007/08	2008/09	2009/10	2010/11	2011	Total
HLSC	2460U	2.53	2.62	2.59	2.72	2.79	2.70	2.67
	2461U	2.75	2.81	2.80	2.78	2.92	2.36	2.77
	3710U	2.57	2.75	2.60	3.06	2.95	2.84	2.89
	3800U	2.63	2.76	2.46	2.90	2.91	2.77	2.84
	3910U	3.04	2.86	2.89	3.02	3.38	3.77	3.07
NURS	2420U			2.67	2.69	2.71	2.77	2.71
	4100U	3.21	3.04	3.33	3.39	2.97	3.08	3.16
Total		2.77	2.80	2.77	2.90	2.93	2.80	2.86

Range of Transfer Credits

Students entering the RPN-BScN bridging program are currently granted 33 block transfer credits for their 2 year RPN diploma. However, in the first few intake years of the program, they received 30 transfer credits. Residency requirements at UOIT stipulate that students must earn a minimum of 50% of the credits counted toward their degree at UOIT (i.e., 60 transfer credits would be the maximum allowable to meet residency requirements). The overall range of transfer credits that was granted to students was 30-54. The mean was 35.1, the median was 33, and the mode was 33. **Table 8** provides a summary of the range of transfer credits granted across all 7 years of the program. While data is only currently available for 406/434 students, analysis of basic trends is valuable and ongoing data searching will continue. However, the data presented in Table 6 is very revealing in terms of transfer credits. Given that the minimum amount of transfer credit over the entire duration of the program is 30, and currently the standard amount is 33, it's reasonable to conclude that the majority of students are granted only the standard entrance block transfer credit amount, with potentially 3 or 6 additional credits.

Table 8: Transfer Credits		
Credit Hours	Number of Students	% of students (total 406 reported)
30	58	14%
33	194	48%
36	63	16%
39	13	3%
42	18	4%
45	44	11%
48	11	3%
51	3	1%
54	2	<1%
Missing data	28	7%

When we consider the data around transfer credits, it would be important to determine if the degree of transfer credit awarded was a predictor in any way of likelihood of successful completion of the program. While not able to answer this question with certainty at this time, we can provide relevant descriptive data. For the 97 students who graduated from the program from intakes 2005-2007 for whom we have transfer credit data, the average credit transferred was 33.51 (range 30-54). For the 19 students from these intake years who have not completed the program, the average credit transferred was 31.2 (range 30-36).

In examining the data, the research team was interested in considering if previous university exposure might have any impact on success in the bridging program. Descriptive statistics will be provided in this

report, while more extensive statistical analysis of this question will be included in our Phase 2 report (June 2012). In order to examine this question, we looked at data for students admitted from 2005-2007 (these groups would be most likely to have graduated at this point even if on a part-time program of study). **Table 9** provides a summary of this information. Of the 100 students who were admitted in the first 3 intakes, 37 had previous university exposure. Of these 37, only 3 of these students did not complete the program (**92% success rate**). Of the 58 students with no previous university exposure, 14 did not complete the program (**76% success rate**).

Table 9: Previous University Exposure

	Total #	# completed program	# did not complete program	Success rate
Previous university exposure	37	34	3	92%
No previous university exposure	58	44	14	76%
No information	5	3	2	60%

Rate of Graduation/Attrition

<u>Table 10</u>, <u>Table 11</u>, and <u>Table 12</u> provide summarized data around retention and graduation rates. It is interesting to note that for years where we have relatively complete data sets (intakes from 2005-2007 with some partial data for 2008), the graduation rate for RPN-BScN students is generally higher than that for collaborative nursing students (see <u>Table 10</u>). However, the attrition rates for 2nd year are much higher for the RPN-BScN students than for the collaborative nursing students. Given that the RPN-BScN program is a 3 year program as opposed to a 4 year program, more detailed analysis of this data will continue to determine if we are able to more clearly identify trends in retention that are suitable for meaningful comparison.

Table 10: Graduation Rate						
	2003	2004	2005	2006	2007	2008
Nursing (Collaborative)	81%	69%	71%	71%	65%	
Nursing (RPN-BScN) Oshawa			83%	71%	81%	28%
Nursing (RPN-BScN) Lindsay						7%
Grand Total	81%	69%	74%	71%	69%	8%

Table 11: 1st Year Retention Rates								
	2003	2004	2005	2006	2007	2008	2009	2010
Nursing (Collaborative)	87%	93%	88%	96%	95%	91%	92%	98%
Nursing (RPN-BScN)Oshawa			94%	91%	90%	87%	93%	92%
Nursing (RPN-BScN) Georgian							89%	92%
Nursing (RPN-BScN) Lindsay						50%		
Grand Total	87%	93%	89%	95%	94%	86%	82%	85%

Table 12: 2nd Year Retention Rates

	2003	2004	2005	2006	2007	2008	2009
Nursing (Collaborative)	84%	88%	86%	89%	91%	89%	88%
Nursing (RPN-BScN) Oshawa			92%	88%	84%	72%	64%
Nursing (RPN) Georgian							61%
Nursing (RPN-BScN) Lindsay						50%	
Grand Total	84%	88%	87%	89%	90%	81%	77%

Range of Time for Program Completion

This program is offered on either a full-time or part-time basis to students applying to the DC-UOIT Oshawa campus. Initially students completing the program at the GC Barrie campus were only offered a full-time option, however there is now greater potential to move to part-time programs of study as needed for this group of students as well. The program has thus far graduated 100 students, with 38 more students on track to complete their program of study in May 2012 (14 from the DC-UOIT Oshawa campus and 24 from the GC Barrie Campus). Table 13 provides a summary of the years to completion for the 100 students who have graduated from the program as well as the 38 students on track to graduate in May 2012. The overall mean time for completion for all students who have graduated was 3.2 years, the median and mode were both 3 years. While program regulations allow for students to complete the program in as long as 7 years, no student has thus graduated from the program after taking longer than 5 years to complete it. Further analysis will continue into Phase 2 of this study, but it is worth noting that while there is high attrition rate overall in this program compared to the collaborative BScN program, possible differential attrition between the cohort model and the integrated model requires exploration. Additionally, more extensive statistical analysis to uncover impact on success indicators (i.e., completion of the program, ongoing program cumulative GPA, etc.) will continue into Phase 2 of the project.

Table 13: Time to Completion

Table 10: Time to Completion of the BScN Degree

	# who		Range of			Mean
	have	Graduation	time to	Raw	Distribution	Wean
Admission Year	araduated	rate	araduation	Distribution	as a %	
	gradatoa		gradation	3 vrs-22		
				students	73%	
				4 vrs-4	10/0	
				students	13%	
			3-5 vrs	5 vrs-4		
2005	30	83%	, , , , , , , , , , , , , , , , , , ,	students	13%	3.4 yrs
			3-5 yrs	3 yrs–21		, ,
			,	students	88%	
				4 yrs –1		
				student	4%	
				5 yrs–2		
2006	24	71%		students	8%	3.2 yrs
			3-4 yrs	3 yrs–21		
				students	78%	
	25		(5 yr # is	4 yrs–4		
		81%	based on	students	15%	
	(+ 2		anticpated	_		
	scheduled	(anticipated	graduation	5 yrs		
0007	for May	87% as of	for May	anticipated – 2	70/	0.0
2007	2012)	May 2012)	2012)	students	1%	3.3 yrs
				3 yrs- 11		
				students		
	11			4 yrs		
				anticipated – 6		
	(+ 6			students		
	scheduled	Not vet	Not vet	Not vet	Not vet	Not vet
	for May	accurately	accurately	accurately	accurately	accurately
2008	2012)	reportable	reportable	reportable	reportable	reportable
	,	•	Not yet	3 vrs- 1 student	- '	
			accurately	4 vrs - 0		
			reportable	students		
		Not vet		Not vet	Not vet	Not yet
2008 (Lindsay		accurately		accurately	accurately	accurately
cohort)	1	reportable		reportable	reportable	reportable
		Not yet	Not yet	3 yrs	Not yet	Not yet
		accurately	accurately	anticipated -	accurately	accurately
2009 (Oshawa)		reportable	reportable	13 students	reportable	reportable
		Not yet	Not yet	3 yrs	Not yet	Not yet
		accurately	accurately	anticipated -	accurately	accurately
2009 (Georgian)		reportable	reportable	24 students	reportable	reportable

Note: Blue represents complete data, pink anticipated or incomplete data

Demographic Factors and Life Circumstances

Determining the impact of demographic factors and life circumstance on student performance and behaviours in the program will require continued examination and the opportunity to fill in missing data. It is possible, however, to provide "snapshots" of student admitted to the program in this report. **Table 14** provides a summary of student data related to age at which they were admitted to the program. For the 268 students for whom we have this data, age range was 20-56 years, with a mean age of 33.3 years, median 33, and mode 22. Ongoing data collection will continue to attempt to fill any data gaps and Phase 2 data collection includes age as a demographic characteristic.

Table 14: Age			
Age Category	Number of Students	# who completed the program	% of this age category who completed the program to date
Under 25	58	20	34%
25-29	44	10	23%
30-34	43	2	5%
35-39	51	10	20%
40-44	43	8	19%
45-49	17	2	12%
50+	12	0	0%
total reported	268	52	
Missing data	164	48	

<u>**Table 15**</u> provides a summary of data related to student gender. The data is not complete enough to draw any conclusions to overall nursing program admission representations generally presented in the literature (male students are generally reported to comprise approximately 6-12% of students enrolled in nursing programs across North America). Ongoing data collection will continue to attempt to fill any data gaps and Phase 2 data collection includes gender as a demographic characteristic.

Table 15: Gender			
Gender	Number of Students	# who completed the program	% of this gender category who completed the program to date
female	248	51	21%
male	20	1	5%
total reported	268	52	
Missing data	164	48	

Table 16 provides a summary of data related to marital status. The data is not complete enough to draw any conclusions. Ongoing data collection will continue to attempt to fill any data gaps and Phase 2 data collection includes marital status as a demographic characteristic.

Table 16: Marital Stat			
Marital Status	Number of Students	# who completed the program	% of this marital status category who completed the program to date
Single	139	34	24%
married	127	16	13%
total reported	266	50	
Missing data	166	50	

Table 17 provides an overview of available data around location of residence for the RPN-BScN students. Ongoing data collection will continue to attempt to fill any data gaps and Phase 2 data collection includes location of residence and travel time as demographic characteristic.

Table 17: Location of Residence							
		# who	% of this category				
	Number of	completed the	who completed the				
Location	Students	program	program to date				
Cornwall	3	2	67%				
Dufferin County	7	0	0%				
Durham	53	8	15%				
Grey County	8	3	38%				
Halton Region	2	1	50%				
Hastings County	5	3	60%				
Kawartha	7	2	29%				
Northumberland	4	1	25%				
Parry Sound	3	1	33%				
Muskoka	4	2	50%				
Peel Region	24	1	4%				
Peterborough	7	3	43%				
Simcoe County	30	1	3%				
Toronto	55	9	16%				
Waterloo	9	5	56%				
Wellington County	3	0	0%				
York Region	18	3	17%				
Out of Province	2	0	0%				
Other	20	6	30%				
total reported	268	52					
Missing data	164	48					

Project Activity: Triangulate data from quantitative and qualitative sources

Data analysis and comparison will continue through Phase 2 of this study. This report has provided important and insightful observations about key elements of RNP-BScN bridging students in our program. Continued data mining and analysis will no doubt allow us to uncover relationships between factors at a more sophisticated statistical level.

Project Activity: Report to CUCC including financial reporting

Please find attached the financial reporting for this project. A pdf of the signed version of this document will be transmitted electronically along with this report. As per our communication from CUCC on March 13, 2012, funds allocated to Phase 1 of this project but not yet spent will be carried over to Phase 2. If you would like us to provide an updated budget to reflect this, we would be happy to do so. The research team is delighted with the progress we have made on this ambitious project. Data collection and analysis to uncover more detailed relationships between variables identified in this report will continue and be reported on again with the Phase 2 report.