



Washington State Nursing Education Trend Report

2014-2020

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Washington State Nursing Education Trend Report 2014-2020

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Summary of Key Findings

Pre-Licensure Programs (PN, ADN-RN, BSN) from 2014 to 2020 academic years:

- 54% decline in the number of students admitted into PN programs
- The acceptance rate for qualified applicants ADN-RN (43%) and BSN applicants (65%)
- Average of 3,200 qualified RN applicants turned away each year from RN programs
- 22% increase in ethnic/minorities and 14% increase in males for pre-licensure students
- Decrease in attrition rates across programs PN attrition rate (53% decline); ADN-RN rates decreasing 42%, and BSN attrition decreasing 54%
- Average of 2,600 initial licensure RN graduates every year from RN programs

Post-licensure Programs (RNB, MN, Doctoral) 2014-2020 academic years:

- New programs added from 2014 to 2020: 9 RNB programs, 6 master's (non-ARNP), and 3 DNP programs added
- The number of RNB students admitted more than doubled from 620 to 1253 students
- Average of 225 students admitted every year into MN-ARNP programs with an average acceptance rate of 50%
- DNP programs: admissions increased 49% from 2015-2020; an average of 410 students admitted every year and an average acceptance rate of 65% for students who met program requirements
- ARNP specialties: largest specialty is family practice with an average of 670 students enrolled every year; 24% increase in mental health specialty and a 300% increased enrollment in gerontology specialty in recent three years
- The number of RNB graduates increased 68% from 2015 to the 2020 year
- The number of DNP graduates more than doubled from 2015 to 2020 (from 121 to 351 graduates)

Nurse faculty data 2014-2020 academic years:

- More part-time faculty (724 average) compared with full-time faculty (610 average)
- The majority of full-time faculty have either a master's degree (50%) or a PhD in nursing (32%) as their highest level of education; an average of 50% of full-time faculty have a doctorate with a 31% increase in doctorate prepared faculty from 2014 to 2020
- Faculty salary for a 9-month contract at a university decreased 13% over six years while the 9-month salary for a community college faculty increased 48% during the same time
- The majority of full-time faculty are younger than 50 years old (55%); 18% of full-time faculty are older than 61-65 years; 10% of full-time faculty are older than 66 years
- Washington has a higher average faculty vacancy rate (13%) compared with national faculty vacancy rates (8%) over the last 3 years
- The most critical issue regarding faculty recruitment was noncompetitive salaries (42%)



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Background

The United States is confronting a nationwide nursing shortage, and according to the Bureau of Labor Statistics (2021), registered nurse jobs are projected to grow faster than average occupations. One of the solutions frequently cited to address the nursing shortage is to graduate more students from schools of nursing to join the profession. While the American Association of Colleges of Nursing (AACN, 2021) reports a 5.6% increase in enrollment into baccalaureate programs in 2020, this increase does not meet the projected demand for nurses and does not consider the rising need for nurse faculty, researchers, and the role of nurse practitioners as primary care providers. Beyond a doubt, nursing programs have a significant role in educating a new generation of nurses to meet complex health needs and adapt to an evolving healthcare environment.

The recent impact of the COVID-19 pandemic underscores the demand for nurses in all health settings. As a result, nursing education programs face increased pressure to produce more graduates to meet the nursing workforce needs. Programs have been forced to quickly pivot and adapt to emerging challenges while delivering high-quality education for nursing students. Nursing programs across the U.S. experienced longstanding challenges prior to the pandemic attributing to the nursing shortage. For example, a national faculty shortage results in schools turning away over 80,000 qualified applicants from baccalaureate and graduate nursing programs (AACN, 2021). Locally, stakeholders are interested in nursing education data to meet current demands and plan for future needs for the state of Washington.

Introduction

This report was developed by the Washington Center for Nursing in collaboration with the Nursing Care Quality Assurance Commission (NCQAC). This report was designed to analyze existing education data to determine 1) what information is already available 2) identify gaps for future education research at the Washington Center for Nursing. This report has been informed by a survey of nursing workforce stakeholders in the Spring of 2021.

The tables and charts in the report provide a trend summary across pre-licensure programs, post-licensure programs, and nurse faculty over six academic years starting in 2014 to the 2019-2020 year. Data includes trends in the number of applicants by program and provides demographic and diversity data of students and faculty. While the NCQAC delivers an annual nursing program report every year, this report provides additional nursing education data and provides six-year trends across programs, students, and faculty. Data was analyzed using results from the annual education survey collected from Washington State-approved nursing programs.

The report is organized into three sections:

- Pre-Licensure Programs: PN, ADN-RN, and BSN/GE
- Post-Licensure Programs: RNB, MN (ARNP and non-ARNP), DNP, and doctoral
- Nurse Faculty



Pre-Licensure Programs

Pre-licensure programs are designed for students to complete requirements to obtain eligibility for initial licensure as a Licensed Practical Nurse or a Registered Nurse. This includes practical nursing programs, associate degree programs, and bachelor programs for RNs. It also includes initial licensure for graduate-entry programs and those with a previous degree in another field. These programs do not include any post-licensure students.

The number of pre-licensure programs has remained relatively the same, with 55 programs in 2014 and 55 programs in 2020. There are two fewer PN programs and a gain of two BSN programs from 2014 to 2020. There is variance in the number of programs across the years due to annual survey changes in how the program data is collected and those programs that completed the survey.

Table 1. WA Pre-licensure Programs 2014 – 2020

Pre-licensure Program	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020*
PN	9	7	7	5	5	7
PN to ADN	8	1	1	1	1	8
ADN-RN	25	27	26	27	24	25
PN to BSN	2	1	0	0	0	3
GE	2	2	2	2	1	2
BSN	9	8	8	9	9	10
Totals	55	46	44	44	40	55

Sources: 1) NCQAC Annual Education Survey 2014-2020 2) *Washington Department of Health Approved Nursing Programs October 2021.



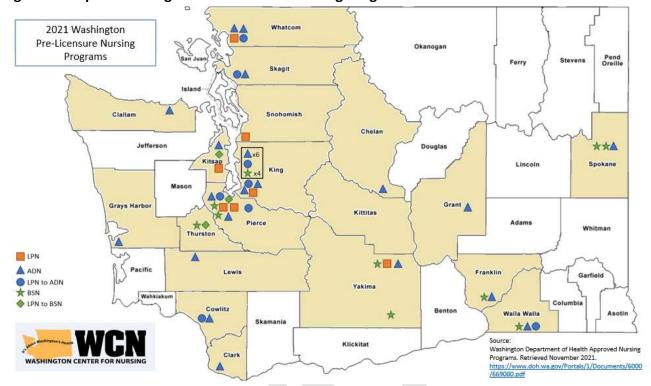


Figure 1. Map of Washington Pre-Licensure Nursing Programs 2021

Table 2. Pre-Licensure Accreditation Status

Pre-licensure Program Type	2021 Accreditation status (October 2021)
7	3 - NLN/CNEA Accredited
PN programs	1 - CCNE Accredited
	3 - Not yet Accredited
25	19 - ACEN Accredited
AD-RN programs	1 - CCNE Accredited
	3 - NLN/CNEA Accredited
	2 - Not yet Accredited
12	1 - ACEN Accredited
BSN and 2 GE programs	12 - CCNE Accredited
	1 - Not yet Accredited

Source: 1) Approved Nursing Programs in the State of Washington (2021)

Applicants

Figures 2 through 5 display details on pre-licensure applicants from the academic years 2014 to 2020. The first column shows the number of students who applied to the program, the second is the number of applicants who met program requirements (also referred to as a qualified applicant), and the third is the number of applicants admitted into the program.



PN Applicants 2014-2020 Source: NCQAC Annual Education Survey 900 800 827 700 600 500 400 469 438 300 307 282 200 100 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 ■ Applied ■ Met Req. ■ Admitted

Figure 2. Practical Nurse Applicants 2014-2020

There was a 69% decline in the number of PN applicants from 827 in 2014 to 255 in 2019 and a 54% decline in the number of students admitted into PN programs over six years.

The average acceptance rate for a qualified applicant into a PN program during these six years was 80%.

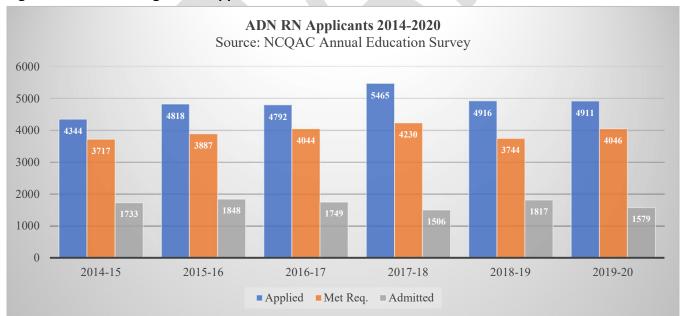


Figure 3. Associate Degree RN Applicants 2014-2020

An average of 4,000 ADN-RN applicants met requirements every year from 2014-2020. Approximately 1,700 students were admitted every year, with an average acceptance rate of 43% for qualified applicants.

There was a 9% increase in qualified ADN-RN applicants from the academic year of 2014 year to 2019.



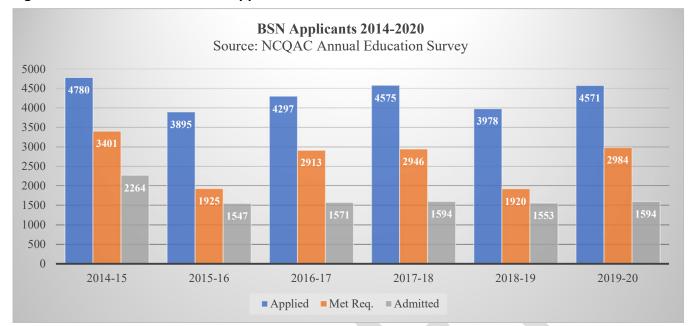


Figure 4. Bachelor of Science RN Applicants 2014-2020

The average number of BSN applicants who met program requirements from 2014-2020 was 2,700, with an average acceptance rate of 65% for qualified applicants.

An average of 1,572 students were admitted into BSN programs every year over the last five years. There was a 29% decline in the number of students admitted into BSN programs from the years 2014 to 2020.

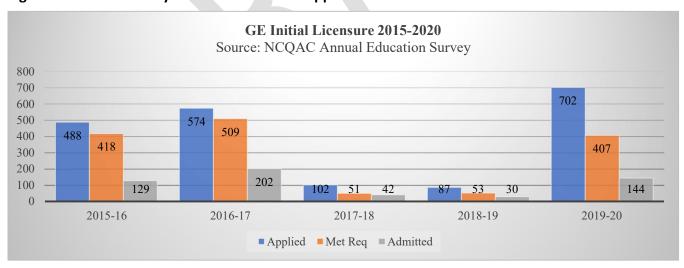


Figure 5. Graduate Entry Initial Licensure RN Applicants 2014-2020

The number of Graduate Entry initial licensure applicants is lower than other pre-licensure programs, with 547 students admitted into this program over five years. Only 35% of students who met the requirements for this program were accepted in the most recent year.



Qualified Applicants Turned Away From AD-RN and BSN Nursing Programs

Figure 6 displays the total number of qualified RN applicants turned away from programs in the academic years 2014-2020. A *qualified RN applicant turned away* is an applicant who meets the ADN-RN or BSN program requirements and is not admitted into the program due to limited capacity.

Nationally, AACN reports over 80 thousand qualified applicants were turned away from baccalaureate and graduate nursing programs in 2019 (AACN, 2020). Qualified applicants are turned away for several reasons including: insufficient number of faculty, limited clinical site availability, classroom space capacity, insufficient number of clinical preceptors, and budget constraints (AACN, 2020).

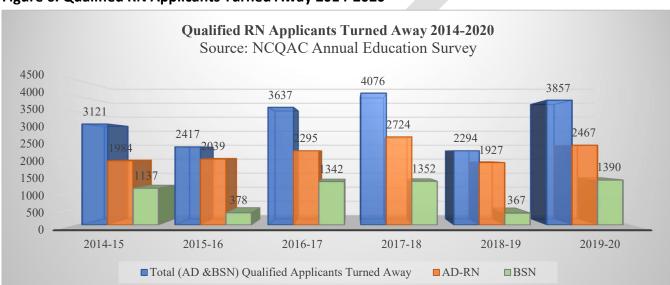


Figure 6. Qualified RN Applicants Turned Away 2014-2020

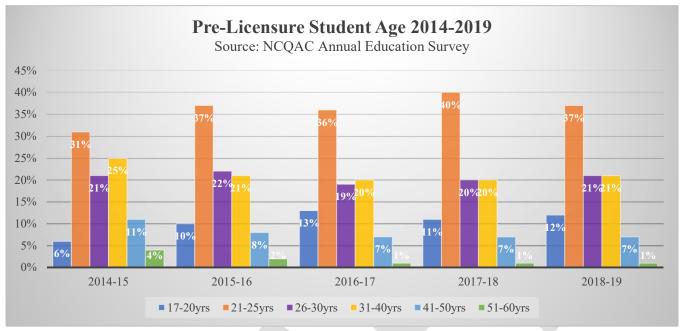
From 2014-2020 there were a total of 19,402 qualified RN applicants turned away from RN programs in Washington (an overall 50% acceptance rate).

On average, 3,200 qualified RN applicants turned away every year, with fewer BSN qualified applicants turned away (994) compared with ADN-RN applicants (1,906).



Student Demographics and Diversity

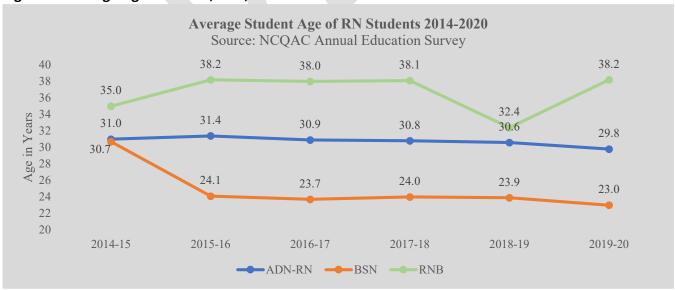
Figure 7. Pre-Licensure Student Age: 2014-2019



On average, 78% of pre-licensure students are between the ages of 21 and 40 years old.

The largest age group in pre-licensure students are those who are 21-25 years old (36% average), followed by those who are 26-30 years (21%) and 31-40 years old (21%).

Figure 8. Average Age: ADN-RN, BSN, and RNB Students 2014-2020



On average, BSN students are the youngest among the three groups of RN students, and the RN to BSN students are older.

Across six years, the average age of a BSN student was 25, the ADN-RN student was 31, and the RN to BSN student was 37 years old.



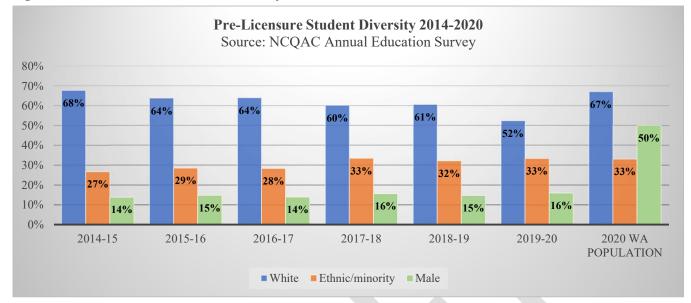


Figure 9. Pre-Licensure Student Diversity 2014- 2020

On average, pre-licensure students were 52% White or Caucasian,30% from an ethnic or minority group, and 15% male. There was a 22% increase in ethnic or minority pre-licensure students over the last six years and a 14% increase in males.

*Note: Totals for White and Ethnic/minority may not add up to 100 with missing/unknown race and ethnicity data. Ethnic/minority categories includes all non-White categories, including Mixed Race excluding any missing or unknown data.

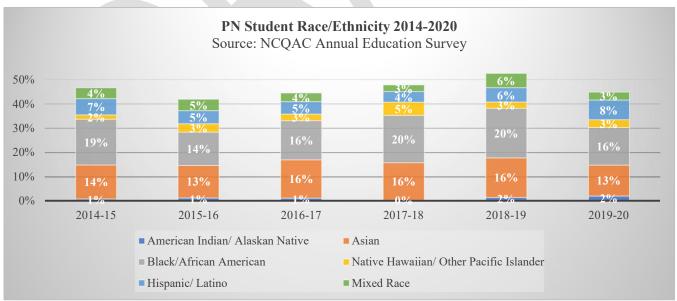


Figure 10. PN Student Race/Ethnicity 2014-2020

On average, 47% of PN students identified as one or more race and ethnicity category. The largest racial or ethnic group in PN students was Black/African American students (17% average), followed by Asian students (15% average).



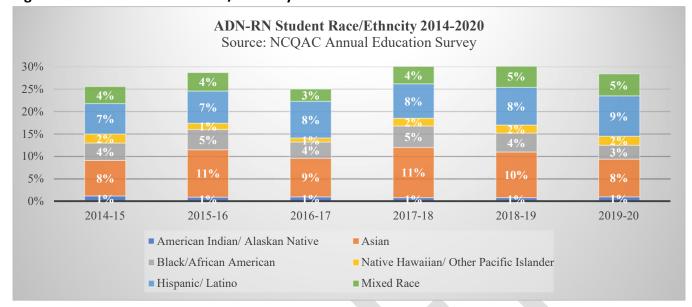


Figure 11. ADN-RN Student Race/Ethnicity 2014-2020

On average, 28% of ADN-RN students identified as a racial or ethnic minority. There was a 4% increase in racial and ethnic groups from 2014 to 2019.

The largest group was Asian students (10% average), followed by Hispanic/Latino students (8% average) from 2014-2020.

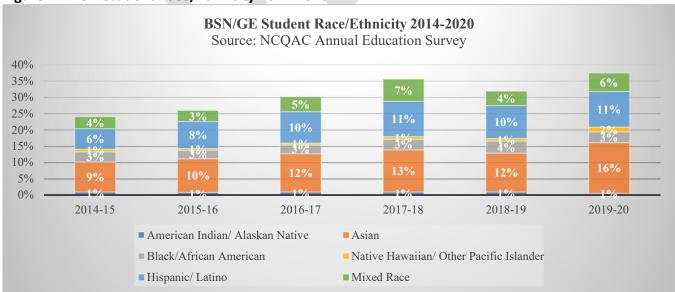


Figure 12. BSN Student Race/Ethnicity 2014-2020

On average, 32% of BSN/GE students identified as a racial or ethnic minority, with the largest race/ethnic group in Asian students (12% average) followed by Hispanic/Latino students (9% average).

Since 2014, there has been a 27% increase in racial and ethnic minority students in the BSN/GE students from 24% to 39% in the most recent year.



Attrition

Attrition is the number of students who leave the program of study before they have completed the program. The two reasons identified for students leaving a program include 1) students who voluntarily withdrew for any reason and 2) students who did not pass the program for any reason.

Pre-Licensure Attrition 2014-2020 Source: NCQAC Annual Education Survey 30% 25% 20% 15% 10% 5% 0% 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 PN ——AD-RN ——BSN

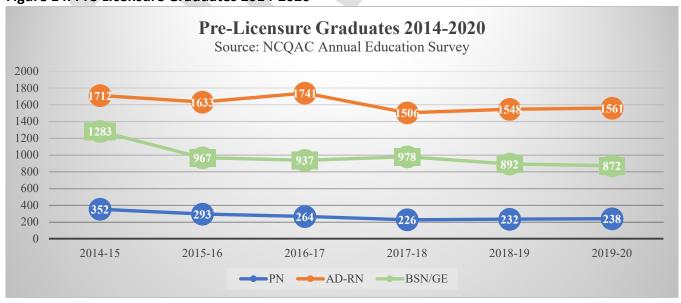
Figure 13. Pre-Licensure Attrition 2014-2020

The median attrition rate for the PN program was 21% over six years. The median attrition rate for the ADN-RN and BSN programs were 15% and 8%, respectively.

There is a notable decrease in attrition rates across programs from 2014 to 2020, with the PN attrition rate decreasing 53%, ADN-RN rates decreasing 42%, and BSN attrition decreasing 54% over six years.

Graduates

Figure 14. Pre-Licensure Graduates 2014-2020





There was an average of 2,600 RN graduates from ADN-RN and BSN programs across six years.

The largest number of pre-licensure graduates are the ADN-RN graduates, with an average of 1,600 graduates every year.

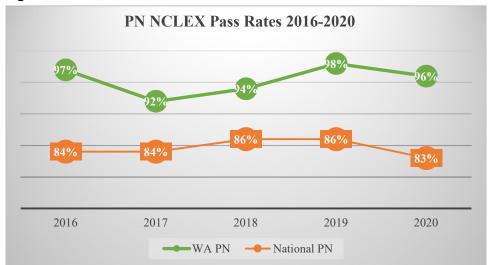
There were an average of 990 BSN graduates every year. The number of ADN-RN graduates has slightly declined from 2014 to 2020, with an 8% decrease in the number of graduates. Both the BSN program and PN program had a 32% decrease in the number of graduates from 2014 to 2020.

2016-2020 NCLEX Pass Rates

The NCLEX pass rates for pre-licensure programs are displayed in Figures 15-17. Washington pre-licensure programs consistently have a higher NCLEX pass rate when compared with National pass rates. The five-year average pass rates in Washington are 96% for PN programs, 91% for ADN-RN programs, and 91% for BSN programs.

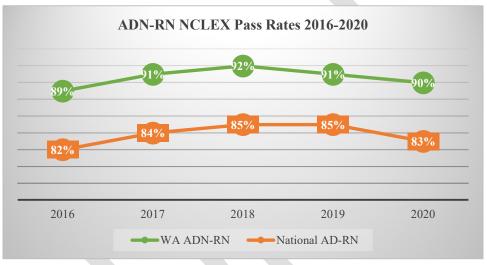


Figure 15. PN NCELX Pass Rates 2016-2020



Sources: 1) WA DOH NCLEX School Reports (2021) 2) NCSBN NCLEX Pass Rates 2016-2020 publications

Figure 16. Associate Degree Nursing-RN NCLEX Pass Rates 2016-2020



Sources: 1) WA DOH NCLEX School Reports (2021) 2) NCSBN NCLEX Pass Rates 2016-2020 publications

Figure 17. BSN NCLEX Pass Rates 2016-2020



Sources: 1) WA DOH NCLEX School Reports (2021) 2) NCSBN NCLEX Pass Rates 2016-2020 publications



Post-Licensure Programs

Post licensure programs are for students who are already licensed as RNs. This includes licensed RNs whose highest degree is a diploma or associate degree and who are working toward a bachelor's degree, also known as RN to BSN programs. Post-licensure programs also include graduate-level programs such as master's degrees and doctorate degrees. These programs do not include any pre-licensure students.

The number of post-licensure programs in Washington (and those who completed the annual survey) has increased over six years ranging from 33 programs in the 2014-2015 academic year to 53 programs in the most recent year.

There was notable growth in two specific programs, the RNB program, which grew from 8 to 17 programs, and the master's (non-ARNP) program, which increased from 7 to 13 programs. There were three DNP programs added during this period. There are three fewer master's ARNP programs from 2014 to 2019.

Table 3. WA Post-Licensure Programs 2014–2020

Post-Licensure Program						
Туре	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*
RNB	8	7	8	9	8	17
AD to MN	4	3	3	3	2	5
Master's (ARNP)	4	5	2	3	3	1
Master's (non-ARNP)	7	7	6	7	6	13
Post Master's Certificate	3	3	3	2	3	7
DNP	5	5	5	6	6	8
Doctoral (non-DNP)	2	2	2	2	2	2
Totals	33	32	29	32	30	53

Sources: 1) NCQAC Annual Education Survey 2014-2020, 2) Washington Department of Health Approved Nursing Programs October 2021*



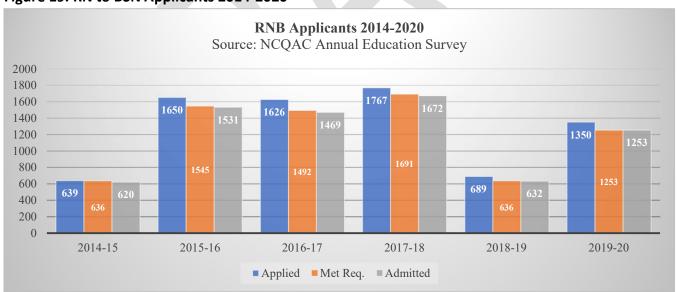
Program Location

Figure 18. Map of Washington Post-Licensure Nursing Programs 2021



Applicants

Figure 19. RN to BSN Applicants 2014-2020



The number of students admitted into RN to BSN programs more than doubled from 2014 to 2019.

On average, 1,200 students were admitted into RN to BSN programs every year with a 99% acceptance rate for applicants who met requirements.



AD-MN Applicants 2015-2020 Source: NCQAC Annual Education Survey 300 250 254 254 200 188 150 150 100 50 0 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 ■ Applied ■ Met Req ■ Admitted

Figure 20. Associate Degree RN to Master's Degree Applicants 2015-2020

An average of 130 students were admitted into associate degree to Master's in Nursing programs every year with a 90% acceptance rate for applicants who met program requirements.

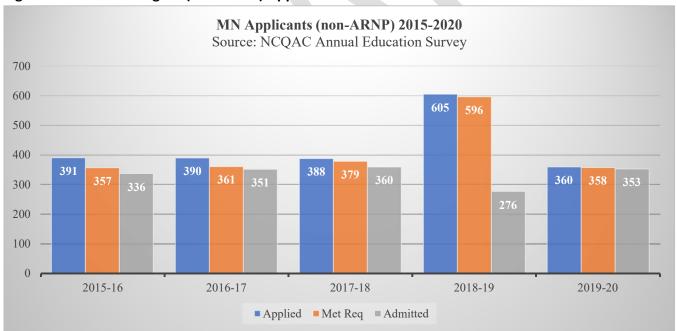


Figure 21. Master's Degree (non-ARNP) Applicants 2015-2020

An average of 335 students were admitted into Master's in Nursing and Master's of Science programs (non-ARNP) over five years, with an average acceptance rate of 86% for students who met program requirements.



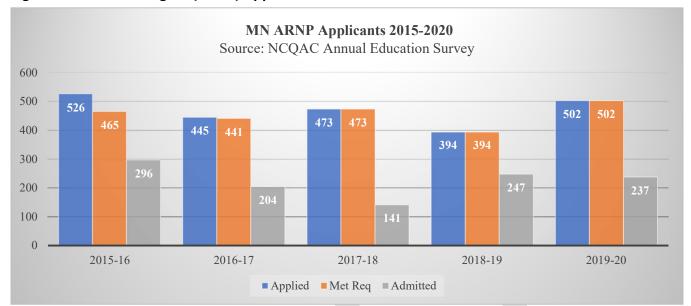


Figure 22. Master's Degree (ARNP) Applicants 2015-2020

An average of 225 students a year were admitted into Master's in Nursing programs with an ARNP focus.

There was an average acceptance rate of 50% for students who met program requirements over the last five academic years for the MN-ARNP programs.

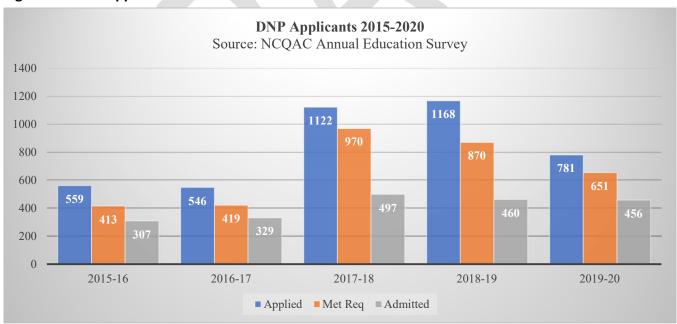


Figure 23. DNP Applicants 2015-2020

The number of students admitted into DNP programs increased 49% during these five years. The number of applicants also increased 40%, with an average of 410 students admitted into DNP programs every year and an average acceptance rate of 65% for students who meet program requirements.



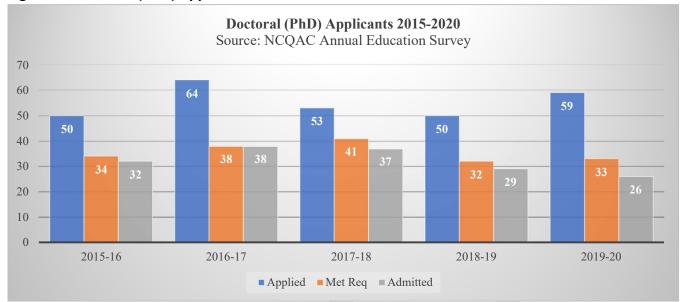


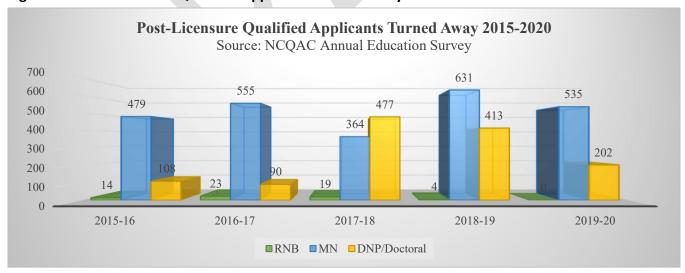
Figure 24. Doctoral (PHD) Applicants 2015-2020

The number of students admitted into research doctorate programs decreased by 18% from the academic years of 2015 to 2019.

An average of 32 students were admitted into research doctorate programs every year in the last five years, with an acceptance rate of 91% for those who met program requirements.

Qualified Applicants Turned Away

Figure 25. Post-Licensure Qualified Applicants Turned Away 2015-2020

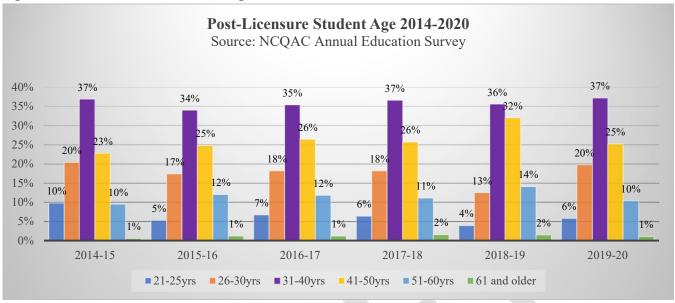


A qualified applicant turned away is an applicant who met program requirements and was not admitted due to limited program capacity. The largest group of qualified applicants turned away in a post-licensure program are the master's program applicants, with an average of 510 qualified applicants turned away every year. The majority of these are from the ARNP master's programs as they have a 50% acceptance rate, as displayed in Figure 22. There is a notable 87% increase in DNP/doctoral qualified applicants turned away from 2015 to the most recent 2019-2020 year.



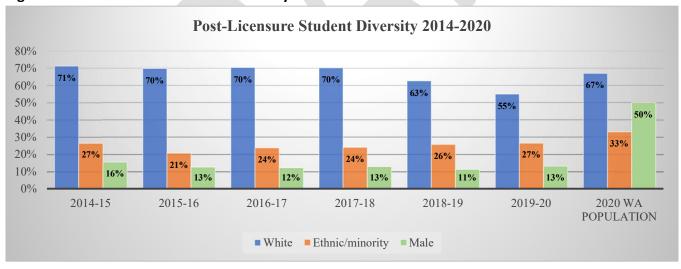
Student Demographics and Diversity

Figure 26. Post-Licensure Student Age 2014-2020



Most post-licensure students are between the ages of 3I-40 years (36%). The next largest groups are between the age of 41-50 years old (26%) and 26-30 years old (18%). Age for post-licensure students is relatively consistent over six years.

Figure 27. Post-Licensure Student Diversity 2014-2020



Over six years, post-licensure students were 67% White or Caucasian and 25% were from an ethnic or racial minority group, and 13% male.

The percent of racial or ethnic minorities among post-licensure students remained at 27% through the academic years of 2014 to 2019. There was a 4% decrease in male students from the 2015 year to the recent 2019 year.



*Note: Totals for White and ethnic/minority may not add up to 100 with missing/unknown data for race/ethnicity. 2014-2015 results include RNB and AD-MN data only. Sources: 1) NCQAC 2014 – 2020 Annual Education Survey. 2) 2021 U.S. Census Bureau

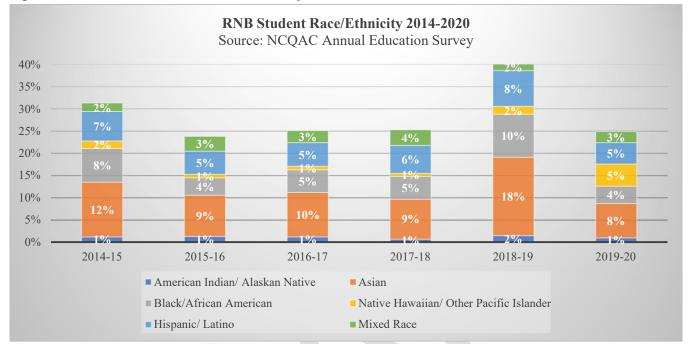


Figure 28. RN to BSN Student Race/Ethnicity 2014-2020

On average, 29% of RN to BSN students identified as one of the six race/ethnicity categories listed including, Mixed Race. The largest group identified as Asian (11%) with the second largest groups equally at 6% for Black/ African American and Hispanic/Latino students as the six-year average.

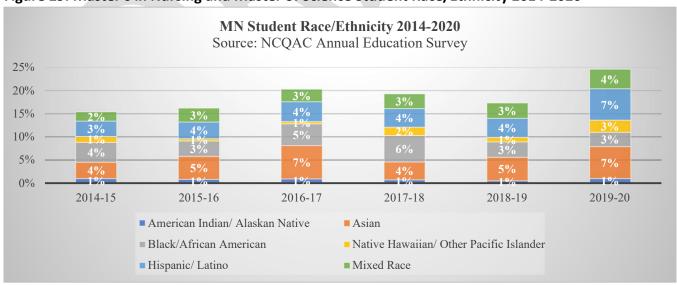


Figure 29. Master's in Nursing and Master of Science Student Race/Ethnicity 2014-2020

On average, 19% of master's students were from a racial and ethnic minority group over six years. The largest group was Asian, and the second largest group was Hispanic/Latino, with an average of 5% and 4%, respectively.



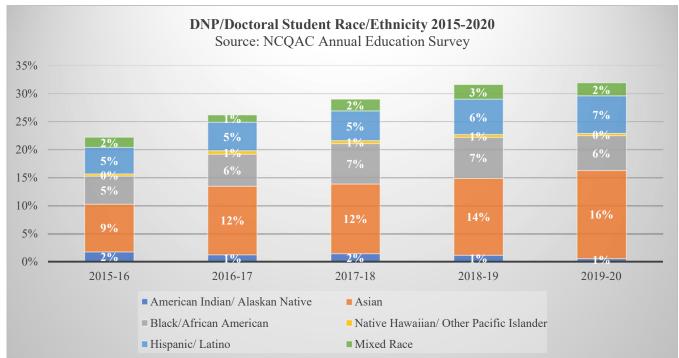
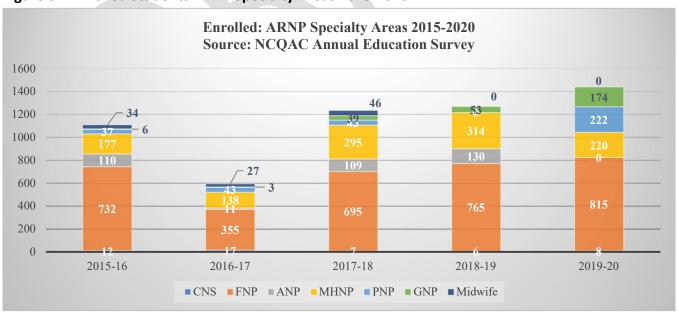


Figure 30. DNP/Doctoral Student Race/Ethnicity 2014-2020

There was a 32% increase in racial and ethnic minority students in DNP/doctoral programs from 2015 to the recent 2019 academic year. On average, 24% of DNP/doctoral students identified as racial/ethnic minorities over five years. The largest group is Asian, with an average of 13%, and the second largest is Black/African American at 6%.

ARNP Specialty Areas

Figure 31. Enrolled Students ARNP Specialty Areas 2015-2020



The largest specialty area for students enrolled in an ARNP program is the Family Nurse Practitioner, with an average of 670 students enrolled in this specialty every year.



There was a significant increase (>300%) in the number of enrolled ARNP students with a gerontology (GNP) specialty from 39 in 2017 to 174 in 2019.

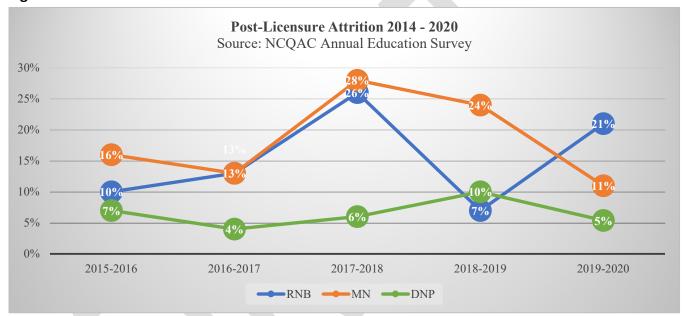
Those enrolled in mental health (MHNP) specialty rose 24% from 2015 to 2019.

*Note: No CRNA data available.

Attrition

Attrition is the number of students who leave the program before they have completed the program. The two reasons listed in the annual survey for students leaving a program include: 1) students who voluntarily withdrew for any reason and 2) students who did not pass the program for any reason.

Figure 32. Post-Licensure Attrition 2014-2020

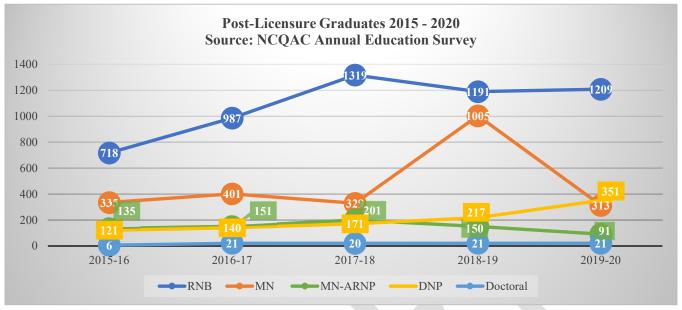


Post-licensure attrition is highest among master's level students, with an average of 18% attrition rate over five years. RNB programs have an average 15% attrition rate, and DNP programs have an average attrition rate of 6%.



Graduates

Figure 33. Post-Licensure Graduates 2015-2020



RN to BSN graduates increased 68% from 2015 to 2020. DNP graduates more than doubled over five years with more programs available. The number of master's ARNP students declined with fewer programs and recommended changes to entry-level nurse practitioner education to a DNP preparation by 2025 (NONPF, 2018).

^{*}Note: Variation in MN results due to missing data.



Nurse Faculty

To prepare more nurses for the future, nursing students require both didactic and practical application learning via clinical education provided by *nurse faculty*. A recent AACN report cited faculty shortages as the top reason for not accepting qualified applicants into their nursing programs (AACN, 2020). Schools also reported the need to add more faculty positions to meet student demand with most faculty vacancies requiring or preferring a doctoral degree (AACN, 2020).

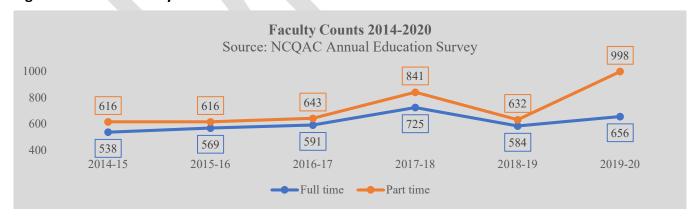
Reasons for faculty shortages include (AACN, 2020; National Advisory Council on Nursing Education and Practice, 2020):

- 1) projected faculty retirements for 2025 are approximately 30% of total faculty in 2015 (Fang & Kesten, 2017)
- 2) higher compensation in clinical settings compared with a teaching salary
- 3) high faculty workloads leading to stress and burnout
- 4) poor understanding of the faculty role and contribution to the development of the next generation of nurses
- 5) lack of diversity among nurse faculty workforce
- 6) an insufficient pool of nurse educators who are master's or doctorate prepared to meet the growing demand

Nursing programs require academically qualified registered nurses with an active unincumbered Washington license to teach in nursing education programs. Specifically, faculty in a Practical Nursing or Associate Degree program are required to have a Bachelor of Science in Nursing (BSN) or a graduate degree (Washington Administrative Codes [WAC], 2021). To teach in baccalaureate and graduate nursing programs, faculty require a minimum of a graduate or a doctoral degree-level education. In addition to minimum education requirements, programs prefer preparation in teaching, and some require at least two years of experience in nursing (WAC, 2021).

Faculty Counts

Figure 34. Nurse Faculty Part-Time and Full-Time Counts 2014-2020



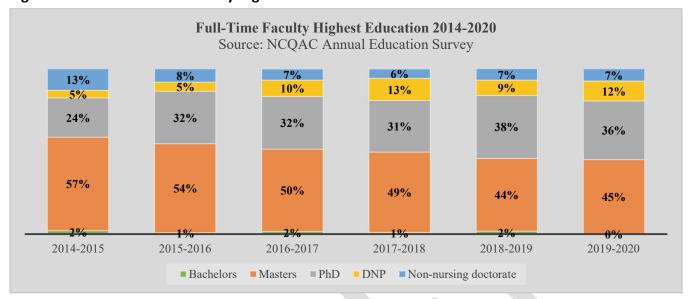
There is a higher average of part-time faculty (724) than full-time faculty (510).

There was a 21% increase in full-time faculty and a 62% increase in part-time faculty from 2014 to the recent 2019 year.



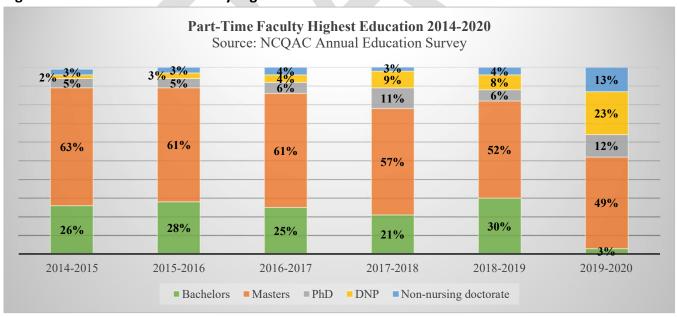
Faculty Education

Figure 35. Full-Time Nurse Faculty Highest Education 2014-2020



The majority of full-time faculty have either a master's degree (50%) or a PhD in nursing (32%) as their highest level of education. The percent of faculty with a DNP more than doubled from 2014 to 2019. An average of 50% of full-time faculty have a doctorate degree, with a 31% increase in doctorate-prepared faculty from 2014 to 2019. *Note: The 2019-2020 pre-licensure education survey did not offer an option to select a bachelor's level education for faculty. Thus, the variation from previous years.

Figure 36. Part-Time Nurse Faculty Highest Education 2014-2020



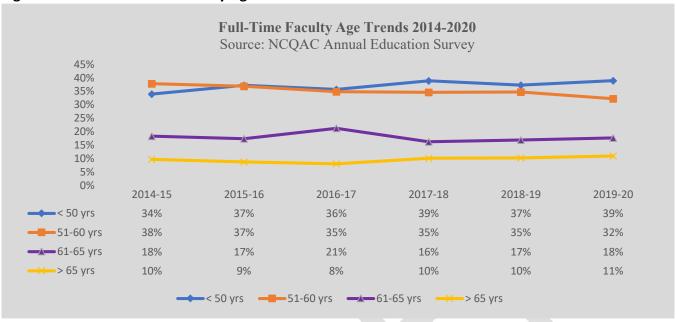
The majority of part-time faculty have a master's degree as their highest level of education (57%). A higher number of part-time faculty have a bachelor's degrees (26%) when compared with full-time faculty (2%).

^{*}Note: The 2019-2020 pre-licensure education survey did not offer an option to select a bachelor's level education for faculty. Thus, the lower value compared with previous years.



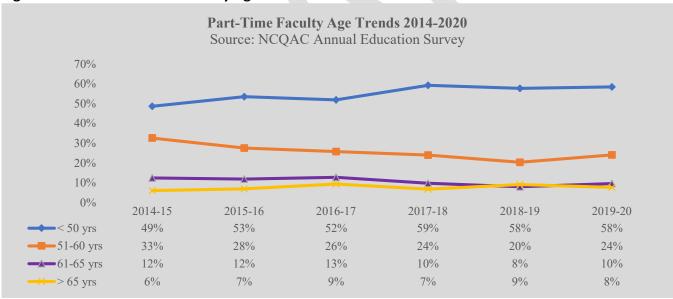
Faculty Demographics and Diversity

Figure 37. Full-Time Nurse Faculty Age Trends 2014-2020



Full-time faculty age remained consistent these six years for those 61 years and older.

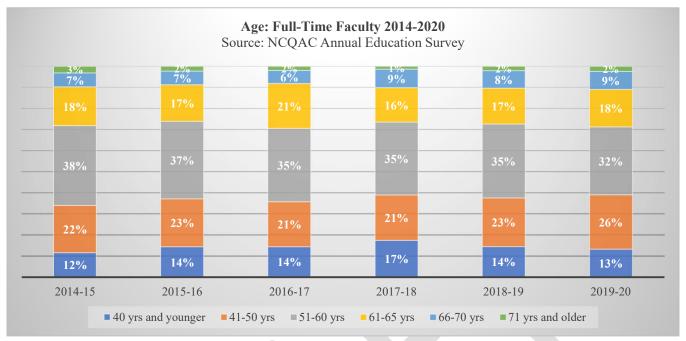
Figure 38. Part-Time Nurse Faculty Age Trends 2014-2020



The largest age group for part-time faculty over six years is 50 or younger.



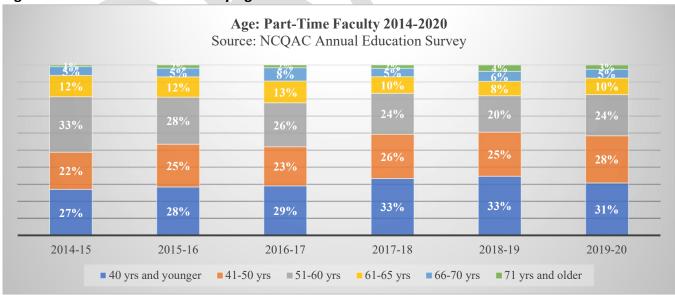
Figure 39. Full-Time Nurse Faculty Age 2014-2020



The largest age group for full-time faculty are those in the 51 to 60 years old category (36%). Those 50 years and younger make up 37% of full-time faculty, with a 14% increase in this age group from 2014 to 2019.

On average, 17% of full-time faculty are 61-65 years of age and within five years of targeted retirement age of 65. And 10% of full-time faculty are over 66 years and passed the target retirement age.

Figure 40. Part-Time Nurse Faculty Age 2014-2020



The largest age category for part-time faculty is those 40 years or younger (30%), followed by those 41 to 50 years (25%). Overall, part-time faculty are younger than full-time faculty.



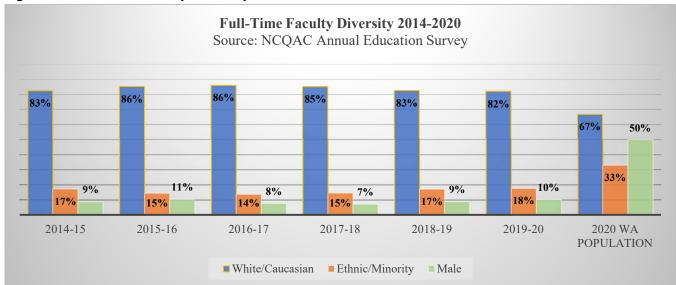


Figure 41. Full-Time Faculty Diversity 2014-2020

Full-time faculty are, on average, 85% White or Caucasian and 16% are from an ethnic or minority group including Mixed Race, and 9% are male.

*Note: Totals for White and Ethnic/minority may not add up to 100 with missing or unknown race/ethnicity data. Ethnic/minority categories include all non-White categories, including Mixed Race and exclude any missing or unknown data. Sources: 1) 2014-2020 NCQAC Education Survey 2) U.S. Census 2020

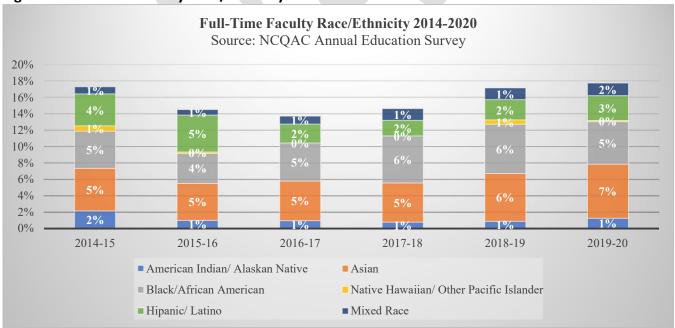


Figure 42. Full-Time Faculty Race/Ethnicity 2014-2020

Excluding White or Caucasian faculty, the largest race or ethnicity category in full-time faculty is Asian faculty (6%), followed by Black or African American faculty (5%).



*Note: Totals for White and Ethnic/minority may not add up to 100 with missing or unknown race/ethnicity data. Sources: 1) 2014-2020 NCQAC Education Survey 2) U.S. Census 2021

Part-Time Faculty Diversity 2014-2020 Source: NCQAC Annual Education Survey 100% 80% 84% **82**% 81% **82%** 50% 60% 40% 13% 12% 33% 20% 18% 16% 15% 19% 18% 23% 0% 2015-16 2014-15 2016-17 2017-18 2018-19 2019-20 2020 WA POPULATION ■ White/Caucasian ■ Ethnic/Minority

Figure 43. Part-Time Faculty Diversity 2014-2020

On average, 82% of part-time faculty are White or Caucasian, 18% are from an ethnic or minority group, and 11% are male.

*Note: Totals for White and Ethnic/minority may not add up to 100 with missing or unknown race/ethnicity data. Ethnic/minority categories include all non-White categories, including Mixed Race and exclude any missing or unknown data. Sources: 1) 2014-2020 NCQAC Education Survey 2) U.S. Census 2020

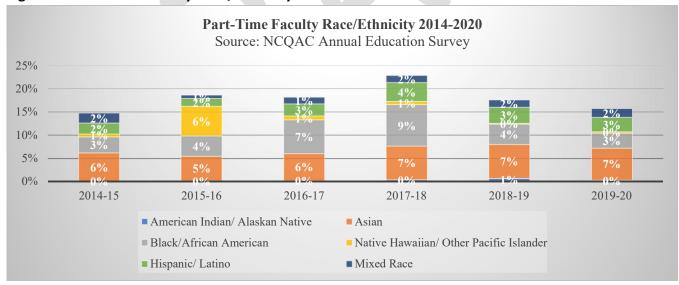


Figure 44. Part-Time Faculty Race/Ethnicity 2014-2020

Excluding White/Caucasian faculty, the largest race or ethnicity category in part-time faculty is Asian faculty (6%), followed by Black or African American faculty (5%).

*Note: Totals may not add up to 100 with missing or unknown race/ethnicity data. Sources: 1) 2014-2020 NCQAC Education Survey 2) U.S. Census 2021



Faculty Salary

The median high salary for faculty with a 9-month contract at a university decreased 13% over six years, while the 9-month salary for a community college faculty increased 48% during the same time. The 9-month low salaries for community colleges and universities were relatively the same during this time.

The 12-month contracts show a 3.5% increase for university faculty and a 39.5% increase for community college faculty. The university salaries were consistently higher than community college salaries for 12-month contracts.

The most notable increase for community college faculty is from 2018 to 2019, a 39% increase in salary. In 2019, House Bill 2158 (the Workforce Education Investment Act) included \$40 million designated to increase nurse faculty salaries at community and technical colleges (Washington State Nurses Association, 2020).

National average full-time salary for nurse faculty for a 12-month contract depends on the type of institution such as associate college versus doctoral/research university and Carnegie Classification or faculty rank such as Instructor or Professor and ranges from \$70 thousand to \$160 thousand (NLN, 2017).

Nurse Faculty Salary 9 Month Contract 2014-2020 Source: NCQAC Annual Education Survey \$120,000 \$110,000 \$102,900 \$95,400 \$93,356 \$100,000 \$92,099 \$88,980 \$88,808 \$90,000 \$89,010 \$80,000 \$70,322 \$67,875 \$66,672 \$65,500 \$70,000 \$62,951 \$63,000 \$58,326 \$56,839 \$56,839 \$56 320 \$67,415 \$60,000 \$51,000 \$50,000 \$56,729 \$54,340 \$53,798 \$52,000 \$51,518 \$40,000 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 ···*·*··· Community College Low 9 month salary — Community College High 9 month salary ··· • University Low 9 month salary University High 9 month salary

Figure 45. Nurse Faculty Salary 9-Month Contract 2014-2020

^{*}Note: Median salaries across pre-licensure and post-licensure faculty.



Figure 46. Nurse Faculty Salary 12-Month Contract 2014-2020 **Nurse Faculty Salary 12 Month Contract 2014-2020** Source: NCQAC Annual Education Survey \$114,000 \$120,000 \$107,189 \$106,080 \$104,210 \$110,000 \$100,675 \$96,708 \$100,000 \$90,339 \$90,000 \$81,270 \$79,440 \$80,000 \$69,687 \$68,000 \$70,000 \$75,047 \$73,186 \$73,175 \$72,583 \$72,583 \$69,637 \$60,000 \$654634 \$62,000 \$58,399 \$50,000 \$53,112 \$54,000

2016-17

••• Community College Low 12 month salary — Community College High 12 month salary

2017-18

University High 12 month salary

2018-19

2019-20

2015-16

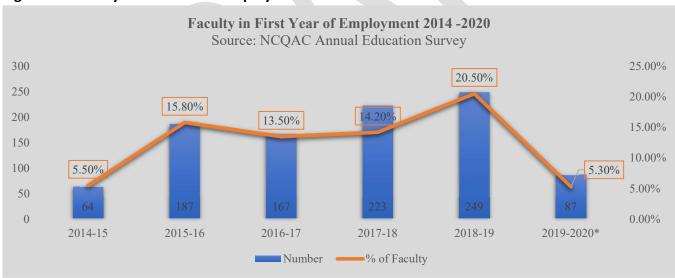
Faculty Employment and Vacancies

2014-15

\$40,000

Figure 47. Faculty in First Year of Employment 2014-2020

··• University Low 12 month salary



^{*}Note: The 2019-2020 results include post-licensure faculty only, whereas previous years include pre and postlicensure faculty. Source: NCQAC Annual Education Survey 2014-2020

^{*}Note: Median salaries across pre-licensure and post-licensure faculty.



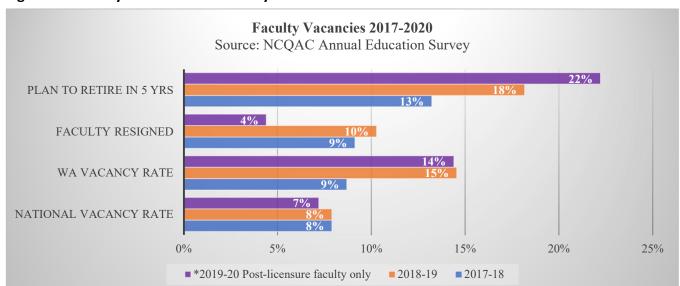


Figure 48. Faculty and National Vacancy Rates 2017-2020

*Note: The 2019-2020 results include post-licensure full-time faculty only. The 2017-2019 results include full-time and part-time faculty across pre and post-licensure programs. Sources: 1) NCQAC Education Survey 2017-2020. 2) National vacancy rates from 2018-2020 AACN Annual Reports https://www.aacnnursing.org/News-Information/Publications/Annual-Reports

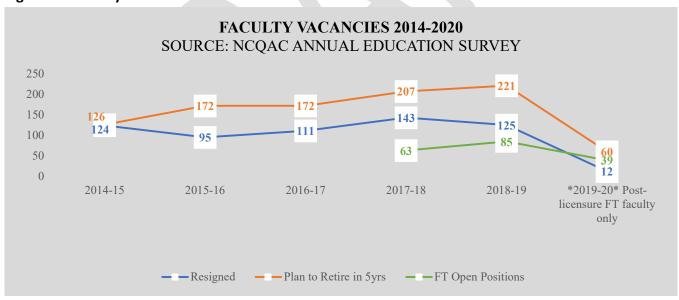


Figure 49. Faculty Vacancies 2014-2020

From 2014 to 2018 there was an average of 120 faculty vacancies due to faculty resignations. In addition, an average of 180 faculty planning to retire in 5 years. The most recent 2019 year has lower numbers when compared with previous years due to missing pre-licensure data.

*Note: 2014-19 data includes full-time and part-time faculty with pre and post licensure faculty. No data was available for FT open positions from 2014-17 years. 2019-20 data includes full-time and post-licensure faculty only.



Faculty Recruitment Issues
Source: AACN WA Faculty Vacancy Survey 2021

Noncompetitive salaries
Limited pool of doctorally prepared faculty
High faculty workload

17%

Figure 50. Faculty Recruitment Issues 2021

Finding faculty with the right specialty mix

Finding faculty willing/able to teach clinical courses

Finding faculty willing/able to conduct research

The 2021 AACN Faculty Vacancy Survey includes 12 Washington schools responding to the survey. Of the 12 respondents, 10 had full-time budgeted vacant positions with a vacancy rate of 10%. Schools were asked to identify their *single* most critical issue regarding faculty recruitment, with the largest response being non-competitive salaries (42%).

10%

15%

20%

25%

30%

35%

40%

45%

0%

5%

0%

Technical Information about Data Resource and Limitations

This report conducted a secondary data analysis using existing data from the annual education survey collected by the NCQAC. The annual surveys used in this report were from the 2014-15 academic year to the 2019-20 academic year.

Regulations regarding nursing education in the state of Washington require programs to submit an annual report via a survey provided by the NCQAC (WAC 246-840-520). The annual report covers data based on the academic year. The data is aggregated and reported in a summary form then shared publicly via the NCQAC website. The data is subject to public disclosure under RCW 42.56. The surveys include, on average, approximately 110-155 unique questions regarding programs, students, faculty, clinical hours, and other targeted topics for the year. The survey design followed the National Nursing Workforce Minimum Datasets: Education (2020) and includes additional target information for Washington. During this six-year analysis, the survey questions were relatively consistent. However, there were some questions added or removed during this time. In the 2019-2020 year, two surveys were used to collect program data. The first was aimed at pre-licensure program data in collaboration with the National Council of State Boards of Nursing. This collaboration included questions about COVID-19 and focused on pre-licensure program data only. The second survey was the typical survey administered by the NCQAC and collected post-licensure data.

The annual survey data is rich with information, however, there were limitations to its use.

- 1) Missing data. There was no entry for certain questions or entered as unknown. Missing data was omitted for analysis.
- 2) Errors in data entry. Data entry is manual, and numbers may be entered incorrectly or inaccurately. For example, one entry noted two thousand Hispanic students when this program only admitted a few hundred students in total. Therefore, this number was not congruent.



- When there was an obvious error like this, the data was omitted from the analysis. However, smaller errors may have gone undetected and used in the analysis.
- 3) Inconsistent interpretation of survey questions. It is evident in reviewing entries over several years that there is not a uniform interpretation of definitions or survey questions. For example, the person entering data one year may not be the same the following year, leading to inconsistent entry results.
- 4) Inconsistent survey questions. Specifically, the 2019-2020 year added a second NCSBN survey that focused only on pre-licensure data. The questions in this survey were asked differently or omitted and thus do not allow for comparison from previous years.
- 5) Data collected is for regulatory purposes, not for research purposes. Thus, does not address specific research questions or provide rationales for responses in the survey.

Ultimately, the accuracy of the report is dependent on the accuracy of the data submitted. The NCQAC provides technical assistance for programs to better understand the survey questions and support consistent data entry.





Policy Recommendations from Stakeholder Groups

These two pages intentionally left black as we gather feedback from stockholders.









Future Studies

In March 2021, WCN conducted a stakeholder survey to inform the WCN Research Agenda. The table below lists the stakeholder recommendations for education-related research topics in the first column. Education-related topics include information on programs, students, and faculty in Washington programs. The WCN Washington State Nursing Education Trend Report 2014-2020 summarizes results analyzed from annual survey data and fulfills 60% of the listed recommendations from stakeholders. The Future Studies column lists recommendations where data was not readily available or recommendations beyond the scope of the Education report. For example, by expanding to post-graduation employer and employment-related topics.

20	21 WCN Research Stakeholder Survey:	Potential Future	
Education Recommendations		2022 WCN Education Report	Studies
1)	Program success rates	NCLEX pass rates included	Post-graduation and
2)	Do employers feel that students are	Not available in annual	employment study (eg.
_,	prepared coming out of programs	survey data	residency, specialties,
	currently after clinical rotations were	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	preparation of student)
	almost non-existent due to the		
	pandemic		Impact of COVID during
3)	Nursing faculty data	Analyzed and included	nursing program
4)	Nursing student demographics,	Analyzed and included	
	enrollment changes, graduation rates	student demographics:	Preceptor and clinical
		graduation rates,	sites study, including
		applicants, retention,	diversity and ARNPs
		race/ethnicity, age	preceptors
5)	First employment. Use of residency	Not available in annual	
	programs and retention of residency	survey data	Nursing student study:
	programs.		Applicants, WA
6)	Trends in diversity of nursing students	Analyzed and included	residency, prior
	and nursing faculty		education, prior
7)	Admission criteria that are predictive of	Admission criteria data	healthcare related
	successful matriculation, graduation and	not available in annual	experience and type,
	pass on NCLEX	survey every year	specialty interests, etc.
8)	Numbers of students in each type of	Analyzed and included	Expanded faculty
	program. Diversity statistics.		survey (including CTC
9)	Diversity of Preceptors for ARNP	Not available in annual	vs University) data
	students	survey data	vs Offiversity) data
10	Level of and type of any prior education	Not available in annual	Challenges to entering
	whether nursing related or not for	survey data	nursing school
	students		(including
11	Number of enrolled, average of enrolled	Number and average of	socioeconomic status,
	completing program, average pass rate,	admissions, average pass	race, ethnicity, prior
	& average of those looking for secondary	rate included. No	, , , ,
	degrees	available data in those	



	looking for second	experience, number of
	degrees	applications, etc.)
12) Interdisciplinary collaboration during	Not available in annual	
nursing school	survey data	
13) Diversity of faculty	Analyzed and included in	
	report	
14) Diversity statistics, legislation updates	Analyzed and included	
on SB 5044 - 2021-22 and similar efforts	diversity of students by	
to increase and enhance diversity in	program. Public school	
public school system in WA nursing	data not available in	
programs.	annual survey	
15) Disaggregated completion rates, degree	Analyzed and included in	
pathways, and employment for ADN vs	report; employment data	
BSN students	not available	
16) Follow up from current students when	Data not available in	
they get out into the workforce and the	annual survey; Potential	
changes that had to be made to	future study	
education programs due to COVID		
17) Data regarding challenges faced by	Data available in annual	
nursing deans and directors - especially	survey, did not analyze as	
during COVID	NCQAC focused on COVID	
	related topics	
18) Faculty data that distinguishes a clinical	Included salary by CTC vs	
education in practice, clinical vs tenure	university. Unable to	
track faculty at CTCs and universities	distinguish #18 from	
	annual survey data	
19) Dashboard for clinical placements, out of	Analyzed applicants and	
state programs, and	graduation rates over six	
enrollment/graduation that allows for	years; out of state	
tracking of the same elements over time.	programs data in NCQAC	
	report	
20) Concerned there are significant	Reported trends over six	
inconsistencies in NCQAC annual report	years in several	
of which data and in what format are	categories; some data not	
presented each year making tracking	collected annually	
trends difficult	·	
21) Add a report on nursing education	Dedicated section to	
workforce similar to others.	nurse faculty data	
22) Enrollment, capacity	Analyzed and included	
	numbers of students	
	admitted; program	
	capacity was inconsistent	
	in survey data	



23) Refusal rates of qualified applicants	Analyzed and included	
across the state	qualified applicant data	
	by program	
24) Number of full-time faculty and staff	Analyzed and included in	
	report	
25) Nursing specialty interests (eg.	Analyzed specialties for	
community health nursing, public health	ARNPs; data not available	
nursing, school nursing)	for pre-licensure students	
26) Diversity in the pipeline	Analyzed and included in	
	report for student by	
	program and faculty	
27) Faculty motivation for teaching, job	Analyzed and included	
satisfaction, pay rates, intention to	faculty salaries and	
leave, education levels	education levels	
28) Breakdown of ethnicity	Analyzed and included for	
	students by program and	
	faculty	
29) Specific age and diversity stats from 2	Analyzed and included for	
and 4 year schools of nursing &	AD-RN, BSN, and RNB	
breakdown by education by County	students included. Map of	
	programs by region	
	included	
30) Demographics (including age, race	Analyzed and included	
ethnicity) students from WA or other	age, race and ethnicity.	
states/regions; motivation for nursing	Others not available via	
career, previous licensure/ education (ie	annual survey data.	
direct to nursing or, thru CNA for		
example - how easy is it to get nursing		
education and are there correlates to		
family income or race)		
31) Dashboard elements on diversity	Available in the reports	
	and working on how to	
	create dashboard for data	
	visibility via WCN website	



List of Abbreviations

ADN-RN...Associate Degree in Nursing-Registered Nurse

AD to MN...Associate Degree in Nursing to a Master of Nursing

ANP...Adult Nurse Practitioner

BSN...Bachelor of Science in Nursing-Registered Nurse

CCNE...Commission on Collegiate Nursing Education (American Association of Colleges of Nursing)

CNS...Clinical Nurse Specialist

DNP...Doctorate of Nursing Practice

FNP...Family Nurse Practitioner

GE...Graduate Entry Program- Registered Nurse

GNP...Geriatric Nurse Practitioner

MHNP...Mental Health Nurse Practitioner

MN...Master of Nursing or Master of Science in Nursing

MN-ARNP...Master of Nursing-Advanced Registered Nurse Practitioner

MW...Midwife

NCQAC...Nursing Care Quality Assurance Commission

NLN/CNEA...National League for Nursing Commission for Nursing Education Accreditation

PMC...Post Master's Certificate

PN...Practical Nursing

PN to ADN...Practical Nursing to Associate Degree in Nursing

PN to BSN...Practical Nursing to Bachelor of Science in Nursing

PNP...Pediatric Nurse Practitioner

RNB...Registered Nurse Bachelor (bachelor's degree programs for licensed RNs)



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