

Nursing Education Trends Report

DECEMBER 2022

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Executive Summary

Section 1004.015, *Florida Statutes*, requires that the Talent Development Council provides information on 10-year trends in pre-licensure nursing education. The Board of Governors of the State University System of Florida (SUS), the Florida Department of Education (DOE), the Commission for Independent Education (CIE), and the Independent Colleges and Universities of Florida (ICUF) collaborated to produce the following information with facilitation from the Reimagining Education and Career Help (REACH) Office.

Most of the data shown in this report is self-reported by institutions through surveys administered by their state-level governing and coordinating bodies. Data for CIE institutions are incomplete principally on account of a low response rate, particularly amongst nonaccredited institutions. Newly installed CIE leadership is developing solutions, including policy recommendations.

Newly required enrollment data is provided in a 2020-21 snapshot, and the 10-year trend will be built out in coming reports. As the LINE and PIPELINE programs are fully implemented, information on awards and outcomes will be included in future iterations of the report.

The report presents separate data for Licensed Practical Nurse (LPN) and Registered Nurse (RN) programs including numbers of slots, applications, accepted students, enrollment, graduates, retention/graduation rates, and National Council of State Boards of Nursing Licensing Examination (NCLEX) pass rates. The report also presents four-year data trends for the nursing student loan forgiveness program instituted in section 1009.66, *Florida Statutes*.

Nursing Programs Offered in Florida

As required in section 1004.015, *Florida Statutes*, this report sponsored by the Talent Development Council presents 10-year data trends in nursing education in Florida. There are three levels of nursing programs offered by postsecondary institutions in Florida: Licensed Practical Nurse (LPN), Associate in Science in Nursing (ASN), and Bachelor of Science in Nursing (BSN). Degrees for RN's may be earned at the associate or baccalaureate level. Nursing education may be provided by local school districts, Florida College System (FCS) institutions, CIE institutions, state universities, and ICUF institutions.

In 2020-21, 28 of Florida's 67 school districts, 13 of the 28 FCS institutions, and 82 CIE institutions offered LPN programs. RN programs were offered by all 28 FCS institutions, 103 CIE institutions, 10 SUS institutions, and 14 ICUF institutions. Note that bachelor's level nursing programs offered by FCS institutions are not considered pre-licensure programs because they are intended and designed to bridge working ASNs to the bachelor's level.

About the Data

Most of the data shown in this report is derived from surveys of institutions and school districts, not state-level administrative databases. Surveys from each sector were administered in 2021 to collect data for academic years 2010-11 to 2019-20 and follow-up surveys were administered in 2022 to collect data for 2020-21. The REACH Office provided standardized reporting templates to each sector in August 2022, which were populated with survey data and returned so the REACH Office could compile this iteration of the report.

In the 2022 Legislative Session, the law governing this report was amended to require outcome information on the PIPELINE nursing program performance incentives and the LINE fund for nursing

educator recruitment. At the time that this report was being prepared, the programs were in the early phases of implementation. Future iterations of this report will include information on awards and outcomes.

Addressing another legislative change in 2022, the REACH Office requested data from DOE's Office of Student Financial Aid regarding the nursing student loan forgiveness program instituted in Section 1009.66, *Florida Statutes*. The office was able to provide all the required data except for the length of time recipients were employed at sponsoring institutions. That data is being collected and will be included in future reports.

The 2022 legislation also added enrollment (headcount) to the required data. This report begins that process by providing a snapshot of 2020-21 enrollments. Rather than re-surveying all the institutions to build out a 10-year time series, the REACH Office is exploring other options including the use of data from the federal Integrated Postsecondary Education Data System. If no other options are available, supplemental surveys will be administered.

The Talent Development Council recognizes the importance of the legislative charge behind this report and is committed to developing quality data for decision makers. There are, however, some caveats to the interpretation of the trend data in this report revolving around CIE institutional reporting issues. The most important issue is that data from CIE institutions is based on relatively low survey response rates¹, especially among nonaccredited institutions², thus CIE trends should be viewed with caution. Newly installed CIE leadership is developing solutions, but it is reasonable to conclude that—because previously publicly available nursing program metrics from nonaccredited institutions frequently showed lower performance than accredited public and private institutions—many of the nonaccredited CIE institutions have no incentive or requirement to report meaningful data, here.

In addition to low survey response rates, historical data was self-reported only by institutions in operation at the time of the survey. In other words, CIE institutions that closed at any time before administration of a survey would not be represented in the figures, and recently established institutions would not have a full 10 years of data to report.

Registered Nurse Programs

This section of the report analyzes the 10-year trend data in RN (both ASN and BSN levels) education programs for the academic years of 2011-12 through 2020-21. The data include the number of student slots, application and acceptance data, number of graduates, retention/graduation rates, and licensure exam pass rates.

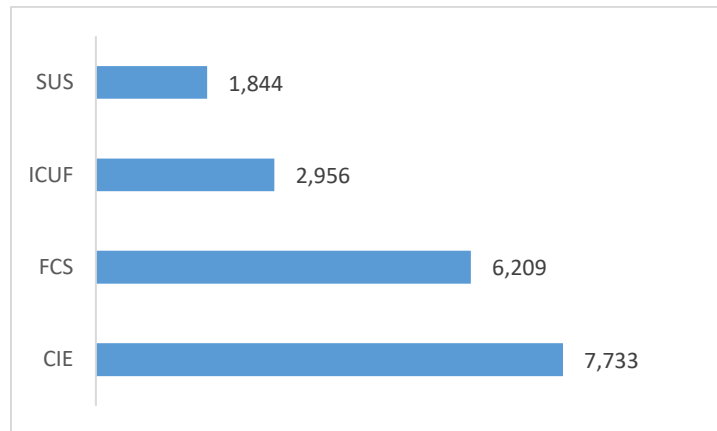
¹ For 2020-21 academic year data, CIE surveyed 38 institutions with accredited LPN programs, and 17 (45%) provided complete responses to the survey. CIE surveyed 44 institutions with non-accredited LPN programs, and 3 (7%) responded. CIE surveyed 67 institutions with accredited RN programs, and 39 (58%) provided complete responses to the survey. CIE surveyed 36 institutions with non-accredited RN programs, and 4 (11%) responded.

² Some CIE institutions are not yet fully accredited. Private, for-profit institutions may be licensed by CIE and approved by the Florida Board of Nursing pending accreditation to train nursing students, who, upon graduation, are eligible to take the NCLEX licensure exam.

Enrollment

CIE institutions enrolled 7,733 RN students in 2020-21, which was the largest number among the sectors. Exhibit 1 shows the share of statewide enrollment in pre-licensure RN programs represented by each sector in 2020-21.

Exhibit 1: Pre-Licensure Student RN Enrollment, 2020-21

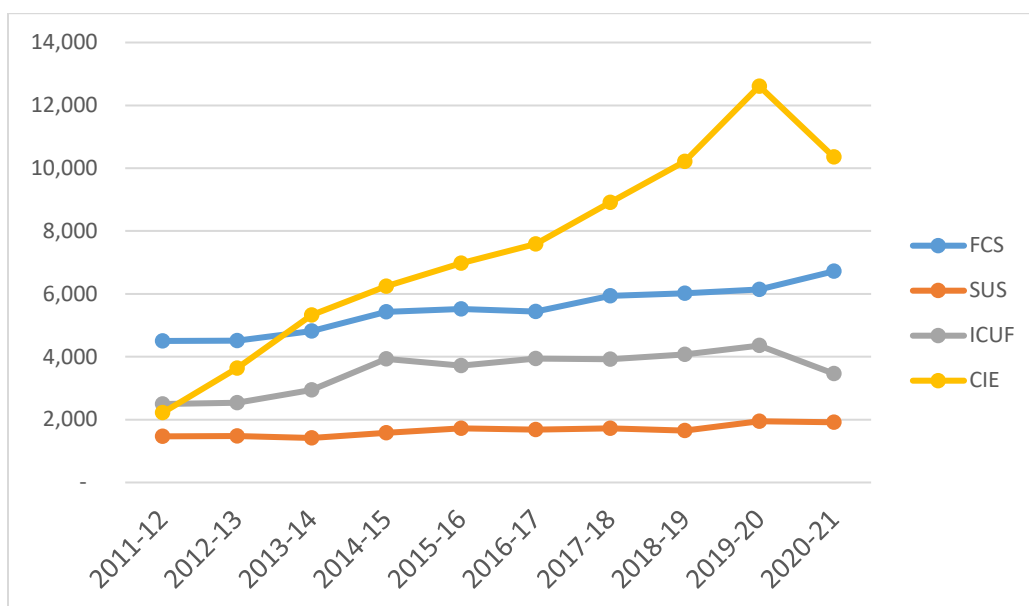


Source: Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

RN Student Slots

During the review period, the number of student nursing slots increased from 10,680 slots to 24,811, an increase of 135%.³ Exhibit 2 displays the trend for each sector. Except for CIE and ICUF, there has been modest or relatively flat growth. For academic year 2020-21, which was the first full academic year affected by the pandemic, there was a slight increase in student slots among FCS institutions. However, both CIE and ICUF institutions saw a large decrease of 800 plus slots.

Exhibit 2: Pre-Licensure Student RN Slots



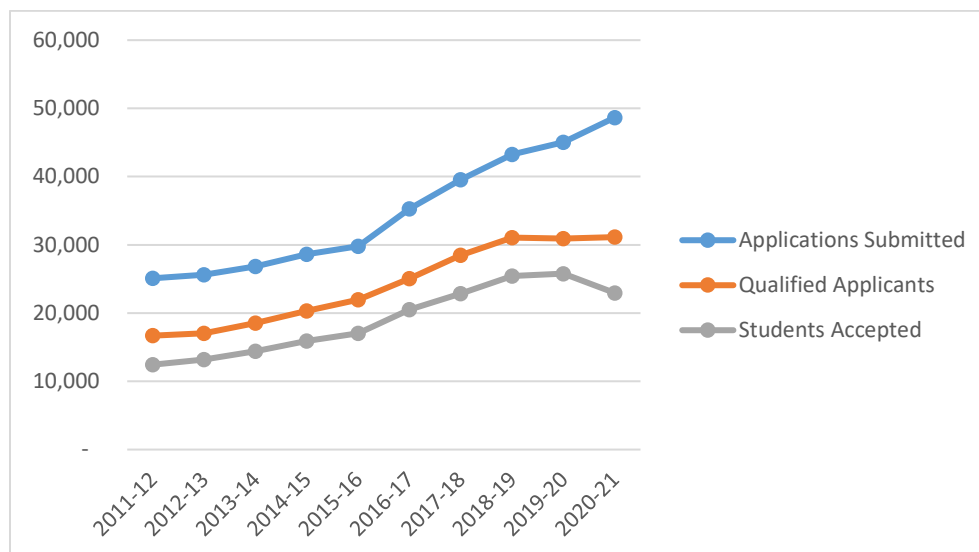
Source: Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

³ For the 2020-21 academic year, there were 12 CIE and 2 ICUF institutions that did not report slot numbers. For those cases, we used the number enrolled as a proxy for slots.

RN Applications and Admission

Between 2011-12 and 2020-21 across all postsecondary sectors, the number of RN program applications, qualified applicants, and accepted students has increased. While all three of these measures have increased, the gap between all applications submitted and the number of students accepted to these programs has grown from 12,660 in 2011-12 to 25,704 in 2020-21, representing a 103% increase. Additionally, the gap between qualified applicants and the number of students accepted has grown by 92% from 4,251 to 8,177.⁴

Exhibit 3: RN Program Applications, Qualified Applicants, Accepted Students across All Sectors

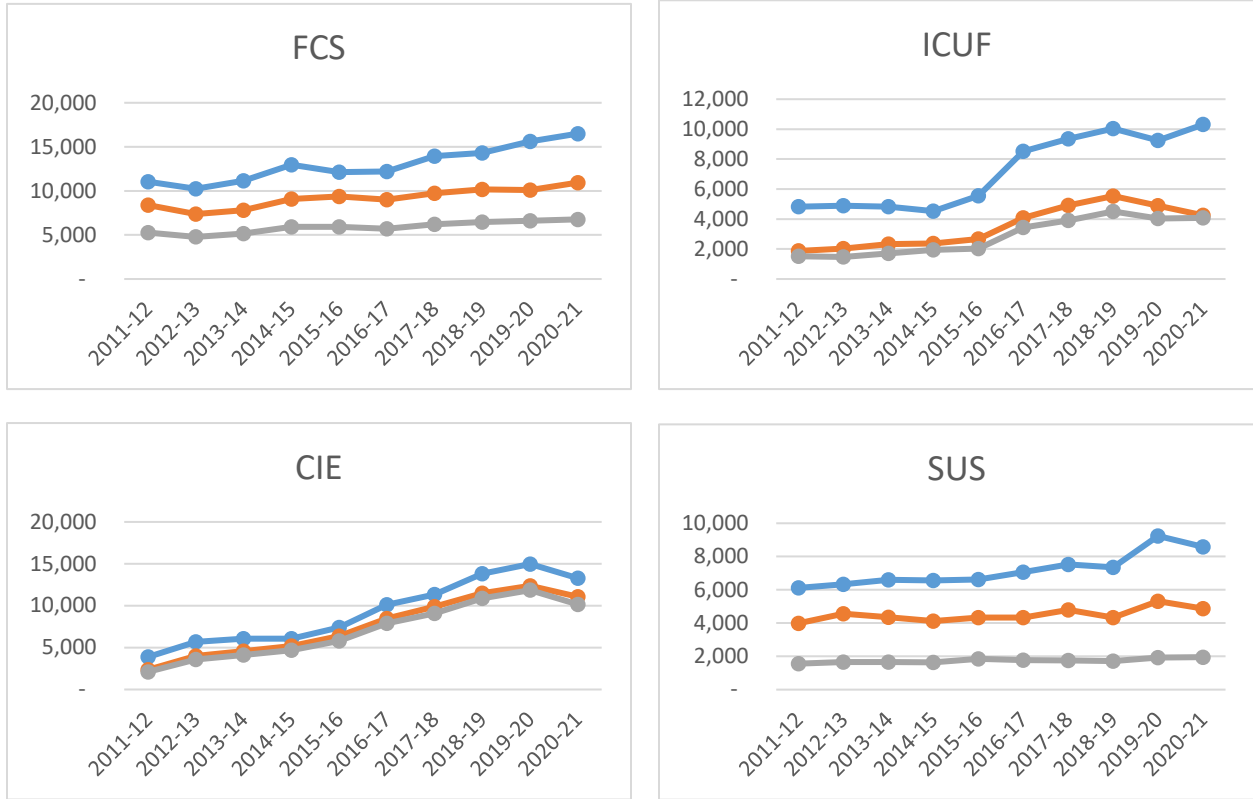


Source: Analysis of data from the Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

⁴ Students can be accepted by multiple programs but may not enroll in all of them. Therefore, there could be a gap between the number of students admitted and the number who ultimately fill open slots.

While the 2020-21 academic year saw an acceleration of application growth there was a decline in accepted students, widening the gap. Exhibit 4 shows these trends by postsecondary education sector.

Exhibit 4: RN Program Applications (blue), Qualified Applicants (orange), Accepted Students (gray) by Education Sector

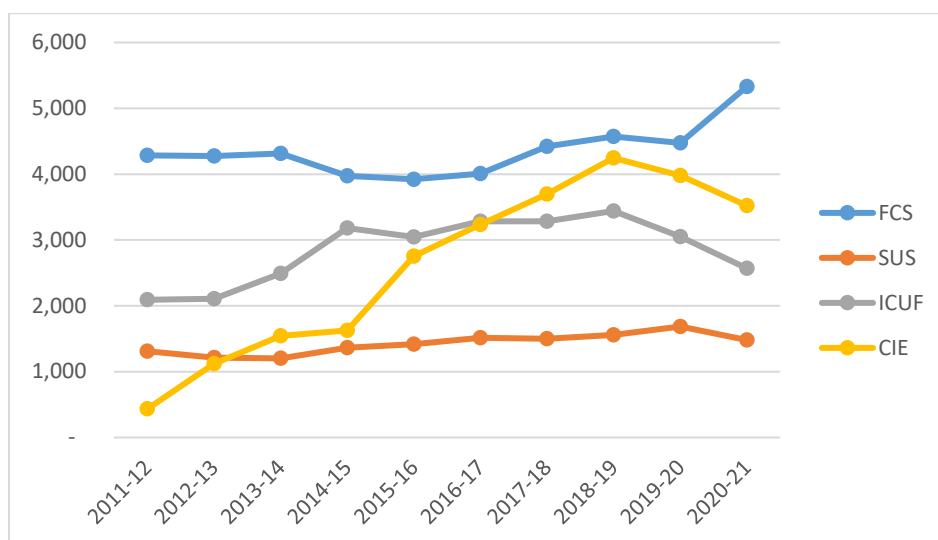


Source: Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

RN Graduates

Across all education sectors the total number of pre-licensure nursing program graduates increased from 8,122 to 12,900 between 2011-12 and 2020-21. Exhibit 5 below shows the trends for each postsecondary education sector. Despite having a decrease in the number of graduates beginning in 2018-19, CIE institutions showed the most growth over the 10-year period. ICUF graduates have also declined from 2018-19 through 2020-21. The number of SUS and FCS graduates has been relatively flat.

Exhibit 5: Pre-licensure RN Program Graduates

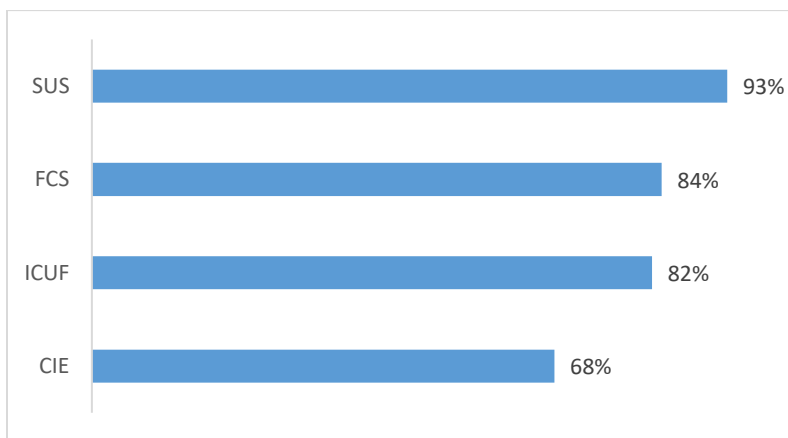


Source: Analysis of data from Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

RN Program Retention/Graduation Rates

Section 1004.015, *Florida Statutes*, requires reporting on program retention rates of students tracked from program entry to graduation. Because of variation in program lengths and when students start programs during their postsecondary career, calculation of this data is challenging. As a solution, the REACH Office, along with staff from each sector, formulated a standardized proxy measure beginning with the 2020-21 program year. The measure calculates the rate of retention or graduation among all enrolled students from the previous year, what percentage either graduated or were continuously enrolled by the summer of the following academic year. Results ranged from 93% (SUS) to 68% (CIE). Exhibit 6 shows the 2020-21 retention or graduation rate for each sector.

Exhibit 6: Retention/Graduation Rates of RN Students, 2020-21

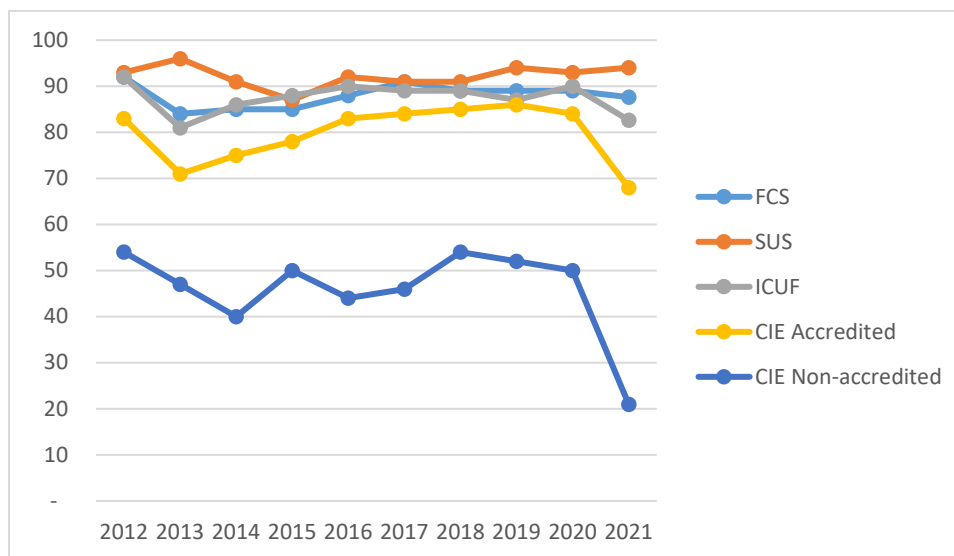


Source: Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

National Council of State Boards of Nursing Licensing Examination (NCLEX) Pass Rates

The NCLEX pass rate among education sectors varied over the 10-year period with SUS institutions having the highest pass rates overall. CIE non-accredited institutions lagged far behind the other sectors, including accredited CIE institutions, across the time series. CIE institution pass rates dropped sharply in 2021. For the 2020-21 academic year, NCLEX pass rates ranged from 21% for CIE non-accredited institutions to 94% for SUS institutions. Exhibit 7 shows the trend in NCLEX pass rates for each education sector.

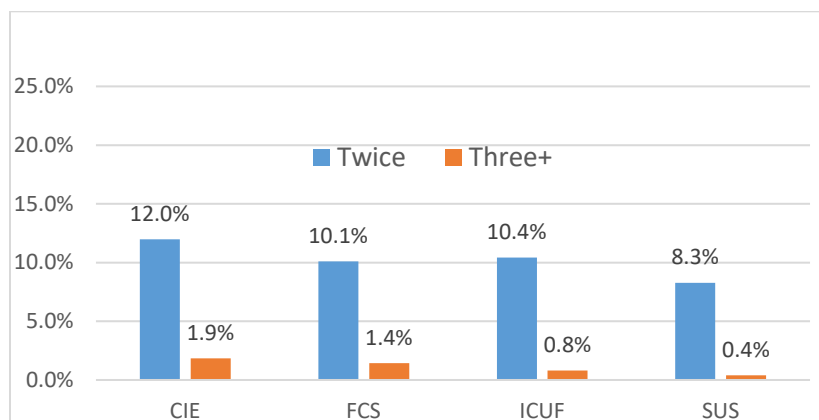
Exhibit 7: RN Program NCLEX Pass Rates



Source: Board of Governors, Florida Department of Education, and Independent Colleges and Universities of Florida.

Among RN students who graduated in 2020-21 and took the NCLEX exam within a year of graduation, most took the exam one time, 10.8% took the exam a second time, and 1.4% took the exam a total of three or more times. Exhibit 8 shows the percentages of 2021 graduate test takers who took the exam multiple times by education sector.

Exhibit 8: NCLEX Retakes Among RN Program 2020-21 Graduates

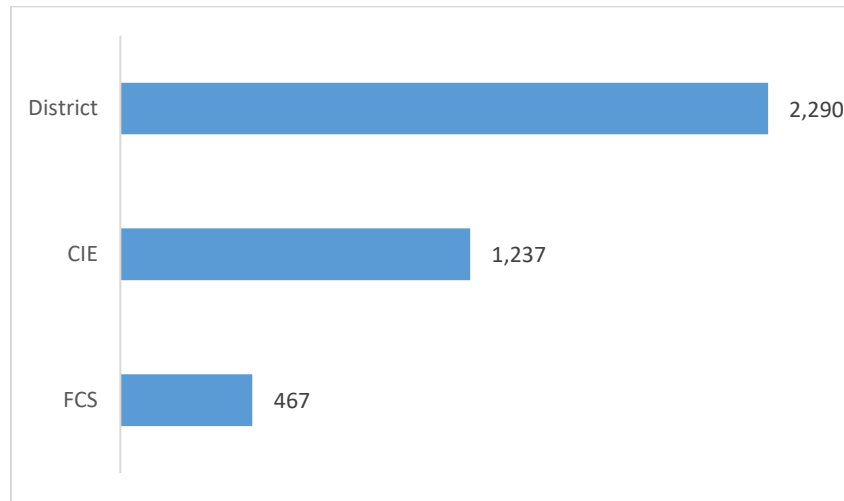


Source: Analysis of data provided by the National Council of State Boards of Nursing.

Licensed Practical Nurse Programs

This section of the report analyses the 10-year trend data in LPN education programs for the academic years of 2011-12 through 2020-21. This data includes the numbers of student slots, application and acceptance data, numbers of graduates, retention/graduation rates, and licensure exam pass rates. School districts, FCS institutions, and CIE institutions offer LPN programs. School districts enrolled 2,195 LPN students in 2020-21, the largest number among the sectors. Exhibit 9 shows the share of statewide enrollment in pre-licensure LPN programs by each education sector in 2020-21.

Exhibit 9: Student LPN Enrollment, 2020-21

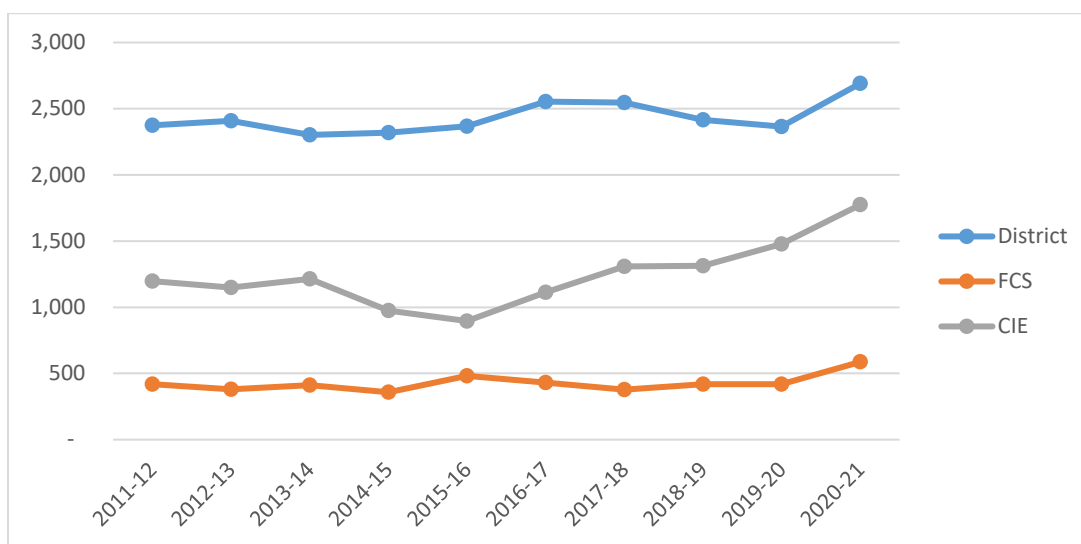


Source: Florida Department of Education.

LPN Student Slots

Between 2011-12 and 2020-21, the number of student LPN slots increased from 3,993 slots to 5,052, an increase of 26.5%. Among school districts and FCS institutions there has been relatively flat growth over the period; however, both experienced a slight uptick between 2019-20 and 2020-21. CIE institutions experienced modest growth with 1,198 slots in 2011-12 to 1,774 slots in 2020-21. Exhibit 10 displays ten-year trend for each education sector.

Exhibit 10: Student LPN Slots

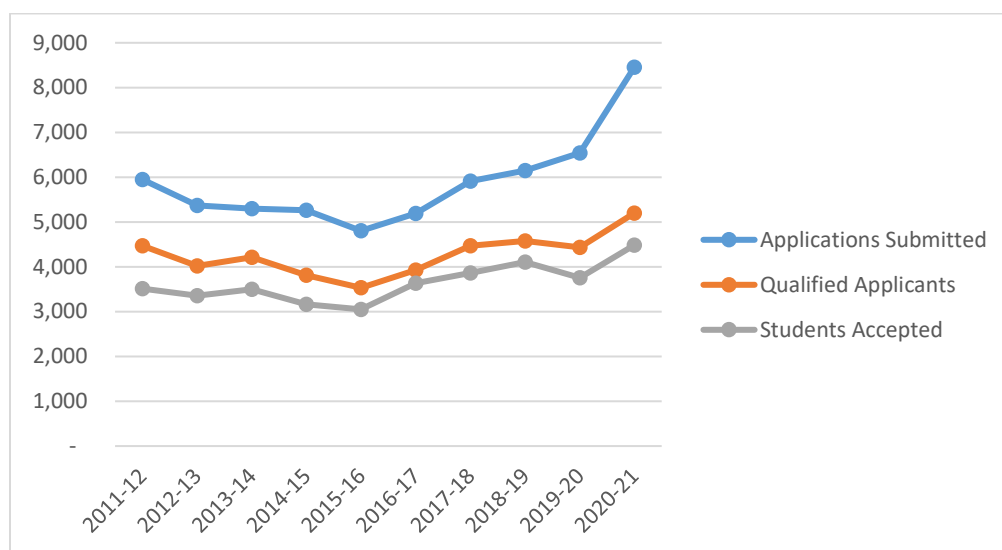


Source: Florida Department of Education.

LPN Applications and Admission

Between 2011-12 and 2020-21 across all postsecondary sectors, the number of LPN program applications increased by 42% while the number of qualified applicants increased by 16%. In that timeframe, the gap between all applications submitted and the number of students accepted has grown from 2,439 in 2011-12 to 3,970 in 2020-21. This represents an increase of 63%. However, the gap between qualified applicants and students accepted has decreased by 26% from 961 to 715. There was a surge in applications between 2019-20 and 2020-21 but the qualified applications grew at a slower pace. Exhibit 12 shows these trends by postsecondary education sector.⁵

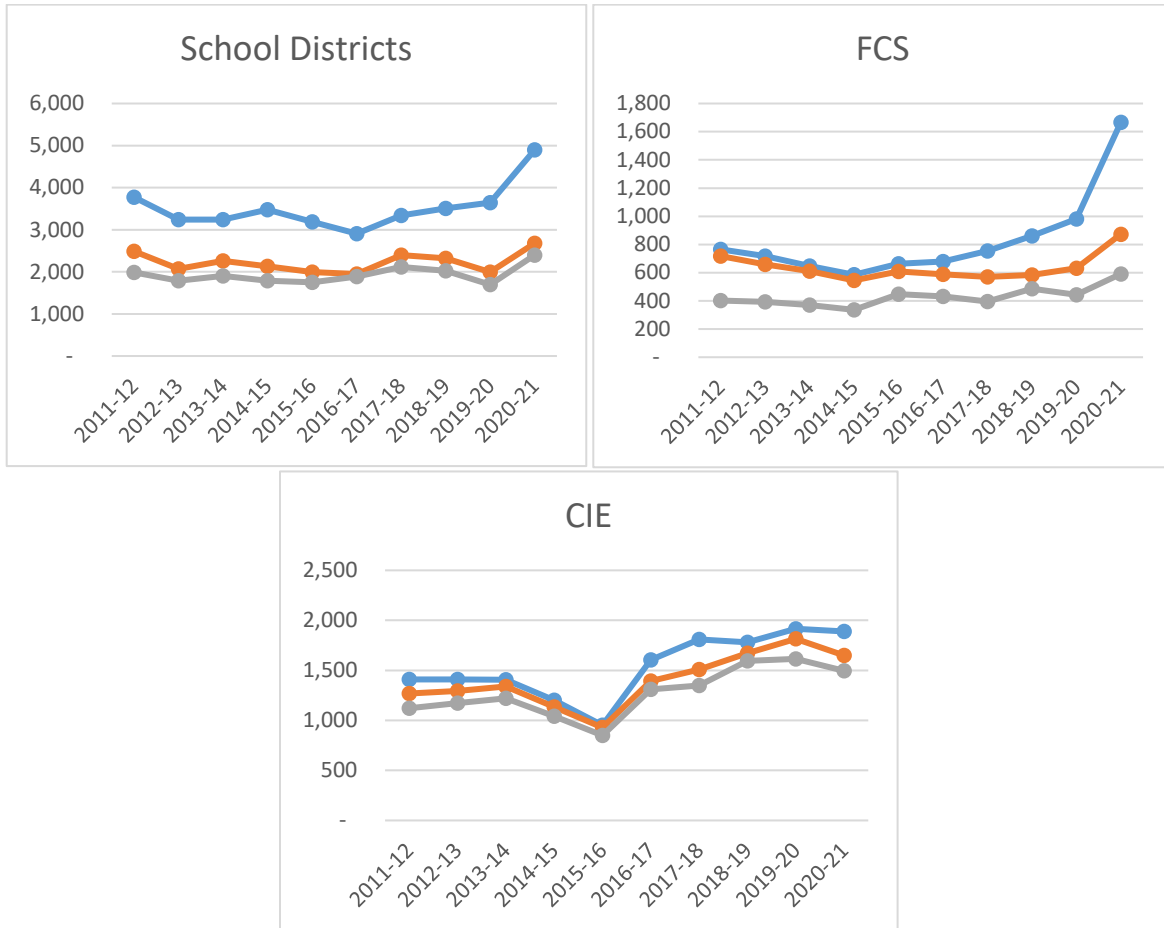
Exhibit 11: LPN Program Applications, Qualified Applicants, Accepted Students across All Sectors



Source: Analysis of data from the Florida Department of Education.

⁵ Students can be accepted by multiple programs but may not enroll in all of them. Therefore, there could be a gap between the number of students admitted and the number who ultimately fill open slots.

Exhibit 12: LPN Program Applications (blue), Qualified Applicants (orange), Accepted Students (gray) by Education Sector

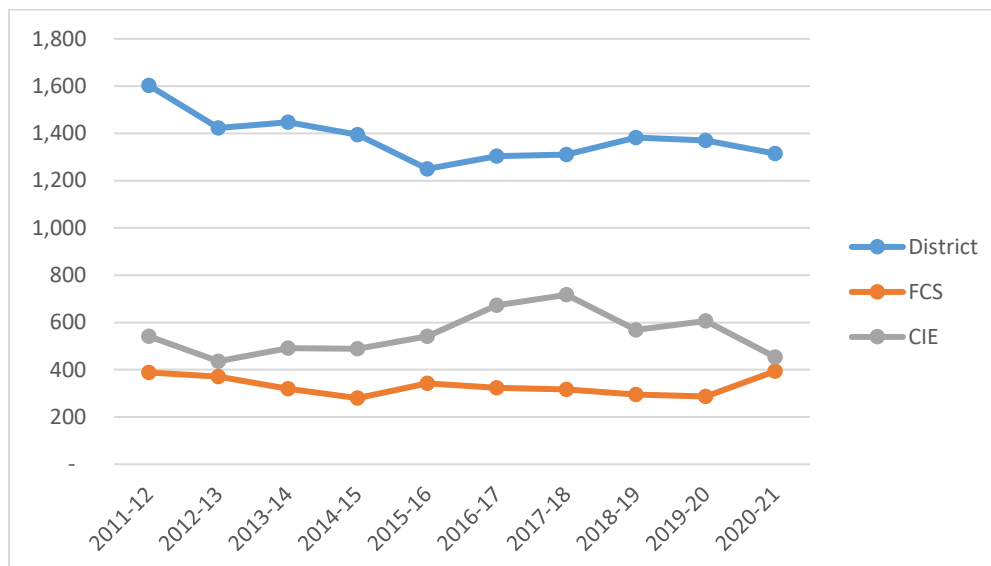


Source: Florida Department of Education.

LPN Graduates

The total number of pre-licensure LPN program graduates decreased from 2,553 to 2,162 (-15%) between 2011-12 and 2020-21. Exhibit 13 below shows the trends for each postsecondary education sector. Over this timeframe both school districts and CIE institutions saw a decrease in the number of LPN graduates at 22% and 16%, respectively. Conversely, the number of graduates from FCS institutions increased by 2%.

Exhibit 13: LPN Program Graduates

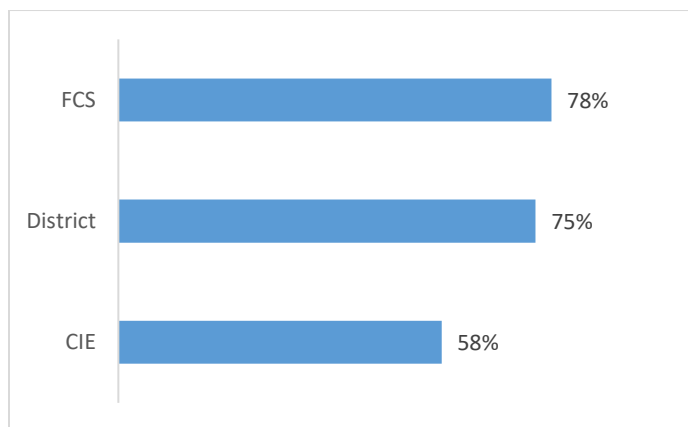


Source: Analysis of data from Florida Department of Education.

LPN Program Retention/Graduation Rates

For 2021 across all school districts and FCS institutions, the average retention/graduation rate was 71% and ranged from 78% for FCS institutions to 58% for CIE institutions. Exhibit 14 shows the rates by education sector.

Exhibit 14: Retention/Graduation Rates of RN Students, 2020-21

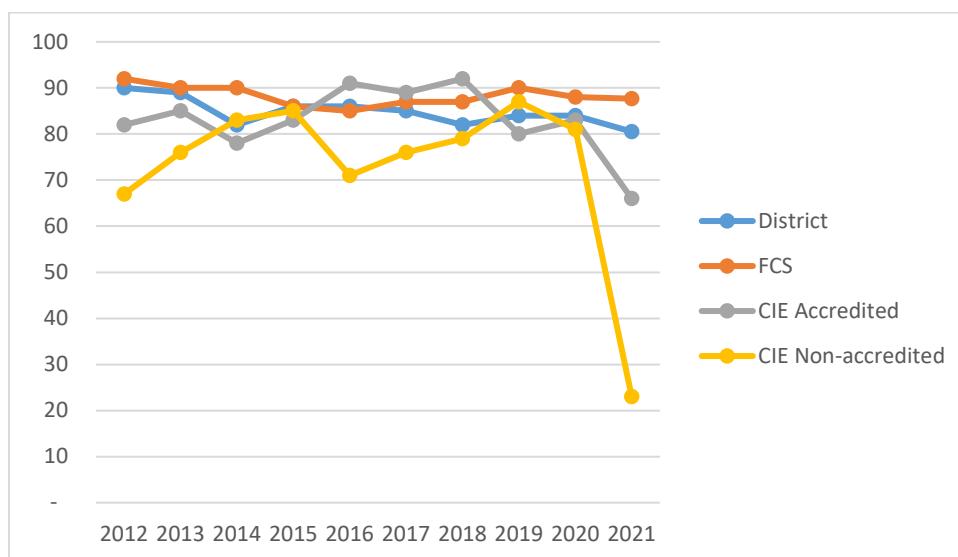


Source: Florida Department of Education.

LPN National Council of State Boards of Nursing Licensing Examination Pass Rates

Across all sectors for the 10-year time series, LPN NCLEX pass rates ranged from the low of 23% to the high of 92%. Pass rates remained steady over the period for FCS institutions. Exhibit 15 shows the NCLEX pass rate trends for each education sector. CIE pass rates dropped sharply in 2021, particularly among non-accredited institutions. The pass rates for the sectors ranged between 23% and 88% in 2021.

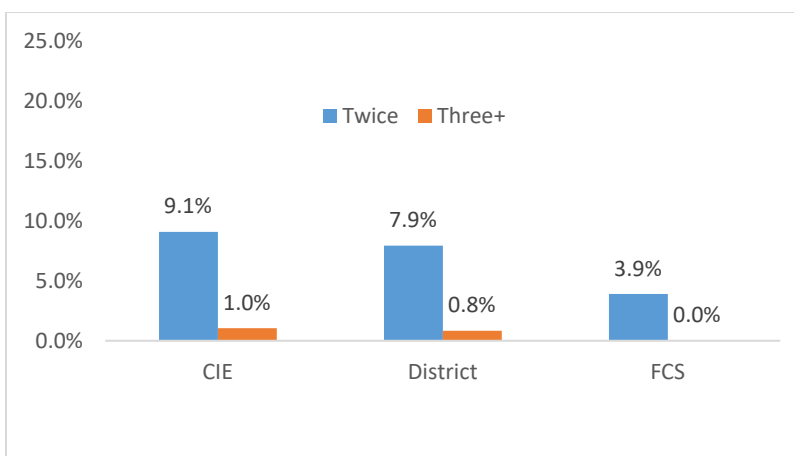
Exhibit 15: LPN Program NCLEX Pass Rates



Source: Florida Department of Education.

Among LPN students who graduated in 2020-21 and took the NCLEX exam within a year of graduation, 10.8% took the exam a second time and 1.4% took the exam a total of three or more times. Exhibit 16 shows the percentages of 2021 graduate test takers who took the exam multiple times by education sector.

Exhibit 16: NCLEX Retakes Among LPN Program 2020-21 Graduates



Source: Analysis of data provided by the National Council of State Boards of Nursing.

Loan Forgiveness Program

The nursing student loan forgiveness program instituted in section 1009.66, *Florida Statutes*, allows the Florida DOE to repay loan principal of up to \$4,000 a year for up to four years for selected graduates of accredited or approved nursing programs. In 2021, a total of 322 graduates received a total of \$1.2 million, which averages to \$3,729 per graduate. Of these graduates across all nursing program, 242 were from bachelor's level RN programs. Exhibit 17 below summarizes repayment details from the last four years.

Exhibit 17: Nursing Loan Forgiveness Repayment Data, 2018-2021

Loan Repayment Detail	2018	2019	2020	2021
Graduates Receiving Payments (All Credential Levels)	418	436	401	322
Bachelor's in Nursing	336	365	319	242
Associate in Nursing	49	53	64	64
Licensed Practical Nurse	13	16	16	15
Not Reported	20	2	2	1
Total Amount Paid	\$1,217,839.28	\$1,220,815.08	\$1,221,588.51	\$1,200,895.54
Average Amount Paid	\$2,913.49	\$2,800.03	\$3,046.36	\$3,729.49

Source: Analysis of data provided by the Florida Department of Education.

As shown in Exhibit 18, most of the graduates receiving loan repayment assistance over the last four years were employed at teaching hospitals.

Exhibit 18: Nursing Loan Forgiveness Program Employers, 2018-2021

Employer Type	2018	2019	2020	2021
Teaching Hospital	331	343	311	250
Public School	5	13	15	19
Community Health Center	6	11	18	16
County Health Department	15	21	25	16
State Medical Facility	11	17	15	15
Hospital for Children	36	24	14	5
Family Practice Teaching Hospital	14	7	3	1
Total	418	436	401	322

Source: Analysis of data provided by the Florida Department of Education.

Next Steps

Postsecondary education partners will continue to work on providing more complete, accurate, valid, and refined data on 10-year nursing education trends. The REACH Office will explore with CIE the issue of low survey response rates and work with partners on a 10-year time series of enrollments for all education sectors. Efforts will also be focused on compiling more complete outcome data for the student loan forgiveness programs including length of time with employers as specified in law. As implementation of the LINE and PIPELINE programs progresses, future reports will include data on their outcomes. For post-graduation follow-up, surveys of newly licensed nurses will generate data on the number of graduates

who become employed as practical or professional nurses, and surveys of mid-career nurses will provide insight on advancement of through nursing career pathways.