



Nurse Practitioner Education in Canada

Final Report – November 2011

CASN
ACESI



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Background

During discussions at the 2010 CASN Graduate Studies and Nurse Practitioner (NP) Educators' Forum in November of 2010 in Gatineau, Quebec, participants identified a need for more data on current NP programs in Canada to inform the development of a national vision on Nurse Practitioner education. To this end, CASN conducted a survey on current practices and program delivery modalities among the 27 Nurse Practitioner programs across the country.

The objectives in carrying out this survey included:

- Developing a current inventory of educational programs for Nurse Practitioners in Canada;
- Gaining more information on the content of Nurse Practitioner programs in Canada;
- Informing the discussion at the CASN NP Forum, scheduled for September 2011 and the CASN Graduate Studies and NP Educators' Forum in November 2011; and,
- Informing decisions related to National Consensus Based Educational Guidelines for Nurse Practitioners.

The CASN Nurse Practitioner Forum Environmental Scan was sent electronically to each of the Schools of Nursing offering a NP program (Appendix A). Of the 27 programs, 20 programs had responded as of September 10, 2011. This represents a response rate of 74.1%.

Key Findings on Nurse Practitioner Programs in Canada

Nursing Programs in Canada

- There are currently 27 Nurse Practitioner programs being offered by Canadian universities and Colleges.
- BC, Alberta, Saskatchewan, Ontario, Quebec, the North West Territories, Nova Scotia, New Brunswick and Newfoundland each have at least one NP program.
- Manitoba, PEI, Yukon and Nunavut are not currently reporting a NP program in any of their universities or colleges.

Table 1

Nurse Practitioner Programs in Canada

Centre for Nursing Studies	✓
Dalhousie University	✓
McGill University	✓
Laurentian University	✓
University of Ottawa	✓
The University of Western Ontario	✓
SIAST	✓
Athabasca University	✓
University of Alberta	✓
University of Saskatchewan	✓
University of Victoria	✓
Memorial University	✓
Université de Moncton	✓
Université de Montréal	✓
Université Laval	✓
University of New-Brunswick	✓
Lakehead University	✓
McMaster University	✓
Queen's University	✓
Ryerson University	✓
University of Toronto	✓
University of Windsor	✓
York University	✓
Aurora College	✓
University of British Columbia	✓
University of Calgary	✓
University of Northern British Columbia	✓
Canada Total	27

Source: Nursing Education in Canada Statistics 2008-2009¹

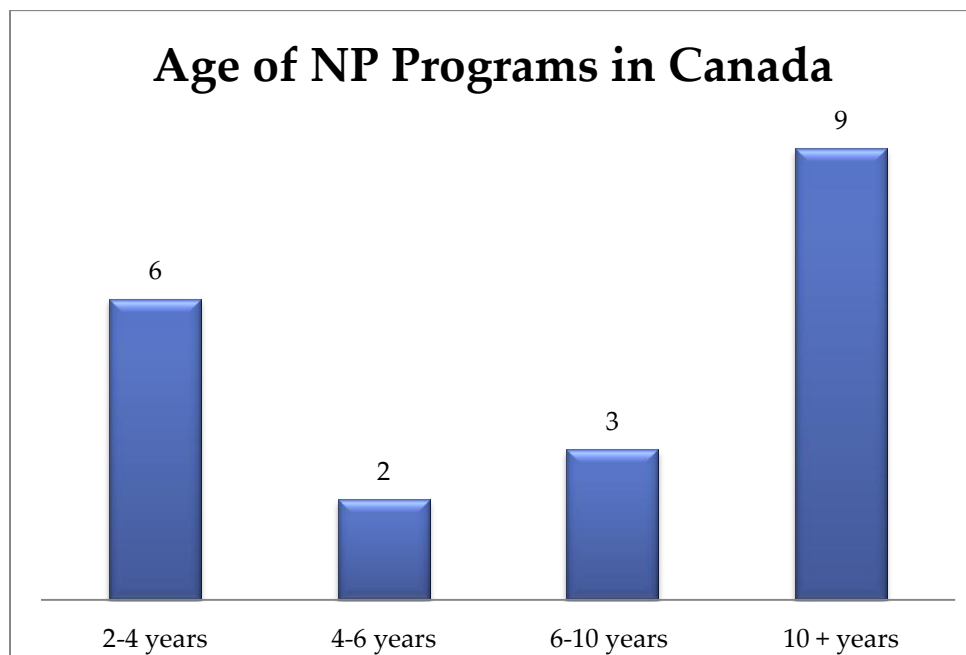
¹ Canadian Association of Schools of Nursing and Canadian Nurses Association, Nursing Education in Canada Statistics 2008-2009 Registered Nurse Workforce, Canadian Production: Potential New Supply (Ottawa, ON: Canadian Nurses Association, 2010).

Age of Nurse Practitioner Programs in Canada

There has been a progressive increase in the number of NP programs in Canada over the last ten years. Of the 20 programs who responded to the environmental scan,

- No programs have been established in the last two years,
- 6 were established 2-4 years ago,
- 2 were established 4-6 years ago,
- 3 were established 6-10 years ago, and
- 9 were established 10 + years ago.

Figure 1



Source: NP Forum - Environmental Scan 2011

Educational Level of Programs

Although the majority of schools offer Nurse Practitioner programs at the Graduate level, there continues to be diversity in entry-level requirements. As can be seen in Table 2,

- 75 % of the schools offer a Master's level program,
- of that 75%, 40% also offer a Post-Master's level program,
- 10% of the schools offer a Baccalaureate level program,
- 20% offer a Certificate program, and
- 20% are classified as 'Other'.

Table 2

Baccalaureate	Masters	Post-Masters	Certificate	Other
	✓	✓		
	✓			
			✓	
			✓	
	✓			✓
✓				
	✓	✓		
	✓	✓		
	✓			
	✓	✓		
✓	✓	✓	✓	✓
	✓	✓		
	✓	✓		
	✓		✓	
	✓			
	✓			
	✓			
				✓
		✓		✓
2	15	7	4	4

Source: NP Forum - Environmental Scan 2011

Enrollment and Completion Rates

- Currently, enrollment levels in Nurse Practitioner programs at the responding schools totals 673 students.
- In 2008-2009, the total national enrollment in Nurse Practitioner programs was reported to be 1133², reported in the *Nursing Education in Canada Statistics 2008-2009 Registered Nurse Workforce, Canadian Production: Potential New Supply*.
- The average time to completion for a Nurse Practitioner degree was 2.5 years, with a range of 1 to 6 years.

Students’ preference for part-time (rather than full-time) study was a major factor in lengthening completion time.

Mandatory Minimum Clinical Hours

The number of mandatory minimum clinical hours reported ranged from 700 to 950, with the average being 764.6 hours.

Table 3

Mandatory Minimum Clinical Hours	
	Clinical Hours
	925
	800
	728
	700
	728
	850
	700
	700
	700
	767
	800
	n/a
	720
	720
	725
	752
	700
	725
	767
	950

Source: NP Forum - Environmental Scan 2011

Examination Types

Registration examination requirements vary across the country. Types of examinations include provincial, the American Nurses Credentialing Center examinations, and the Canadian Nurse Practitioner Examination.

- 60% (12 of 20) of programs required the Canadian Nurse Practitioner Examination: Family/All Ages (CNPE:F/AA).
- 25% (5 of 20) of programs required the American Nurse Credentialing Center exam.
- 25% (5 of 20) required a provincial examination.

Table 4

Examination Type Required

No.	Examination Types
5	Provincial
5	American Nurses Credentialing Center (ANCC)
12	Canadian Nurse Practitioner Examination: Family/All Ages (CNPE:F/AA)
2	Other (i.e. Objective Structured Clinical Examinations [OSCEs])

Note: Some schools indicated that students had the option of choosing from more than one type of examination.

Source: NP Forum - Environmental Scan 2011

NP Program Delivery Models

- Most respondents incorporated a combination of distance learning and onsite education.
- 1 program is offered entirely by distance.
- 4 programs are offered entirely on site.

Table 5

NP Program Delivery Models

<i>Distance</i>	<i>On Site</i>	<i>Combination</i>	<i>Other</i>
	✓		✓
		✓	
✓		✓	
		✓	
	✓		
		✓	
		✓	
	✓		
			✓
		✓	
	✓		
		✓	
		✓	
		✓	
			✓
			✓
<i>1</i>	<i>4</i>	<i>12</i>	<i>4</i>

Source: NP Forum - Environmental Scan 2011

Faculty

- Respondents identified a total of 164 faculty members currently teaching in NP programs
- 54.9% (90 out of 164) were identified as having a NP qualification.
- 50.0% (82 of the 164) were identified as being practicing NPs.
- 18.3% (30 of the 164) were identified as holding a PhD.
- In 5 of the 20 NP programs ,there were no part-time faculty members teaching. All others reported having both full- and part-time faculty members teaching NP students

Non-NP Faculty

- 95.0% (19 of 20) of responding programs reported having non-NPs teaching in their NP program
- Courses taught by non-NPs included Pathophysiology (50.0%), Research Methodology (35.0%), and Pharmacology (55.0%).

Table 6

Courses Taught by Non-NPs

No.	Content Area
10	Pathophysiology
7	Research Methodology
11	Pharmacology/Pharmacotherapy
8	Other (i.e.: final project, theory, physiology, policy)

Note: Some schools identified multiple content areas.

Source: NP Forum - Environmental Scan 2011

Program Funding

- 95.0% of respondents reported that their NP program is funded by the provincial ministry.
- 20.0% reported that they also receive funding directly from their university.

Table 7

Program Funding

No.	Sources
4	University
19	Ministry/Provincial
1	Other

Note: Some schools identified multiple funding sources.

Source: NP Forum - Environmental Scan 2011

Challenges of Providing NP Education

Respondents were asked to identify what the major challenges were within their own institutions in providing NP education. The most common challenge identified is a lack of qualified faculty. The second most common challenge is the lack of available clinical placements for students, which is required in order to meet the mandatory minimum clinical hours required to graduate.

- 60.0 % identified a dearth of qualified faculty to be a major challenge in NP education.
- 50.0% identified a lack of sufficient clinical placements for NP students to be a challenge.
- 40.0% identified limited financial assistance to be a challenge for the programs.

Table 8

No.	Themes
8	Lack of Financial assistance
12	Lack of Qualified staff
10	Lack of Clinical Placements
3	Other

Note: Some schools identified multiple themes.

Source: NP Forum - Environmental Scan 2011

Innovations in NP Education in Canada

- 70.0% of respondents reported the establishment and maintenance of partnerships with community stakeholders, and other NP organizations and programs to be a key innovation.
- 50.0% of respondents identified the use of distance learning to be an important innovation.
- 35.0% of respondents identified the integration of new technologies into teaching models to be a major innovation
- 20.0% identified the use of Objective Structured Clinical Examinations (OSCEs) during the course of the program (as opposed to only at the end) as a key innovation.

Table 9

No.	Themes
10	Online Courses & Exams
4	Use of OSCE during training
7	Integration of a new technology
14	Partnerships
16	Other (aligning courses with specific competencies, stress management course added)

Note: Some schools identified multiple themes.

Source: NP Forum – Environmental Scan 2011

Important Components of a Quality NP Program

One of the central objectives of the CASN NP Task Force was to identify the important components of quality NP Education in Canada.

- 70% (14 of 20) of programs identified quality faculty as a key component of quality NP programs.
- 55% (11 of 20) programs identified strong clinical education practice sites as a key component of quality NP programs.
- 30% (6 of 20) programs identified the strength of NP preceptors as one of the key components of quality NP programs.
- 35% (7 of 20) programs identified a strong curriculum as a key component to quality NP programs.

Table 10

No.	Theme
11	Strong clinical education practice sites
14	Quality and qualified faculty
6	Excellent NP preceptors
7	Strong curriculum
22	Other (i.e. funding, knowledge of advance practice roles, high quality candidates, collaboration with other stakeholder groups, student success rate etc...)

Note: Some schools identified multiple themes

Source: NP Forum - Environmental Scan 2011

Key Trends Influencing NP Education

In order to inform the discussion on the current and future place of NP education in Canada, respondents were asked to identify the trends that are currently influencing NP Education.

- 55.5% (11 of 20) of respondents indicated that the provincial demand for practicing NPs was a key influence.
- 55.5% (11 of 20) of respondents indicated that the availability of different delivery models, such as distance learning, was a key influence.
- 40.0% (8 of 20) of respondents identified provincial regulations as having a strong influence on NP Education.
- 30.0% (6 of 20) of respondents identified the lack of available funding for NP practice roles as one of the key influences.

Table 11

No.	Themes
11	Increasing demand/Decreasing demand
8	Regulations/standards
6	Lack of funding for NP roles in practice
11	Flexible Delivery
7	Other (i.e. practice doctorate, public awareness, etc.)

Note: Some schools identified multiple themes.
Source: NP Forum – Environmental Scan 2011

Required Courses in NP Programs

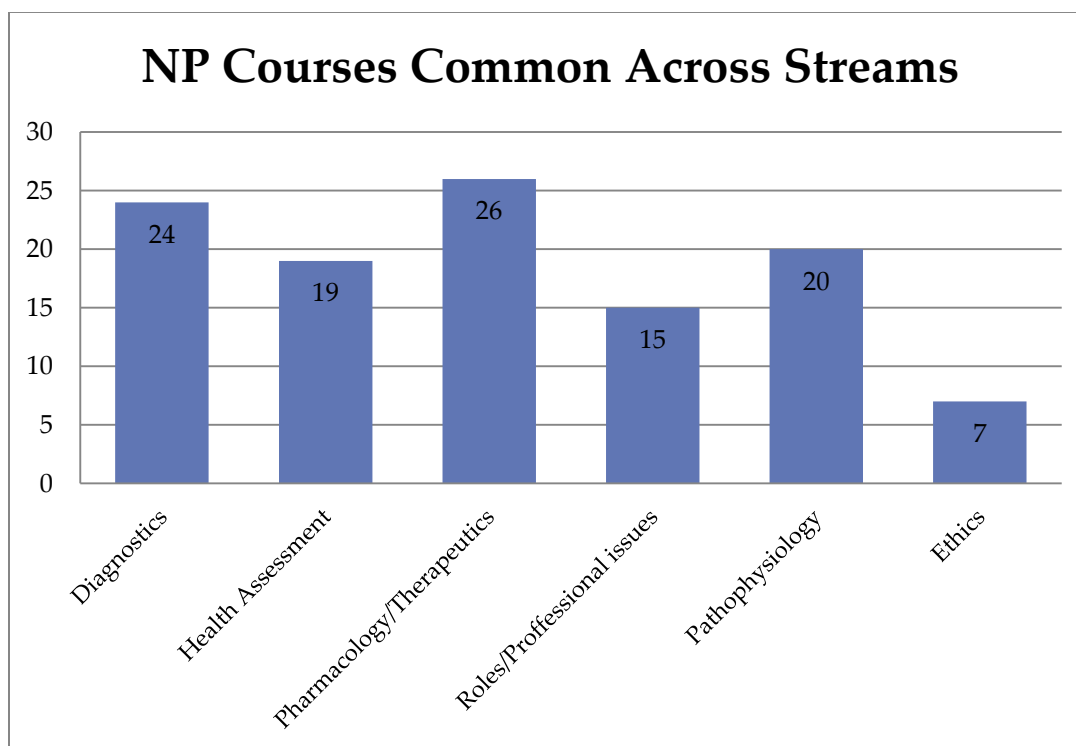
In order to inform the discussion of NP program course requirements, a question was included in the environmental scan survey regarding mandatory courses in each school’s program. To augment these results, further research was done on each of the responding schools’ websites (20 schools) to determine program streams, and specific course requirements by stream. The following represent the combined results from both sources. Please note that only course titles, and not course descriptions, were available.

NP Courses Common to all Program Streams

For the purposes of this section, the number of program “streams” was determined to be 26. (Please note that many schools host more than one program stream.)

- 100.0% of program streams included at least one Pharmacology/ Therapeutics course in the program.
- 92.3% of all streams included Diagnostics in at least one course.
- 76.9% of all program streams included Pathophysiology in at least one course.
- 73.1% of all program streams included Health Assessment in at least one course.
- 57.7% of all program streams included Roles and Professional Issues in at least one course.
- 26.9% of program streams included Ethics in at least one course.

Figure 2



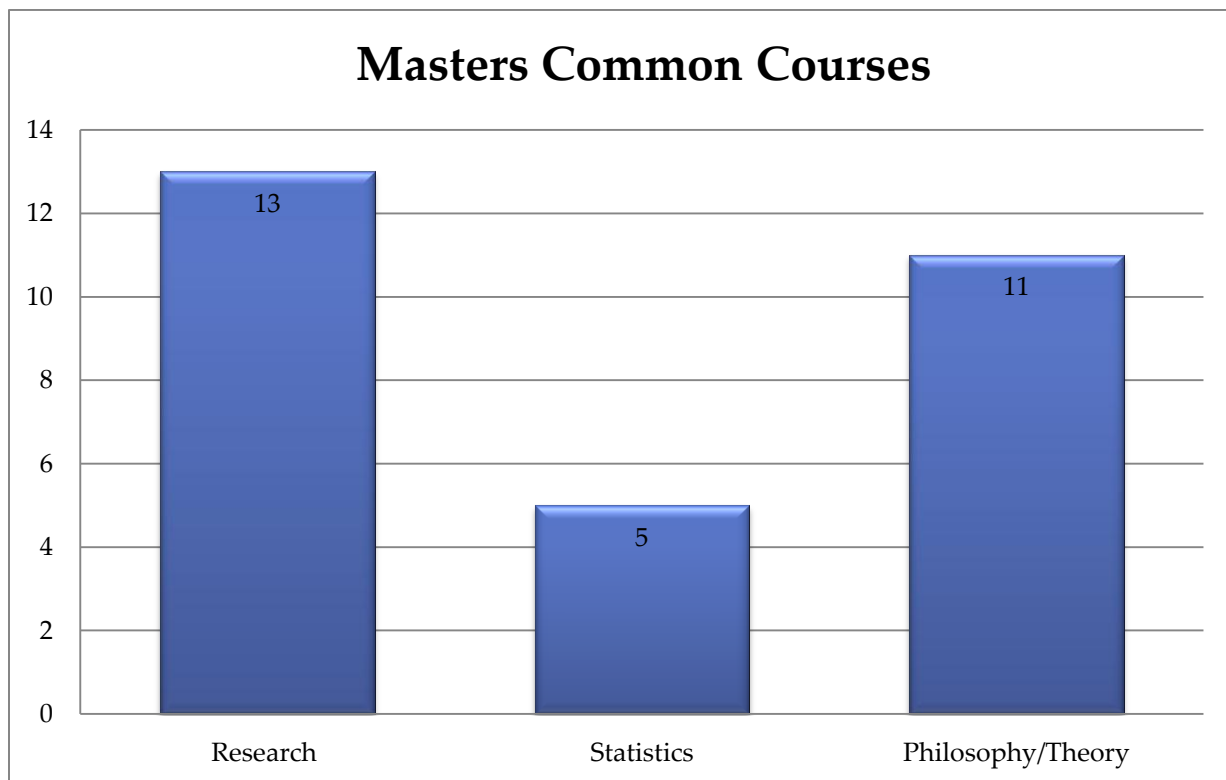
Source: NP Forum - Environmental Scan 2011 with additional research from School websites

Courses Common to NP Masters Programs

For the purposes of this section of the report, statistics are based on the responses received from 16 Masters' level NP programs.

- 81.3% of Masters programs require at least one course in Research Methodology.
- 68.8% of Masters programs require at least one course in Nursing Philosophy and /or Theory.
- 31.3% of Masters programs identified a separate course in Statistics.

Figure 3



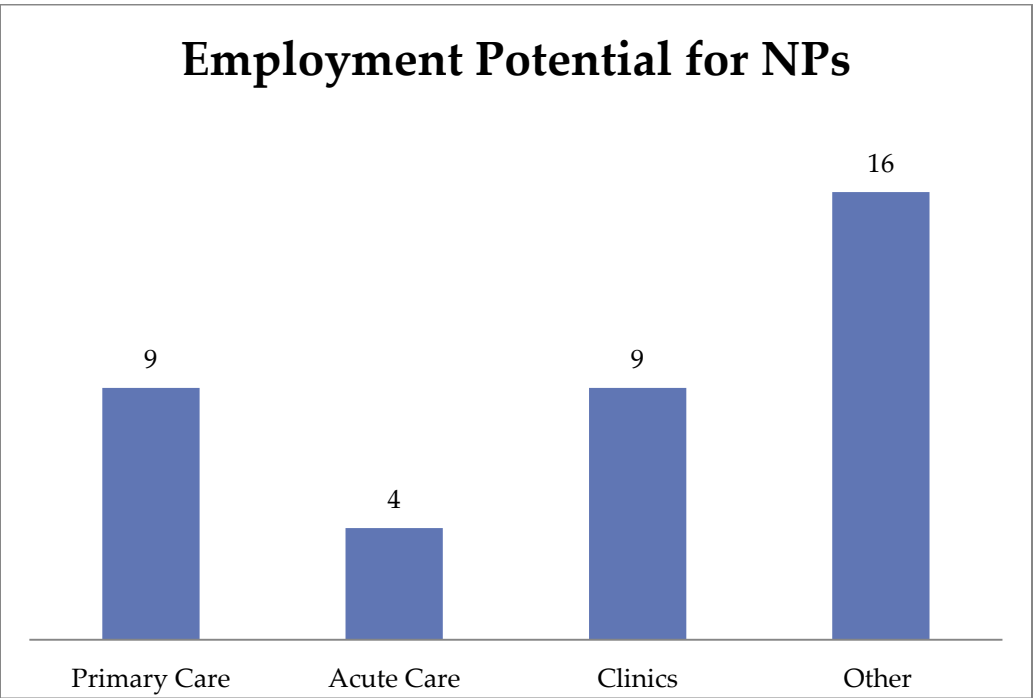
Source: NP Forum - Environmental Scan 2011 with additional research from School websites.

Provincial Employment Potential for NP Graduates in the Province

Respondents were asked to identify potential areas for employment for NP graduates in their province.

- 45% (9 of 20) of programs identified Primary Health Care as one of the areas of potential employment for newly graduated Nurse Practitioners.
- 45% (9 of 20) of programs identified Clinics as one of the areas of potential employment for newly graduated Nurse Practitioners.
- 20% (4 of 20) of programs identified Acute Care as a potential area of employment.
- 80% (16 of 20) of programs identified Other areas (i.e. Aboriginal Access Centers, Family Health Teams, Hospital Based Primary care, Emergency Rooms etc...).

Figure 4



Note: Some schools identified multiple themes.
Source: NP Forum - Environmental Scan 2011

Issues in Supporting NP Practice Learning

All programs identified preceptors to be a key component in NP Education across Canada. A number of issues were identified related to the use of preceptors.

- 40.0% (8 of 20) of respondents identified an insufficient number of preceptors to be a major challenge.
- 40.0% (8 of 20) of respondents reported that a lack of understanding of the NP scope-of-practice in Canada was an important issue related to preceptorship.
- 35.5% (7 of 20) of responding schools identified insufficient funding to support the preceptor program as a major challenge in the use of preceptors.
- 20.0% (4 of 20) mentioned that NPs are in competition for clinical placements with other medical professionals, including medical students.

Table 12

No.	Themes
7	Lack of Financial support
4	Competition for placements (i.e. placements going to med students, residents and physician assistants)
8	Lack of understanding of the NP scope of practice
8	Insufficient number of preceptors
7	Other (i.e. language requirements, aboriginal access centers)

Note: Some schools identified multiple themes.

Source: NP Forum - Environmental Scan 2011

Facilitators Supporting NP Practice Learning

Despite the issues reported with the preceptorship system, respondents identified a number of components that were working well within their programs, including the quality of preceptors, communication between faculty and preceptors, and preceptor training.

- 65.0% (13 of 20) acknowledged the high quality of the preceptors within their programs, and identified them as contributing to the programs' success.
- 45.0% (9 of 20) acknowledged strong communication between faculty and preceptors.
- 35.0% (7 of 20) indicated that offering preceptor training and development activities was contributing positively to the program.

Table 13

No.	Themes
13	Quality of preceptors
9	Strong communication between faculty and preceptors
7	Preceptor training and development activities
4	Other (i.e. open to student requests for specific placements, awards and events for preceptors)

Note: Some schools identified multiple themes.

Source: NP Forum - Environmental Scan 2011

Summary

The findings of the 2011 CASN Nurse Practitioner Environmental Scan suggest the following:

- More than three quarters of current NP programs are offered at the Masters level, or higher.
- Schools are meeting (or exceeding) the recommended mandatory minimum clinical hours identified by the Canadian Nurse Practitioner Initiative.
- 95.5% of funding for NP programs is provided by Provincial Governments.
- Schools consider the most important innovation in NP programming to be the development and maintenance of partnerships with other stakeholder groups.
- Schools perceive key components of quality NP Education to be:
 - Quality and qualified Faculty,
 - Strong clinical practice experiences,
 - Excellent NP preceptors, and
 - A strong curriculum
- Broad similarities in the required courses exist across Canadian Nurse Practitioner Programs.

Appendix A

NP Forum Environmental Scan Survey 2011

1. **School Name:** _____
2. **Age of program:**
 - ☐ under 2 years
 - ☐ 2-4 years
 - ☐ 4-6 years
 - ☐ 6-10 years
 - ☐ 10 years or more
3. **What level of Study is your NP program:**
 - ☐ Baccalaureate
 - ☐ Masters
 - ☐ Post Masters
 - ☐ Certificate
 - ☐ Other: _____
4. **Number of students currently enrolled:** _____
5. **Average length of time to complete the program:** _____
6. **Mandatory minimum clinical hours:** _____
7. **What type of registration examination is required for graduates to become registered as NPs?**
8. **Is your program delivered:**
 - ☐ all by distance
 - ☐ all on site
 - ☐ Combination of distance and on site delivery
 - ☐ Other _____
9. **Number of Faculty with NP qualifications teaching in the NP program:** _____
10. **Number of Faculty with PhD qualifications teaching in the NP program:** _____
11. **Number of NP faculty teaching in your program:** _____

12. Are your NP faculty full-time _____ part-time _____
13. Number of NP faculty (both full and part-time) who also practice as NPs: _____
14. Do non-NPs teach in your program?
- 14A. If yes, what courses do they teach?
15. How is your NP program funded?
16. What, in your view, are the two most important problems, if any, to providing NP education students?
17. Please identify any innovative approaches that you have introduced for NP education:
18. In your view, what are the three most important components of a quality NP program?
19. In your view, what are the key trends influencing NP education?
20. What are the required courses in your NP program?
21. Identify provincial employment potential for NP graduates in your province:
22. In your program, what (if any) issues have you encountered in the use of preceptors to support NP practice learning?
23. In your program, what aspects of the preceptor component would you identify as working well?