





# **Acknowledgments 2021**

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Cover photos courtesy of Keene State College (Photographer Will Wrobel), Southern New Hampshire University, the Community College System of New Hampshire, and Colby-Sawyer College.

# **Forward**

Welcome to the "Status of Postsecondary Education in New Hampshire" report. As we close out 2021, we have much to be thankful when it comes to higher education in the Granite State. The information in this report reflects how our postsecondary institutions work to provide the education, training, and skills individuals need to achieve personal and career success. Despite the challenges of COVID-19, we celebrate the many accomplishments, innovations, and collaborations noted within these pages.

The future, however, will bring difficult challenges. The most worrisome: New Hampshire's K-12 school enrollment has declined for the past 10 years, resulting in a shrinking pipeline of students for New Hampshire's colleges, career schools, and apprenticeships. This could mean fewer graduates and completers to fill jobs in New Hampshire's workforce. The issue is compounded by the fact that so many of New Hampshire college-going students attend out-of-state universities, and many do not return to live and work in our state. Also of concern: 45 percent of New Hampshire's workforce ages 25 through 64 lack a postsecondary credential of any kind, but 65 percent of jobs by 2025 will require some education beyond high school.

New Hampshire residents will need access to degrees, high-quality certifications, certificates, licenses, apprenticeships and more as their home lives and workplaces continue to become more technologically complex. Postsecondary education is not static, but will constantly evolve to meet the needs of our changing world and students of all ages and skill levels.

We must ask ourselves: What can we do to encourage students to stay and study in the state we all love so much? How can we encourage those who need reskilling, upskilling, or education beyond high school to enroll in the programs they need to thrive?





# THE STATUS OF POSTSECONDARY EDUCATION IN NEW HAMPSHIRE

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# Introduction

New Hampshire's higher education heritage is rich and diverse. The state's postsecondary educational institutions fuel New Hampshire's economic engine. They serve as talent pipelines that provide a consistent source of graduates ready for employment or to start their own businesses. New Hampshire colleges and universities are large and vibrant employers located across the state and act as anchor institutions in their communities. The state's career schools and registered apprenticeship programs are varied, robust, and can provide hands-on access to well-paying careers.

The education, training, research, services, outreach, and employment that New Hampshire postsecondary institutions and programs provide help to ensure that New Hampshire communities, businesses, and families

thrive and that the state maintains a strong and sustainable workforce and economy. Currently, in the Granite State:

"There are a number of ways to measure value, but it really comes down to how students and society are better off because of their investment in education after high school."

Mamie Voight, Managing Partner, The Postsecondary Value Commission<sup>1</sup>

- New Hampshire residents with marketable degrees, skills, and quality credentials have a significant
  competitive advantage over those without. Postsecondary credentials are needed in almost all well-paying
  jobs because of increasingly complex work environments that rely on increasingly complex technology and
  thought processes.
- Unemployment and average weekly wage statistics reflect the importance of postsecondary education. In 2020, the 12-month average in state unemployment for adults with a bachelor's degree was 4.5 percent, while the unemployment rate for an individual with less than a high school diploma was 9.8 percent.
- New Hampshire residents have access to multiple, pathways for career advancement and employment.
  While career schools and apprenticeships provide many with solid careers, healthy paychecks, and
  economic security, New Hampshire's college graduates, on average, earn more money and have lower
  unemployment. College degrees are significantly linked to higher employment and higher income both
  nationally and in New Hampshire.
- The role that New Hampshire's postsecondary institutions play in workforce development cannot be understated. At least 65 percent of jobs in New Hampshire will require a postsecondary credential by 2025. This could be a degree; high-value certificate, certification, license, or training program; apprenticeship; or a combination of two or more. As of August 2021, 45 percent of Granite State residents aged 25 through 64 lacked a postsecondary credential.<sup>2</sup>

"There was a time when people could walk into a manufacturing facility like a shipyard and start work the same day. Automation, computer-aided design, 3D printing, modular construction and precision machining have changed that."

"A surprise for America's many career switchers: They need to go back to school." Jon Marcus, The Hechinger Report<sup>3</sup>

# O Earnings and unemployment rates by education attainment in New Hampshire, 2020



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.

Source: US Census Bureau, unpublished Current Population Survey data (12 Months Average). Economic and Labor Market Information Bureau, New Hampshire Employment Security

The unemployment rate in 2020 was elevated due to the impact of the COVID-19 pandemic, especially in the spring of 2020. New Hampshire's unemployment rate spiked in the months of April and May at 16.0 and 13.4 percent, respectively. The unemployment rate in July 2021 was 2.9 percent, which was close to the pre-pandemic rate. Unemployment for a person with a professional school degree was 2.2 percent. The pandemic has had a large negative impact on hospitality and retail trade jobs, many of which do not require any educational attainment, contributing to the very high unemployment rate for persons with less than a high school diploma.

# **Key findings**

# Postsecondary enrollment

- Nationally, 20 percent of recent high school graduates leave their home to attend college out-of-state. In New Hampshire, however, 48 percent of recent high school graduates migrate out of the state to attend two-year and four-year colleges.
- Almost 60 percent (58 percent) of New Hampshire's fouryear, college-going high school graduates leave the state, tying New Hampshire with Hawaii as the highest exporter of four-year college students in the nation.
- Preliminary data from 2020 show New Hampshire colleges followed national pandemic enrollment trends. New Hampshire graduate school enrollments rose and Southern New Hampshire University's (SNHU) enrollment rose for full-time and graduate students, most likely due to its large number of online programs. New Hampshire public two-year, four-year, and the majority of state nonprofit colleges suffered enrollment losses.

"When it comes to earnings, education matters, but so do general competencies. Workers need to focus not just on college degrees, but on the knowledge, skills, and abilities they need to reach high earnings in their occupations."

"Workplace basics, the competencies employers want: 2020." Anthony P. Carnevale. The Georgetown University Center on Education and the Workforce<sup>5</sup>

• The pipeline for New Hampshire's colleges, career schools, and workforce is shrinking. New Hampshire K-12 school enrollment has declined for the past ten years.

### Degree and certificate conferral

- Students who attend New Hampshire four-year public colleges and universities (i.e. the University System of New Hampshire (USNH)) continue to have high six-year completion rates and surpass the national averages for all categories, with the exception of part-time and mixed-enrollment completions.
- New Hampshire two-year public colleges (i.e., the Community College System of New Hampshire (CCSNH)) surpassed the national averages for all completion categories in this sector.
- New Hampshire's private, nonprofit four-year institutions, as a group, fell below all national completion category averages in this sector for the first time.
- Conferrals of degrees and certificates continue to increase in New Hampshire. State public and private postsecondary Title IV degree-granting institutions conferred 33,990 degrees and 1,931 certificates in 2020. These numbers include resident, non-resident, and online students.

# Pell Grant recipients in New Hampshire

- 28 percent of all USNH undergraduate New Hampshire resident students were Pell eligible in the fall of 2020.
- 31 percent of all CCSNH students, resident and non-resident, were Pell grant eligible in the fall of 2019
- 33 percent of all New Hampshire four-year private institution students, resident and non-resident, were Pell grant eligible in the fall of 2020.

# State financing for higher education

- From 2019-20, New Hampshire had the largest increase in educational appropriations per FTE (full-time equivalent) in the nation at 42.1 percent. In large part, the funding increase is due to almost \$31 million in federal stimulus funding (\$886 per FTE). Excluding stimulus funds, New Hampshire's additional higher education investments totaled \$14.6 million. As a result, New Hampshire moved from 50th to 49th in education appropriations per FTE.
- New Hampshire is still at 55 percent of the national average for FTE educational appropriations. It is 13.3 percent below its appropriations in 1980 and 21.8 percent below education appropriations per FTE in 2001.
- The Granite State still ranks 47<sup>th</sup> in the nation for student share, or net tuition as a percent of total educational revenue. Student tuition pays for 71 percent of higher education revenue in New Hampshire versus the national average of 44 percent.
- New Hampshire is the state with the largest financial aid disparity favoring its two-year sector. New Hampshire's financial aid allocated to two-year institutions is 74 percent of the U.S. average, while financial aid for four-year institutions is only 1 percent of the U.S. average.

### Student debt

- For the class of 2020, 70 percent of New Hampshire college graduates had student loan debt. The average debt load was \$39,928.
- Graduates of New Hampshire colleges rank first in the nation for highest debt and second in the nation for the proportion of graduates with debt.
- In the first quarter of 2021, national student loan debt topped \$1.7 trillion.
- The official three-year default rate for the New Hampshire 2018 cohort is 7.9 percent, down from 9.8 percent for the 2015 cohort, and about the same as for the 2013 cohort, which was at 7.8 percent.
- As of September 2018, 4,111 students from the 30 New Hampshire colleges and career schools that distribute federal Title IV financial aid were in default on their loans. (This includes a substantial number of online students.)

"...We estimate that by
2025, 85 million jobs may be
displaced by a shift in the
division of labor between
humans and machines,
while 97 million new roles
may emerge that are more
adapted to the new division
of labor between humans,
machines, and algorithms."

"The future of jobs report 2020." The World Economic Forum<sup>6</sup>

### Value of a postsecondary education

- The average rate of return for a bachelor's degree has edged down slightly in recent years due to rising costs, but remains high at around 14 percent, easily surpassing the threshold for a good investment.
- The difference between wages of a college and high school graduate is \$1 million over a lifetime, the difference between the highest- and lowest paying college majors is \$3.4 million.
- Time to completion is another factor that significantly affects a college degree's rate of return.
- A consumer survey of over 50,000 individuals with a certificate or certification, but no postsecondary degree, found they had a median annual income of \$45,000, versus \$30,000 for those without a credential.

### Licensed career schools and veterans education services

- In the 2020-21 fiscal year, New Hampshire's licensed career schools offered 1,695 programs.
- 7,900 residents attended these schools, along with 12,776 out-of-state students in 2020-21.
- Seventeen career schools accepted GI Bill benefits, and 391 veterans received career school certifications or certificates.
- 329 facilities were approved to provide more than 3,500 programs through the GI Bill® and 13,817 veterans and dependents enrolled in these programs over the past 12 months.

# Registered apprenticeship

- In fiscal year 2021, 896 new apprentices were registered for a total of 2,675 active apprentices in New Hampshire.
- 578 apprentices successfully completed their registered apprenticeship programs. The greatest number of apprentices are enrolled in construction programs, with a large majority registered in the plumbing, electrical, and marine construction trades.
- Due to the large number of grants received, CCSNH provides the largest number of credit-bearing courses to registered apprentices. USNH and Colby-Sawyer also provide instruction with credit-bearing courses.

### Population, employment, and workforce

- Both declining K-12 enrollment and an aging workforce continue to hamper New Hampshire's ability to meet its need for more skilled and educated workers.
- New Hampshire's population grew by the largest percentage of any New England state for the past three years.
- Where a person lives in the state can impact employment opportunities significantly, with those living near larger cities, businesses, or the Boston Metropolitan Area having access to more jobs and postsecondary education options.
- At least 65 percent of jobs in New Hampshire will require a postsecondary credential by 2025.
- New Hampshire's current postsecondary attainment rate is 55.1 percent. This exceeds the national average of 51.9 percent but is significantly below New Hampshire's attainment goal set in 2015 of 65 percent by 2025.

### Alternative credentials and upskilling

- A quality non-degree credential that's recognized by an independent third party can boost the "hireability" of college grads and non-grads alike.
- The University of New Hampshire, CCSNH, SNHU, Franklin Pierce University, and Keene State College are examples of institutions that offer micro-credentials.
- Since the onset of the COVID-19 pandemic there has been an increasing appetite among students for non-degree credentials.
- Continuous learning of new skills by individuals and development of new education delivery methods by postsecondary institutions is increasingly important.

### **Next steps**

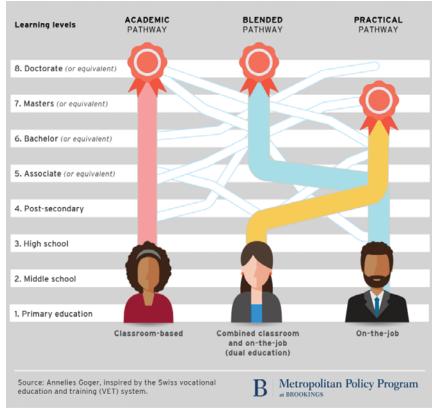
- Ensure that the cost of a college degree or high value certificate is affordable and accessible for all.
- Aid New Hampshire postsecondary students with scholarships, grants, and the services they need to complete their programs.
- Support postsecondary enrollment and completion efforts for both traditional and nontraditional students.
- Provide New Hampshire's rural students with access to quality postsecondary education options.
- Encourage collaboration between business and educators.
- Encourage degree and program students and graduates to stay, study, and work in New Hampshire.
- Keep an eye towards the future; anticipate student and workforce needs.

# **SECTION 1**

# New Hampshire's postsecondary, higher education landscape, trends, and issues

# O Multiple pathways to opportunity

The changing nature of work will require a sophisticated vision for making our talent development ecosystem more equitable and functional for employers and workers.



Graphic used with permission of the Brookings Institute.7

### **COLLEGES AND UNIVERSITIES**

## The University System of New Hampshire (USNH)

The state's four accredited, four-year public institutions enroll more than 30,000 students annually in eight locations across the state and online 24/7, 365 days a year. USNH enrolls approximately 30 percent of New Hampshire's four-year college-going high school graduates, awards 62 percent of the state's bachelor's degrees in engineering and science, and awards 68 percent of New Hampshire's K-12 STEM teacher degrees. The university system's mission is to provide exceptional educational and research programs, from certificates to doctoral degrees, while remaining focused on community service and maintaining affordability. Nearly 1,600 New Hampshire Pell-eligible students attended USNH institutions tuition-free in 2019-20 under the Granite Guarantee, and \$2.7 million in tuition waivers were awarded to NH National Guard members in that year. All USNH colleges and universities offer Title IV federal financial aid. Learn more about the USNH system on page 34.

### The Community College System of New Hampshire (CCSNH)

New Hampshire's seven two-year public colleges, at 12 campuses across the state, offer an accredited, accessible and affordable postsecondary education to New Hampshire residents. With over 80 associate's degrees, 120 short-term certificate programs, and a range of apprenticeship and other job training programs, CCSNH creates educational pathways that connect students and graduates to New Hampshire's workforce and to transfer opportunities at four-year colleges. CCSNH was the first to adopt the 65-by-25 goal in 2014, and is committed to achieving the vision that 65 percent of New Hampshire's workforce have a degree or high-value certificate by 2025 in order to meet the state's workforce needs. Counting all types of enrollment and learning activity (credit, non-credit, dual high school/college enrollment, workforce training), CCSNH serves approximately 26,000 students each year. The system's added commitment to rural colleges and communities ensures that educational opportunities are available in New Hampshire regardless of where individuals live.<sup>9</sup> All CCSNH colleges offer Title IV federal financial aid. Learn more about the CCSNH system on page 30.

# Private, nonprofit colleges and universities

New Hampshire-based private, nonprofit colleges include two-year, four-year, and graduate-degree institutions that enrolled more than 132,140 undergraduate and graduate students in the fall of 2019. (Of this number, 100,542 were out-of-state online students while 7,402 were in-state.) These institutions draw in-state and a large number of out-of-state students to Granite State schools for both on-campus and online programs. New Hampshire's private nonprofit colleges are home to the state's only medical school (Dartmouth College) and only aviation management program (Southern New Hampshire University). All New Hampshire private nonprofit Title IV colleges are accredited. The institutions' missions, methods, program offerings, and distinct histories vary widely, but all are centers of professional preparation and innovation for both traditional and non-traditional students, and all offer Title IV federal financial aid. To learn more about New Hampshire's private nonprofit colleges see page 38.

### HIGH SCHOOL POSTSECONDARY PROGRAMS

Dual Enrollment, concurrent enrollment, Early College, and the New Hampshire Career Academy are postsecondary preparation and postsecondary programs offered at New Hampshire high schools. Learn more on page 7.

# **CAREER SCHOOLS**

With a focus on job-skills expertise, New Hampshire's licensed career schools, also known as trade schools, offer career training in nearly 60 focus areas. These schools often offer competency-based programs that are quicker to complete than degree programs, and are well suited to individuals who are committing to a specific occupation.

Depending on the training and trade chosen for study, graduates can achieve substantial earning power with a high-value program. New Hampshire's licensed career schools offered 1,695 programs in the 2020-21 fiscal year. Nearly 7,900 New Hampshire residents attended these career schools along with another 12,776 out-of-state students. Currently, nine out-of-state career schools have a physical presence within the state and five more are expected to file for licensing before the end of 2021. Ten of New Hampshire's 52 licensed career schools offer Title IV federal financial aid. Learn more about New Hampshire's licensed career schools on page 44.

### **NEW HAMPSHIRE REGISTERED APPRENTICESHIPS**

New Hampshire registered apprenticeships are an "Earn While You Learn" model of education and training. They are industry-driven, high-quality career pathways where individuals receive paid work experience, classroom instruction and a portable, nationally-recognized credential while employers develop their future workforce. Program design can be time-based, competency based, or a hybrid of the two. New Hampshire's registered apprenticeships range in length from one to six years. Learn more about New Hampshire's registered apprenticeship programs on page 47.

### **ALTERNATIVE CREDENTIALS**

Digital badges, stackable verified certificates, competency-based certifications, bootcamps, nanodegrees, micro masters and other forms of digital and in-person learning opportunities address more granular, skills-based education that some individuals and businesses desire. Learn more on page 10.

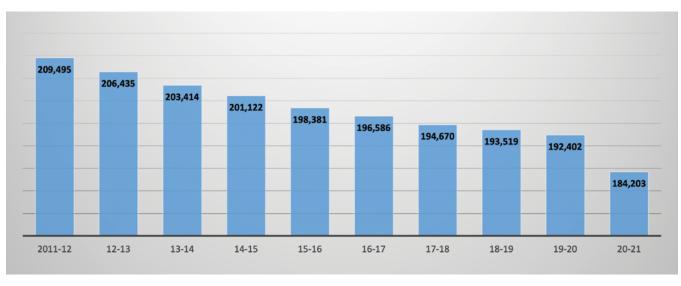
"As the future of work unfolds, what makes us human is what will make us employable."

Joe Deegan and Nathan Martin, Pearson and Jobs for the Future<sup>11</sup>

# Where postsecondary options begin: High school postsecondary programs

# O Public and private school fall enrollments

(preschool through postgraduate)



Source: www.education.nh.gov/who-we-are/division-of-educator-and-analytic-resources/bureau-of-education-statistics/state-totals

# Dual or concurrent enrollment in New Hampshire

New Hampshire's dual enrollment programs help local high school students earn college credits and high school credits at the same time. New Hampshire's concurrent enrollment programs allow students to take college courses and earn college credits while enrolled in high school. Students interested in taking dual or concurrent courses should work with their high schools to make sure the programs offered — Early College, eStart, Running Start, SNHU in the High School, and UNH First Step — will be counted as part of high school requirements. The Community College System of New Hampshire and Southern New Hampshire University both offer dual enrollment programs.

# Community College System of New Hampshire (CCSNH) programs: Running Start, eStart, and Early College

In New Hampshire, 10th, 11th and 12th grade students can take up to two free dual- or concurrent-enrollment CCSNH STEM (science, technology, engineering and math) courses or Career and Technical Education courses each academic year. This includes CCSNH Early College, eStart, and Running Start courses.

### **RUNNING START**

With Running Start, high school students earn college credits by taking college classes that are taught in their high school by a college-approved high school teacher. Running Start courses not eligible for STEM and CTE scholarships cost \$150 in October 2021.

In the 2019-20 academic year, 105 high schools participated in Running Start and offered 1,126 courses. Approximately 9,000 students participated, some taking more than one course, for a total enrollment of 11,861.

Enrollment totals from the 2020 to 2021 academic year fell significantly due to disruptions in school schedules as a result of the pandemic. In the 2020-2021 academic year, 105 high schools participated in Running Start and offered 893 courses. Approximately 8,500 students participated, some taking more than one course, for a total enrollment of 8,933.

### **ESTART**

eStart is the online version of Running Start offered through the Virtual Learning Academy Charter School (VLACS). Online courses are also eligible for STEM/CTE scholarships mentioned above. eStart courses also cost \$150 per course.

### **EARLY COLLEGE**

The Early College program enables high school students to take courses on the campus of a New Hampshire Community College at a discount of half the "regular" college cost for each course. As with the Running Start program, students earn college credit, which gives them a jump on college requirements and saves money. Early College courses are also eligible for the STEM/CTE scholarships mentioned above.

### **Southern New Hampshire University**

### SNHU IN THE HIGH SCHOOL DUAL ENROLLMENT PROGRAM

45 schools currently participate in the SNHU in the High School dual enrollment program. Currently, a three-credit course costs \$100, and a one-credit lab costs \$25, if applicable.

In the 2019-20 academic year, 44 high schools participated in SNHU in the High School and offered 207 courses. Approximately 1,856 students participated, some taking more than one course, for a total enrollment of 2,920.

In the 2020-2021 academic year, 47 high schools participated in SNHU in the High School and offered 274 courses. Approximately 1,150 students participated, some taking more than one course, for a total enrollment of approximately 2,532.

# **University of New Hampshire (UNH)**

### **UNH FIRST STEP**

UNH First Step was launched in 2019 as a two-year concurrent enrollment pilot program (now a three-year pilot due to COVID-19 disruption) at Pinkerton Academy and Bow High School. Designed with UNH admissions standards in mind, UNH First Step participants must have an overall "B" average and be on track to be admissible to a four-year college. Students benefit from lower tuition, an opportunity to complete higher education requirements in less time, and a smoother transition from high school to college. Once the pilot is successfully completed, UNH's goal is to continue to expand to high schools throughout the state.

# The New Hampshire Career Academy (NHCA)

Students who complete the New Hampshire Career Academy (NHCA) program graduate with a high school diploma and an associate's degree or industry credential. They are also scheduled for a job interview with a local employer or they can continue their education at a four-year college, entering with no debt and full Pell grant eligibility. This two-year option is tuition free for students or their families.

Currently six New Hampshire Community Colleges participate in NHCA and offer a wide range of majors. NHCA does not cost the state education system additional funds and is tuition free to New Hampshire students who qualify. Enrollment is limited to high school students, typically seniors, who have accumulated enough credits and meet all eligibility criteria for the program they wish to attend. (Note: Students interested in NHCA should research the program and coordinate with their high school and intended participating community college early, most often in their junior year.) Visit <a href="https://www.education.nh.gov/partners/education-outside-classroom/nh-career-academy">https://www.education.nh.gov/partners/education-outside-classroom/nh-career-academy</a> and <a href="https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/2020/nhca-faq-jan-2020.pdf">https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/2020/nhca-faq-jan-2020.pdf</a> for details on eligibility, enrollment requirements, funding, and deadlines.

# Isabella Edwards and the New Hampshire Career Academy:

A HIGH SCHOOL DIPLOMA AND A TUITION-FREE DEGREE OR CREDENTIAL

Like all six academy students in NHCA's first cohort, Isabella Edwards entered the program at the start of her senior year in the fall of 2020. A full-time student, she majors in accounting and takes her classes at Great Bay Community College. A paid internship in the accounting department at Seacoast United Sports Club last summer provided real-life experience in her field.

While she worked with a custodial high school to enroll in the program, her guidance now comes from staff within Great Bay. It outlines the requirements needed for her associate's degree and her high school diploma and provides the credits.

While Isabella had taken several Early College and e-Start community college classes prior to enrolling in NHCA, becoming a full-time college student was still something she didn't feel completely ready to do. "But with these classes, I was equipped with the knowledge and game plan needed to be successful; and was confident that the experience would come with time. … The support in this program is incomparable as well, the care and attention people put on you as an

individual really builds an environment in which anyone can succeed."

After graduating in the spring, Isabella plans to continue her education in accounting. Forensic accounting, in particular, intrigues her. She encourages students interested in Early College classes to explore NHCA.

"The New Hampshire Career Academy provides a unique opportunity that is unmatched. In terms of accelerated learning and personal development, the NHCA provides a massive head start for any student



involved. ...Being someone who was hard set on what they wanted with their future, the options I have been given by Great Bay and NHCA to fuel my interests is truly special." ■

Source: Jan Fiderio, New Hampshire Department of Education

# Additional postsecondary options and support services

There are a variety of other avenues individuals can explore when seeking education, training, or career support in the Granite State. These include:

- High school Career and Technical Education (CTE) centers that
  offer School-to-Work programs such as internships, cooperative
  work experience (training) programs, apprenticeships or studentrun enterprises within CTE.
- Adult and community education programs offered at 29 locations across New Hampshire.
- Employer developed or supported work-based education or training programs. One example is Walmart's Live Better U program.

- A variety of occupational licenses and training programs for aspiring plumbers, electricians, and other specialty careers.
- Programs such as WorkReadyNH, New Hampshire Works, My Next Move (Career exploration), New Hampshire Works Job Match, and Career Technical Education programs that provide adult training support.
- Online options that include a wide range of out-of-state career school, college degree and non-degree offerings, as well as a vast array of non-degree, alternative credentials.

See the endnotes of this document for website addresses. 12 ■

# Alternative credentials and upskilling trends

Recent years have brought an explosion of new credentials to the forefront of postsecondary education. Digital badges, verified certificates, competency-based certifications, bootcamps, nanodegrees, micro bachelor's and master's, MOOCs (Massive Open Online Courses), and other types of digital and in-person learning opportunities address more granular, skills-and competency-based education. The credentials can teach hard skills, such as coding, or soft skills, such as communication. Digital, verified credentials such as badges have been adopted by many businesses and industries, including Amazon, Google, IBM, Microsoft, Oracle, AICPA, GED, and the American Health Information Management Association.

"In the case of industry certifications there's the beginning of a movement in both community colleges and universities to embed certifications into degree programs. That could be very, very powerful in many industry sectors."

13

Holly Zanville, co-director of the Program on Skills, Credentials, and Workforce Policy for George Washington University.

A quality non-degree credential that's recognized by an independent third party can boost the "hireability" of college grads and non-grads alike. Alternative credentials provide a way job seekers can demonstrate abilities and competencies and can provide a way potential employers can shift to a skills-based hiring model.

These programs are available in non-degree career schools, two-year colleges, and four-year colleges. They may be required or optional, and may be based on vendor-specific credentials, such as a Microsoft certification, or vendor neutral, such as with the CompTIA certifications.<sup>14</sup>

While many new organizations and businesses offer alternative credentials, there has also been an increased interest in partnerships between traditional colleges and universities and non-traditional, alternative-credential providers.

SNHU has developed partnerships with alternative credential providers Thinkful, Inc. and edX. It offers two edX micro-bachelors programs in Business Analytics and Data Management with Python and SQL. These programs are each worth up to six credits upon successful completion and admittance to SNHU. SNHU also partners with Thinkful, a subsidiary of Chegg, to enable learners who have completed its Thinkful coding bootcamp certificates to apply credit toward appropriate SNHU degree programs. Students who have completed specific Thinkful credentials can earn up to 18 SNHU credits and a Thinkful/SNHU co-branded digital badge to share on social media.

## Examples of badges and micro-credentials at New Hampshire colleges

University of New Hampshire's Micro-Credential and Digital Badge program currently offers more than 50 credentials in a variety of content areas that provides learners with skills in business management, computer science, health care, and more. Sharing badges is learner controlled and open across technology platforms. The college issued its first badges as part of the pilot in 2020 and as of October 2021 has since issued 4,025 digital badges.

The Community College System of New Hampshire began offering digital badges in spring of 2021<sup>15</sup>. Across the seven colleges more than 1,000 credentials have been issued to date. As a student completes a program or a milestone they are provided digital assets that are then chronicled and stored in their personal custodial wallets. They are then able to share these badges on social media, LinkedIn, digital resumes, and many other locations.

**Keene State College** started offering seven micro-credentials this academic year. These credentials can serve as an introduction or entry point to a degree program, or be issued as a stand-alone credential to complement a degree program or prior work experience. Completed courses will appear on student transcripts.

**SNHU** currently offers 64 digital badges across multiple disciplines such as healthcare, business strategy, leadership, psychology, HR, data visualization, and more. Over 5,000 badges have been issued since the start of the program in 2019.

**Franklin Pierce University** partnered with the City of Manchester recently to launch a digital badging program aimed at offering skill development for city employees. The online, open-enrollment, customizable program enables learners to complete competencies and earn badges in different skill areas at their own pace.

A 2018 National Center for Educational Statistics (NCES) report analyzed the Adult Training and Education Survey and determined that 13 percent of the U.S. labor force had a non-degree credential as their only work credential. However, an additional 18 percent held both a degree and a non-degree credential. In all 31 percent of labor force participants hold a non-degree credential. Since the onset of the COVID-19 pandemic research indicates that there is an increasing appetite for non-degree credentials among preferred educational options for students who anticipate engaging education. In one recent study by Strada Education Network, 62 percent of respondents indicated that they would prefer skills based or non-degree training if they enrolled in a program in the next six months. 17

"Among high-school graduates attending four-year programs, 58 percent left the state to study in 2018. New Hampshire is tied with Hawaii as the highest exporter of four-year college students in the nation."

"Digest of educational statistics 2020."

# Making sense of alternative credentials

A ccording to Credential Engine, a nonprofit organization that provides tools and services to find, understand, and compare information about credentials, there are 967,734 unique and certified credentials in the United States. <sup>18</sup> This can be a "buyer beware" environment – some of these credential providers are accredited or affiliated with reputable organizations, and some are not. However, structures provided by Credential Engine and other companies are providing a standardized foundation where employers, educational institutions, and individuals can determine the value of a credential.

The New England Board of Higher Education recently launched the High Value Credentials for New England (HVCNE) initiative in partnership with Credential Engine. The initiative is mapping New England's credential landscape in the life and biosciences, information technology, healthcare, and business and financial operations industries and will help to populate the credentials to Credential Engine.

# New Hampshire college and career school enrollment and student migration

In 2018, 48 percent of recent New Hampshire high school graduates migrated out of state to attend two-year and four-year colleges.<sup>19</sup> That's more than double the national average of 20 percent.<sup>20</sup>

Among high-school graduates attending four-year programs, 58 percent left the state to study in 2018. New Hampshire is tied with Hawaii as the highest exporter of four-year college students in the nation.<sup>21</sup> The high percentage of students who migrate out of the state for postsecondary education continues to concern policy makers worried about New Hampshire's future workforce.

"A bachelor's degree is the single most influential determinant in multigenerational change and ending the cycle of poverty,"

Catherine Suitor, an administrator at Alliance, a network of Los Angeles high schools.<sup>22</sup>

# Postsecondary enrollment after high school

New Hampshire Department of Education postsecondary enrollment data show how many students who completed high school move on to enroll in either a two-year or four-year college. This data is obtained through the National Student Clearinghouse, CCSNH, and USNH data. In 2019, New Hampshire's postsecondary enrollment was 58.5 percent. Following national trends, New Hampshire's 2020 enrollment slipped, most likely due to the pandemic, to 54.7 percent. (Explore this data and more on the Department of Education website's iPlatform data transparency portal. Drill down to iReport, click on the state report card link at the bottom of the page, and open the College tab.)

# O Navigating the college-to-career pathway:

The 10 rules of moving from youth dependency to adult economic independence<sup>23</sup>

These rules, developed by the Georgetown University Center on Education and the Workforce and the Postsecondary Value Commission, can help students make sound postsecondary education decisions.

Know before you go. In the short term, community colleges and certificate programs tend to have higher ROI, while in the long term, colleges that award bachelor's degrees are often the better investment.

When faced with poor job prospects due to recession, go to school. It's much better to enter the labor market during an economic recovery because a first job influences the earning and learning trajectory of a career.

RULE 3	<b>Get more postsecondary education if you can.</b> With each level of educational attainment, workers have higher median earnings; but race, ethnicity, and gender still matter.				
RULE 4	Choose carefully when selecting a major and program of study. Earnings vary significantly by field of study.				
RULE 5	Do not worry too much about where you go to school: institutional brand adds value, but not nearly as much as most people believe. When it comes to labor-market returns, occupation and program of study generally matter most.				
RULE 6	Realize that field of study alone does not determine workforce outcomes. Earnings within majors range widely. For example, the top 25% of bachelor's degree holders with majors in the humanities and liberal arts earn more than the bottom 25% of architecture and engineering majors.				
RULE 7	Know the costs and benefits of your choice of major. At the median, majors like humanities, education, and psychology rarely catch up with the highest-earning majors. Long-term earnings trajectories vary considerably by major, much as they vary by education level. While graduate education boosts earnings, it also tends to widen the disparities between STEM majors and humanities majors.				
RULE 8	Seek out a curriculum that provides broad learning across disciplines as well as deep learning in a subject area. Both general liberal arts education and specific career education have value, and they can act as complements and substitutes for one another. The bachelor's degree conveys an optimal balance of learning tailored to a field as well as learning about a wide range of subjects.				
RULE 9	Focus on competencies required in individual occupations and common occupational clusters. Educational programming should be designed to yield the general competencies that are valued across the workplace—specifically, communication, teamwork, sales and customer service, leadership, and problem solving and complex thinking.				
RULE 10	If you are a woman or a member of an underrepresented racial or ethnic group, the deck is stacked against you. You will need to take additional measures [such as earn an additional degree or attend a more selective college] to optimize your outcomes.				

Note: Used with permission. Read the full Postsecondary Value Commission and Georgetown University Center on Education and the Workforce report here: "Navigating the College-to-Career Pathway: The 10 Rules of Moving from Youth Dependency to Adult Economic Independence" - CEW Georgetown

# College enrollment and degrees conferred

Total fall enrollment in public and private New Hampshire degree-granting institutions grew from 160,750 in 2018 to 169,412 in 2019. New Hampshire's fastest growing higher education institution, Southern New Hampshire University (SNHU), continues to account for the majority of that growth.

Preliminary data from 2020 show New Hampshire colleges followed national pandemic enrollment trends. New Hampshire graduate school/program enrollments rose and SNHU's full-time and graduate enrollment rose, most likely due to its large number of online programs. New Hampshire public two-year, four-year and the majority of state nonprofit colleges suffered enrollment losses.

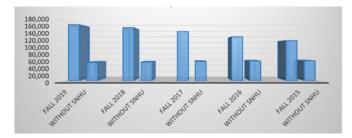
New Hampshire's declining high school population will affect enrollment for those New Hampshire postsecondary institutions that rely on residents for students, particularly New Hampshire's public two-year and four-year degree-granting institutions and career schools.

# O Total fall enrollment of NH Career Schools

# FALL 2019: FALL 2018: FALL 2017: FALL 2016: FALL 2015: 808 797 702 714 636

Note: These career schools accept Title IV funds. Source: IPEDS

# O Total fall enrollment in NH 2 year and 4 year colleges

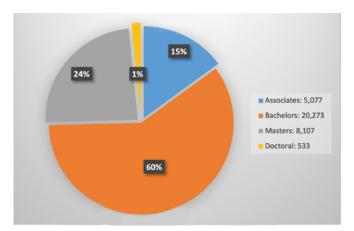


Note: These schools accept Title IV funds. Source: IPEDS

SNHU is broken out separately to show the dramatic increase of its online enrollment growth. 97% of SNHU students are online only. They are located throughout the U.S. and include a significant number of international students as well.

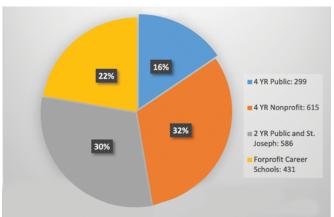
The number of college students has declined by an unprecedented 2.6 million in the last decade, with a further drop of from 11 to 15 percent projected starting in the mid-2020s."<sup>24</sup>

# O Degrees conferred by NH colleges in 2020: 33,990



Note: SNHU conferred 62% of all degrees by NH institutions in 2019–20. Source: IPEDS

# O Certificates conferred by NH colleges/ career schools\* in 2020: 1,931



Note: \*Only includes the 10 NH career schools that submit IPEDS data. The total of 1,931includes certificates below and above the bachelors degree. SNHU conferred 25% of all certifications by IPEDS-submitting NH institutions in 2019–20. Source: IPEDS

# Four-year completion rates

Students who attend New Hampshire four-year public colleges and universities [USNH] continue to have high six-year completion rates<sup>25</sup> and surpass the national averages for all categories, with the exception of part-time and mixed-enrollment completions. According to the National Student Clearinghouse Research Center, New Hampshire four-year public colleges have the third highest college completion rates in the nation: 89.7 percent of exclusively full-time USNH students who started at one of the system's four-year public colleges completed their studies within six years. (The national average is 83.7 percent.)

Two-year public college students typically take longer to complete their degrees, often due to the high number of non-traditional and part-time students. The six-year completion rate for students who attend New Hampshire public two-year colleges [CCSNH] was 42.9 percent. (The national average was 40.4 percent.) However, the New Hampshire six-year completion rate jumped to 68.4 percent for full-time students, a 25.5 percent increase, and 4.95 percent above the national average of 63.5 percent. New Hampshire two-year public colleges surpassed the national averages for all completion categories.

New Hampshire's private, nonprofit four-year institutions, as a group, fell below all national completion category averages in this sector for the first time. However, there is a wide variation between the completion outcomes of individual New Hampshire private, nonprofit four-year colleges, some of which have extremely high completion rates.

Completion rates can be significantly affected by an institution's mission and admission policies. Completion and persistence is particularly low at open-admissions schools, such as community colleges, among non-traditional, first-generation, and under-represented students, including immigrants, students of color, and low-income students.<sup>26</sup>

# Who are adult learners and what do they need to complete their degrees or credentials?

In 2019, 75 percent of Granite State College students were 25 or older and 71 percent of New Hampshire's private college enrollment was 25 years or older. (This is due to Southern New Hampshire University's large online enrollment). In 2020, 36 percent of CCSNH learners were over the age of 25. Connecting with these adult learners, and providing affordable, accessible, and flexible programs to help them complete their degrees or other credentials is important if New Hampshire wants to meet degree attainment rate goals and business needs for an educated workforce. Strada Educational Network's Consumer Highlights survey<sup>27</sup> shows that 41 percent of high school/GED grads, 46 percent of Some College grads, 51 percent of Voc/Tech school grads, and 45 percent of Associate's degree holders perceive a need for more education.

Adult learners are students aged 25 or older or learners under 25 with adult-like responsibilities.<sup>28</sup>

- 64 percent are employed 40 percent work full-time
- 49 percent are financially independent

- 24 percent have non-spousal dependents
- Many take a non-traditional educational trajectory e.g., did not complete high school, delayed entrance into higher education, or "stopped out" of higher education
- Many have prior job experience and 6 percent have served in the military

Defining ways to recognizing existing work experience is particularly important to this segment of the state population. The New England Board of Higher Education (NEBHE) addresses this issue in All Learning Counts, a brief that suggests individuals should "receive credit based on what they know and can do, regardless of where their learning occurred." Examples of NH institutions that award credit for prior learning are Granite State and SNHU. Both institutions allow students to test out of college courses and Granite State allows incoming students to demonstrate college-level knowledge by submitting an experiential learning portfolio. Learn more about NEBHE's efforts at ALCNE: State Policy Brief 12 20 (nebhe.org)

# O Six-year completion outcomes for New Hampshire colleges by sector

Source: National Student Clearinghouse

USNH	CCSNH	NILI DDIVATE NICHDDOFITS*					
		NH PRIVATE, NONPROFITS*					
79.4%	42.9%	56.9%					
67.4%	U.S. AVERAGE FOR SECTOR 40.4%	76.9%					
	40.470	70.970					
Exclusively full-time completion rate							
USNH	CCSNH	NH PRIVATE, NONPROFITS*					
89.7%	68.4%	80.1%					
	U.S. AVERAGE FOR SECTOR						
83.7%	63.5%	87.7%					
Exclusively part-time completion rate							
USNH	CCSNH	NH PRIVATE, NONPROFITS*					
20%	24.1%	16.8%					
	U.S. AVERAGE FOR SECTOR						
21.6%	17.8%	39.1%					
Age at first entry 20 or younger completion rate							
USNH	CCSNH	NH PRIVATE, NONPROFITS*					
82.1%	44.5%	77.8%					
	U.S. AVERAGE FOR SECTOR						
70.5%	43.48%	79.96%					
Age at first entry over 24 completion r	rate						
USNH	CCSNH	NH PRIVATE, NONPROFITS*					
57.2%	41.6%	37.6%					
	U.S. AVERAGE FOR SECTOR						
56.3%	34.9%	67.9%					
Six-year outcomes for women							
USNH	CCSNH	NH PRIVATE, NONPROFITS*					
82.7%	46.3%	56.6%					
	U.S. AVERAGE FOR SECTOR						
71.3%	43.5%	80.2%					
Six-year outcomes for men							
USNH	CCSNH	NH PRIVATE, NONPROFITS*					
76.7%	41.3%	57.1%					
	U.S. AVERAGE FOR SECTOR						
63.9%	38.5%	74.2%					

Source: \* NH private, nonprofits equal all New Hampshire private nonprofits including SNHU online students. "Completing College: A State-Level View of Student Attainment Rates (Signature Report No. 19)." National Student Clearinghouse Research Center, December 2020.

# **Tuition discounting**

Tuition discounting continues to skyrocket among private nonprofit colleges. This means the "sticker price" listed by New Hampshire four-year private nonprofit colleges can differ greatly from what each student actually pays. The National Association of College and University Business Officers Association lists the

private college discount rate for the 2020-21 academic year at 53.9 percent for first-time, full-time freshmen, and 48.1 percent for all undergraduates. This topped the previous year's high of 51.2 percent for first-time freshmen and 45.9 percent for all undergraduates.<sup>29</sup> ■

# How New Hampshire residents perceive postsecondary education

In 2019, a survey of New Hampshire residents by Strada Education Network and the Education Commission of the States<sup>30</sup> helped capture state residents' perceptions of higher education and its role in assisting people in meeting their career goals. The survey of 1,500+ individuals found students with all types of postsecondary credentials report value and employability from their postsecondary experience.

- Holders of associate's and graduate degrees were particularly satisfied that their degrees were worth the cost; 82 percent of holders for both degree types either strongly agreed or agreed that their education was worth the cost.
- 68 percent of bachelor degree earners either strongly agreed or agreed that their education was worth the cost.
- 88 percent of graduate degree holders, 77 percent of bachelor degree holders, and 62 percent of associate's degree holders either strongly agreed or agreed that their education made them an attractive candidate to potential employers

New Hampshire residents also perceived a need for additional education, especially when linked to employment opportunity. Forty-five percent of respondents ages 25 to 34, 40 percent of respondents ages 35 to 44, 32 percent

# **New Hampshire scholarship programs**

Currently the State of New Hampshire supports three primary scholarship programs.

# GOVERNOR'S SCHOLARSHIP PROGRAM

This program provides financial assistance to eligible high school graduates or recent high school graduates who meet the definition of an eligible student set forth in Csp 402.05 and who attend an eligible postsecondary education or training program in New Hampshire. Scholarship amounts range from \$1,000 to \$2,000 (based on New Hampshire scholar status from high school) per year for the length of their program, which shall not exceed four years. For award year 2021-22, the New Hampshire college tuition savings plan advisory commission (commission) has allocated \$5,465,000 of funds to be awarded by the participating institutions.

# UNIQUE ANNUAL ALLOCATION PROGRAM (UAAP)

The New Hampshire college tuition savings plan UNIQUE annual allocation program (UAAP), was designed as one method to fulfill the statutory obligation in RSA 6:38, to provide increased, equal access and choice for deserving, needy New Hampshire residents seeking the benefits of postsecondary education at a New Hampshire institution. Awards of up to \$1,000 annually are available for qualifying students. For award year 2021-22, the commission has budgeted \$5,000,000 in funds to be awarded by participating institutions.

Scholarships through these programs are awarded by the financial aid offices at the participating institutions. For links to the rules governing these programs, including eligibility, see this document's endnotes. $^{31}$ 

### UNIQUE ENDOWMENT ALLOCATION PROGRAM (UEAP)

The New Hampshire college tuition savings plan UNIQUE endowment allocation program (UEAP) was designed as another method to fulfill the statutory obligation in RSA 6:38, to provide eligible New Hampshire institutions of higher education with endowment allocations, the earnings from which shall be used to provide awards to New Hampshire residents who are attending the participating institution. The minimum award is \$1,000 and is not capped. For award year 2021-22, the commission budgeted \$14,722,950 in UNIQUE endowment allocations to participating institutions. The amount of UEAP scholarships awarded to eligible students is determined by the participating institutions and should equal at least four percent of the restricted endowment account balance annually.

of respondents ages 45 to 54, and 28 percent of respondents ages 55 to 64 perceived a need for additional education. Education sources could include employers, two- or four-year colleges, trade schools, professional associations, labor unions, online academic and non-academic providers, or professional associations. Respondents were particularly interested in seeing more employer-provided training.

# The value of higher education

## The college degree still makes sense

According to the Georgetown University
Center on Education and the Workforce the
most valuable education over the long term
is the one that provides the most marketable
combination of specific and general skills. The
Center's extensive research reflects that workers
who attain a two- or four-year degree "with its
combination of specific and general education
have an overall, if not universal, competitive
edge in the economy."<sup>32</sup>

One of the Center's many workforce studies noted that while the difference between wages

"...the average rate of return for a bachelor's degree has edged down slightly in recent years due to rising costs, but remains high at around 14 percent, easily surpassing the threshold for a good investment. Thus, while the rising cost of college appears to have eroded the value of a bachelor's degree somewhat, college remains a good investment for most people."

Jaison Abel and Richard Deitz, Federal Reserve Bank of New York, 2019<sup>33</sup>

# The impact of COVID-19 on postsecondary education

Isolation, quarantine, testing, mask and vaccine requirements entered the New Hampshire postsecondary lexicon in March 2020 and still affect local schools and students as of fall 2021. In New Hampshire, colleges, high school dual enrollment programs, careers schools, and apprenticeships saw faltering enrollment; lower retention of existing students, significant financial disruptions, and big changes in how institutions taught students. Many schools had to scramble to provide additional distanced, remote, and online learning options. Some colleges closed residence halls and some career schools temporarily closed. All institutions had to implement safety and health plans to ensure that students and staff were protected.

For example, Keene State College and the City of Keene implemented bi-weekly wastewater (sewage) samples to predict COVID-19 spread in the community,<sup>34</sup> Rivier University offered all spring 2020 students the option to choose pass/fail grades,<sup>35</sup> and Dartmouth College sent saliva-based testing kits, pre-arrival, to incoming students. Other institutions adopted similar tactics.

Recognizing the financial pressures faced by many students and their families, New Hampshire institutions worked to offer relief wherever possible. For example, the University of New Hampshire refunded \$27 million to students for prorated dining, housing and student fees<sup>36</sup> and Southern New Hampshire University (SNHU), one of the largest online institutions in the U.S., moved all of its fall 2020 inperson students online and gave them one year of free tuition.<sup>37</sup>

In addition, the University System of New Hampshire continued its tuition freeze for 2021-22 for the third year for instate students; the Community College System of New Hampshire froze in-state tuition and partnered with the New Hampshire Charitable Foundation and the Foundation for New Hampshire Community Colleges to offer one free, three-credit course in the fall semester to any member of a New Hampshire high school class of '21; and SNHU once again froze its tuition (for the 10th year) for on-line students until 2022.

New Hampshire institutions also found creative ways to give back to their communities during this time of adversity. For example, Plymouth State graduated nursing students a month early who then went on to treat COVID-19 patients, <sup>38</sup> Rivier donated telehealth equipment and medical supplies to support local hospitals and organizations, <sup>39</sup> and the UNH Extension and the New Hampshire Department of Agriculture created an interactive online Farm Products Map that consumers could use to find local farms with produce for sale in the spring of 2020, <sup>40</sup> just to name a few.

Nationally, the pandemic had a significant impact on colleges. In fall 2021, the National Center for Education Statistics released preliminary data, some for the 2020 fiscal year and some for the fall of 2020, that revealed three takeaways about how colleges fared.

- "Revenue from room and board and other auxiliary services took a hit at public colleges. (UNH's dropped 23.3 percent)
- First-time freshmen didn't enroll in their typical numbers, with two-year colleges faring the worst.

of a college and high school graduate is \$1 million over a lifetime, the difference between the highest- and lowest paying college majors is \$3.4 million.<sup>41</sup> The study also noted that 80 percent of students choose a college major tied to job prospects; all but one of the highest paying majors are in engineering; and the lowest paid majors are in education, social work, and the arts. Abel and Deitz, of the New York Federal Reserve, noted in 2019 that "while the strong labor market has boosted the wages of those with a high school diploma in recent years, the wages of college graduates have gone up by as much or more, keeping the college wage premium near an all-time high."

The Hamilton Project, a Brookings Institution initiative, is well known for its research that tracks career and lifetime earnings as well as undergraduate student loan repayments. The earnings data, updated in 2020, continues to show that a college degree, in any major, is key to boosting an individual's earning profile over a lifetime.

"To figure out how much money graduates are likely to make with a particular major at a given institution, consumers can select a college or university on the Department of Education's College Scorecard website, then choose a field of study."

"Will that college degree pay off? Now you can finally see the numbers." Jon Marcus, The Hechinger Report<sup>12</sup>

Time to completion is another factor that significantly affects a college degree's rate of return. While students who complete a bachelor's in four years see an average of 14 percent return on investment, students that complete in six years see only an eight percent return. This 40 percent drop is especially felt by non-traditional, first-in-family to attend college students, who often work part-time and take longer to finish their degrees.<sup>43</sup> The drop in return is a result of lost years of wages, or opportunity cost, and the earnings wedge that follows individuals throughout their careers.

 Part-time instructors bore some of the steepest cuts in the academic work force."<sup>44</sup>

In June 2021, the National Student Clearinghouse Research Center noted a dramatic 3.5 percent enrollment decline from the year earlier in colleges across the nation. The persistent impact of COVID-19 resulted in 603,000 fewer students overall.<sup>45</sup> First-time students dropped 18.9 percent at community colleges while enrollment of first-time students in public four-year colleges dropped by 10.5 percent.<sup>46</sup> As of September 10, 2021 completion of the FAFSA for high school seniors was down 4.1 percent from the previous academic year.<sup>47</sup>

The Strada Center for Education Consumer Insights Public Viewpoint surveys connected with over 3,000 U.S. adults ages 18 from February to April 2021. The surveys found:<sup>48</sup>

- "More than one-third of U.S. adults changed or canceled their education plans as a result of the COVID-19 crisis. Two-fifths of these disrupted learners have canceled their plans altogether.
- Financial costs and competing work demands were the most cited reasons for having to change or cancel education plans, followed by a lack of viable in-person learning options.
- Many Americans whose work and education changed because
  of the pandemic are turning to education to get back on their
  feet. Among U.S. adults who experienced a work-related change,
  seven percent have enrolled in an education program, and 37

- percent said they intend to enroll in an education program within the next six months. Of those whose learning was disrupted by the pandemic, 33 percent are currently enrolled, and 35 percent intend to enroll in the near future.
- Some disrupted learners, especially adults over 25 and white Americans, have given up their pursuit of education. Compared to a year ago, the share of disrupted learners who are enrolled or intend to enroll in an education program in the next six months has declined from 90 percent to 68 percent." Read the entire survey results here: Strada (stradaeducation.org)

In addition, SAT and PSAT/NMSQT testing dropped dramatically in the class of 2021. The College Board noted "that the 2021 SAT Suite of Assessments Program Results shows that 1.5 million students in the high school class of 2021 took the SAT at least once, down from 2.2 million in the class of 2020" and that more than "one million test registrations were canceled as schools and test centers closed."

The College Board noted "participation in PSAT/NMSQT<sup>®</sup> was down from approximately 3.76 million for the 2020 administration to 1.85 million in 2021."<sup>49</sup> ACT testing also dropped by 375,000 graduating students in 2021 with only 1.3 million taking the exam.<sup>50</sup> As a result, colleges and universities across the country moved to test-optional admissions in fall 2020, a movement that had been slowly gaining momentum prior to COVID-19. Given the declining youth demographic in the U.S. and its projected impact on enrollment, it remains to be seen whether the widespread move to optional testing is temporary or will remain in place. ■

# ApprenticeshipNH program with Smiths Medical to focus on the growing field of Mechatronics

Smiths Medical recently entered into a partnership with the ApprenticeshipNH program to put current staff members in their Keene facility working as machine operators through a comprehensive educational and training program that will allow them to advance into roles as industrial systems technicians. Following the "earn while you learn" model of ApprenticeshipNH, Nashua Community College (NCC) and Keene State College (KSC) are developing and delivering the academic programming for this customized program, which launched with its first cohort in January.

Smiths Medical is a global company that supplies specialized medical devices and equipment for global markets, focusing on the medication delivery, vital care and safety devices market segments. The initial group will take their knowledge of operating machinery they have developed and supplement that with classroom instruction and 4,000 hours of hands-on equipment maintenance training as part of the apprenticeship. The skill sets they will develop align with a newer field often referred to as mechatronics, which focuses on automation and includes mechanical engineering and some electrical engineering skills.

"We wanted to develop the pool of talent and provide career steppingstones for our current employees. It's difficult to find people with engineer-level skills. The ApprenticeshipNH team helped us envision how we could build and scale a program that will provide these employees with invaluable, cutting edge engineering skills that will lead to growth and supervisory opportunities and a pathway to earn a college degree over the longer term," said Jonathan



Tomachick, engineering manager and site SES leader for the Smiths Medical Keene operations.

Apprentices in the program are exposed to project related work and outside assignments through a blend of hands-on examples and on the job training. Through this work, they will get exposed to the equipment used by Smiths Medical and learn about troubleshooting by partnering with an engineering technician in house that can help with coaching. Smiths Medical is already planning for recruiting for a second cohort in late 2021.

Source: Community College System of New Hampshire. Read the expanded story here: <u>Smiths Medical enters partnership</u> -<u>ApprenticeshipNH</u>

## Benefits beyond wages

The value of a college education goes well beyond a graduate's take home pay. Research by Philip Trostel at the University of Maine found that there are pervasive societal benefits of a college education. People with a college degree pay more taxes; use fewer social services; live longer; smoke and are incarcerated less; volunteer more; donate more money; have better marriages, health, and life satisfaction; and are more apt to be involved in their communities and neighborhoods. In addition, they are more likely to have employer-provided health insurance and retirement plans, very good or excellent health, greater job safety, a higher probability of being employed, and greater asset income.<sup>51</sup>

### Confusion over education, earnings, debt, and value

Negative press, the pandemic, and concerns over student debt, however, continue to chip away at college popularity. A recent of 2021 survey of 2,200 people reflects lukewarm support for a college degree despite empirical evidence that a degree is well worth the effort. According to the survey, only six in 10 Americans think a bachelor of arts degree (BA) is currently worth the time and the money and this figure is sharply divided by political party affiliation, income level and age.<sup>52</sup>

While workforce statistics and research show that the BA still rules when it comes to ROI, most people have heard the stories of the person with a bachelor's degree working at Starbucks or the person with an associate's degree earning more than a person with a master's degree. The Georgetown University Center on Education and the Workforce looked at national education and earnings statistics to create a rulebook to explain these discrepancies.<sup>53</sup>

This is what it learned:

## Rule No.1: Degree level matters

On average, people with more education make more than those with less.

But

### Rule No.2: Occupational choice can trump degree level

People with less education in high-paying occupations can out-earn people with more education in less remunerative occupations.

But

# Rule No.3: While occupation can sometimes trump education, degree level still matters most within individual occupations

But

# Rule No.4: Race/ethnicity and gender are wild cards that matter more than education or occupation in determining earnings

Women earn less than men, even when they work the same number of hours — a gap that persists across all levels of educational attainment. African-Americans and Latinos earn less than their White counterparts, even among the most highly-educated workers.

### The value of a certificate

A recent Strada Education Network and Lumina Foundation consumer survey of over 50,000 individuals with a certificate or certification, but no postsecondary degree,<sup>54</sup> found they:

- report higher levels of marketability, employment, and income—(though wage outcomes vary widely across occupational fields and across genders. The income premium is considerably larger for men with a certificate or certification than it is for women, and this holds across all occupations.)
- see themselves as more attractive job candidates, and are more likely to recommend their path to their peers, and
- have a median annual income of \$45,000, versus \$30,000 for those without a credential.
- The study also found that significant gender gaps exist.

# Tuition and fees at New Hampshire degreegranting institutions

From 2019-20 to 2020-21, New Hampshire public four-year colleges increased tuition and fees by less than half of one percent (.40 percent), and public two-year colleges did not increase tuition and fees at all. According to the U.S. Department of Education, College Affordability and Transparency Center, college tuition nationwide rose six percent from 2017-18 to 2019-20— the latest figures available.<sup>55</sup> But despite New Hampshire public institutions' attempts to keep tuition prices in check, New Hampshire's public two- and four-year colleges and universities continue to be among the most expensive in the U.S.<sup>56</sup>

# O Average instate tuition and required fees at public institutions

		Change from	Change from			
	2020–21	2019–20	2010–11			
TWO YEAR						
New Hampshire	\$6,899	0%	39.6%			
New England	\$5,580	2.6%	36%			
FOUR YEAR						
New Hampshire	\$14,327	0.4%	39.4%			
New England	\$13,096	2.6%	48%			

Source: NEBHE Analysis of IPEDS and New Hampshire Tuition and Fees Data

# **USNH/CCSNH** collaborative efforts

Transfer pathways. A universal transfer model has been established between UNH and all seven of the CCSNH colleges that has identified hundreds of course equivalencies (for both general education and major's level work) that have been packaged into approved transfer pathways to 22 UNH majors, available to any CCSNH student. Eight additional pathways are on schedule to be approved by Fall of 2021. Also, Granite State College has developed pathway programs that map the unique coursework available at each of the seven CCSNH campuses to each of GSC's 25 bachelor's degree programs.

Honors pathway pilot. A new pilot program makes UNH's Honors Program more accessible to students transferring from CCSNH. Qualified CCSNH students can apply to fill open seats in "Honors Discovery" courses at UNH. This allows CCSNH students to be better positioned to enter the UNH Honors Program upon transfer, as these courses are typically taken during the first two years. In the pilot phase, UNH is waiving tuition for these courses.

Outreach and enrollment center (OEC). The USNH OEC is recognized as a critical resource by campuses across both systems for engaging students for recruitment, retention, registration, advising and financial aid activities and also for communication related to managing campuses more safely under COVID-19. The mission of the OEC is to place students in the right seats and to wrap services around those offered on the campuses that retain them and adjust along their degree or certificate pathways. This resource is internal to USNH but serves individual campuses across CCSNH as well and builds bridges for students between the two systems.

**Open educational resources (OER).** The systems continue to build OER opportunities that offer low or no-cost textbooks and other course materials for students. OER can remove costly barriers to student success.

Mental health tele-health. CCSNH and USNH continue to jointly explore vendors able to bring enhanced tele-health services for counseling, begun in part due to COVID-related limitations. ■

# State higher education funding: How New Hampshire ranks

The last two recessions resulted in unprecedented cuts in state funded higher education appropriations per full-time equivalent (FTE) student nationwide. For this reason, public colleges now rely heavily on tuition and fees and students have assumed a growing share of their postsecondary expenses.

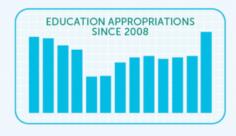
In New Hampshire, budgetary support for public two- and four-year higher education institutions dropped precipitously in 2012. At that time, the state's FTE educational appropriations hit a low of \$1,835 - the lowest dollar amount for any state in the nation.

Since then, gradual increases in state support have raised New Hampshire's FTE educational appropriations to \$4,747. From 2019-20, New Hampshire had the largest increase in educational appropriations per FTE in the nation at 42.1 percent.<sup>57</sup> While this a positive trend, New Hampshire is 49th out of 50 states in higher education funding, at 55% of the national average for FTE educational appropriations. It is 13.3 percent below its appropriations in 1980 and 21.8 percent below education appropriations per FTE in 2001. As a result, the Granite State still ranks third from the bottom in the nation for student share, or net tuition as a percent of total educational revenue. That means student tuition accounts for 71 percent of higher education revenue. The national average is 44 percent.

# O State spotlight: New Hampshire

Education appropriations per FTE increased 42.1% (\$1,280 per FTE) in New Hampshire between 2019 and 2020. As a result, New Hampshire moved from 50th to 49th in education appropriations per FTE. In large part, the funding increase is due to almost \$31 million in federal stimulus funding (\$886 per FTE).

There were also increases in per-FTE general operating appropriations: 29.9% at two-year public institutions and 8.2% at four-year public institutions. The numbers are also adjusted upward due to a 4.6% decline in net FTE enrollment. Percent changes in states like New Hampshire sometimes fluctuate more dramatically due to low funding and FTE. Excluding stimulus funds, New Hampshire's additional higher education investments totaled \$14.6 million.



Source: State Higher Education Finance: FY 2020 (SHEF report). State Higher Education Executive Officers Association. (2021)

New Hampshire statistics from the 2020 State Higher Education Finance report include:

- State and local government funding for higher education totaled \$178 million in fiscal year 2020.<sup>58</sup> In addition, public institutions in New Hampshire received almost \$401 million in tuition revenue. These two revenue sources serve 34,695 total FTE students at public institutions. [See pages XX and XX for CCSNH and USNH for individual part-time and full-time enrollment details.]
- In 2020-21, net FTE enrollment, which excludes medical students, decreased 4.6 percent in New Hampshire.
- New Hampshire allocates 73.3 percent of all higher education funding for general operations at public institutions, but general operating appropriations in New Hampshire have decreased 37.6 percent per FTE, from \$6,028 in 2001 to \$3,759 in 2020.
- New Hampshire has the fourth smallest state student financial aid program in the nation, awarding \$101 per FTE in state student financial aid (the national average is \$830 per FTE).

- New Hampshire is the state with the largest financial aid disparity favoring its two-year sector. New Hampshire's financial aid allocated to two-year institutions is 74 percent of the U.S. average, while financial aid for four-year institutions is just 1 percent of the U.S. average.
- In New Hampshire, public two–year institutions received \$6,671 in education appropriations per FTE in 2020 (82 percent of the U.S. average), while four–year institutions received \$2,850 (34 percent of the U.S. average).
- Students attending two-year institutions make up 26 percent of New Hampshire's FTE enrollment, which is lower than the U.S. average of 39 percent.
- New Hampshire had an above average student share (the proportion of total education revenues at public institutions coming from net tuition revenue) in 2020 at 71 percent. [New Hampshire's two-year student share was 46 percent, and the state's four-year student share was 83 percent.]

# New Hampshire state operating appropriations and state financial aid for public institutions



Source: "State Higher Education Finance: FY 2020" (SHEF report). State Higher Education Executive Officers Association. (2021)

# New Hampshire student debt

For the class of 2020, 70 percent of New Hampshire college graduates had student loan debt, and the average debt load was \$39,928.<sup>59</sup> Graduates of New Hampshire colleges (based on reporting colleges) now rank first in the nation for highest debt and second in the nation for the proportion of graduates with debt.

# National student debt

In the first quarter of 2021, national student loan debt topped \$1.7 trillion. 60 Trends in College Pricing and Student Aid 2021, an annual guide that uses U.S. Department of Education, Federal Student Aid Data Center, National Student Clearinghouse, and IPEDS data to track debt and enrollment trends yearly, reported these national statistics:

- "As of March 2021, 54 percent of borrowers with outstanding education debt owed less than \$20,000;
  45 percent of the outstanding federal education loan debt was held by the 10 percent of borrowers owing \$80,000 or more.
- As of March 2021, 23 percent of the \$1.59 trillion outstanding federal loan balance was held by borrowers who were 50 or older, up from 18 percent in 2017.

"Consistent with recent years, most student loan borrowers were current on their payments, although those who failed to complete a degree, and those who attended for-profit institutions, were more likely to have fallen behind on their payments."

"Report on the economic well-being of U.S. households in 2020" - May 2021, The Federal Reserve Board<sup>61</sup>

- In 2019-20, 55 percent of bachelor's degree recipients from public and private nonprofit four-year colleges and universities graduated with debt and had an average debt level of \$28,400. Average debt per bachelor's degree recipient, including both those who borrowed and those who did not, was \$15,600 for the two sectors combined.
- Total annual student and parent borrowing for postsecondary education reached its peak of \$135.1 billion in 2010-11 and then declined by 29 percent (\$39.3 billion in 2020 dollars) in the next ten years, to \$95.9 billion in 2020-21.
- Students borrow nonfederal education loans from banks, credit unions, and other private lenders, including some states and postsecondary institutions. These loans, which are not part of the student aid system and typically do not involve subsidies, fell from about \$28 billion (in 2020 dollars) in 2007-08 to \$9 billion in 2010-11, before increasing to about \$12 billion in 2020-21. Nonfederal loans accounted for about 13 percent of all education loans in 2020-21.
- In March 2021, 17 percent of borrowers (and 11 percent of outstanding dollars) were in default. The average balance on defaulted loans was \$21,700, compared with \$33,500 for all outstanding loans.
- The number of undergraduates declined by 4.0 million (16 percent) between 2011-12 and 2020-21. The number of Pell Grant recipients declined by 3.3 million (35 percent) over these nine years."<sup>62</sup>

Read the entire report here: <a href="https://research.collegeboard.org/pdf/trends-college-pricing-student-aid-2021.pdf">https://research.college-pricing-student-aid-2021.pdf</a>

# Debt for traditional and non-traditional borrowers

How much debt is too much? According to Mark Kantrowitz, Edvisor's.com publisher and author of four books on financial aid, "As long as student loan debt at graduation is less than your annual starting salary, you'll be able to repay your student loans in 10 years or less."

"The burden of student loan debt is not shared equally. Overall, low-income students who attend college are more likely to borrow — and borrow at a higher amount — to complete a degree."

"The student debt dilemma," Anthony P. Carnevale, Georgetown University Center on Education and the Workforce<sup>63</sup>

Research continues to reflect that traditional student borrowers, even those with larger student loan balances, have low student loan default rates, higher earnings, and lower unemployment. Many of these individuals were full-time students who attended more selective public or private four-year nonprofit schools, or graduated from professional or graduate programs.

Non-traditional student borrowers, however, are often older, first-generation college goers who live independently, study part-time, come from economically disadvantaged backgrounds, and attended less selective colleges. These non-traditional students have higher student loan default rates, lower earnings, higher unemployment, and fewer job prospects.<sup>65</sup>

# High debt, vs. low debt and where defaults are concentrated

While many people think the high amount of debt a student holds is a problem, this is often not the case. Those with more student debt are less likely to default because students with larger balances also tend to have higher levels of attainment and earnings.<sup>66</sup>

Student loan defaults are concentrated among borrowers with small loans because this group is less likely to have completed their degrees. "Borrowers who owe less than \$5,000 were more likely than those with higher amounts of debt to default within four years." A Urban Institute study found that student loan default was also tied closely to debts that indicate financial stress, such as medical or utilities collections debt, as opposed to credit card, mortgage or car loan debt. 68

The official three-year default rate for the New Hampshire 2018 cohort is 7.9 percent, down from 9.8 percent for the 2015 cohort, and about the same as for the 2013 cohort, which was at 7.8 percent. As of September 2018, 4,111 students, from 30 New Hampshire colleges and career schools that distribute federal Title IV financial aid, were in default of their loans. (This includes a substantial number of online students.)<sup>69</sup> The national (fiscal year 2018) cohort default rate is 7.3 percent, down from 10.8 percent in 2015 and from 11.3 percent in 2013.<sup>70</sup> [To determine the default rate of a specific New Hampshire college; university; or for-profit, IPEDS-submitting NH career schools, search the U.S. Department of Education's Cohort Default Rate Database at: <a href="https://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html">https://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html</a>

# Federal Pell Grant statistics in New Hampshire

Pell Grants were designed to provide accessibility to higher education. Because they are awarded to students with the lowest ability to pay for higher education, "the size of the Pell Grant student population is often used as a proxy to characterize the low-income status of student populations." The grants do not have to be repaid and are typically awarded only to students enrolled in undergraduate for-credit programs. They are not available for graduate education.

The maximum Pell Grant in the July 1, 2021 through June 30, 2022 award year is \$6,495 and the corresponding maximum Pell Grant eligible expected family contribution (EFC) is \$5,846.<sup>72</sup> That is the maximum amount; the awards decline with income level (and other factors), and can be much smaller, especially since many students attend college part-time. Nationally, 31 percent of undergraduates received Pell Grants in 2019-20. In 2018-19, 48 percent of Pell Grant recipients were independent students, not reliant on family financial support.<sup>73</sup>

According to the U.S. Department of Education, over 58,917 New Hampshire residents received Pell Grants in 2017-18.<sup>74</sup> These students attended public, private and proprietary schools (career schools). The number of Pell Grant students in New Hampshire varies by institution. Even with a Pell Grant, tuition and fees can have a significant impact on student and family finances.

# Workforce trends and life-long learning 65 by 25

# O 2019 Education distribution of New Hampshire residents ages 25-64



Source: Lumina Foundation, "A Stronger Nation, 2021"

At least 65 percent of jobs in New Hampshire will require a postsecondary credential by 2025. This could be a degree; high-value certificate, certification, license, or training program; apprenticeship; or a combination of two or more. As of August 2021, 45 percent of Granite State residents aged 25 through 64 lacked a postsecondary credential.<sup>75</sup>

New Hampshire's current postsecondary attainment rate is 55.1 percent. This exceeds the national average of 51.9 percent but is significantly below New Hampshire's attainment goal set in 2015.<sup>76</sup> To reach this goal, New Hampshire must "significantly increase the number of people who enroll in programs and earn all types of credentials beyond

high school. With the inclusion of workforce certificates (beginning in 2014) and certifications (in 2018), New Hampshire's overall rate of educational attainment has increased by 10.4 percentage points since 2009."

According to the New England Board of Higher Education, for New Hampshire to increase its adult college attainment rate by five percent, 21,632 individuals ages 25 or older would have to complete an associate's or higher degree.

"The half-life of a skill is five years and shrinking. ...There are new business models and learning environments that become bidirectional; as organizations help employees or students pick up new things in different stages of their lives – often every other year given the half-life of skills – the organizations themselves also learn in the process."

Speaker John Seely Brown, former director of XEROX PARC

# Adapting to a changing environment

Continuous learning of new skills by individuals and development of new

education delivery methods by postsecondary institutions is increasingly important. Change happens fast in today's business environment, and having the ability to acquire and renew knowledge and skills regularly is vital.

# O Top 5 in-demand competencies

- 1. Communication
- 2. Teamwork
- 3. Sales/customer service
- 4. Leadership
- 5. Problem solving/Complex thinking

Source: "Workplace basics, The competencies employers want: 2020," Georgetown University Center on Education and the Workforce

# O Top 20 jobs increasing in demand

- 1. Data analysts and scientists
- Artificial intelligence and machine learning specialists
- 3. Big Data specialists
- 4. Digital marketing and strategy specialists
- 5. Process automation specialists
- 6. Business development professionals
- 7. Digital transformation specialists
- 8. Information security analysts
- 9. Software and applications developers
- 10. Internet of Things specialists

- 11. Project managers
- **12.** Business services and administration managers
- 13. Database and network professionals
- 14. Robotics engineers
- 15. Strategic advisors
- 16. Management and organization analysts
- 17. Financial technology (FinTech) engineers
- 18. Mechanics and machinery repairers
- 19. Organizational development specialists
- 20. Risk management specialists

Source: "The future of jobs report, 2020" by the World Economic Forum

# O Top 15 emerging skills for 2025

- 1. Analytical thinking and innovation
- 2. Active learning and learning strategies
- Complex problem-solving
- 4. Critical thinking and analysis
- 5. Resilience, stress tolerance and flexibility
- 6. Creativity, originality and initiative
- 7. Leadership and social influence
- 8. Reasoning, problem-solving and ideation
- 10. Technology design and programming
- 11. Technology use, monitoring and control
  - 12. Systems analysis and evaluation
  - 13. Troubleshooting and user experience
  - 14. Service orientation

9. Emotional intelligence

15. Persuasion and negotiation

Source: "The future of jobs report, 2020" by the World Economic Forum

# Top existing reskilling/upskilling programs

- 1. Analytical thinking and innovation
- 2. Leadership and social influence
- Active learning and learning strategies
- 4. Critical thinking and analysis
- 5. Technology design and programming
- Complex problem-solving
- 7. Technology use, monitoring and control
- 8. Creativity, originality and initiative
- 9. Emotional intelligence
- 10. Reasoning, problem-solving and ideation

Source: "The future of jobs report, 2020" by the World Economic Forum

Educational institutions must know not only how to teach rapidly changing technologies, but know how to use rapidly changing technologies. Gartner Research noted that within the next ten years "constant upskilling will outweigh tenure and experience. The digital economy will demand new ideas, new information and new business models that continually expand, combine and morph into new ventures and new businesses."79

In February 2021, a report by Credential Engine estimated that U.S. educational institutions, employers, federal grant programs, states, and the military spend an estimated \$1.921 trillion each year on education and training.80 The \$1,325 billion by educational institutions, \$516 billion by employers, and \$79 billion by states and federal grants to other schools, programs, and the military is meant to ensure that individuals have the skills and talent needed for them to succeed in a rapidly changing workforce and that employers have access to workers with those skills.

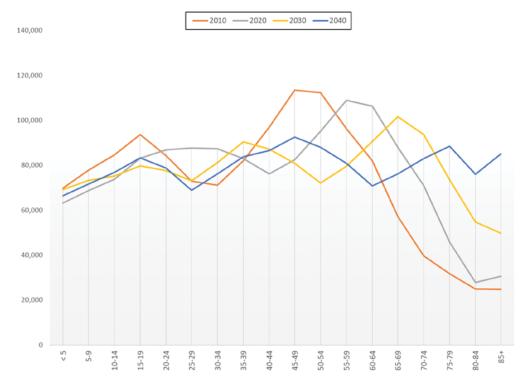
Yet in New Hampshire and elsewhere in the U.S., employers are scrambling to find workers with the skills, degrees, training, and flexible thinking needed to fill open positions. Despite myriad choices of higher education options in the state, a significant number of potential employees are not getting the degrees and other high-value credentials they need to succeed and to qualify for these positions.

# Population, employment

New Hampshire's challenge of meeting the need to build an educated and trained workforce continues to be hampered by an aging population. The New Hampshire Office of Energy and Planning (OEP)81 predicts that by 2040, 28.5 percent of New Hampshire residents, or 408,522 (July 2020 population: 1,366,000) will be 65 and older. Within that group, more than 85,000 people will be over the age of 85.

# O New Hampshire's population by age

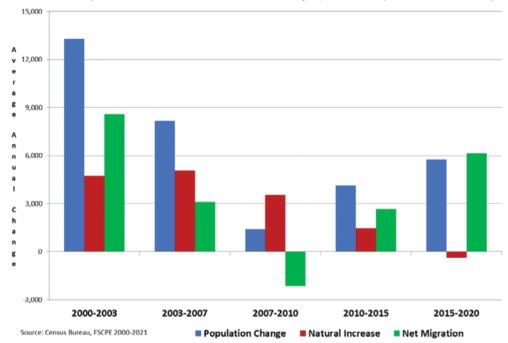
Estimated 2010 and 2020 and projected 2030 and 2040



Source: U.S. Census, Population Estimates and NH Office of Energy and Planning (September 2016)

# O New Hampshire demographic change, 2000 to 2020

Note: Created by Kenneth M. Johnson, Senior Demographer, Carsey School, University of New Hampshire.



Source: Census Bureau estimates. Analysis. K.M. Johnson, Carsey School, UNH

# How location effects employment and educational attainment

Where a person lives in the state can also increase or decrease employment opportunities significantly, with those living near larger cities, businesses, or the Boston Metropolitan Area, having access to more jobs and postsecondary education. Providing New Hampshire's rural citizens with both jobs and postsecondary options continues to be a challenge. Recent research by the New England Board of Higher

Education notes significant differences in educational attainment across different parts of each New England state. It suggests "Plans to increase educational attainment should focus on providing opportunities for people in less accessible and more isolated areas through methods like more flexible schedules or remote and hybrid education models."82

On a positive note, New Hampshire has gained population through migration over the past four years, and its population grew by the largest percentage of any New England state over the past three years.<sup>83</sup>

# **SECTION 2**

# New Hampshire colleges by sector

"New Hampshire is now gaining significantly more migrants from other U.S. destinations than earlier in the decade. The largest gains are among young adults."

Kenneth Johnson, Carsey School of Public Policy, University of New Hampshire<sup>84</sup>

# Community College System of New Hampshire (CCSNH)

## **CCSNH Institutions**

- Great Bay Community College in Portsmouth and Rochester
- Lakes Region Community College in Laconia
- Manchester Community College
- Nashua Community College
- NHTI in Concord
- River Valley Community College in Claremont, Keene, and Lebanon
- White Mountains Community College in Berlin, Littleton, and North Conway

## Overview

The Community College System of New Hampshire has evolved continuously in its fifty-year history. As the needs of the state, businesses, industries, communities, and citizens have changed, the System has transitioned to maintain and increase its critical economic and social relevance. Today, the Community College System of New Hampshire offers students varied programs on seven college campuses, from Manchester to Berlin, with an additional four academic center locations throughout New Hampshire, all designed to offer affordable, accessible education and training that aligns with the needs of New Hampshire's businesses and communities. CCSNH is dedicated to the educational, professional, and personal success of its students; a skilled workforce for our state's businesses; and a strong New Hampshire economy.

Despite COVID-19 pandemic challenges, New Hampshire's colleges and universities have been busy adding new programs and services to meet the needs of students, the Granite State workforce, and area businesses. Below are examples of just some of the innovations, collaborations, and changes that have come about during this time.

# Community Colleges System of New Hampshire (CCSNH) Innovations

#### GREAT BAY COMMUNITY COLLEGE (GBCC)

#### Manufacturing courses support employer training needs.

Developed with input from area business leaders, the first rollout of non-credit foundational course offerings include manufacturing skills and knowledge, shop and construction math, technical blueprint reading fundamentals, and CNC setup operator fundamentals. The flexible 20 hour/week format offers a viable solution for employers looking to train employees without affecting everyday operations.

Initiative to reduce food insecurity. Great Bay worked to reduce food insecurity among students by developing partnerships with Gather, Hannaford, Take Out Hunger, and through financial support from Great Bay's Student Government Association and the Foundation for New Hampshire Community Colleges. The college distributed Hannaford gift cards to students and launched a curbside food pickup program with dry goods, milk, eggs, produce, prepared meals, and more. Over 2,000 pounds of food was distributed to students January through May.

"Soar to Success" a weeklong college readiness bootcamp. To introduce students considering or heading to GBCC, the college hosted a weeklong college readiness bootcamp. Students had an opportunity to refresh writing and math skills, tour both campuses (and the college's new e-sports lab space), and learn about financial literacy, campus technology, academic advising, and the registration process, in addition to meeting other students.

#### LAKES REGION COMMUNITY COLLEGE (LRCC)

**Nursing excellence.** In the summer of 2021, LRCC Nursing faculty once more reported a 100 percent pass rate for the members of the 2021 graduating class. For LRCC, this distinction has been in place since 2017. However, the challenges posed to teaching and learning in the nursing field by the pandemic make this year's milestone even more admirable.

**Business faculty pilot first ever FLEX classes.** With FLEX classes, in-classroom technology upgrades and faculty training enable

#### Statistics (All CCSNH data reflect system-level aggregate.)

➤ Student enrollment headcount, fall 2020

(excludes noncredit and dual enrollment, includes non-matriculated students with credit)

Total: 9,614 students

Undergraduate degree/certificate seeking full-time: 2,963 students Undergraduate degree/certificate seeking part-time: 5,665 students

→ Undergraduate demographics, fall 2020

(excludes noncredit, dual enrollment, and non-matriculated students with credit)

Minority: 13 percent

Pell eligible (Fall 2019): 31 percent Male: 40 percent | Female: 60 percent

Age 24 and under: 64 percent | Age 25 and over: 36 percent

- New Hampshire residents, fall 2020
  - First-time, degree-seeking students: 94 percent of first-time degree- and certificate-seeking students are New Hampshire residents
  - All undergraduate students: 94 percent of all degree/certificate seeking students are New Hampshire
  - All graduate students: n/a

- → Distance Education, fall 2020
  - Students that are exclusively enrolled in distance education (undergraduate degree/cert seeking): 4,102
  - Students located in New Hampshire enrolled exclusively in distance education (undergraduate degree/cert seeking): 3,910
- → Faculty headcount (all instructional, research, and public service faculty): 261 Full-time Faculty | 1,130 Part-time Faculty
- → Number of degrees/certificates conferred, FY20

Certificates (for-credit programs): 594 Certificates (non-credit programs): 301

Associate's: 1,830 Bachelor's: 0 Graduate: 0

→ Percent of degrees and certificates awarded by gender – Male: 42 percent | Female: 58 percent

students to choose whether to attend classes in person or remotely on any given day, or to participate in the class 100 percent online. Students pay the same tuition and follow the same schedule, but have the flexibility to attend class in whatever format works best for them. Achieved results: increased participation and engagement and on-time completion.

Hospitality wing opens. LRCC's new hospitality wing includes two laboratory kitchens and a restaurant. With help from a grant from the Northern Borders Regional Commission and support from community partners like Bank of New Hampshire, LRCC was able to renovate space to create state-of-the-art learning facilities for all three of its hospitality programs. The new Community Table restaurant is scheduled to open to the public in late Fall 2021.

#### MANCHESTER COMMUNITY COLLEGE (MCC)

Power Sports Certificate program launched. The 22-credit program prepares graduates to succeed as technicians in the hi-tech and increasingly complex power-sport vehicle industry. Curriculum was developed in partnership with businesses to include hands-on training, on-the-job work experience, and online education. The MCC Power Sports program is designed to cultivate highly skilled work-ready technicians in less than a year.

Scholarships for behavioral health students. Thanks to its partnership with Catholic Medical Center's Network 4 Health initiative, an MCC scholarship program has been expanded for the next five-to-seven years for those enrolled in behavioral science and human services degree programs. The scholarship is also available to students enrolled in shorter programs, including recovery support, substance misuse prevention, and mental health support worker certificates.

MCC launches HVAC Advanced Certificate program. Since the opening of MCC's Advanced Technologies building (now renamed "Susan D. Huard" Advanced Technologies), there has been

heightened interest in MCC's HVAC and electrical technology degree and certificate programs. Area businesses continue to struggle to fill many vacancies in this field and those who graduate from MCC's programs head straight into new jobs.

#### NASHUA COMMUNITY COLLEGE (NCC)

Coding bootcamps and Big Data Developer program offered remotely. NCC launched completely remote 18-week front-end and back-end coding boot camps during the pandemic that have already graduated several cohorts. Graduates were from all ages and industries, including My Turn clients and WIOA recipients. Based on the success of the coding boot camps, NCC launched a 26-week remote Big Data Developer program to train students for entry-level careers as data engineers.

Criminal Justice dual enrollment program reinforces pathways for high school students. In spring 2021, Salem High School, the Salem Police Department, and NCC teamed up to provide a semester of hands-on criminal justice career exploration for Career and Technical Education (CTE) high school students. NCC hosted a virtual Early College course via Zoom to accommodate the safety protocols in place.

Honda Technology certificate and Full Stack Web Development certificate help students get ahead fast. NCC now offers two new certificates that will help students be workforce ready. The 49 credit Honda Technology certificate at 49 credits is comprised of the core classes of the 70-credit Honda Automotive Technology associate's degree. NCC also added a new 24-credit Full Stack Web Development certificate to its program offerings.

#### NHTI, CONCORD'S COMMUNITY COLLEGE

**Five-star status.** The Alpha Upsilon Omicron chapter of Phi Theta Kappa, the two-year honor society at NHTI, achieved five-star status and received three regional awards. It was the only community college in New Hampshire to achieve this honor.

- → Top three majors by undergrad degrees awarded:
  - 1. Nursing
  - 2. Business Administration/Business Management
  - 3. General Studies
- ➤ Number of STEM degrees and certificates awarded: 1,246
- ➤ Total Scholarships and Fellowships, FY20 (all sources including Pell): \$23,839,703

#### **Notable Collaborations and Achievements:**

- CCSNH Freezes Tuition for 2021-2022, CCSNH Begins Awarding Digital Professional Badges,
- Gift to the Class of 2021, Smiths Medical, NCC and KSC partner to meet academic and workforce needs,
- WMCC Partnership with Milton Cat,
- NCC student finalists in National STEM Competition, LRCC Completes Expansion of Culinary Arts Program, GBCC Creates New Welding Lab to Meet Employer Demand, and ApprenticeshipNH, Earn While you Learn. Links to the stories listed below are included in this document's end notes<sup>85</sup>

**Diversity, equity, and inclusion in the spotlight.** NHTI developed and offers 39 new diversity, equity, and inclusion programs, including a 'Let's Talk' series, the Black Literature Book Club, and events to celebrate Hispanic heritage, black history and LGBTQ+ Pride months.

Scholarships help students persist. NHTI awarded \$5.6 million in student scholarships through CARES, GOFERR, CRSSA, and ARP Federal COVID-19 funding support, which helped students persist in the face of pandemic-related challenges.

#### RIVER VALLEY COMMUNITY COLLEGES (RVCC)

LPN program reborn. In January, 2020 the RVCC Licensed Practical Nurse (LPN) program was reborn and in December 2020, all completing students passed their NCLEX license exam and were offered jobs in hospitals and nursing homes in the region. Many chose to continue their education through RVCC's Direct Entry program to earn their Registered Nursing (RN) degree. The LPN program was an immediate success. The applicant pool quadrupled and the number of students RVCC could accept nearly tripled in the second year. RVCC now offers the one-year LPN certificate program in Keene, Laconia, Lebanon, and Littleton each spring.

Medical Lab Technician program: the only one of its kind in New Hampshire and Vermont. The program includes a clinical practicum for hands-on learning at affiliated local hospitals. Graduates are eligible to sit for a certification exam, however many are employed prior to taking the exam. RVCC also has articulation agreements with UNH and Colby-Sawyer College for RVCC graduates who plan on continuing their education.

Summer STEM bootcamp for 8<sup>th</sup> graders. RVCC held a free computer technology boot camp last summer for rising 8th grade students. College faculty offered half-day morning and afternoon sessions for young students and their parents to get acquainted

with the technology and labs. The campers enjoyed hands-on experimental learning in networking, cybersecurity, information technology, and programming. They each built and programmed their own Raspberry Pi, a micro-computer that drives programs and operates like a desktop computer when connected to a monitor and keyboard.

#### WHITE MOUNTAINS COMMUNITY COLLEGE (WMCC)

Here we grow again - Littleton expansion: The Build Community Littleton Expansion will help White Mountains Community College provide North Country residents with affordable, accessible education and training that aligns with local business and community needs. WMCC's Littleton Academic Center will create a technology hub – living lab – to meet current and future workforce needs through the growth of high-demand programs, improved access, increased recruitment, and increased community integration.

Medical Assistant apprenticeship: WMCC and Memorial Hospital in North Conway partnered to create the hospital's first-ever Medical Assistant apprenticeship program. Students will participate in a credit-bearing program aimed at filling open positions at the hospital's primary care practices. Tuition and fees for the program were funded by proceeds from Memorial's 2020 golf tournament and grants from Citizen's Bank. Students spend two days in the classroom at WMCC, with a third day allotted toward studying, and two days on-site at Memorial Hospital.

Automotive program lights up with electric vehicle: Recognizing the growing emphasis on electric vehicles, WMCC has added a unique, hands-on class to its automotive technology program. As part of the new course in electric vehicles, seniors at the Berlin campus will embark on a 16-week project learning course to build a Switch Glider, a three-wheeled electric vehicle. ■

# University System of New Hampshire (USNH) innovations

#### **GRANITE STATE COLLEGE**

**4,000** New Hampshire educators to be trained in online teaching. Granite State College was selected to train up to 4,000 PK-12 teachers on behalf of the New Hampshire Department of Education. This grant-funded training offers certified New Hampshire PK-12 educators the opportunity to further develop skills related to creating effective virtual classrooms and facilitating engaging online instruction. The dynamic five-week online micro-credential is facilitated by faculty at Granite State College's School of Education.

New programs support frontline workers. Two new Granite State College degree programs will help build capacity across frontline workers: the Bachelor of Science in Fire Service Administration and the Master of Science in Nursing Health Care Education. Granite State also recently introduced a set of graduate certificates which will provide an affordable, credit-efficient pathway to a master's-level credential. Options include graduate certificates in health care management, nonprofit leadership, project management, and administration of online education.

"Putting families first" – Inaugural virtual DCYF conference. The Child Welfare Education Partnership (CWEP) at Granite State College and the State of New Hampshire's Division of Children Youth and Families (DCYF) marked the first ever virtual DCYF conference. The event, coordinated and facilitated by CWEP, provided DCYF staff, community partners, and stakeholders with 61 individual workshops. More than 850 participants attended the conference, including social workers, juvenile probation officers, attorneys, foster parents, guardian ad litems, and public and private agencies.

#### UNIVERSITY OF NEW HAMPSHIRE (UNH)

State-of-the-art COVID-19 testing and sequencing. Early in the pandemic UNH established a nation leading testing program that served to keep campuses open and communities safe. Equipped with state-of-the-art instrumentation and robotics that can screen for COVID-19 on at least 4,000 samples a day, the lab continues to serve the needs of the University System as well as other state partners including schools, nursing homes, and prisons. Recently, UNH received a grant from the National Institutes of Health to conduct genomic testing of positive cases of the COVID-19 virus to help monitor for variants of concern that may be found in New Hampshire.

Focus on career and professional success: 80 percent of the class participated in at least one internship. With a commitment to preparing students for post-graduation success, UNH has reimagined career services as a campus-wide career preparedness mindset. Career teams across UNH empower students with opportunities for experiential learning, mentoring, networking, and personal growth. Engagement with more than 2,500 employers means that over 80 percent of the class of 2020 participated in at least one internship, and 91 percent of the class are either employed or pursuing further education, despite entering the job market during the pandemic and economic slowdown.

Modernized health sciences facilities to meet the needs of employers. In Durham, the newly opened Health Sciences Simulation Center includes fully equipped simulation labs that mimic hospital, clinic, primary care, and other health care settings. UNH Manchester expanded its teaching and research facilities in

# University System of New Hampshire (USNH)

#### **Institutions**

- Granite State College
- Keene State College
- Plymouth State University
- University of New Hampshire

#### Overview

USNH is a community of four-year public colleges and universities with diverse missions and a shared commitment to serve the higher educational needs of the people of New Hampshire. The University System strives to ensure the availability of appropriate higher educational opportunities to all New Hampshire citizens; seeks to enroll a diverse student population to enhance educational experiences; and provides programs and activities based on a commitment to excellence. USNH proudly serves as an innovation hub for new and emerging business activity, as the largest provider of an educated workforce, and as one of the state's greatest resources for social mobility. Through its institutions, USNH engages in research that contributes to the welfare of humanity and provides educational resources and professional expertise that benefit the state and its people, the region, and the nation.

the areas of biotechnology and cellular biology, in partnership with the Advanced Regenerative Manufacturing Institute (ARMI) and its BioFabUSA program, to include the state-of-the-art Biotechnology Innovation Center. The center will be used for classes, faculty research, and incubator space for startup companies. Finally, the renovation of Spaulding Hall, the university's largest ever capital project, will build the university's capacity for high-impact research in the life sciences while ensuring student access to leading-edge technology and meaningful, real-world skill-building opportunities.

#### **KEENE STATE COLLEGE**

Fostering workforce development. Keene State College continues to partner with the City of Keene, area industries, and other higher education institutions to foster workforce development. It is a key stakeholder in the Keene Technology and Innovation Partnership (KTIP). Keene State and its Optics Engineering and Precision Manufacturing programs join with the City of Keene, private partners, Hannah Grimes Center for Entrepreneurship, Monadnock Economic Development Corporation, and the New Hampshire Idea Network of Biomedical Research Excellence in efforts to plan and locate a business and technology hub in Keene.

NSF grant provides S-STEM opportunities. Keene State was awarded a grant through the National Science Foundation (NSF) Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program. The program provides scholarships, research opportunities, and academic and professional development support for eligible students majoring in chemistry or biology at Keene State.

Students are provided with four-year scholarships, which are on average \$6,000 – \$8,000 per year. They also receive peer course assistance and mentoring, paid research opportunities or internships, career preparation, and a learning community with other students.

Supporting pathways to college for CTE students. Keene State College is partnering with area public schools, River Valley Community College, all New Hampshire career and technical education (CTE) centers, and selected CTEs in Massachusetts and Vermont to support pathways to college for CTE students who complete their high school program with a B grade or better. Participating students can apply eight college credits to their bachelor's degree at Keene State, choosing from programs in architecture, biology, business management, construction safety, safety and occupational health applied sciences, sustainable product design and innovation, and more.

#### PLYMOUTH STATE UNIVERSITY (PSU)

Center for Cybersecurity addresses employee shortages with new programming. The 480-hour online program offers flexibility to allow employees of both large and small businesses to participate. The Center's program has been developed by global cybersecurity education leader Cybint and is taught by PSU faculty. As of October 2020, there were more than 1,000 vacant cybersecurity positions in New Hampshire. In the past decade the field has had a near zero percent unemployment rate.

#### Statistics (All USNH data reflect system-level aggregate.)

➤ Student enrollment headcount, fall 2020

Total: 25,087

Undergraduate degree/certificate seeking full-time: 19,269 Undergraduate degree/certificate seeking part-time: 1,335

Graduate full-time: 2,248 Graduate part-time: 1,905

→ Undergraduate demographics, fall 2020. All data this bullet are total undergrads: resident and nonresident, new and continuing, including Pell eligible.

Minority: 12 percent Pell eligible: 24 percent

Male: 45 percent | Female: 55 percent

Age 24 and under: 91 percent | Age 25 and over: 9 percent

➤ New Hampshire residents, fall 2020

• First-time, degree-seeking students: 47 percent

• Pell eligibility for New Hampshire resident: 28 percent

All undergraduate students: 52 percentAll graduate students: 54 percent

→ Distance Education, fall 2020

• Students that are exclusively enrolled in distance education (undergraduate degree/cert seeking): 2,200

• Students located in New Hampshire enrolled exclusively in distance education (undergraduate degree/cert seeking): 1,543

→ Faculty headcount (all instructional, research, and public service faculty) – Full-time: 1,277 | Part-time: 863

➤ Number of degrees/certificates conferred, FY20

Certificates (for-credit programs): 299

Certificates: (non-credit programs [not collected by USNH institutions]

Associate's: 141 Bachelor's: 5,664 Graduate: 1,206

→ Percent of degrees and certificates awarded by gender – Male: 41 percent | Female: 59 percent

➤ Top three majors by undergrad degrees awarded:

1. Business Administration

2. Psychology

3. Communication and Media Studies

# Keene State students intern and begin careers at Florentine Films

Keene State has a long-standing relationship with Florentine Films, the production house of Ken Burns, a documentary filmmaker known for his American history narratives. With locations in nearby Walpole, NH, and New York City, Florentine Films has worked with nearly 70 students through the past three decades. For 11 of those students, their internship experiences led to a full-time position with the production house.

For students studying film, history, or art, an internship at Florentine Films is an incredible opportunity for them to build their skills, expand their knowledge, and try something unexpected. Film studies major Becca Connolly '16 was accepted to an internship with Florentine Films her senior year. Now, she's an apprentice editor. "In a lot of ways, as an intern, the experience helped me learn the aspects of the programs, such as Avid Media Composer. I was taking courses on how to use Avid while at the same time seeing how it was being implemented in a real-world setting."

Cat Harris '10 found her way to Florentine Films as an intern after graduation. "It's great to have Keene State students intern here because you get a lot of access to everything that is involved in documentary film production," said Cat. "You get to meet editors, assistants, apprentice editors; you get to know the workflow and see if it's something you want to do in the future. As an intern, you don't always get that access. Here, you can learn."

It's this experience at Florentine Films that gave many Keene State grads a successful start in film. Jennifer Dunnington '93 is now an Oscar-nominated music editor. Chris DeVito '08 travels the world as a post-producer/editor for House Hunters International. Lindsay Taylor Jackson '12 is now an independent filmmaker. Alex Cucchi '12 stayed after his internship at Florentine Films ended and is now an assistant editor. After completing a summer internship after graduation, Lynne Carrión '18 now works as an apprentice editor at Florentine Films.



Alumni employees at Florentine Films. Back row: Daniel White '95, Dave Mast '96. Front row: Rebecca Connolly '16, Cat Harris '10, Lynne Carrión '18. (Not pictured: Susanna Steisel '75, Ted Raviv '08, Alex Cucchi '12, Samantha Spielberg '16, Nora Colgan '19, and Craig Mellish ACE).

Source: Laurie O'Hara, Keene State College. Students Intern and Begin Careers with Ken Burns's Film Production House · News · Keene State College Climate studies bachelor's degree launched. PSU launched a new bachelor's in climate studies, becoming the first institution in New Hampshire, and one of just a few in the country, to offer it as an undergraduate degree. The program joins PSU's nationally recognized meteorology program. The interdisciplinary bachelor's gives students a foundation in the science of climate and the field, and allows them to explore a variety of other related disciplines, topics, and skills, or pursue areas of specialization that match their interests.

Open Educational Resources save \$1.2 million. Nearly 30 percent of PSU students are considered low-income and many struggle to afford expensive textbooks. PSU has achieved dramatic savings by being proactive in finding low- or no-cost alternatives, including Open Educational Resources (OER). As of May 2021, PSU students and their families have saved over \$1.2 million and the pace is increasing as more faculty adopt OER. Plymouth State recently helped found the New Hampshire Open Ed Public Consortium, a joint effort across the state's 11 public postsecondary institutions to lower the cost of textbooks and other learning materials. ■

- ➤ Number of STEM degrees awarded: 1,938 (excludes certificates)
- → Total Scholarships and Fellowships, FY20 (all sources including Pell): \$205,805,547

#### Notable collaborations and achievements:

- USNH institutions regularly partner with PK-12 and NH DOE, CCSNH, state agencies, and businesses, communities, and nonprofit organizations to address the state's most pressing issues, such as workforce readiness, K-12 education, environmental stewardship, and health care, often involving innovative approaches to overcome challenges. Examples of collaborations are included in the Innovations section of this report.
- USNH is #1 in the Northeast for the highest public 4-year sector bachelor's degree completion at 79.4%. [National Student Clearinghouse Completions Report 2020]
- Since 2011, USNH has awarded \$20 million in tuition waivers to the men and women serving in NH's National Guard.
- USNH generates \$2 billion in economic activity annually in New Hampshire.
- USNH is #1 in the Northeast for the lowest public 4-year sector student loan default at 4.3%.

# O USNH employment outcomes

Employed or further advancing education  Employed, or enrolled in graduate education, within 1 year of graduation*  (alumni/first-destination surveys)	92.4%
Employed in field of study  Of those employed, employed in field of study  (alumni/first-destination surveys)	82.5%
Employed in NH In-state bachelor's grads employed in NH within 1 year of graduation** (NHES employment data)	63.1%

<sup>\*</sup>GSC surveys alumni one to five years post-graduation.

First-destination survey data results for UNH and PSU 2020; KSC 2019. GSC alumni survey results 2020. USNH analysis of NHES data: bachelor's degree completers in academic year 2017-18, employed in NH in the second quarter of 2019.

<sup>\*\*</sup>NHES records exclude individuals employed in other states as well as those working in NH but employed by the federal government or self employed and therefore may undercount NH employment

# Private nonprofit colleges and universities

#### **Title IV Institutions**

- Antioch University New England
- Colby-Sawyer College
- Dartmouth College
- Franklin Pierce University
- New England College
- Magdalen College
- Rivier University
- Saint Anselm College
- · Saint Joseph School of Nursing
- Southern New Hampshire University
- The Thomas More College of Liberal Arts
- Upper Valley Graduate School of Education

#### Overview

Private two- and four-year colleges and universities are located in communities all across New Hampshire, and are often the largest employers in their regions. With diverse missions and distinct histories, these institutions are important centers of learning, culture, and innovation and are highly regarded for their outstanding teaching, research, and community service activities. Private colleges and universities in New Hampshire serve students at the certificate, associate's, bachelor's, master's, and doctoral levels. Dartmouth College, established in 1769, is the oldest private nonprofit college in New Hampshire, Southern New Hampshire University is the largest, and the smallest is Magdalen College. Private colleges in New Hampshire educate students both on campus and online. In 2019-20, New Hampshire's private institutions awarded 26,334 degrees and certificates, 15,156 of which were bachelor's degrees. Many of these recipients were online students from across the U.S. due to Southern New Hampshire University's size and reach.

#### INNOVATIONS AND NEWS

# Private, nonprofit college and university innovations

#### ANTIOCH UNIVERSITY NEW ENGLAND (AUNE)

AUNE launches Master of Arts in Nonprofit Management degree online. The M.A. in Nonprofit Management program from Antioch University New England is an online 33-credit program that can be completed in under two years. Most students can work full time while going to school and can start in January, May, or August.

Professor receives social justice award. Dr. Devona Stalnaker-Shofner, Associate Chair of AUNE's M.A. in Clinical Mental Health Counseling program, was awarded the 2021 North Atlantic Association of Counselor Education and Supervision Social Justice Award. This award recognizes a counselor educator who has made significant contributions to the research and literature on social justice and/or multicultural issues.

#### **COLBY-SAWYER COLLEGE**

Nursing degree articulation agreements established with CCSNH. Colby-Sawyer College has established formal articulation agreements with all seven public community colleges in the state to increase access to affordable four-year degrees for professional nurses. Students who

earn an associate's degree in nursing in one of the state's community colleges and become a registered nurse can enroll in Colby-Sawyer's Registered Nurse to Bachelor of Science in Nursing (RN to B.S.) program. The agreements give students preferred tuition pricing. The total cost of the RN to B.S. program can be as low as \$8,400 for students who transfer the maximum number of credits allowed.

Scholarship funding for health sciences students. Colby-Sawyer College will soon provide additional scholarships to students in nursing and health sciences, thanks to a gift to the college and a grant awarded to Dartmouth-Hitchcock Health (D-HH). The grant funding through D-HH will come to the college as a sub-award from a nearly \$2.5 million H-1B Grant for Rural Healthcare Workforce Development by the U.S. Department of Labor.

Practice makes perfect with simulations. State-of-the-art simulations prepare nursing students at Colby-Sawyer College for virtually any clinical scenario. All students enrolled in Colby-Sawyer's Bachelor of Science in Nursing program are required to take part in a variety of treatment simulations. Run in conjunction with Dartmouth-Hitchcock Health (D-HH), simulations are conducted using state-of-the-art technology that allow faculty to replicate virtually any clinical scenario.

# Statistics (All private nonprofit data reflect system-level aggregate.)

➤ Student enrollment headcount, fall 2020

Total: 153,329 students\* (Enrollment figures includes both online and on-campus enrollment. SNHU is one of the largest online education providers in the U.S. which means SNHU significantly impacts New Hampshire enrollment figures.)

Undergraduate degree/certificate seeking full-time: 45,285 Undergraduate degree/certificate seeking part-time: 78,130

Graduate full-time: 12,365 Graduate part-time: 17,549

→ Undergraduate demographics, fall 2019

Minority: 29 percent \* (This does not 17 percent of students who do not specify race/ethnicity or are

international students)

Pell eligible: 33 percent (Average, this ranges from 50 percent eligible at New England College to 16

percent eligible at Dartmouth)

Male: 37 percent | Female: 63 percent

Age 24 and under: 29 percent | Age 25 and over: 71 percent

➤ New Hampshire residents, fall 2018

• First-time, degree-seeking students 11 percent

• All undergraduate students/all graduate students: Not collected

Students that are exclusively enrolled in distance education (undergraduate degree/cert seeking) (Fall 2019):

• 87,628 (99 percent of New Hampshire private institution fully online students are SNHU students)

• Students located in New Hampshire enrolled exclusively in distance education (undergraduate degree/cert seeking): 5,093

➤ Faculty headcount (Fall 2019, all instructional, research, and public service faculty) – Full-time: 1,423 | Part-time: 7,465

#### **DARTMOUTH COLLEGE**

Alumni gift seeds a \$60 million investment plan for DEI initiatives. A gift of \$20 million will help to enhance the representation, success, and leadership of historically underrepresented groups in science, technology, engineering, and mathematics (STEM) nationally. The gift honors the legacy of Dartmouth alumnus E.E. Just, the African American scientific trailblazer and valedictorian of the Class of 1907, and is a key component of a \$60 million investment Dartmouth is making in diversity, equity, and inclusion (DEI) initiatives.

Grant supports undergraduate's global health translation app. Tinotenda Kuretu '22, a Global Health Fellow at the John Sloan Dickey Center for International Understanding, received a stage 1 award through the Verizon/Clinton Global Initiative 2021 Social Innovation Challenge to develop a translation application that will allow health care and international aid workers to communicate with patients between any two languages in real time.

Classm8 launches on App Store, web. The app Classm8 helps students track progress toward their degrees and select courses each term. Classm8 is the brainchild of Ashkaan Mahjoob '23. The app aggregates all of the classes a student has taken thus far and ranks majors and minors based on the number of remaining classes a student would need to complete them.

#### FRANKLIN PIERCE UNIVERSITY (FPU)

FPU and City of Manchester launch digital badge program. The online, customizable, open-enrollment digital badging program enables Manchester city employees to complete competencies and earn badges in different skill areas at their own pace. Each module was developed by an FPU faculty or staff member and includes embedded videos and instructional materials (available via an online portal) and frequent assessments so those enrolled can track their progress.

**Leadership in nursing.** FPU's Master's Entry Program in Nursing (MEPN), is intended for students who have already earned a bachelor's or higher in a discipline other than nursing. The MEPN program provides a general foundation in nursing as well as master's level courses that impart the necessary skills for nursing leadership roles. Previously, FPU offered both a bachelor's and master's in nursing.

Mental health options now available to students. The Center for Counseling and Outreach Education at FPU has changed how it operates amid COVID-19, and now offers both in-person and virtual appointments with counselors. During the pandemic, the counseling center also began working with graduate interns for the first time, noting the benefits of a member of the staff who is less removed from their own college experience.

#### MAGDALEN COLLEGE OF THE LIBERAL ARTS

Curriculum receives "A" rating. The American Council of Trustees and Alumni (ACTA) has awarded Magdalen College's curriculum an "A" rating. This rating places the college among only four Catholic institutions in the country and among a mere twenty-four of the over 1,100 colleges and universities evaluated in the nation. ACTA based its rating on the college's substantial inclusion within its curriculum of seven essential subjects: literature, foreign language, composition, U.S. government or history, economics, mathematics, and natural science.

**Dr. Ryan Messmore appointed president.** Dr. Ryan Messmore became the fifth President of Magdalen College in July. Most recently, Messmore served as Assistant Headmaster of Academic Affairs at St. David's School in Raleigh, NC. Previously, he served as President of Campion College in Australia.

Fresh food from the campus greenhouse. Deep into the fall semester and later in the spring semester, Magdalen College students harvest food from the campus greenhouse for use in the kitchen. This saves costs and endows students with food production knowledge and an appreciation for locally sourced food.

#### **NEW ENGLAND COLLEGE (NEC)**

Transfer policy expands to all community colleges in New England. NEC extended its community college transfer agreement, previously limited to New Hampshire institutions, to all community college graduates across New England. Under the transfer agreement, students who have completed an associate's degree at a New England community college receive guaranteed admission to a bachelor's degree program at NEC at the a tuition rate of \$5,000 per semester. This discounted rate is guaranteed for up to two years—enough time to complete a bachelor's degree.

Doctorate of Education options expand. NEC expanded its Doctorate of Education (Ed.D) to include an online option. NEC launched a hybrid Ed.D program in 2011, which enables students to advance through online courses and residencies in cohorts. This initial program has focused primarily on leadership and administration in the student's chosen area, Pre-K through grade 12 or postsecondary education. NEC's new Ed.D program, designed for a national audience, is delivered 100 percent online. Students can choose the program delivery method and curriculum that fit best their professional aspirations. Students can complete their dissertation proposal by the end of the first year in both options.

#### **RIVIER UNIVERSITY**

New Hampshire Association of Chamber of Commerce honors Rivier. Business NH Magazine and the New Hampshire Association of Chamber of Commerce Executives selected Rivier University as the 2021 Business of the Year in the Education category. The University is the first-ever to receive this honor in the newly created category. Rivier prepares the largest number of nurses in the state and was recognized for graduating exceptional nurses, teachers, educational administrators, and business/community leaders.

New 4+1 STEM degree programs launched. Two new 4+1 STEM degree programs were recently launched to address the U.S. shortage of skilled computer science professionals. Students enrolled in Rivier's B.S. in Cybersecurity Management or B.A. in Mathematics can earn a M.S in Computer Science with just one additional year of study.

Science and Innovation Center opens. The launch of the new STEM 4+1 degree programs coincides with the opening of the University's 36,000 square-foot Science and Innovation Center. The Center will

▶ Number of degrees/certificates conferred, FY19-20: total 26,334 (81 percent are SNHU credentials)

Certificates (for-credit programs): 615

Certificates: (non-credit programs) [Not Available]

Associates: 3,128 Bachelor's: 15,156 Graduate: 7,435

- → Percent of degrees awarded by gender Male: 36 percent | Female: 63 percent (1 percent did not specify gender)
- → Top three majors by undergrad degrees awarded:
  - 1. Business management and marketing
  - 2. Health professions
  - 3. Psychology
- ➤ Number of STEM degrees awarded 2019-20: 4,566
- → Total Scholarships and Fellowships, FY20 (all sources including Pell): \$529,089,807

help prepare students for the 21st-century workforce, especially those majoring in biology, biotechnology, nursing, and public health. It provides students with state-of-the-art laboratories, equipment, learning spaces, and technology to foster active learning and expanded student and faculty research.

#### SOUTHERN NEW HAMPSHIRE UNIVERSITY (SNHU)

Online tuition will remain frozen at its 2011 rate as campus tuition is radically reduced. SNHU is extending its 10-year tuition freeze for its online programs through 2022. The tuition freeze applies to all online course-based programs offered at SNHU. In addition, after a five-year tuition freeze on campus, SNHU reduced campus tuition to offer a tiered tuition rate of \$15,000 per year or \$10,000 per year starting in the fall of 2021, which aligns more closely with its online tuition rates.

SNHU, edX launch micro bachelors programs in business analytics and data management. SNHU launched the University's first micro bachelor's programs in collaboration with edX. Offered at \$498 per course, the SNHUx micro bachelor's programs — Business Analytics Foundations and Data Management with Python and SQL — provide standalone credentials, but pending admission, also allow learners to apply transfer credit toward a SNHU associate or bachelor's degree program.

Kenzie Academy, SNHU launch software engineering program developed with Amazon. Kenzie Academy, recently acquired by SNHU, is launching a new software engineering program developed with Amazon and based on the curriculum from Amazon Technical Academy. The Academy is one of the first education institutions to roll

out the program to learners nationwide. Graduates of the software engineering program will be eligible to apply for entry-level software development engineering roles with Kenzie Academy's corporate partners and other large tech companies. The program can be completed in 12 months or less. Once completed, learners will earn a software engineering certificate with a specialization in back-end Java from Kenzie Academy.

#### SAINT ANSELM COLLEGE

Alumni pioneer nurse-run COVID Resource Center. Nurse Manager Ryan Gagnon '97 and Nurse Director for Clinical Informatics Brian Laneau '98 helped establish one of largest nurse-run COVID-19 resource centers in the Northeast as employees of Atrius Health, a Massachusetts-based healthcare network. The call center allowed a trained team of nurses to manage up to 4,000 calls and emails a day at the height of the pandemic surge.

College survey shows support for affordable housing. Saint Anselm's Center for Ethics in Society released its Second Annual New Hampshire Housing Survey in July 2021. The survey, designed to reveal voter attitudes about New Hampshire's housing crisis, showed overwhelming support for affordable housing in local communities. Sixty-three percent of respondents agreed with the statement "My community needs more affordable housing to be built" while only 31 percent disagreed.

Saint Anselm Fine Arts Department exhibitions go virtual. The creative work of Saint Anselm students was highlighted virtually over the past year thanks to an effort led by Associate Professor of Art and Design Kimberly Kersey-Asbury. See photos and video snippets of the artwork and exhibition programming at Saint Anselm College in the 2020/21 academic year here: Fine Arts Department exhibitions go virtual! | Saint Anselm College ■

#### Notable collaborations and achievements:

New Hampshire's private colleges and universities work closely with education and business partners to graduate students on time with workforce-ready skills. In 2019-20 these institutions awarded 59 percent of all STEM degrees in New Hampshire. (SNHU awarded 36 percent of all New Hampshire 2019-20 STEM awards.) New Hampshire's private colleges and universities also work closely with college-ready and college access programs such as New Hampshire Scholars and GEAR UP New Hampshire. Many partner with community colleges across the country to ensure seamless transferability of credits. New Hampshire's private institutions have developed some of the best competency-based learning strategies in the country. Online education offers students affordable and flexible higher education options. Private colleges also lead the way in providing forums for political and presidential candidates and offer civic and community service opportunities for students to fully immerse themselves in their local communities.

# **Council for Teacher Education**

The Council for Teacher Education (CTE) is authorized by statute RSA 190 to coordinate teacher/educator education in New Hampshire in an advisory capacity through continuing study and discussion of pre-service progress and the CTE shall issue advisory reports to agencies and institutions, public and private, concerned with educator preparation programs.

Currently, New Hampshire hosts twelve Institutions of Higher Education that have approved professional educator preparation programs (PEPPs) leading to teacher, administrator, instructional specialist, or educational specialist licensure. They include:

#### **PUBLIC NH INSTITUTIONS**

- → Granite State College
- → Keene State College
- → NHTI, Concord's Community School
- → Plymouth State College
- ➤ University of New Hampshire

#### PRIVATE NH INSTITUTIONS-

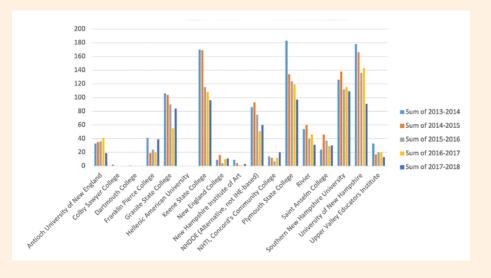
- → Antioch University New England
- ➤ Franklin Pierce University
- → New England College
- → Rivier University
- → Saint Anselm College
- ➤ Southern New Hampshire University
- → Upper Valley Educator Institute

NH State Board of Education Approved Professional Educator Preparation Programs (PEPPs) by Institutions of Higher Education (IHE)-

	TOTAL NH approved PEPPs by license	Total NH approved IHEs offering PEPPs	Total PEPP per Title 2 (initial licensure only)
2021-2022	186	12	
2020-2021	193	12	
2019-2020	192	13	
2018-2019	178	14	data not yet available <sup>86</sup>
2017–2018	179	14	176
2016-2017	205	14	176
2015-2016	215	16	177
2014-2015	206	15	174
2013-2014	data not available	data not available	163

# NH IHE completers for initial license by year 2013-2018

\*A program completer is defined as a person who has met all the requirements of a state-approved teacher preparation program. Program completers include all those who are documented as having met such requirements. Documentation may take the form of a degree, institutional certificate, program credential, transcript or other written proof of having met the program's requirements. In applying this definition, the fact that an individual has or has not been recommended to the state for an initial credential may not be used as a criterion for determining who is a program completer. Data from Title II.87

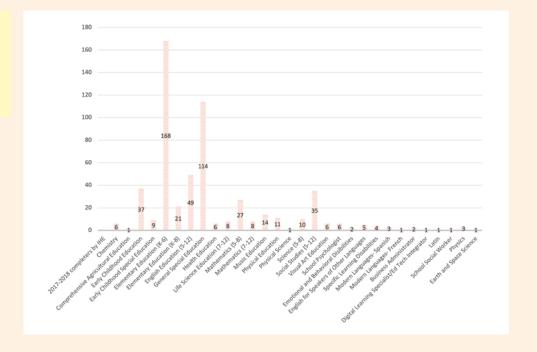


Program Completers for each candidate by academic year

Program Completers for each candidate by academic year	2013-2014	2014-2015	2015–2016	2016–2017	2017–2018
Antioch University of New England	33	35	36	41	19
Colby Sawyer College	2	0	0	0	0
Dartmouth College	1	0	0	0	0
Franklin Pierce College	41	19	24	20	39
Granite State College	106	104	90	55	84
Hellenic American University	0	0	0	0	0
Keene State College	170	169	115	108	96
New England College	9	16	4	10	11
New Hampshire Institute of Art	9	4	1	1	3
NHTI, Concord's Community College	14	12	7	12	20
Plymouth State College	183	134	124	119	97
Rivier	54	60	40	46	31
Saint Anselm College	24	46	37	29	30
Southern New Hampshire University	126	138	112	115	109
University of New Hampshire	178	166	136	143	91
Upper Valley Education Institute	33	17	20	20	13
Subtotal IHE EPP completers	983	920	746	719	643 <sup>88</sup>
NHDOE (Alternative, non-NH based)	86	93	75	51	60
Total Program Completers*	1069	1013	821	770	703
Total # Programs**	163	174	177	176	176
Total Enrollment	2767	2616	2686	2008	2097

2017-2018 NH completers by endorsement

Initial teacher license only



NH professional educator preparation program reviews for approval

(# PEPPs Reviewed)

#### 2019-2020 ACADEMIC YEAR

- → University of New Hampshire- 12
- → Plymouth State University- 16
- ➤ New England College- 10
- ➤ Rivier University- 15

#### 2020-2021 ACADEMIC YEAR

- ➤ Upper Valley Educator Institute- 2
- → University of New Hampshire- 25
- ➤ Granite State College- 14
- → Upper Valley Educators Institute- 2
   → Antioch University New England- 8

# 2021-2022 ACADEMIC YEAR

→ The 2021 Academic Year began with a total of twelve (12) Institutions of Higher Education offering a total of 164 PEPPs (142 Full Approval and 22 Conditional Approval) with an additional 20 PEPPs scheduled to close in the near future. PEPPs are offered at various levels/ formats (Bachelors, Masters, CAGS, Educational Specialist, PhD and/or licensure only) within each IHE.

Learn more about the New Hampshire Department of Education, Division of Educator Support and Higher Education, Bureau of Educator Preparation and Higher Education Services at: <a href="https://www.education.nh.gov/who-we-are/council-for-teacher-education">www.education.nh.gov/who-we-are/council-for-teacher-education</a>

For a complete list of all current approved educator preparation programs and available levels here at:  $\underline{www.education.nh.gov/who-we-are/division-of-educator-support-and-higher-education/educator-preparation}$ 

# **SECTION 3**

# Career schools, veterans programs, apprenticeship

# Licensed career schools

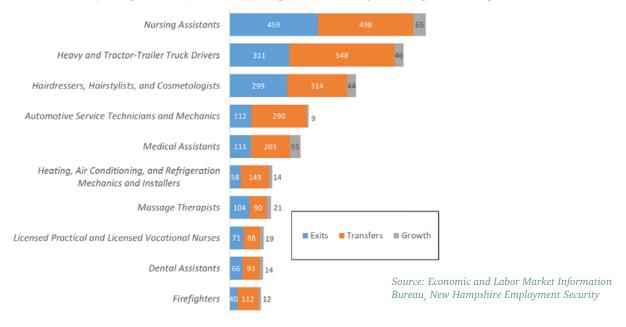
In the 2020-21 fiscal year, New Hampshire's licensed career schools offered 1,695 programs. 7,900 residents attended these schools, along with 12,776 out-of-state students during that time. This reflects a robust educational sector that serves students who range from high school graduates to mature populations. New Hampshire Career schools offer a diverse set of postsecondary education options. Attendees can study everything from cyber security (The Prelude Institute), to surgical technology (Dartmouth-Hitchcock Workforce Readiness Institute), professional boating navigation (Boatwise), feline and canine training (The Animal Behavior College), midwifery (The Birthwise Midwifery School), and bartending (Boston Bartenders School of America).

#### As of June 2021:

- Seventeen career schools accepted GI Bill benefits, and 391 veterans received career school certifications or certificates.
- Twenty-four career schools offered Workforce Innovation and Opportunity Act (WIOA) -approved programs, 995
  people received WIOA program support and 983 of them also received training services. Two hundreds and fortyfive individuals received 292 WIOA-approved certificates or certifications.
- 18,290 students completed a career school program in the fiscal year, and 7,463 of them were New Hampshire residents.
- 5,110 resident and non-resident students studied full-time at career schools while 9,678 studied part-time.
- Nine out-of-state career schools have a physical presence within the state, and five more are expected to file for licensing before the end of 2021.
- Ten of New Hampshire's 52 licensed career schools offer Title IV federal financial aid.

# New Hampshire employment projection by occupations 2018-28

Most annual openings in occupations requiring postsecondary non-degree training



## Legislative news and moving forward

Starting in October 2021, smaller career schools in New Hampshire will be exempt from regulation and may opt out of licensure with the New Hampshire Department of Education. The recently enacted Senate Bill 148, which was signed by Gov. Chris Sununu in August, exempts private, post-secondary career schools with an adjusted gross income of less than \$100,000 per year from regulation. Forty-one existing licensed schools are now exempt and will no longer pay any new fees or file any renewals unless they opt to remain licensed, which may be necessary in order to participate in select federal programs. Schools that are now exempt may, over time, grow to exceed the \$100,000 annual income threshold and become subject to regulation.

This 2021 legislation follows an October of 2018 legislative initiative designed to simplify administrative rules and reduce initial application fees by \$2,000. The resulting process provided greater autonomy to businesses and schools. In addition, a New Hampshire State Senate bill on surety indemnification updated protections for student tuition investments.

Moving forward, the challenge for New Hampshire licensed career schools lies in correcting the traditional public misconception that two- and four-year colleges are the best educational option for all students after high school. Often overlooked is the fact that students can use certificates from trade schools as a stepping stone into earning a degree in their field of interest, or to develop a successful career path. Students who pursue such certificate programs may, in fact, find themselves at an advantage, given that they have a unique opportunity to explore a field of interest prior to making a greater economic commitment.

See all New Hampshire registered career schools here: <a href="https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sonh/career-school-directory.pdf">https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sonh/career-school-directory.pdf</a>

# O Trades and focus areas supported by New Hampshire career schools

Interested in a career or in developing your skills and training? New Hampshire career schools currently offer programs and training in more than 60 focus areas:

- Accounting
- → Animation
- Architecture and engineering software
- → Audio-visual technology
- Advanced manufacturing
- Bartending
- Computer training and software support
- Computer aided design
- CPA exam support
- Dental assistant training
- Data management
- Dog grooming
- Dog and feline training
- Electrical and electronic assemblies
- → Electrical, gas, oil, plumbing
- Electrical, HVAC, Mechanical Industrial plant management
- → Electrical technology
- → Emergency medical service
- Engineering
- Firearms

- Food safety
- Healthcare
- → Health seminars
- → Heavy construction equipment
- Herbology/Flower practitioner
- Human resources
- Hypnotherapy
- Income tax prep
- Industrial skills
- Infrared thermography
- Language
- Leadership
- Legal seminars
- Manufacturing
- Maritime
- Marketing
- Massage Therapy
- Mechanical design application
- Mechanical trades
- Medical gas certification and renewal
- Medical interpreter
- → Medical and legal
- Interpretation

- → Mental health
- Midwifery
- Nursing (LNA and MNA)
- Online distance learning
- → Ophthalmic assistant training
- Organic lawn care
- Photography
- → Professional interpreter
- Project management
- Psychology
- > Radiation safety
- Reiki healing
- Religious training and education of clergy
- Soldering
- Stone masonry
- → Surgical technology
- Taxidermy
- Test prep
- Veterinarian technician and assistant
- Yoga

# Veterans education services

The U.S. Department of Veterans Affairs offers GI Bill® educational benefits to help service members, eligible veterans, and their families obtain a postsecondary education. New Hampshire veterans have access to programs at locations across the state, including college degree, certifications, diplomas, apprenticeships, and on-the-job training. This ranges from university-based studies to apprenticeships and police training. GI Bill® benefits can include fees for national and state examinations.

In the past 12 months, GI Bill<sup>®</sup> benefits were provided in New Hampshire as follows:

- 329 facilities were approved to provide more than 3,500 programs through the GI Bill®.
- 13,817 veterans and dependents enrolled in these programs.
- Veterans and their dependents received over \$50 million in educational benefits that were used for tuition and fees.
- New Hampshire residents included 101,593 veterans in 2015.89 31.4 percent held a bachelor's degree, 35.3 attained some college or held an associate degree, and 28.6 percent were high school graduates or had earned an equivalency.90

The success of the GI Bill® program is critical to New Hampshire's future because it provides new opportunities to people who have proven skills while providing benefits to the families of the fallen. Since many of these programs are situated in the Granite State, these funds tend to stay here. The accession of veterans into the New Hampshire workforce strengthens and elevates the State's economy while the progression of veterans into local police and fire departments keeps citizens safer.

Learn more about the New Hampshire Department of Education, Division of Higher Education — Higher Education Commission, Veterans Education Services here: http://www.education.nh.gov/highered/veterans/index.htm

# Captain Gig Michaud, continuing a lifetime spent on the water

Calm seas do not make a skilled sailor. With over 26 years in the Navy and Navy reserves, U.S. Coast Guard Licensed Master Captain Gig Michaud, owner of Compass Rose Yacht Charters, LLC in Newburyport, Massachusetts, knows this more than most. In addition to providing private chartered trips on his 35 foot Tiara luxury yacht 'Gia', Gig is a Licensed Captain for Towboat U.S., a Licensed Training Captain for Freedom Boat Club new members and private yacht and small boat owners, and when needed, a Delivery Captain hired to pilot yachts across the eastern seaboard.

As a Training Captain, he often finds himself teaching novice boaters not only how to operate their boats safely in the Merrimack River currents, but also how to navigate the treacherous inlet between the Merrimack River and the Atlantic Ocean. The inlet, found between Plum Island and Salisbury Beach, is known to be one of the most dangerous on the east coast during and immediately after bad weather. When the river's reputation, with its strong currents, keeps boat owners from leaving their dock, Gig teaches them proper operating techniques to navigate the strong currents, how to dock their boats in the currents, and shows them the rocky areas of the river.

Gig credits New Hampshire career school, Boatwise, LLC, with providing him with the training he needed to receive his U.S. Coast

Guard Captains (Master) license. This enabled him to jump from his Navy career, where he last served as a Captain and the Inspector General for Navy New England, and from his corporate career in the bus industry, to opening his own yacht charter business. Boatwise, located in South Hampton, New Hampshire, provides a wide variety of licensing classes approved by the U.S. Coast Guard (USCG) and was one of the first career schools in the country to have its curricula and test approved by the USCG National Maritime Center in Washington. Boatwise is now one of the largest private Marine Training schools of its type on the east coast.



Gig first studied at Boatwise for his 50 Gross Ton Master's Near Coastal license eight years ago and in 2020 upgraded to his 100 Gross Ton Master's license. "I looked at many programs and schools before I chose Boatwise," said Gig. "Boatwise is tough, but they are very fair. They will go out of their way to help you master the material. I can't speak highly enough about them." ■

Source: Jan Fiderio and Shireen Meskoob, New Hampshire Department of Education

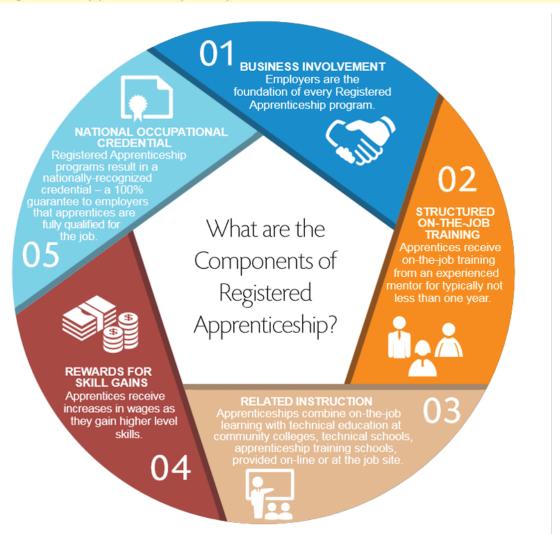
# Registered apprenticeship

New Hampshire has many registered apprenticeship programs with openings for career seekers. A registered apprenticeship program is a proven model of apprenticeship that has been validated by the U.S. Department of Labor.

These programs are an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, classroom instruction, and a portable, nationally-recognized credential. The programs are fully customizable and have an open entry and exit strategy to best meet the needs of individual employers. [See the index for a list of registered apprenticeship resources.

The federal government facilitates all registered apprenticeships in New Hampshire, which can range from one year to six years in length.

# Registered apprenticeship components



 $Source: A\ Quick-Start\ Toolkit:\ Building\ Registered\ Apprenticeship\ Programs:\ \underline{https://www.apprenticeship.gov/sites/default/files/apprenticeship}\underline{toolkit.pdf}$ 

# O New Hampshire apprenticeship date fiscal year 2017 - 2021\*

Fiscal Year (FY)	2017	2018	2019**	2020	2021***
New Programs	22	38	37	45	59
Cancelled Programs	15	19	20	31	10****
Total Programs	248	278	310	345	404
New Occupations	8	38	38	16	27
New Apprentices	750	1,108	1,403	1,033	896
Total Active Apprentices	2,059	2,452	2,814	2,796	2,675
Completed Apprentices	309	351	466	516	578

#### Chart Notes:

In fiscal year 2021, 896 new apprentices were registered for a total of 2,675 active apprentices in New Hampshire. Additionally, 578 apprentices successfully completed their registered apprenticeship program. The greatest number of apprentices are enrolled in construction programs, with a large majority registered in the plumbing, electrical, and marine construction trades.

In New Hampshire, sponsor registration with the U.S. Department of Labor Office of Apprenticeship is voluntary except for plumbers who, supported by the New Hampshire Mechanical Licensing Board, choose registered apprenticeship to complete licensure requirements. Although active apprentice numbers decreased last year due to the pandemic, 59 new programs have been registered, for a total of 404 active programs in fiscal year 2021. New programs accounted for 27 new occupations added in 2021. The fastest growing new programs in fiscal year 2021 are in healthcare and advanced manufacturing.

# Apprenticeship occupations

Many apprentices are working in traditional building trades like plumbing, electricity, ironwork, and carpentry. But today's apprentices are also learning trades like biotechnology, child development, health care, information technology, environmental services, food services, geospatial technologies, military, maritime, and hundreds of other fields.<sup>91</sup>

## Registered apprenticeship partners

Businesses are the key players when it comes to registered apprenticeships. Each program is customized, and each business relies on a strong partnership network to help meet its business objectives.

Businesses in a wide range of industries are adopting and adapting apprenticeship to meet their needs in New Hampshire. Many of the nation's most recognizable companies have effectively integrated apprenticeship into their workforce development strategy.

<sup>\*</sup> The federal fiscal year is October 1 through September 31. The numbers for 2021 are a snapshot in time (08/31/2021) and will continue to change well into the 2022 fiscal year.

<sup>\*\*</sup> Prior to 2020 the New Hampshire Office of Apprenticeship administered multiple federal programs in multiple states. This included the Bureau of Prisons in all of the Region 1 states. Though this office continues to administer multiple state programs, the numbers have been transferred to our National Office in Washington, DC. As a result of that change, numbers for New Hampshire have been changed retroactively to reflect New Hampshire ONLY programs. These numbers also include Portsmouth Naval Shipyard, a federal program located in the state of Maine and administered by the Office of Apprenticeship-NH.

<sup>\*\*\*</sup> Years During COVID-19

<sup>\*\*\*\*</sup> Cancelled programs in 2021 are fewer in number, however, currently 91 programs have zero apprentices. This number will change with the new academic year starting in September. Programs with zero apprentices are being left open to allow for post-COVID adaptation.

Source: New Hampshire Office of Apprenticeship

# O Prospective partners for registered apprenticeships



 $Source: A\ Quick-Start\ Toolkit:\ Building\ Registered\ Apprenticeship\ Programs:\ \underline{https://www.apprenticeship.gov/sites/default/files/apprenticeship\_toolkit.pdf}$ 

#### Who makes up New Hampshire's registered apprenticeship universe?

Most apprenticeships in New Hampshire are driven by small businesses. Seventy-five percent of companies with apprenticeships have four or fewer apprentices while twenty-five percent have five or more. Many New Hampshire businesses employ significant numbers of apprentices. 92 These include:

- The Portsmouth Naval Shipyard (federal program)
- CVS Caremark
- Hypertherm, and the
- Dartmouth-Hitchcock Workforce Readiness Institute

## Apprenticeship intermediaries

Also a large presence in the state are the apprenticeship intermediaries. Examples include the Community College System of New Hampshire and state licensing board-based programs. The largest of these intermediaries are:

## **→** Community College System of New Hampshire (CCSNH)

The Community College System of New Hampshire serves as both an apprenticeship intermediary and a related instruction provider for apprenticeships in New Hampshire. As the result of substantial grants from the U.S. Department of Labor Office of Apprenticeship, CCSNH has been instrumental in the expansion of apprenticeships in non-traditional apprenticeship occupations.

#### → New Hampshire mechanical licensing board as intermediary

Office of Apprenticeship-New Hampshire, in collaboration with the New Hampshire Mechanical Licensing Board, administers the plumbing apprenticeship that leads to a New Hampshire plumbing license. This program currently supports 200 active program sponsors and 517 active registered apprentices. One union program is supported by this program, New Hampshire Plumbers & Pipefitters UA Local 131. So far in 2021, 124 apprentices completed their programs. Instruction is provided by unions, New Hampshire Department of Education adult education programs, trade schools, community colleges in New Hampshire and Vermont, and distance learning instruction providers.

#### → New Hampshire electricians board as intermediary

Although registration with the Office of Apprenticeship is voluntary, electrician programs continue to be one of the strongest in New Hampshire. In collaboration with the New Hampshire Electricians Board, the Office of Apprenticeship provides support and service to 43 active electrical program sponsors with 469 active registered apprentices. One union program, IBEW Local Union 490 JATC, is included in this number. This year 90 apprentices completed their programs. Instruction is provided by unions, New Hampshire Department of Education adult education programs, trade schools, community colleges in New Hampshire and Vermont, and distance learning instruction providers.

#### Related instruction providers

Related instruction providers of registered apprenticeship programs [the individuals or institutions that teach the subject matter] are designated by the registered apprenticeship program sponsor. The many options include inhouse instruction provided by an industry subject matter expert, two or four-year colleges and universities, career or trade schools; adult education programs, and distance learning providers.

Apprentices seeking credit for previous experience gained outside their apprenticeship program are allowed to submit documentation for advanced academic credit and/or advanced placement in on-the-job learning. The program sponsor evaluates the request for credit and makes a determination during the apprentice's probationary period. Among the most popular requests for credit for previous experience come from apprentices with career and technical education, Job Corps, and military knowledge and experience.

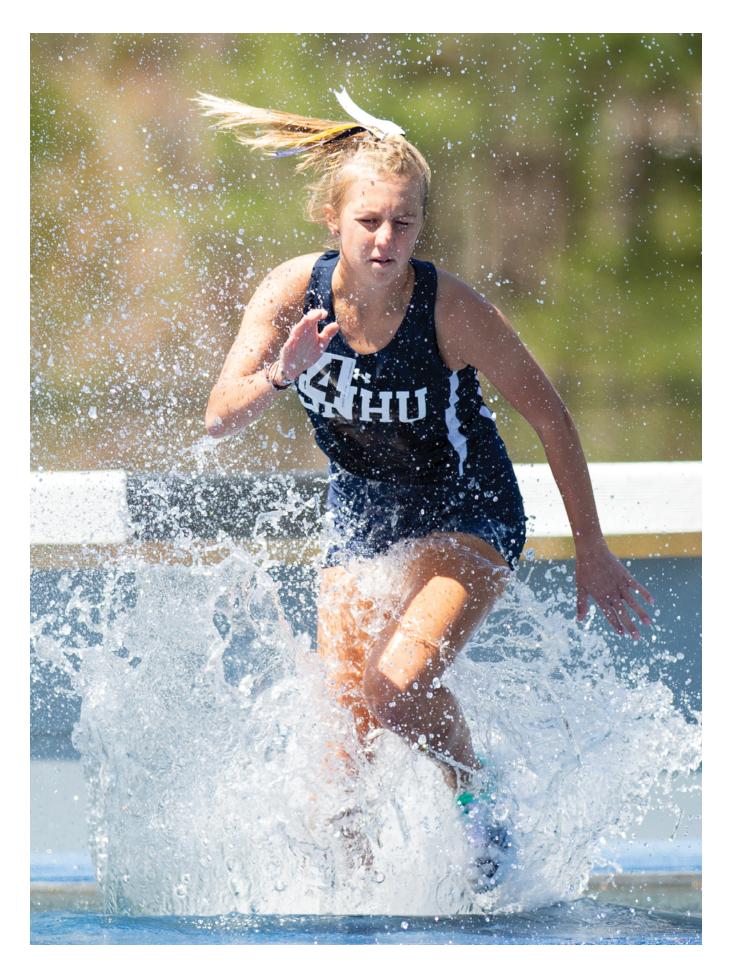
Due to the large number of grants received, the Community College System of New Hampshire provides the largest number of credit-bearing courses to registered apprentices. The University System of New Hampshire and Colby-Sawyer also provide instruction with credit-bearing courses. The strong transferability of credit-bearing courses allows New Hampshire apprentices to use apprenticeship courses to complete certificates or degrees at New Hampshire public institutions. Granite State Adult Education partners, through electrical and plumbing instruction, deliver the greatest number of courses that lead directly to a State of New Hampshire license. Career and trade schools, along with multiple distance learning providers, round out the majority of schools with programs that lead to at least one license in New Hampshire.

# O Registered apprenticeship investments in New Hampshire

Investments in registered apprenticeships in New Hampshire have been through a variety of sources and include the following:

LOGO	GRANT	GRANT FOCUS	AMOUNT
EAR NH APPRENTICESHIP	State Apprenticeship Expansion (2016 - 2022) Community College System of New Hampshire WEBSITE: https://apprenticeshipnh.com/ CONTACT: apprenticeshipusanh@ccsnh.edu USDOL Funded	Advanced Manufacturing, Healthcare, Inform-ation Technology, Hospitality, Construction / Infrastructure	\$2,047,770.00
EAR NH APPRENTICESHIP	Expanding Community College Apprenticeship (2018-2022) Community College System of New Hampshire WEBSITE: https://apprenticeshipnh.com/ CONTACT: apprenticeshipusanh@ccsnh.edu American Association of Community Colleges/USDOL Funded	Biomedical, Technology, Automotive Technology, Business and Finance	\$450,000.00
<b>EARN</b> High School	Apprenticeship State Expansion (2019-2023) Community College System of New Hampshire WEBSITE: https://apprenticeshipnh.com/ CONTACT: apprenticeshipusanh@ccsnh.edu USDOL Funded	Pre-Apprenticeship to Registered Apprenticeship Models for high school youth.	\$1,344,557.00
WORKFORG MADABLE DISTRIFE  Min Dartmouth-Hitchcock	H-1B Rural Healthcare Grant Program Dartmouth-Hitchcock Workforce Readiness Institute WEBSITE: https://dhwri.org/ CONTACT: wri@hitchcock.org USDOL Funded	Healthcare Occupations, Behavioral and Mental Healthcare, Serving Rural Populations	\$1,231,238.00
building futures together  Recovery, Resillence, and Hope	Opioid-Impacted Family Support Program (2020-2024) University of NH, Institute on Disability Building Futures Together NH WEBSITE: https://iod.unh.edu/projects/building-futures-together CONTACT: macey.muller@unh.edu USDHHS Funded	Inclusive Early Care & Education, Behavioral Health & Wellness	\$600,000.00
SNHS The Community Artifum Partimenhips serving Adhabarough and Reakingham Counties	SNHS Early Childhood Apprenticeship Program Southern New Hampshire Services  WEBSITE: https://www.snhs.org/services/early-childhood-apprenticeship-program  CONTACT: apprentice@snhs.org	Early Childhood Education	\$60,000

Visit Apprenticeship.gov's Explore Industries [www.apprenticeship.gov/apprenticeship-industries] to learn more about success stories of companies leveraging occupations in registered apprenticeship and to access valuable resources.



# Index

## New Hampshire registered apprenticeship resources

U.S. Department of Labor, Apprenticeship.gov information: www.apprenticeship.gov

Plumbing Apprenticeship Card Application:

 $\underline{https://www.oplc.nh.gov/sites/g/files/ehbemt441/files/inline-documents/sonh/mechanical-plumbing-apprentice-packet.pdf}$ 

Electricians Apprentice Application: https://www.oplc.nh.gov/electricians-board-apprenticeship-requirements

New Hampshire Employment Security, Employer Services: https://www.nhes.nh.gov/services/employers/index.htm

Apprenticeship NH: https://apprenticeshipnh.org/

New Hampshire Sector Partnerships Initiative: http://www.nhsectorpartners.org/

## Free apprenticeship job posting

USDOL National Posting: <a href="https://www.apprenticeship.gov/list-your-apprenticeship-jobs">https://www.apprenticeship.gov/list-your-apprenticeship-jobs</a>

Apprenticeship NH: https://apprenticeshipnh.org/for-individuals/apply/

New Hampshire Works Job Match: https://nhworksjobmatch.nhes.nh.gov/vosnet/Default.aspx

# **Scholarships**

New Hampshire Charitable Foundation: https://www.nhcf.org/how-can-we-help-you/apply-for-a-scholarship/

# Additional apprenticeship resources

My Next Move (Career Exploration): <a href="https://www.mynextmove.org/">https://www.mynextmove.org/</a>

O\*NET Occupational Database: <a href="https://www.onetonline.org/">https://www.onetonline.org/</a>

Blogsite: <a href="https://apprenticeshipusa.workforcegps.org/">https://apprenticeshipusa.workforcegps.org/</a>

Apprenticeship Investments: https://www.dol.gov/featured/apprenticeship/grants

# **End Notes**

- 1. Voight, Mamie. "Equitable Value: Promoting Economic Mobility and Social Justice Through Postsecondary Education." The Postsecondary Value Commission, 2021. Retrieved from: <a href="PVC-Executive-Summary-FINAL.pdf">PVC-Executive-Summary-FINAL.pdf</a> (postsecondaryvalue.org)
- "Serving New England's Adult Learners." New England Board of Higher Education. Retrieved August 26, 2021 from: "Serving New England's Adult Learners (nebhe.org) and "A Stronger Nation, Learning beyond High School." The Lumina Foundation, August 2021. Retrieved from: Stronger Nation (luminafoundation.org)
- 3. Marcus, Jon. "A surprise for America's many career switchers: They need to go back to school." The Hechinger Report, November 1, 2021. Retrieved from: A surprise for Americans switching careers: They need to go back to school (hechingerreport.org)
- 4. Source: US Census Bureau, unpublished Current Population Survey data (12 Months Average). Economic and Labor Market Information Bureau, New Hampshire Employment Security. Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
- Carnevale, Anthony P, Fascules, Megan L., Peletier Campbell, Katheryn. "Workplace Basics, The Competencies Employers Want: 2020." The Georgetown University Center on Education and the Workforce. Retrieved from: 2020-Workplace-Basics-The-Competencies-Employers-Want-Georgetown-CEW.pdf (theqacommons.org)
- "The Future of Jobs report 2020." World Economic Forum. October 2020.
   Retrieved from: <a href="https://www3.weforum.org/docs/WEF\_Future\_of\_">https://www3.weforum.org/docs/WEF\_Future\_of\_</a>

   Jobs\_2020.pdf
- Goger, Annelies. "Free college won't be enough to prepare Americans for the future of work." Annelies Goger, Brookings Metropolitan Policy Program." Retrieved from: Free college won't be enough to prepare Americans for the future of work (brookings.edu)
- 8. "The University System of New Hampshire: The Pipeline to New Hampshire's Future. 2017 Annual Report." Retrieved from: <a href="https://www.usnh.edu/sites/www.usnh.edu/files/media/2017\_annual\_report.pdf">https://www.usnh.edu/sites/www.usnh.edu/files/media/2017\_annual\_report.pdf</a>
- 9. "Community College System of New Hampshire Annual Report 2017." Retrieved from: https://www.ccsnh.edu/sites/default/files/Annual%20 Report%202017.pdf
- $10.\ Integrated\ Postsecondary\ Education\ Data\ System\ search.\ Fall\ enrollment,\\ 2019,\ all\ undergraduate\ and\ graduate\ students.$
- 11. Deegan, Joe and Martin, Nathan. "Demand Driven Education. Merging Work and Learning to Develop the Human Skills that Matter." Pearson and Jobs for the Future. June 2018. Retrieved from: https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/about-pearson/innovation/open-ideas/DDE\_Pearson\_Report\_3.pdf, and from Deming, David. "The Growing Importance of Social Skills in the Labor Market." NBER Working Paper 21473, National Bureau of Economic Research, 2015. Retrieved from: http://www.nber.org/papers/w21473



- $12.\ Notes: Department of Education Bureau of Adult Education: Retrieved from: \\ \underline{https://www.education.nh.gov/who-we-are/division-of-learner-support/bureau-of-adult-education}$ 
  - --Employer developed work-based training programs: Employees should check with their employer's human resources offices for opportunities.
  - --Plumbing Apprenticeship Card Application: <a href="https://www.oplc.nh.gov/sites/g/files/ehbemt441/files/inline-documents/sonh/mechanical-plumbing-apprentice-packet.pdf">https://www.oplc.nh.gov/sites/g/files/ehbemt441/files/inline-documents/sonh/mechanical-plumbing-apprentice-packet.pdf</a>
  - --Electricians Apprentice Application: https://www.oplc.nh.gov/electricians-board-apprenticeship-requirements
  - --NH Sector Partnerships Initiative: http://www.nhsectorpartners.org/
  - --Work Ready NH: <a href="https://www.ccsnh.edu/colleges-and-programs/">https://www.ccsnh.edu/colleges-and-programs/</a> workready-nh/
  - --NH Works:  $\underline{\text{http://www.nhworks.org/job-seekers/education-and-training/}}$
  - --Career Technical Education programs that provide adult training support: http://www.nhworks.org/job-seekers/education-and-training/ https://www.education.nh.gov/career/career/index.htm
  - --NH Department of Education Bureau of Career Development: <a href="https://www.education.nh.gov/who-we-are/division-of-learner-support/bureau-of-career-development">https://www.education.nh.gov/who-we-are/division-of-learner-support/bureau-of-career-development</a>
- 13. "Examining the value of nondegree credentials." Strada Education Network, webcast. July 2021. Retrieved from: Examining the Value of Nondegree Credential - YouTube
- 14. Zanville, Holly. "10 Tips on Embedding Industry and Professional Certifications in Education Programs." The Evollution, February, 2017. Retrieved from: <a href="https://evolllution.com/revenue-streams/professional\_development/10-tips-on-embedding-industry-and-professional\_certifications-in-education-programs/">https://evolllution.com/revenue-streams/professional\_development/10-tips-on-embedding-industry-and-professional\_certifications-in-education-programs/</a>
- 15. "Community College System of New Hampshire Begins Awarding
  Professional Digital Badges." April 14, 2021. Retrieve it here: Community
  College System of New Hampshire Begins Awarding Professional Digital
  Badges Community College System of New Hampshire (ccsnh.edu)
- 16. This NCES Data Point Report defined a non-degree credential as a certification, license, or postsecondary certificate. Cronen, Stephanie and Isenberg, Emily. "Data Point. Degree and Non-Degree Credentials Held by Labor Force Participants." U.S. Department of Education, National Center for Education Statistics, March 2018. Retrieved from: <a href="https://nces.ed.gov/pubs2018/2018057.pdf">https://nces.ed.gov/pubs2018/2018057.pdf</a>
- 17. Schwarb, Amy Wimmer. "About the Future of Nondegree Credentials."

  Strada Education Network. Retrieved from: <a href="https://stradaeducation.org/on-purpose/things-to-know-now-about-the-future-of-nondegree-credentials/">https://stradaeducation.org/on-purpose/things-to-know-now-about-the-future-of-nondegree-credentials/</a>
- 18. "Counting U.S. Postsecondary and Secondary Credentials." Credential Engine, February 2021. Retrieved from: http://credentialengine.org/wp-content/uploads/2021/02/Counting-Credentials-2021.pdf Find Credential Engine here: https://credentialengine.org
- "Student Residence and Migration Data, Fall 2018." Digest of Educational Statistics 2020. Table 309.20. U.S. Department of Education, National Center for Education Statistics, 2020. Retrieved from: <a href="https://nces.ed.gov/programs/digest/d20/tables/dt20\_309.20.asp">https://nces.ed.gov/programs/digest/d20/tables/dt20\_309.20.asp</a>
- "Student Residence and Migration Data, Fall 2018." Digest of Educational Statistics 2020. Table 309.20. U.S. Department of Education, National Center for Education Statistics, 2020. Retrieved from: <a href="https://nces.ed.gov/programs/digest/d20/tables/dt20\_309.20.asp">https://nces.ed.gov/programs/digest/d20/tables/dt20\_309.20.asp</a>

- "Student Residence and Migration Data, Fall 2018." Digest of Educational Statistics 2020. Table 309.30. U.S. Department of Education, National Center for Education Statistics, 2020. Retrieved from: <a href="https://nces.ed.gov/programs/digest/d20/tables/dt20\_309.30.asp">https://nces.ed.gov/programs/digest/d20/tables/dt20\_309.30.asp</a>
- 22. Leonhardt, David. "More on the College Dropout Crisis." New York Times, May, 2019. Retrieved from: <a href="https://www.nytimes.com/2019/05/24/opinion/college-graduation-rates-dropout.html?action=click&module=Well&pgtype=Homepage&section=OpEdColumnists">httpl://www.nytimes.com/2019/05/24/opinion/college-graduation-rates-dropout.html?action=click&module=Well&pgtype=Homepage&section=OpEdColumnists</a>



- 23. Carnevale, Antony, P.; Strohl, Jeff; Smith, Nicole; Cheah, Ban; Gulish, Artem; Peltier Campbell, Kathryn "Navigating the College-to-Career Pathway." The Postsecondary Value Commission and Georgetown University Center on Education and the Workforce. Retrieved from: Navigating the College-to-Career Pathway: The 10 Rules of Moving from Youth Dependency to Adult Economic Independence CEW Georgetown
- 24. Marcus, Jon. "Colleges face reckoning as plummeting birthrate worsens enrollment declines." The Hechinger Report. May, 2021. Retrieved from: With college enrollment falling, universities start to freeze tuition (hechingerreport.org)
- Shapiro, D., et al. "Completing College: A State-Level View of Student Attainment Rates (Signature Report No. 19)." National Student Clearinghouse Research Center, December 2020. Retrieved from: <a href="https://nscresearchcenter.org/completing-college/">https://nscresearchcenter.org/completing-college/</a>
- 26. The Student Persistence, Completion, and Transfer research collection. The Community College Research Center. Retrieved from: <a href="https://ccrc.tc.columbia.edu/student-persistence-completion-and-transfer.html">https://ccrc.tc.columbia.edu/student-persistence-completion-and-transfer.html</a>
- 27. Strada Educational Network's Consumer survey. Retrieved from <a href="Strada">Strada</a>
   (stradaeducation.org) and referenced from New England Board of Higher Education "All Learning Counts". Retrieved from: <a href="ALCNE">ALCNE</a>: State Policy Brief 12 20 (nebhe.org)
- "Adult Education by the Numbers and Serving New England's Adult Learners." New England Board of Higher Education. Retrieved August 26, 2021 from: "Serving New England's Adult Learners (nebhe.org)
- The annual NACUBO Tuition Discounting Study. May 2021. Access it here <u>Private College Tuition Discounting Continued Upward Trend During</u> <u>COVID-19 Pandemic (nacubo.org)</u>
- "Connecting Education to Work: Insights from the Education Consumer Survey for New Hampshire." The Education Commission of the States and Strada Education Network. June 2020
- 31. Find information on the Governor's Scholarship and the UNIQUE programs here: Csp 100-700 (state.nh.us)
- "The Overlooked Value of Certificates and Associate's Degrees." The Georgetown University Center on Education and the Workforce, 2020. Find it here: https://cew.georgetown.edu/cew-reports/subba/

- 33. Abel, Jaison, R., Deitz, Richard. "Despite Rising Costs, College Is Still a Good Investment." The Federal Reserve Bank of New York, Liberty Street Economics blog, June 5, 2019. Retrieved from: <u>Despite Rising Costs, College</u> Is Still a Good Investment – Liberty Street Economics (newyorkfed.org)
- 34. Find Keene State's COVID-19 dashboard here:  $\underline{\text{COVID-19 Data} \cdot \text{Featured} \cdot}$  Keene State College
- 35. Find Rivier's policy here: Microsoft Word Spring 2020 PF Policy for Covid-19 (rivier.edu)
- 36. Find UNH details here: Updated CARES Act information and new USNH policies to support employees and UNH's future | University of New Hampshire
- 37. Find SNHU details here: Southern New Hampshire freshmen will have free tuition, online courses this fall | Higher Ed Dive
- 38. Find Plymouth State details here: Plymouth State University nurses graduate early to begin working at hospitals treating COVID-19 patients (wmur.com)
- Find Rivier details here: Rivier Donates Telehealth Equipment and Medical Supplies to Support Local Hospitals and Organizations | Rivier University
- 40. Find UNH Extension details here: <u>Business NH Magazine: UNH Connects</u> Farmers and Residents
- Carnevale, Anthony; Cheah, Ban; Hanson, Andrew. "The Economic Value of College Majors." The Georgetown University Center on Education and the Workforce, 2015. Retrieved from: <u>The-Economic-Value-of-College-</u> Majors-Full-Report-web-FINAL.pdf (georgetown.edu)
- 42. Marcus, Jon. "Will that college degree pay off? Now you can finally see the numbers." The Hechinger Report. November 1, 2021. Retrieved from: Will the cost of a college degree actually pay off? (hechingerreport.org)
- 43. Wile, Rob. "If You Take 6 Years To Graduate From College, The Value Of Your Degree Will Be Cut Nearly In Half." Business Insider, September 3, 2014. Retrieved from: <a href="https://www.businessinsider.com/rate-of-return-on-college-degree-2014-9">https://www.businessinsider.com/rate-of-return-on-college-degree-2014-9</a>
- 44. Williams June, Audrey, O'Leary, Brian. "3 Things New Federal Data Reveal About How Colleges Fared During the Pandemic." The Chronicle of Higher Education. September 14, 2021. Retrieved from: 3 Things New Federal Data Reveal About How Colleges Fared During the Pandemic (chronicle.com)
- Spring 2021 Current Term Enrollment Estimates." National Student Clearinghouse Research Center. June 2021. Retrieved from: <a href="https://nscresearchcenter.org/current-term-enrollment-estimates/">https://nscresearchcenter.org/current-term-enrollment-estimates/</a>
- 46. Cummings, Kristen et al. "Investigating the impacts of state higher education appropriations and financial aid." State Higher Ed Executive Officers Association. May 2021. Retrieved from: https://sheeo.org/wpcontent/uploads/2021/05/SHEEO\_ImpactAppropationsFinancialAid.pdf
- 47. FAFSA Tracker. Find it here: FAFSA TRACKER Form Your Future
- "Back to Class: Will Pandemic-Disrupted Learners Return to School?" Strada Center for Education Consumer Insights. Retrieved from: <u>Strada (stradaeducation.org)</u>
- 49. "SAT Program Results Capture Impact of COVID on Class of 2021." The College Board. September 15. Retrieved from: SAT Program Results

  Capture Impact of COVID on Class of 2021 Newsroom (collegeboard. org)
- 50. Bauer-Wolf, Jeremy "About 375,000 fewer students took the ACT in 2021, average score continues to decline." Higher Ed Dive. October 13, 2021. Retrieve it here: About 375,000 fewer students took the ACT in 2021, average score continues to decline | Higher Ed Dive
- Trostel, Philip. "It's Not Just the Money. The Benefits of College Education to Individuals and to Society." The University of Maine and the Lumina Foundation, 2015. Retrieved from: https://www.luminafoundation.org/ files/resources/its-not-just-the-money.pdf

- 52. Finley, Ashley. "Is College Worth the Time and Money? The Association of American Colleges and Universities. September 2021. Retrieve it here: https://www.aacu.org/sites/default/files/files/research/BPC\_Fed\_State\_Brief\_R04.2.pdf Carnevale, Anthony; Rose, Stephen, J.; Cheah, Ban. "The College Payoff." 2011. Retrieved from: https://cew.georgetown.edu/cew-reports/the-college-payoff/
- Carnevale, Anthony; Rose, Stephen, J.; Cheah, Ban. "The College Payoff." 2011. Retrieved from: <a href="https://cew.georgetown.edu/cew-reports/the-college-payoff/">https://cew.georgetown.edu/cew-reports/the-college-payoff/</a>
- 54. "Certified value: when do adults without degrees benefit from earning certificates and certifications?" Strada Education Network and Lumina Foundation, July 2, 2019. Retrieved from: <a href="https://go.stradaeducation.org/certified-value">https://go.stradaeducation.org/certified-value</a>
- 55. For full-time, beginning undergraduate students. U.S. Department of Education, College Affordability and Transparency Center, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2019, Institutional Characteristics component and Winter 2019-20, Student Financial Aid component. Retrieved from: <a href="https://collegecost.ed.gov/affordability">https://collegecost.ed.gov/affordability</a>
- 56. For full-time, beginning undergraduate students. U.S. Department of Education, College Affordability and Transparency Center, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2019, Institutional Characteristics component and Winter 2019-20, Student Financial Aid component. Retrieved from: <a href="https://collegecost.ed.gov/affordability">https://collegecost.ed.gov/affordability</a>
- 57. "State Higher Education Finance: FY 2020." State Higher Education Executive Officers Association. (2021). Retrieved from: SHEF FY 2020 (sheeo.org)
- 58. Note: \$178 million also includes scholarships to students attending nonprofit institutions. However, this was only 0.2% of the total. State and local government funding in New Hampshire is primarily operating appropriations to USNH and CCSNH, but also includes research funding to USNH, state financial aid to students, and funding for the system offices. Capital appropriations are not included in this total, but federal stimulus funding allocated to states from the CARES Act is included if New Hampshire appropriated those funds to higher education.
- 59. Note: Student debt data are voluntarily reported by colleges to the Peterson's Common Data Set (CDS). As a result of fewer colleges reporting debt data in New Hampshire, state coverage of bachelor's degree graduates dropped from 96% to 35% this year. "Student Debt and the Class of 2020." Institute for College Access and Success, Project on Student Debt, November 2021. Retrieved from: http://ticas.org/posd/home
- 60. Note: Includes student loans originated under the Federal Family Education Loan Program and the Direct Loan Program; Perkins loans; and private student loans without government guarantees. This memo item includes loan balances that are not included in the nonrevolving credit balances. Board of Governors for the Federal Reserve System. Retrieved from: <a href="https://fred.stlouisfed.org/series/SLOAS">https://fred.stlouisfed.org/series/SLOAS</a>
- 61. "Report on the Economic Well-Being of U.S. Households in 2020 May 2021." The Federal Reserve. Retrieved from: <a href="https://www.federalreserve.gov/publications/2021-economic-well-being-of-us-households-in-2020-student-loans.htm#xfigure34-paymentstatusofloansforown-b31744c2">https://www.federalreserve.gov/publications/2021-economic-well-being-of-us-households-in-2020-student-loans.htm#xfigure34-paymentstatusofloansforown-b31744c2</a>
- Ma, Jennifer and Pender, Matea. "Trends in College Pricing and Student Aid." The College Board. Retrieved from: <a href="https://research.collegeboard.org/pdf/trends-college-pricing-student-aid-2021.pdf">https://research.collegeboard.org/pdf/trends-college-pricing-student-aid-2021.pdf</a>
- 63. Carnevale, Anthony P. "The Student Debt Dilemma." Georgetown
  University Center on Education and the Workforce. Retrieved from: The
  Student Debt Dilemma. College is worth the cost, but too many... | by
  Anthony P. Carnevale | Georgetown CEW | Medium
- 64. "New Directions for Higher Education: Q&A with Kantrowitz on Scholarships and Debt." New England Board of Higher Education. May, 2013. Retrieved from: » New Directions for Higher Education: Q&A with Kantrowitz on Scholarships and Debt (nebhe.org)

- 65. Looney, Adam and Yannelis, Constantine. "A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults." The Brookings Institution, Fall 2015. Retrieved from: <a href="https://www.brookings.edu/wp-content/uploads/2015/09/looneytextfall15bpea.pdf">https://www.brookings.edu/wp-content/uploads/2015/09/looneytextfall15bpea.pdf</a>
- 66. Brown, Meta et al. "Looking at Student Loan Defaults through a Larger Window," Liberty Street Economics Blog, Federal Reserve Bank of New York, February, 2015. Dynarski, Susan. "The trouble with student loans? Low earnings, not high debt," Evidence Speaks, The Brookings Institution, January 2016; Looney, Adam and Yannelis, Constantine. "A crisis in student loans? How changes in the characteristics of borrowers and in the institutions they attended contributed to rising loan defaults." The Brookings Institution, Fall 2015. Retrieved from: https://www.brookings.edu/wp-content/uploads/2015/09/looneytextfall15bpea.pdf
- 67. Blagg, Kristin. "Underwater on Student Debt Understanding Consumer Credit and Student Loan Default." The Urban Institute, August 2018. Retrieved from: https://www.urban.org/sites/default/files/publication/98884/underwater\_on\_student\_debt.pdf
- Blagg, Kristin. "Underwater on Student Debt Understanding Consumer Credit and Student Loan Default." The Urban Institute, August 2018. Retrieved from: https://www.urban.org/sites/default/files/ publication/98884/underwater\_on\_student\_debt.pdf
- "Official Cohort Default Rates by State/Territory, National." Federal Student Aid, U.S. Department of Education. Reflective as of September 21, 2021. Retrieved from: <a href="https://www2.ed.gov/offices/OSFAP/">https://www2.ed.gov/offices/OSFAP/</a> defaultmanagement/
- 70. National rates as calculated by US DOE. Retrieved from: https://fsapartners.ed.gov/sites/default/files/2021-09/ FY18OfficialNationalBriefing.pdf
- Arbeit, Caren and Horn, Laura. "A Profile of the Enrollment Patterns and Demographic Characteristics of Undergraduates at For-Profit Institutions." U.S. Department of Education, Stats in Brief, February 2017. <a href="https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017416">https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017416</a>
- 72. "2021-2022 Federal Pell Grant Payment and Disbursement Schedules."
  U.S. department of Education, office of Federal Student Aid. Retrieved from: 2021-2022 Federal Pell Grant Payment and Disbursement Schedules
  | Knowledge Center
- "Trends in Student Aid 2020." The College Board, October 2020. Retrieved from: https://trends.collegeboard.org/student-aid
- 74. U.S. Department of Education, "Federal Pell Grant Program End of Year Report, 2017-18." Table 21, Distribution of Federal Pell grant recipients by State of Legal Residence and Control of Institution. Retrieved from: https://www2.ed.gov/finaid/prof/resources/data/pell-data.html
- 75. "Serving New England's Adult Learners." New England Board of Higher Education. Retrieved August 26, 2021 from: "Serving New England's Adult Learners (nebhe.org) and "A Stronger Nation, Learning beyond High School." The Lumina Foundation, August 2021. Retrieved from: <a href="Stronger">Stronger</a> Nation (luminafoundation.org)
- 76. Note: 65 by 25 was an initiative of the New Hampshire Coalition for Business and Education whose members included educator, business, philanthropic, and government leaders. Learn more at: Mission, Vision & Strategic Goals Community College System of New Hampshire (ccsnh.edu)
- "A Stronger Nation, Learning beyond High School." The Lumina Foundation, August 2021. Retrieved from: Stronger Nation (luminafoundation.org)
- 78. Brown, John Seely. "Working/Learning/Leading in the Exponential Age. The Game is Changing, Are we?" 2016 AACSB International Deans Conference. Retrieved from: <a href="http://www.johnseelybrown.com/WorkingLearningLeading.pdf">http://www.johnseelybrown.com/WorkingLearningLeading.pdf</a>
- 79. George, Sharon. "Six Ways the Workplace Will Change in the Next 10 Years." Gartner Research. December 2017. Retrieved from: https://www.gartner.com/smarterwithgartner/6-ways-the-workplace-will-change-in-the-next-10-years/

- "Education and Training Expenditures in the U.S." Credential Engine, February 2021. Retrieved from <a href="http://credentialengine.org/wp-content/uploads/2021/02/Education-and-Training-Expenditures-in-the-US.pdf">http://credentialengine.org/wp-content/uploads/2021/02/Education-and-Training-Expenditures-in-the-US.pdf</a>
- 81. "State of New Hampshire Regional Planning Commissions County Population Projections, 2016 by Age and Sex." RLS Demographics, Inc. with revisions by New Hampshire Office of Energy and Planning, September 2016. Retrieved from: <a href="http://www.nh.gov/oep/data-center/documents/2016-state-county-projections-final-report.pdf">http://www.nh.gov/oep/data-center/documents/2016-state-county-projections-final-report.pdf</a>
- 82. Rubens, Miles. "Learning, All Grown Up." New England Board of Higher Education. August, 2021. Retrieved from: "Learning, All Grown Up (nebhe.org)
- 83. Johnson, Kenneth. "New Hampshire's Estimated Population Gain Is the Largest in New England." Carsey School of Public Policy, University of New Hampshire. Retrieved from: New Hampshire's Estimated Population Gain

  Is the Largest in New England | Carsey School of Public Policy | UNH
- 84. Johnson, Kenneth. "Migration Gains to New Hampshire From Other U.S.
  States Are Growing, With the Largest Gains Among Young Adults" Carsey
  School of Public Policy, University of New Hampshire. Retrieved from:

  Migration Gains to New Hampshire From Other U.S. States Are Growing,
  With the Largest Gains Among Young Adults | Carsey School of Public
  Policy | UNH
- 85. Find the CCSNH news links here: CCSNH Freezes Tuition for 2021-2022 [www.ccsnh.edu/nh-community-colleges-freeze-tuition-for-2021-22/]; CCSNH Begins Awarding Digital Professional Badges [ www.ccsnh.edu/ professional-digital-badges/]; Gift to the Class of 2021 [ www.ccsnh.edu/ classgift/]; Smiths Medical, NCC and KSC partner to meet academic and workforce needs: [ https://apprenticeshipnh.com/new-apprenticeshipnh-program-with-smiths-medical-to-focus-on-the-growing-field-of-mechatronics/; WMCC Partnership with Milton Cat [ www.ccsnh.edu/ wmcc-miltoncat-partnership/]; NCC student finalists in National STEM Competition [ www.ccsnh.edu/ncc-finalists/]; LRCC Completes Expansion of Culinary Arts Program [ www.ccsnh.edu/lrcc-culinary-expansion/]; GBCC Creates New Welding Lab to Meet Employer Demand [www.ccsnh.edu/gbccrochesterweldinglab/]; ApprenticeshipnH, Earn While you Learn [ https://apprenticeshipnh.com/apprenticeshipnh-year-in-review/]
- 86. https://title2.ed.gov most recent reported data (2018-2019) data not available as of 10/05/2021
- 87. Note: A program completer is defined as a person who has met all the requirements of a state-approved teacher preparation program. Program completers include all those who are documented as having met such requirements. Documentation may take the form of a degree, institutional certificate, program credential, transcript or other written proof of having met the program's requirements. In applying this definition, the fact that an individual has or has not been recommended to the state for an initial credential may not be used as a criterion for determining who is a program completer. Data from Title2.ed.gov.
- 88. Total reflected by IHE completer may differ than total by endorsement due to candidates qualifying for more than one endorsement at time of program completion or due to those that did not apply or meet all licensure requirements.
- 89. "Veterans Statistics. New Hampshire," U.S. Census Bureau, retrieved from: https://www2.census.gov/library/visualizations/2015/comm/vets/nh-vets.pdf
- 90. "Veterans in New Hampshire 2016." New Hampshire Employment Security, The Economic and Labor Market Information Bureau, November 2016.
- 91. New Hampshire Employment Security. Retrieved from Apprenticeships |
  Career Resources | Economic & Labor Market Information Bureau (ELMI)
  NEW HAMPSHIRE Employment Security
- 92. U.S. Department of Labor, Office of Apprenticeship, New Hampshire





