



CASN 2010 ENVIRONMENTAL SCAN  
ON DOCTORAL PROGRAMS  
SUMMARY REPORT



NOVEMBER 2010



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## **Acknowledgements**

**CASN would like to acknowledge the Office of Nursing Policy and thank them for their support of this project and its goals.**

**We would also like to thank all of our member schools who took part in the survey and the Doctoral Forum in May 2010.**



## Introduction

The concept for this project emerged during discussions at the 2009 CASN Graduate Studies and NP Educators Forum, where participants identified a need for data on current doctoral programs in nursing in Canada to inform the development of a national vision of doctoral education for nurses. To this end, CASN conducted a survey on current practices and program delivery modalities among the 15 nursing based doctoral programs across the country. The CASN Doctoral Forum Environmental Scan was sent electronically to each of the schools of nursing offering a doctoral program.

A preliminary report providing data on the programs who had responded prior to the May 27, 2010 Doctoral Forum was presented to the participants.

The CASN Doctoral Forum Environmental Scan (Appendix A) was sent to all 15 of the Doctoral Nursing Programs currently available in Canada. Of the 15 programs, 13 programs had responded as of October, 2010. This represents a response rate of 87%.

The following report is a compilation of the data received and has been prepared for dissemination at the November 2010 Graduate Studies and NP Educators Forum.

The overall aim of the survey was to provide information to CASN member schools about currently available doctoral programs in Canada and inform the development of new programs. The objectives were to:

- Increase understanding of human resources related to doctoral nursing education in Canada.
- Inform discussion at the CASN Graduate Studies and NP Educators Forum 2010.
- Inform decisions related to the expansion of current programs and institution of new programs.
- Provide an inventory of doctoral nursing programs in Canada.

## Findings on Doctoral Nursing Programs in Canada

- There are currently 15 doctoral programs in nursing being offered by Canadian universities.
- There is at least one doctoral nursing program located in each of the following provinces: British Columbia, Alberta, Saskatchewan, Ontario, Quebec and Nova Scotia.
- Manitoba, New Brunswick, Newfoundland, PEI, NWT, Yukon and Nunavut do not currently have a doctoral program in nursing in any of their universities.

**Figure 1**

### Doctoral Programs in Nursing in Canada

	Doctoral
Dalhousie University	✓
McGill University	✓
Université Laval	✓
Université de Montréal	✓
Université de Sherbrooke	✓
McMaster University	✓
Queen's University	✓
University of Ottawa / Université d'Ottawa	✓
University of Toronto	✓
University of Western Ontario	✓
University of Saskatchewan	✓
University of Alberta	✓
University of Calgary	✓
University of British Columbia	✓
University of Victoria	✓
<b>National Total</b>	15

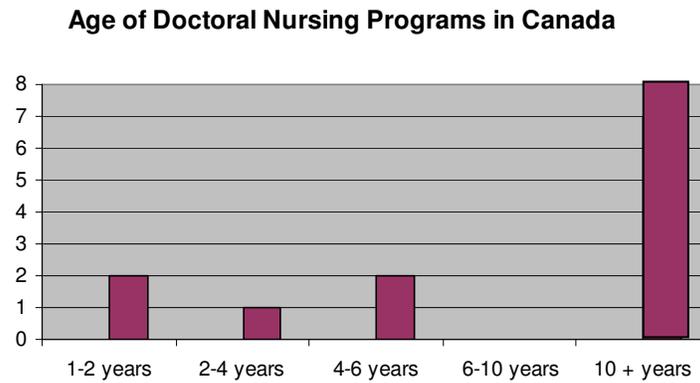
Source: The National Student and Faculty Survey of Canadian Schools of Nursing<sup>1</sup>

### Age of Doctoral Programs in Nursing

There has been a recent increase in the number of Canadian doctoral programs in nursing. Although eight of the thirteen programs who responded to the environmental scan were established over ten years ago, five were established within the last six years.

<sup>1</sup> Canadian Association of Schools of Nursing and Canadian Nurses Association, *Nursing Education in Canada Statistics 2008-2009 Registered Nurse Workforce, Canadian Production: Potential New Supply Manuscript Submitted for Publication* (Ottawa, ON: Canadian Nurses Association, 2010).

**Figure 2**



Source: Doctoral Forum - Environmental Scan 2010

### **Enrolment and Completion Rate**

- The current enrolment in doctoral programs in nursing reported by the 13 responding schools is 419.
- In 2008-2009, the total national enrolment in doctoral programs in nursing, as reported in the *Nursing Education in Canada Statistics 2008-2009 Registered Nurse Workforce, Canadian Production: Potential New Supply*, was 401.<sup>2</sup>
- The average length of time to complete a doctorate in nursing varied from 3 to 7 years: One school estimated an average of 3-4 years, one an average of 4 years, and six a completion rate between 5 and 7 years. Five were unable to identify a completion rate due to the recent implementation of the programs.
- Respondents indicated students' engagement in the workforce while enrolled in doctoral studies as a factor in lengthening the time for completion.

### **Employment Goals of Doctoral Students**

An increasing number of faculty are nearing the normal age of retirement; the age distribution has been shifting progressively towards the higher age cohorts in recent years.<sup>3</sup>

- In 2006, 7.8% of faculty were age 60 or more. By 2009, 13.7% of faculty were 60 or over (see Table 2).<sup>4</sup>
- In 2006 the faculty under age 40 represented 22.3% of the total faculty. By 2009, this number had decreased to 17.5%.

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<sup>2</sup> *Ibid*

<sup>3</sup> *Ibid*

<sup>4</sup> *Ibid*

**Table 1**

**Comparison of RN Permanent Faculty Age Cohorts between 2006 and 2009**

Age Cohort	% of RN Faculty		% of RN Faculty		% Change 2008/2009
	2006	2008	2009		
<40	22.3	19.3	17.5		-0.9
40-49	34.6	29.6	29.9		-0.1
50-59	35.2	39.1	38.96		-0.04
60+	7.8	12.0	13.7		12.4

Source: The National Student and Faculty Survey of Canadian Schools of Nursing<sup>5</sup>

In order to shed some light on what the potential supply of future nursing faculty might be, we asked schools to identify the employment goals of their students.

**Table 2**

**Employment Goals**

<i>Practice</i>			<i>Academic</i>			<i>Other</i>		
Most	Some	Few	Most	Some	Few	Most	Some	Few
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>
			<input checked="" type="checkbox"/>					
			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
0	6	3	12	1	0	1	2	2

Source: Doctoral Forum - Environmental Scan 2010

- As shown in Table 2, the schools who responded indicated that the majority of students enrolled in a doctoral program plan on a career in academia.
- A smaller portion plan on a career path in a practice setting.

<sup>5</sup> *Ibid*

## Indicators of Increased and Decreased Demand for Doctoral Programs

In order to inform the discussion of capacity building, the Doctoral Forum Working Group asked schools to identify indicators of increasing and decreasing demand for doctoral education in nursing.

### Indicators of Increased Demand

Figure 3

#### Indicators of Increased Demand

<b>N</b>	<b>Themes</b>
13	Increase in inquiries
5	Increase in the number of international inquiries
6	Increase in faculty positions
2	Other (e.g. master's students continuing through PhD program with same supervisor, student success rate after graduation)

Note: Some schools identified multiple themes  
Source: Doctoral Forum - Environmental Scan 2010

- All respondents identified an increase in the number of inquires as a key indicator of demand.
- Inquiries from international students were also identified as indicative of increased demand.
- Six (46%) of the respondents identified an increase in positions for faculty as an indicator of increased demand.

## Indicators of Decreased Demand

Equally important as indicators of demand for informing the discourse on doctoral capacity in Canada is recognition of indicators of decreasing demand.

- Six (46%) of the respondents identified requests for programs other than those they currently offer as indicators of decreasing demand.
- Six (46%) respondents identified a decrease in applications as a key indicator of decreasing demand.
- Two (15%) identified a lack of funding for PhD students as a key indicator of decreasing demand.

**Figure 4**

### Indicators of Decreased Demand

N	Theme
2	Limited funding for PhD students
6	Decline in applications
6	Requests for programs/program specialties that are not offered

Note: Some schools identified multiple themes  
Source: Doctoral Forum - Environmental Scan 2010

## Doctoral Delivery Models

The following outlines current delivery models at the Schools who responded to the scan. The following definitions of the delivery models were used:

**Interdisciplinary program:** integrates graduate courses from several academic units to provide a sound foundation for research leading to a dissertation.

**Fast-track:** fast-track programs allow students to move from a master's to a doctoral program in nursing before completion of the master's program.

**Distance delivery:** programs offered entirely electronically or in a blended model that incorporates online and face-to-face delivery.

**Residency based:** the resident is supported by a mentor over the course of their learning experience.

**Collaborative:** collaboratively articulated, integrated or harmonized programs at multiple sites – and with various linkages among institutions.

**Other:** programs that do not fit in any of the preceding four categories.

**Table 3**

**Delivery Models of Doctoral Programs in Nursing**

<i>Interdisciplinary</i>	<i>Fast-tracking</i>	<i>Distance delivery</i>	<i>Residency based</i>	<i>Collaborative</i>	<i>Other</i>
Y	N	Y	Y	N	N
N	Y	N	Y	N	<i>full-time only</i>
N	N	N	Y	N	N
N	Y	N	Y	N	N
Y	Y	N	Y	Y	N
Y	N	N	Y	N	N
N	N	Y	Y	N	N
N	N	N	Y	N	N
N	Y	N	Y	N	N
Y	Y	Y	Y	N	N
Y	N	Y	N	Y	N
N	Y	Y	Y	N	N
Y	Y	Y	N	Y	N
<b>5</b>	<b>7</b>	<b>6</b>	<b>11</b>	<b>3</b>	<b>1</b>

Source: Doctoral Forum - Environmental Scan 2010

- All but two schools reported having a residency based program.
- Five (38%) schools reported having an interdisciplinary delivery model.
- Seven (54%) of the schools reported that they offer a fast-track delivery model.
- Six (46%) schools offer a distance delivery model.
- Three (23%) of the schools provide a collaborative Doctorate.

**Program Strengths**

Schools were asked to identify their strengths.

- All respondents identified the quality of their program and their responsiveness to student requests as a strength.
- Three (23%) identified small class size as a strength.
- Two (17%) identified having international students enrolled in the program as a strength.

**Figure 5**

**Program Strengths**

<b>N</b>	<b>Theme</b>
17	Quality of the program and responsiveness of the program delivery i.e. listening to the wants/needs of the students in determining subject matters and course delivery
3	Small class size
2	International students

Note: Some schools identified multiple themes  
 Source: Doctoral Forum - Environmental Scan 2010

## Program Challenges

- Eight (67%) of respondents identified the lack of funding for PhD students as a challenge in their program, as it leads to students working in the practice setting, often full-time, while they are trying to complete their doctorate.
- Six (46%) identified the application of distance delivery model as a challenge. (NOTE: the same number of respondents who offer distance programs as identified them as a challenge)

**Figure 6**

### Program Challenges

<b>N</b>	<b>Theme</b>
6	Challenges with distance delivery
8	Insufficient funding leads to PhD students continuing to work through full time program
1	Requests for programs/program specialties that are not offered
3	Limited resources

Note: Some schools identified multiple themes  
Source: Doctoral Forum - Environmental Scan 2010

## Admissions Process

Schools were asked to describe their admission processes, as this directly affects the quality and caliber of the students who enter the program. Identification of both success and challenges was requested.

### Admission Success Factors

- Seven (54%) of programs identify flexible admission timelines as admission process success factors.
- Having a flexible admissions process allows students who may not be able to enter the program at the standard time (Fall) to apply for a different entry cycle.

**Figure 7**

### Admission Success Factors

<b>N</b>	<b>Theme</b>
6	Admissions interview/ review process
5	Applicant and supervisor matched prior to admission
7	Flexible admission timelines
7	Other (e.g. clear-timely processes, funding initiatives)

Note: Some schools identified multiple themes  
Source: Doctoral Forum - Environmental Scan 2010

## Admissions Process Challenges

- Seven (54%) of the respondents identified issues surrounding matching students and supervisors to ensure good fit as a key challenge in the admissions process.
- Applicant assessment was identified by respondents as a major challenge.

Figure 8

### Admissions Process Challenges

N	Theme
2	Application review
7	Supervisor-student matching issues
4	Assessment of applicant
3	Other (e.g. internal communication with other departments, lack of mandatory funding application, changes in students availability from admission to start date)

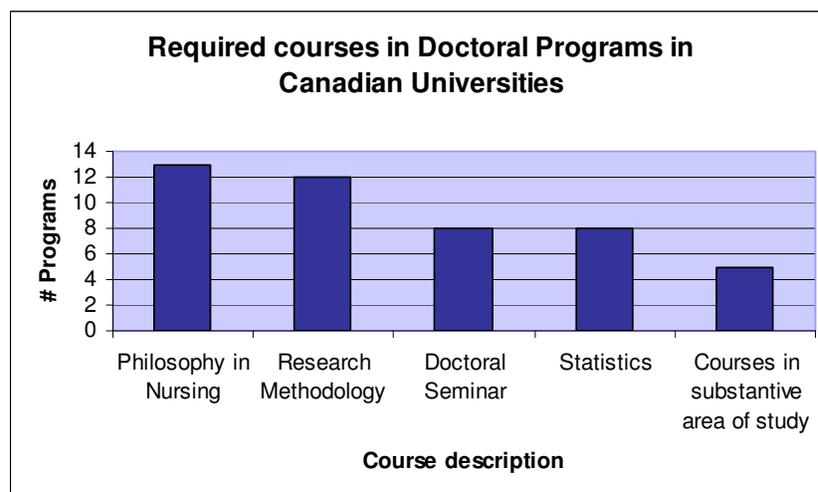
Note: Some schools identified multiple themes  
 Source: Doctoral Forum - Environmental Scan 2010

## Required Courses

All schools reported that they were satisfied with the required courses in their program.

- Thirteen (100%) of the programs require one or more courses related to Philosophy.
- Twelve (92%) of the programs require one or more Research Methodology course.
- A Doctoral Seminar is required by eight (62%) of the programs.
- Eight (62%) of programs include one or more mandatory Statistics courses for completion.
- Five (38%) identified courses in the student's substantive area of study as mandatory.

Figure 9



Source: Doctoral Forum - Environmental Scan 2010

## Comprehensive Exams

Schools were asked to describe their comprehensive exams in order to determine any similarities or difference in their application and timing. Several respondents indicated that the purpose of the exam is to assess students' ability to critically synthesize knowledge in a substantive area of the discipline, and to assess their ability to successfully pursue independent scholarship. Others specified that students are evaluated for 1) In-depth knowledge in theoretical and applied nursing and research methods related to their area; and 2) Theoretical and applied knowledge in their substantive area of study.

### Examination Schedule

- Nine (69%) of programs schedule comprehensive exams between 12 and 24 months after commencement of the Doctoral Program (8/12 respondents).
- Four (31%) of the programs identified more flexible timing of the examinations; allowing from 28-36 months following the commencement of the Doctoral program.

### Examination Process

Responses regarding components of the examination process did not include equivalent details. Therefore, no attempt was made to classify responses. The selected practices that respondents chose to report are listed below:

- Nine (69 %) schools indicated they have a written component to their examination process.
- Nine (69%) schools mentioned having an oral portion to their examination process.
- Eight (61%) specifically indicated they have both an oral and written component to their examination process.
- Take home exam format was noted by five (38%) schools.

Table 4

Examination Process

Written	Oral	Take home	Combination	Other
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
			<input checked="" type="checkbox"/>	
			<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
			<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<b>9</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>1</b>

Source: Doctoral Forum - Environmental Scan 2010

## Thesis Supervision

In order to provide some information on the capacity of current Doctoral Programs in nursing, the number of faculty with the necessary qualifications to prepare doctoral students is presented below, followed by the ratio of doctoral students per qualified faculty member in the schools who responded to the scan, and finally, the number of faculty who are currently supervising doctoral students in these schools.

### ***Number of Faculty with PhD and Post Doctorate Qualifications***

Using only the data that was submitted in numerical format:

- The schools reported a total of 209 faculty with PhD qualifications and 53 with Post Doctoral qualifications.

**Table 5**

**Doctoral and Post Doctoral Qualifications – Faculty**

<i>PhD</i>	<i>Post Doctorate</i>
38	6
100%	30%
12	0
27	3
31	31
27 +	2
31	N/A
27	N/A
13.	3
32	8
N/A	60%
11	3

Source: Doctoral Forum - Environmental Scan 2010

Note : Data presented in format other than numerical were not included? in this analysis.

**Number of Faculty Currently Supervising Doctoral Theses**

Using only the data that was submitted in numeric format, schools reported 119 faculty members who are currently supervising doctoral students.

**Table 6**

**Faculty Supervising Doctoral Theses**

22
> 10
6
13
28
7
All
12
20
50%
11

Source: Doctoral Forum - Environmental Scan 2010

Note : Data presented in format other than number were not used in analysis.

**Number of Doctoral Students per Supervisor**

Of the schools who presented a ratio rather than a range, the average was 1: 3.5

**Table 7**

**Supervision Ratio**

1:3
> 1:3
1:3-1:4
1:4
1:5
1:3
1:4
1:4
1:4
1:4
1:2-1:5
1:1

Source: Doctoral Forum - Environmental Scan 2010

Note : Data presented as a range were not used in the analysis.

The average ratio and the number of faculty qualified to supervise doctoral students indicates a national enrolment capacity of 417 doctoral students. The *Nursing Education in Canada Statistics 2008-2009 Registered Nurse Workforce, Canadian Production: Potential New Supply* reported the

current enrolment in doctoral programs nationally as 401.<sup>6</sup> This suggests that the programs are functioning at or close to capacity.

### ***Success Factors in Thesis Supervision***

Schools were asked to identify success factors of their thesis supervision methods. The major factor identified was the process of pairing students with supervisors as appropriate. Mutually beneficial pairings led to increased capacity within the program. Training programs for thesis supervision for faculty were also identified as beneficial to the program.

**Figure 10**

#### **Success Factors**

<b>N</b>	<b>Theme</b>
7	Student-faculty pairing
4	Training programs for faculty
2	Too early to say
4	Other (e.g. reporting deadlines, multiple supervisors for students)

Source: Doctoral Forum - Environmental Scan 2010

Note: Some schools identified multiple themes

### ***Satisfaction with Thesis Supervision Model***

- 11 (85%) respondents were satisfied with their thesis supervision models.
- One replied that they were not satisfied with the supervision model.
- One replied that they were satisfied with some aspects but not satisfied with others.

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<sup>6</sup> *Ibid*

## Summary

The findings of the inaugural Doctoral Forum and associated Environmental Scan suggest the following:

- More funding is needed to support PhD students to build capacity for the future as it affects length of time to program completion.
- Current programs are functioning near capacity.
- The pairing of student and supervisor is critical to the success of the program.
- The most telling indicator in demand for doctoral programs is an increase in inquiries from students.
- All schools identified responsiveness to student needs as key to a successful Doctoral program.
- There are broad similarities in the required courses across Canadian Doctoral Programs in Nursing.

## Appendix A

### Doctoral Forum Environmental Scan

**School Name:** \_\_\_\_\_

**Age of program:**

- 1-2 years
- 2-4 years
- 4-6 years
- 6-10 years
- 10 years or more

**Number of students currently enrolled:**

**Average length of time to complete the program:** \_\_\_\_\_

**Employment goal of doctoral students**

	Most	Some	Few
Practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**What are the indicators of demand for your program?**

**What are the indicators for lack of demand for your program?**

**Do you have any additional information regarding demand (anecdotal?)  
(i.e. indicators of a preference for other types of academic programs)**

**Delivery Models Used (check all applicable):**

- Interdisciplinary
- Fast tracking
- Distant delivered
- Residency based
- Collaborative      Please specify partner \_\_\_\_\_
- Other      Please specify \_\_\_\_\_

**Strengths of model(s) used:**

**Challenges of model(s) used:**

**Admission process**

**Identify success factors of your admissions process:**

**Identify challenging factors of your admissions process:**

**What are the required courses in your doctoral program?**

**Are you satisfied with the required courses?**

Yes

No

*Please explain:*

**Comprehensive exams**

**At what point in the program do students take their comprehensive exams?**

---

**What content is examined?**

**What is the examination process? (Check all applicable)**

- Written
- Oral
- Take home
- Combination
- Other \_\_\_\_\_

**What is the required criteria for examiners?**

**Thesis supervision**

**Number of Faculty with PhD qualifications:**

**Number of Faculty with Post Doctorate qualifications:**

**Number of faculty currently supervising doctoral theses:**

**Maximum ratio of doctoral students per faculty supervisor:**

**What aspects of the current approach to thesis supervision have you found to be successful and why?**

**Are you satisfied with the current approach to thesis supervision?**

- Yes
- No

**Please explain:**