

New Measures of Student Success in Public Higher Education

Within the diversity of students and institutions in America, much is known about the success of traditional, college age, first-time, full-time freshmen. Much less is understood, however, about the retention and graduation of other types of students.

Funded by the Lumina Foundation for Education as part of the Emerging Pathways project at the University of Virginia's Curry School of Education, this research provides new insights into the typology and success of students in public higher education.

The data for this study were initially compiled by NCHEMS, working with SHEEO offices in the contiguous states of Kentucky, Ohio, Tennessee, and West Virginia to study student migration. Data from Virginia and the State University of New York (SUNY) system were added as part of a proof-in-concept for a new type of multi-state Student Unit Record Exchange (SURE). No data are released at the state or institution level. Numerous tables and the first report are available at <http://highered.org/lumina.asp>.

The results provide six years of longitudinal data from six states about half a million first-time freshmen beginning in Fall 1998 and Fall 1999. Persistence and attainment rates for public, two- and four-year cohorts are explored in terms of majors, dropout, transfer, same school retention, overall retention, and certificate, associate's, and bachelor's awards. The data suggest that:

- Nontraditional students drop out at a much higher rate (38.9%) than traditional starting full-time (18.2%), though the rate is higher for the two-year cohort (41.9%). They also transfer less often (4.3%) than traditional full-time (7.4%).
- Nontraditional students are more likely to earn a certificate (3.1%) or an associate's degree (18.2%), especially in the two-year cohort (4.2% and 21.5% respectively). They are much less likely to earn a bachelor's degree (9.9%), though this varies from two-year (3.9%) to four-year (22.0%).
- Excluding incidental students, women have higher overall retention (77.5%) and baccalaureate attainment (35.5%) rates.
- Under-represented minorities do not do as well in retention (70.5%) or bachelor's attainment (22.9%). Among nontraditional students, African American (55.9%), Hispanic (58.9%), and Native American (56.6%) retention is less than Asian (76.7%) or white (61.6%). Degree attainment corresponds.
- Mixed attendance, a combination of full- and part-time enrollment, dramatically increases nontraditional student retention, from 41.6% for full-time to 76.3% for mixed. Bachelor's attainment is only slightly higher for mixed (10.5%).
- Bachelor's attainment for nontraditional students drops from 11.6% for those who continuously enroll to 3.6% with two enrollment spells and 0.5% with three or more spells.

Student Typology

Traditional age starting full-time
Traditional age starting part-time
Nontraditional, age 20+
Part-time only for 2+ semesters
Incidental, part-time 1 semester

Demographic Data

Gender
Race
Age
Residency

Enrollment Behavior Data

Dual enrollment
Attendance patterns
Enrollment continuity
Transfer patterns
Transfer direction
Time to degree
Degree paths

School Characteristics Data

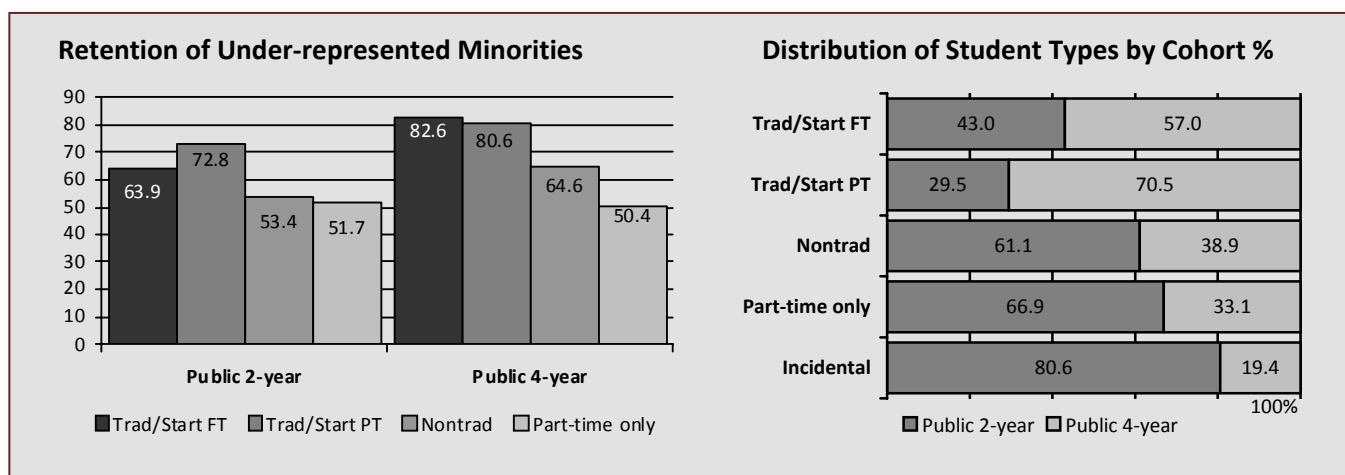
IPEDS new derived variables
Carnegie Classification
Faculty/staff/student diversity
Resources per student
Adult learner-friendly policies
Environmental supports

Disciplines/Majors

CIP Codes
STEM
SMART
Career and technical education
Areas of national need
Nontraditional fields by gender
Academic and career-oriented
Career clusters and pathways

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- Students who attend full-time for eight continuous terms have remarkably high bachelor’s attainment - 87.0% for traditional starting full-time and 65.9% for nontraditional students.
- The bachelor’s rate for nontraditional two-year students age 30+ is 7.2% vs. 20.7% for four-year.
- Few part-time only students complete the bachelor’s (0.5%), though the four-year rate is higher (1.8%).
- There appears to be little difference in retention or attainment based on the presence of adult learner-friendly programs and policies such as credit for life experience, distance learning, campus daycare, and weekend colleges. However, rates are higher at more selective schools.
- Higher average awards of institutional grant aid result in higher retention and bachelor’s rates among four-year nontraditional - 73.0% and 26.0% respectively for \$3,200 in aid vs. 57.8% and 18.4% for <\$575.
- Higher enrollment and FTE staff are associated with greater retention and attainment, as are higher faculty salaries and endowment assets per student FTE. An average of \$7,500+ in instructional expenses per student results in a 72.9% retention and 29.2% baccalaureate rate for four-year nontraditional.
- Approximately 28.1% of nontraditional students major in STEM disciplines, vs. 21.5% of traditional full-time. The two-year cohort is slightly higher (29.1%). However, nontraditional students in STEM have lower baccalaureate rates (7.9%) than average for the combined cohorts (9.9%). In contrast, nontraditional majors in SMART disciplines have slightly higher bachelor’s rates (10.5%).
- Some nontraditional majors have retention rates that are 20 to 30% above average for this type. Nontraditional student bachelor’s rates are higher in some areas of national need, including education (33.5%), math (35.5%), the physical sciences (22.8%), and social work (22.0%).
- Transfers from 2 to 4-year schools result in higher retention (84.6%) and bachelor’s attainment (33.3%) for nontraditional students. Rates are improved with transfers if they are upward and limited in number.
- Students who start at two-year colleges are at a disadvantage if their intent is the baccalaureate.
- Overall, it appears that nontraditional students are poorly served by a public system of postsecondary education that is designed to meet the needs of 18 year olds and the faculty who teach them.

Cohort/Student Type	Count	Dropout	Transfer	Same school Retention	Overall Retention	Certificates	Associate’s	Bachelor’s
4-year cohort	270,184	16.3%	7.7%	76.0%	83.7%	0.6%	6.4%	50.4%
Traditional, starting FT	229,236	13.7%	7.9%	78.4%	86.3%	0.5%	5.9%	55.2%
Traditional, starting PT	9,240	18.1%	12.2%	69.7%	81.9%	1.0%	9.0%	31.9%
Nontraditional age 20+	19,624	32.9%	5.1%	62.1%	67.1%	0.9%	11.5%	22.0%
Part-time only	7,462	50.8%	3.9%	45.2%	49.2%	0.5%	4.6%	1.8%
Incidental	4,622	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2-year cohort	203,786	34.5%	5.6%	60.0%	65.5%	2.6%	22.9%	7.8%
Traditional, starting FT	95,853	29.0%	6.4%	64.6%	71.0%	2.3%	29.6%	11.4%
Traditional, starting PT	14,489	22.9%	11.8%	65.3%	77.1%	2.4%	22.0%	10.5%
Nontraditional age 20+	39,633	41.9%	3.9%	54.1%	58.1%	4.2%	21.5%	3.9%
Part-time only	30,973	47.2%	2.2%	50.5%	52.8%	1.9%	4.4%	0.2%
Incidental	22,838	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%