

One-Year, Two-Year, Three-Year, and Four-Year University Retention Rates Associated with First-Year Participation in a Learning Community at Iowa State University by First-Time, Full-Time Students, Fall 1998 to Fall 2005 Cohorts

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Table 1
Participation Rates of First-Year Students in Learning Communities

| Cohort and Group | LC Participants | LC Nonparticipants | χ^2 (1 df) | p |
|--------------------------------|-----------------|--------------------|--------------------|--------|
| <u>Fall 1998 Cohort</u> | | | | |
| Total (n = 3789) | 1079 (28.5%) | 2710 (71.5%) | | |
| <u>Gender</u> | | | 28.250 | < .001 |
| Women (n = 1771) | 578 (32.6%) | 1193 (67.4%) | | |
| Men (n = 2018) | 501 (24.8%) | 1517 (75.2%) | | |
| <u>Ethnicity</u> | | | 5.439 ^a | .020 |
| Non-Minorities (n = 3343) | 990 (29.6%) | 2353 (70.4%) | | |
| Minorities (n = 259) | 59 (22.8%) | 200 (77.2%) | | |
| Unknown Ethnicity (n = 187) | 30 (16.0%) | 157 (84.0%) | | |
| <u>Fall 1999 Cohort</u> | | | | |
| Total (n = 4008) | 1596 (39.8%) | 2412 (60.2%) | | |
| <u>Gender</u> | | | 17.346 | < .001 |
| Women (n = 1825) | 791 (43.3%) | 1034 (56.7%) | | |
| Men (n = 2183) | 805 (36.9%) | 1378 (63.1%) | | |
| <u>Ethnicity</u> | | | 0.373 ^a | .541 |
| Non-Minorities (n = 3488) | 1404 (40.3%) | 2084 (59.7%) | | |
| Minorities (n = 336) | 141 (42.0%) | 195 (58.0%) | | |
| Unknown Ethnicity (n = 184) | 51 (27.7%) | 133 (72.3%) | | |
| <u>Fall 2000 Cohort</u> | | | | |
| Total (n = 4271) | 1483 (34.7%) | 2788 (65.3%) | | |
| <u>Gender</u> | | | 7.081 | .008 |
| Women (n = 1929) | 711 (36.9%) | 1218 (63.1%) | | |
| Men (n = 2342) | 772 (33.0%) | 1570 (67.0%) | | |
| <u>Ethnicity</u> | | | 8.789 ^a | .003 |
| Non-Minorities (n = 3696) | 1280 (34.6%) | 2416 (65.4%) | | |
| Minorities (n = 345) | 147 (42.6%) | 198 (57.4%) | | |
| Unknown Ethnicity (n = 230) | 56 (24.3%) | 174 (75.7%) | | |

| Cohort and Group | LC Participants | LC Nonparticipants | χ^2 (1 df) | <i>p</i> |
|-------------------------------------|------------------------|---------------------------|-----------------------------------|-----------------|
| Fall 2001 Cohort | | | | |
| Total (<i>n</i> = 4591) | 1692 (36.9%) | 2899 (63.1%) | | |
| <u>Gender</u> | | | 0.506 | .477 |
| Women (<i>n</i> = 2085) | 780 (37.4%) | 1305 (62.6%) | | |
| Men (<i>n</i> = 2506) | 912 (36.4%) | 1594 (63.6%) | | |
| <u>Ethnicity</u> | | | 13.650 ^a | < .001 |
| Non-Minorities (<i>n</i> = 3915) | 1428 (36.5%) | 2487 (63.5%) | | |
| Minorities (<i>n</i> = 411) | 188 (45.7%) | 223 (54.3%) | | |
| Unknown Ethnicity (<i>n</i> = 265) | 76 (28.7%) | 189 (71.3%) | | |
| Fall 2002 Cohort | | | | |
| Total (<i>n</i> = 4154) | 1653 (39.8%) | 2501 (60.2%) | | |
| <u>Gender</u> | | | 12.528 | < .001 |
| Women (<i>n</i> = 1909) | 704 (36.9%) | 1205 (63.1%) | | |
| Men (<i>n</i> = 2245) | 949 (42.3%) | 1296 (57.7%) | | |
| <u>Ethnicity</u> | | | 8.686 ^a | .003 |
| Non-Minorities (<i>n</i> = 3553) | 1403 (39.5%) | 2150 (60.5%) | | |
| Minorities (<i>n</i> = 367) | 174 (47.4%) | 193 (52.6%) | | |
| Unknown Ethnicity (<i>n</i> = 234) | 76 (32.5%) | 158 (67.5%) | | |
| Fall 2003 Cohort | | | | |
| Total (<i>n</i> = 3850) | 1769 (45.9%) | 2081 (54.1%) | | |
| <u>Gender</u> | | | 0.246 | .620 |
| Women (<i>n</i> = 1681) | 780 (46.4%) | 901 (53.6%) | | |
| Men (<i>n</i> = 2169) | 989 (45.6%) | 1180 (54.4%) | | |
| <u>Ethnicity</u> | | | 0.333 ^a | .564 |
| Non-Minorities (<i>n</i> = 3279) | 1504 (45.9%) | 1775 (54.1%) | | |
| Minorities (<i>n</i> = 356) | 169 (47.5%) | 187 (52.5%) | | |
| Unknown Ethnicity (<i>n</i> = 215) | 96 (44.7%) | 119 (55.3%) | | |
| Fall 2004 Cohort | | | | |
| Total (<i>n</i> = 3672) | 1709 (46.5%) | 1963 (53.5%) | | |
| <u>Gender</u> | | | 0.827 | .363 |
| Women (<i>n</i> = 1615) | 738 (45.7%) | 877 (54.3%) | | |
| Men (<i>n</i> = 2057) | 971 (47.2%) | 1086 (52.8%) | | |
| <u>Ethnicity</u> | | | 0.565 | .452 |
| Non-Minorities (<i>n</i> = 3141) | 1478 (47.1%) | 1663 (52.9%) | | |
| Minorities (<i>n</i> = 345) | 155 (44.9%) | 190 (55.1%) | | |
| Unknown Ethnicity (<i>n</i> = 186) | 76 (40.9%) | 110 (59.1%) | | |

| Cohort and Group | LC Participants | LC Nonparticipants | χ^2 (1 df) | P |
|--------------------------------------|------------------------|---------------------------|-----------------------------------|----------|
| Fall 2005 Cohort | | | | |
| Total (<i>n</i> = 3740) | 1900 (50.8%) | 1840 (49.2%) | | |
| <u>Gender</u> | | | 9.634 | .002 |
| Women (<i>n</i> = 1626) | 779 (47.9%) | 847 (52.1%) | | |
| Men (<i>n</i> = 2114) | 1121 (53.0%) | 993 (47.0%) | | |
| <u>Ethnicity</u> | | | 13.419 | <.001 |
| Non-Minorities (<i>n</i> = 3230) | 1683 (52.1%) | 1547 (47.9%) | | |
| Minorities (<i>n</i> = 373) | 157 (42.1%) | 216 (57.9%) | | |
| Unknown Ethnicity (<i>n</i> = 137) | 60 (43.8%) | 77 (56.2%) | | |
| All Cohorts Combined | | | | |
| Total (<i>n</i> = 32075) | 12881 (40.2%) | 19194 (59.8%) | | |
| <u>Gender</u> | | | 1.991 | .158 |
| Women (<i>n</i> = 14441) | 5861 (40.6%) | 8580 (59.4%) | | |
| Men (<i>n</i> = 17634) | 7020 (39.8%) | 10614 (60.2%) | | |
| <u>Ethnicity</u> | | | 5.166 ^a | .023 |
| Non-Minorities (<i>n</i> = 27645) | 11170 (40.4%) | 16475 (59.6%) | | |
| Minorities (<i>n</i> = 2792) | 1190 (42.6%) | 1602 (57.4%) | | |
| Unknown Ethnicity (<i>n</i> = 1638) | 521 (31.8%) | 1117 (68.2%) | | |

Notes:

Deceased students omitted.

^a Test of minority versus non-minority ethnicity only.

3/11/07

Table 2. One-Year Retention Rates for First-Year Learning Community Participants and Nonparticipants, Fall 1998 to Fall 2005 Cohorts

| Cohort and Group | Simple Analyses | | | | Analyses Controlling for High School Rank and ACT Composite | | Adjusted Retention Rates | |
|-------------------------------------|-----------------|--------------------|-----------------|----------|---|----------|--------------------------|--------|
| | LC Participants | LC Nonparticipants | χ^2 (1 df) | <i>p</i> | χ^2 improvement (1 df) | <i>P</i> | LC | Non-LC |
| Fall 1998 Cohort | | | | | | | | |
| Total (<i>n</i> = 3789) | 91.0% | 82.1% | 47.416 | < .001 | 22.893 | < .001 | 88.7% | 83.2% |
| Women (<i>n</i> = 1771) | 91.3% | 82.9% | 22.626 | < .001 | 11.184 | .001 | 89.6% | 84.1% |
| Men (<i>n</i> = 2018) | 90.6% | 81.4% | 23.462 | < .001 | 11.827 | .001 | 87.8% | 82.4% |
| Non-minorities (<i>n</i> = 3343) | 90.8% | 82.3% | 39.345 | < .001 | 19.425 | < .001 | 88.5% | 83.3% |
| Minorities (<i>n</i> = 259) | 91.5% | 83.0% | 2.589 | .078 | 0.955 | .329 | 88.5% | 82.8% |
| Unknown Ethnicity (<i>n</i> = 187) | 96.7% | 77.7% | 5.824 | .017 | 4.666 | .031 | 94.9% | 80.2% |
| Fall 1999 Cohort | | | | | | | | |
| Total (<i>n</i> = 4008) | 90.2% | 82.0% | 52.132 | < .001 | 24.126 | < .001 | 88.5% | 83.2% |
| Women (<i>n</i> = 1825) | 89.6% | 82.6% | 18.073 | < .001 | 5.576 | .018 | 87.8% | 84.1% |
| Men (<i>n</i> = 2183) | 90.8% | 81.5% | 34.429 | < .001 | 20.350 | < .001 | 89.3% | 82.4% |
| Non-minorities (<i>n</i> = 3488) | 90.7% | 81.7% | 54.618 | < .001 | 26.978 | < .001 | 89.0% | 83.0% |
| Minorities (<i>n</i> = 336) | 85.8% | 83.1% | 0.462 | .423 | 0.026 | .873 | 83.1% | 83.9% |
| Unknown Ethnicity (<i>n</i> = 184) | 88.2% | 84.2% | 0.477 | .478 | 0.018 | .910 | 85.4% | 84.7% |
| Fall 2000 Cohort | | | | | | | | |
| Total (<i>n</i> = 4271) | 89.8% | 80.5% | 61.441 | < .001 | 32.099 | < .001 | 88.1% | 81.6% |
| Women (<i>n</i> = 1929) | 89.6% | 81.6% | 21.903 | < .001 | 8.087 | .004 | 87.6% | 83.1% |
| Men (<i>n</i> = 2342) | 90.0% | 79.7% | 39.416 | < .001 | 25.096 | < .001 | 88.5% | 80.4% |
| Non-minorities (<i>n</i> = 3696) | 89.9% | 80.2% | 57.434 | < .001 | 29.225 | < .001 | 88.1% | 81.4% |
| Minorities (<i>n</i> = 345) | 88.4% | 84.3% | 1.179 | .277 | 0.261 | .609 | 87.6% | 85.9% |
| Unknown Ethnicity (<i>n</i> = 230) | 91.1% | 80.5% | 3.388 | .053 | 4.091 | .043 | 90.4% | 78.0% |
| Fall 2001 Cohort | | | | | | | | |
| Total (<i>n</i> = 4591) | 88.1% | 80.8% | 41.324 | < .001 | 14.930 | < .001 | 86.3% | 82.1% |
| Women (<i>n</i> = 2085) | 89.1% | 82.1% | 18.637 | < .001 | 5.761 | .016 | 87.2% | 83.5% |
| Men (<i>n</i> = 2506) | 87.2% | 79.7% | 22.486 | < .001 | 8.783 | .003 | 85.5% | 80.8% |
| Non-minorities (<i>n</i> = 3915) | 88.4% | 81.0% | 36.314 | < .001 | 12.363 | < .001 | 86.4% | 82.3% |
| Minorities (<i>n</i> = 411) | 89.9% | 77.6% | 11.074 | .002 | 6.811 | .009 | 89.0% | 79.1% |
| Unknown Ethnicity (<i>n</i> = 265) | 77.6% | 81.5% | 0.509 | .762 | 0.976 | .323 | 76.5% | 82.3% |
| Fall 2002 Cohort | | | | | | | | |
| Total (<i>n</i> = 4154) | 89.8% | 80.4% | 65.889 | < .001 | 35.038 | < .001 | 88.2% | 81.6% |
| Women (<i>n</i> = 1909) | 89.1% | 80.9% | 21.870 | < .001 | 8.911 | .003 | 87.0% | 82.2% |

| | | | | | | | | |
|--------------------------------------|-------|-------|---------|--------|---------|--------|-------|-------|
| Men (<i>n</i> = 2245) | 90.4% | 80.0% | 44.989 | < .001 | 26.773 | <.001 | 89.0% | 81.1% |
| Non-minorities (<i>n</i> = 3553) | 89.7% | 81.1% | 47.351 | < .001 | 22.534 | < .001 | 88.0% | 82.3% |
| Minorities (<i>n</i> = 367) | 89.1% | 73.1% | 15.057 | < .001 | 9.284 | .002 | 87.8% | 75.5% |
| Unknown Ethnicity (<i>n</i> = 234) | 94.7% | 80.4% | 8.316 | .002 | 11.545 | .001 | 95.6% | 78.7% |
| Fall 2003 Cohort | | | | | | | | |
| Total (<i>n</i> = 3850) | 88.1% | 82.0% | 28.057 | < .001 | 7.919 | .005 | 86.5% | 83.3% |
| Women (<i>n</i> = 1681) | 88.7% | 84.1% | 7.428 | .006 | 1.455 | .228 | 87.2% | 85.3% |
| Men (<i>n</i> = 2169) | 87.7% | 80.3% | 21.140 | < .001 | 6.412 | .011 | 85.8% | 81.8% |
| Non-minorities (<i>n</i> = 3279) | 88.8% | 81.7% | 31.379 | < .001 | 11.337 | .001 | 87.2% | 83.1% |
| Minorities (<i>n</i> = 356) | 84.0% | 86.1% | 0.301 | .598 | 1.928 | .165 | 82.1% | 87.7% |
| Unknown Ethnicity (<i>n</i> = 215) | 85.4% | 79.0% | 1.477 | .224 | 0.682 | .409 | 83.4% | 78.7% |
| Fall 2004 Cohort | | | | | | | | |
| Total (<i>n</i> = 3672) | 90.1% | 82.2% | 46,699 | < .001 | 17.418 | < .001 | 88.4% | 83.7% |
| Women (<i>n</i> = 1615) | 92.0% | 84.5% | 21.307 | < .001 | 9.133 | .003 | 90.5% | 85.8% |
| Men (<i>n</i> = 2057) | 88.6% | 80.3% | 26.379 | < .001 | 8.985 | .003 | 86.9% | 82.1% |
| Non-minorities (<i>n</i> = 3141) | 89.7% | 82.3% | 35.122 | < .001 | 12.318 | < .001 | 88.2% | 83.9% |
| Minorities (<i>n</i> = 345) | 92.3% | 80.0% | 10.350 | .001 | 5.484 | .015 | 90.0% | 81.9% |
| Unknown Ethnicity (<i>n</i> = 186) | 92.1% | 83.6% | 2.868 | .090 | 1.175 | .278 | 90.1% | 84.4% |
| Fall 2005 Cohort | | | | | | | | |
| Total (<i>n</i> = 3740) | 87.2% | 79.7% | 37.957 | < .001 | 11.723 | .001 | 85.5% | 81.3% |
| Women (<i>n</i> = 1626) | 87.5% | 81.8% | 10.206 | .001 | 4.328 | .037 | 86.4% | 82.7% |
| Men (<i>n</i> = 2114) | 86.9% | 77.8% | 30.006 | < .001 | 6.384 | .012 | 84.7% | 80.2% |
| Non-minorities (<i>n</i> = 3230) | 87.2% | 80.0% | 30.740 | < .001 | 9.505 | .002 | 85.7% | 81.6% |
| Minorities (<i>n</i> = 373) | 86.6% | 80.6% | 2.385 | .122 | 0.475 | .491 | 84.6% | 82.0% |
| Unknown Ethnicity (<i>n</i> = 137) | 86.7% | 70.1% | 5.267 | .022 | 2.003 | .157 | 81.4% | 69.5% |
| All Cohorts Combined | | | | | | | | |
| Total (<i>n</i> = 32075) | 89.1% | 81.2% | 370.196 | < .001 | 156.34 | < .001 | 87.4% | 82.5% |
| Women (<i>n</i> = 14441) | 89.6% | 82.5% | 140.210 | < .001 | 51.781 | < .001 | 87.9% | 83.8% |
| Men (<i>n</i> = 17634) | 88.8% | 80.2% | 229.895 | < .001 | 103.711 | < .001 | 87.0% | 81.4% |
| Non-minorities (<i>n</i> = 27645) | 89.3% | 81.3% | 324.910 | < .001 | 137.483 | < .001 | 87.6% | 82.6% |
| Minorities (<i>n</i> = 2792) | 88.2% | 80.9% | 27.380 | < .001 | 9.068 | .003 | 86.5% | 82.4% |
| Unknown Ethnicity (<i>n</i> = 1638) | 88.3% | 80.1% | 16.578 | .001 | 10.301 | .001 | 86.6% | 80.0% |

Notes:

Deceased students omitted.

Logistic regression analyses were used to control for ACT scores and high school rank. These two variables were entered in the first step of the analyses, followed by LC membership in the second step.

Table 3. Two-Year Retention Rates for First-Year Learning Community Participants and Nonparticipants, Fall 1998 to Fall 2005 Cohorts

| Cohort and Group | Simple Analyses | | | | Analyses Controlling for High School Rank and ACT Composite | | Adjusted Retention Rates | |
|-------------------------------------|-----------------|--------------------|-------------------------|----------|---|----------|--------------------------|--------|
| | LC Participants | LC Nonparticipants | χ^2 (1 <i>df</i>) | <i>P</i> | χ^2 improvement (1 <i>df</i>) | <i>P</i> | LC | Non-LC |
| Fall 1998 Cohort | | | | | | | | |
| Total (<i>n</i> = 3789) | 85.7% | 73.1% | 68.503 | < .001 | 31.026 | < .001 | 82.6% | 75.0% |
| Women (<i>n</i> = 1771) | 85.5% | 73.5% | 31.826 | < .001 | 13.753 | < .001 | 82.8% | 75.4% |
| Men (<i>n</i> = 2018) | 86.0% | 72.8% | 36.023 | < .001 | 17.816 | < .001 | 82.7% | 74.6% |
| Non-minorities (<i>n</i> = 3343) | 85.9% | 73.7% | 58.409 | < .001 | 29.158 | < .001 | 83.0% | 75.2% |
| Minorities (<i>n</i> = 259) | 76.3% | 71.5% | 0.521 | .470 | 0.001 | .982 | 73.0% | 73.3% |
| Unknown Ethnicity (<i>n</i> = 187) | 100.0% | 66.2% | 14.133 | < .001 | 13.861 | < .001 | 96.7% | 71.7% |
| Fall 1999 Cohort | | | | | | | | |
| Total (<i>n</i> = 4008) | 84.1% | 72.1% | 78.106 | < .001 | 35.401 | < .001 | 81.4% | 73.8% |
| Women (<i>n</i> = 1825) | 83.6% | 71.9% | 34.617 | < .001 | 12.473 | < .001 | 80.6% | 74.0% |
| Men (<i>n</i> = 2183) | 84.6% | 72.2% | 43.749 | < .001 | 23.954 | < .001 | 82.3% | 73.6% |
| Non-minorities (<i>n</i> = 3488) | 85.3% | 72.2% | 82.235 | < .001 | 38.950 | < .001 | 82.6% | 74.2% |
| Minorities (<i>n</i> = 336) | 73.0% | 69.2% | 0.578 | .447 | 0.177 | .674 | 67.0% | 69.5% |
| Unknown Ethnicity (<i>n</i> = 184) | 82.4% | 74.4% | 1.290 | .256 | 1.385 | .239 | 82.0% | 73.5% |
| Fall 2000 Cohort | | | | | | | | |
| Total (<i>n</i> = 4271) | 82.8% | 70.5% | 77.926 | < .001 | 28.983 | < .001 | 79.8% | 72.5% |
| Women (<i>n</i> = 1929) | 84.8% | 71.9% | 41.697 | < .001 | 15.839 | < .001 | 81.7% | 74.3% |
| Men (<i>n</i> = 2342) | 81.0% | 69.4% | 35.458 | < .001 | 12.654 | < .001 | 78.0% | 71.2% |
| Non-minorities (<i>n</i> = 3696) | 83.7% | 70.7% | 75.526 | < .001 | 30.505 | < .001 | 80.6% | 72.6% |
| Minorities (<i>n</i> = 345) | 78.2% | 67.7% | 4.680 | .031 | 1.333 | .248 | 76.7% | 71.2% |
| Unknown Ethnicity (<i>n</i> = 230) | 75.0% | 70.7% | 0.388 | .533 | 0.000 | .998 | 71.5% | 71.9% |
| Fall 2001 Cohort | | | | | | | | |
| Total (<i>n</i> = 4591) | 80.1% | 70.5% | 50.964 | < .001 | 14.662 | < .001 | 77.5% | 72.5% |
| Women (<i>n</i> = 2085) | 80.9% | 72.2% | 20.008 | < .001 | 3.991 | .046 | 78.0% | 74.5% |
| Men (<i>n</i> = 2506) | 79.4% | 69.1% | 30.835 | < .001 | 10.679 | .001 | 76.9% | 70.9% |
| Non-minorities (<i>n</i> = 3915) | 80.7% | 71.5% | 40.933 | < .001 | 11.522 | .001 | 77.9% | 73.2% |
| Minorities (<i>n</i> = 411) | 78.2% | 64.1% | 9.715 | .002 | 2.885 | .089 | 75.3% | 67.5% |
| Unknown Ethnicity (<i>n</i> = 265) | 73.7% | 65.6% | 1.623 | .203 | 0.993 | .319 | 74.7% | 68.5% |
| Fall 2002 Cohort | | | | | | | | |
| Total (<i>n</i> = 4154) | 82.2% | 71.5% | 61.565 | < .001 | 22.463 | < .001 | 79.6% | 73.4% |

| | | | | | | | | |
|--------------------------------------|-------|-------|---------|--------|---------|--------|-------|-------|
| Women (<i>n</i> = 1909) | 81.5% | 73.3% | 16.762 | < .001 | 3.586 | .058 | 78.6% | 75.2% |
| Men (<i>n</i> = 2245) | 82.6% | 69.8% | 48.045 | < .001 | 20.872 | <.001 | 80.2% | 71.9% |
| Non-minorities (<i>n</i> = 3553) | 82.8% | 72.5% | 50.006 | < .001 | 17.529 | <.001 | 80.2% | 74.4% |
| Minorities (<i>n</i> = 367) | 77.0% | 63.2% | 8.259 | .004 | 2.529 | .112 | 74.2% | 66.5% |
| Unknown Ethnicity (<i>n</i> = 234) | 82.9% | 68.4% | 5.514 | .019 | 5.813 | .016 | 82.7% | 66.9% |
| Fall 2003 Cohort | | | | | | | | |
| Total (<i>n</i> = 3850) | 81.7% | 74.7% | 26.931 | < .001 | 3.692 | .055 | 79.3% | 76.9% |
| Women (<i>n</i> = 1681) | 83.1% | 77.2% | 8.864 | .003 | 1.147 | .278 | 81.0% | 79.1% |
| Men (<i>n</i> = 2169) | 80.6% | 72.8% | 18.081 | < .001 | 2.003 | .157 | 77.8% | 75.3% |
| Non-minorities (<i>n</i> = 3279) | 82.4% | 74.8% | 27.398 | < .001 | 6.754 | .009 | 80.3% | 76.7% |
| Minorities (<i>n</i> = 356) | 75.1% | 77.0% | 0.169 | .681 | 3.856 | .050 | 71.4% | 80.6% |
| Unknown Ethnicity (<i>n</i> = 215) | 82.3% | 69.7% | 4.501 | .034 | 0.560 | .454 | 78.7% | 74.3% |
| Fall 2004 Cohort | | | | | | | | |
| Total (<i>n</i> = 3672) | 83.9% | 73.2% | 61.910 | < .001 | 20.642 | < .001 | 81.4% | 75.4% |
| Women (<i>n</i> = 1615) | 87.3% | 76.9% | 28.937 | < .001 | 10.134 | .001 | 84.8% | 78.9% |
| Men (<i>n</i> = 2057) | 81.4% | 70.2% | 34.677 | < .001 | 11.325 | .001 | 78.8% | 72.5% |
| Non-minorities (<i>n</i> = 3141) | 83.8% | 73.8% | 45.638 | < .001 | 13.266 | <.001 | 81.3% | 76.1% |
| Minorities (<i>n</i> = 345) | 82.6% | 70.0% | 7.335 | .007 | 3.435 | .064 | 80.1% | 71.7% |
| Unknown Ethnicity (<i>n</i> = 186) | 89.5% | 68.2% | 11.464 | .001 | 7.679 | .006 | 86.5% | 69.4% |
| All Cohorts Combined | | | | | | | | |
| Total (<i>n</i> = 28335) | 82.8% | 72.1% | 422.866 | < .001 | 150.844 | < .001 | 80.7% | 70.6% |
| Women (<i>n</i> = 12815) | 83.7% | 73.6% | 181.224 | < .001 | 56.837 | < .001 | 81.0% | 75.7% |
| Men (<i>n</i> = 15520) | 81.9% | 70.9% | 238.800 | < .001 | 91.367 | < .001 | 79.3% | 72.7% |
| Non-minorities (<i>n</i> = 24415) | 83.4% | 72.6% | 376.305 | < .001 | 143.572 | < .001 | 80.8% | 74.4% |
| Minorities (<i>n</i> = 2419) | 77.3% | 68.8% | 21.516 | <.001 | 2.387 | .122 | 74.1% | 71.5% |
| Unknown Ethnicity (<i>n</i> = 1501) | 82.4% | 68.8% | 29.913 | <.001 | 16.538 | < .001 | 80.7% | 70.6% |

Notes:

Deceased students omitted.

Logistic regression analyses were used to control for ACT scores and high school rank. These two variables were entered in the first step of the analyses, followed by LC membership in the second step.

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Table 4. Three-Year Retention Rates for First-Year Learning Community Participants and Nonparticipants, Fall 1998 to Fall 2005 Cohorts

| Cohort and Group | Simple Analyses | | | | Analyses Controlling for High School Rank and ACT Composite | | Adjusted Retention Rates | |
|-----------------------------|-----------------|--------------------|-----------------|--------|---|--------|--------------------------|--------|
| | LC Participants | LC Nonparticipants | χ^2 (1 df) | P | χ^2 improvement (1 df) | P | LC | Non-LC |
| Fall 1998 Cohort | | | | | | | | |
| Total (n = 3789) | 81.3% | 69.0% | 58.641 | < .001 | 22.231 | < .001 | 77.8% | 70.8% |
| Women (n = 1771) | 80.6% | 68.7% | 28.029 | < .001 | 9.302 | .002 | 77.2% | 70.7% |
| Men (n = 2018) | 82.0% | 69.2% | 30.977 | < .001 | 14.218 | < .001 | 78.7% | 70.9% |
| Non-minorities (n = 3343) | 81.7% | 69.8% | 50.404 | < .001 | 21.653 | < .001 | 78.5% | 71.3% |
| Minorities (n = 259) | 67.8% | 63.0% | 0.455 | .500 | 0.140 | .708 | 62.7% | 65.5% |
| Unknown Ethnicity (n = 187) | 93.3% | 63.7% | 10.245 | .001 | 9.644 | .002 | 92.9% | 68.5% |
| Fall 1999 Cohort | | | | | | | | |
| Total (n = 4008) | 80.0% | 69.0% | 59.754 | < .001 | 22.196 | < .001 | 77.3% | 71.0% |
| Women (n = 1825) | 79.9% | 70.1% | 22.494 | < .001 | 6.087 | .014 | 77.1% | 72.4% |
| Men (n = 2183) | 80.1% | 68.1% | 36.642 | < .001 | 16.884 | < .001 | 77.6% | 69.9% |
| Non-minorities (n = 3488) | 81.2% | 69.0% | 64.230 | < .001 | 24.669 | < .001 | 78.3% | 71.2% |
| Minorities (n = 336) | 68.8% | 66.7% | 0.169 | .681 | 0.207 | .649 | 64.7% | 67.5% |
| Unknown Ethnicity (n = 184) | 78.4% | 71.4% | 0.925 | .336 | 0.646 | .422 | 78.9% | 72.9% |
| Fall 2000 Cohort | | | | | | | | |
| Total (n = 4271) | 80.3% | 67.0% | 83.951 | < .001 | 32.163 | < .001 | 77.1% | 69.1% |
| Women (n = 1929) | 81.4% | 68.2% | 39.823 | < .001 | 13.708 | < .001 | 78.0% | 70.7% |
| Men (n = 2342) | 79.3% | 66.1% | 43.055 | < .001 | 17.946 | < .001 | 76.3% | 67.9% |
| Non-minorities (n = 3696) | 81.6% | 67.6% | 81.355 | < .001 | 31.497 | < .001 | 78.1% | 69.8% |
| Minorities (n = 345) | 71.4% | 58.6% | 6.044 | .014 | 2.978 | .084 | 70.2% | 60.9% |
| Unknown Ethnicity (n = 230) | 75.0% | 68.4% | 0.881 | .348 | 0.340 | .560 | 73.4% | 69.0% |
| Fall 2001 Cohort | | | | | | | | |
| Total (n = 4591) | 77.4% | 67.7% | 49.549 | < .001 | 12.725 | < .001 | 74.7% | 69.9% |
| Women (n = 2085) | 78.6% | 70.6% | 16.130 | < .001 | 2.094 | .148 | 75.6% | 73.0% |
| Men (n = 2506) | 76.4% | 65.3% | 33.737 | < .001 | 11.520 | .001 | 73.8% | 67.4% |
| Non-minorities (n = 3915) | 78.6% | 69.0% | 42.011 | < .001 | 11.616 | .001 | 75.7% | 70.8% |
| Minorities (n = 411) | 72.3% | 59.2% | 7.772 | .005 | 1.677 | .195 | 69.1% | 63.0% |
| Unknown Ethnicity (n = 265) | 68.4% | 60.8% | 1.334 | .248 | 0.782 | .377 | 69.8% | 63.9% |
| Fall 2002 Cohort | | | | | | | | |
| Total (n = 4154) | 78.3% | 67.9% | 53.581 | < .001 | 14.846 | < .001 | 75.6% | 70.3% |

| | | | | | | | | |
|--------------------------------------|-------|-------|---------|--------|---------|--------|-------|-------|
| Women (<i>n</i> = 1909) | 78.8% | 70.7% | 15.154 | < .001 | 2.394 | .122 | 75.6% | 72.7% |
| Men (<i>n</i> = 2245) | 78.0% | 65.4% | 42.124 | < .001 | 13.820 | < .001 | 75.3% | 68.2% |
| Non-minorities (<i>n</i> = 3553) | 79.2% | 69.3% | 42.665 | < .001 | 11.787 | < .001 | 76.3% | 71.4% |
| Minorities (<i>n</i> = 367) | 73.6% | 58.5% | 9.149 | .002 | 3.032 | .082 | 70.5% | 61.8% |
| Unknown Ethnicity (<i>n</i> = 234) | 73.7% | 61.4% | 3.426 | .064 | 1.998 | .157 | 74.1% | 64.2% |
| Fall 2003 Cohort | | | | | | | | |
| Total (<i>n</i> = 3850) | 78.3% | 70.1% | 33.165 | < .001 | 6.249 | .012 | 75.8% | 72.4% |
| Women (<i>n</i> = 1681) | 80.6% | 72.6% | 15.011 | .001 | 3.888 | .049 | 78.5% | 74.6% |
| Men (<i>n</i> = 2169) | 76.4% | 68.2% | 18.023 | < .001 | 1.964 | .161 | 73.5% | 70.9% |
| Non-minorities (<i>n</i> = 3279) | 78.8% | 70.3% | 30.966 | < .001 | 8.055 | .005 | 76.5% | 72.3% |
| Minorities (<i>n</i> = 356) | 74.6% | 70.6% | 0.701 | .403 | 0.282 | .596 | 71.0% | 73.9% |
| Unknown Ethnicity (<i>n</i> = 215) | 77.1% | 67.2% | 2.540 | .111 | 0.114 | .736 | 73.4% | 71.3% |
| All Cohorts Combined | | | | | | | | |
| Total (<i>n</i> = 24664) | 79.1% | 68.4% | 334.206 | < .001 | 106.276 | < .001 | 76.3% | 70.5% |
| Women (<i>n</i> = 11201) | 80.8% | 70.0% | 135.857 | < .001 | 35.602 | < .001 | 77.0% | 72.3% |
| Men (<i>n</i> = 13463) | 78.3% | 67.0% | 195.440 | < .001 | 69.195 | <.001 | 75.6% | 69.1% |
| Non-minorities (<i>n</i> = 21275) | 80.0% | 69.1% | 304.782 | < .001 | 105.840 | < .001 | 77.2% | 71.0% |
| Minorities (<i>n</i> = 2074) | 72.0% | 62.6% | 19.921 | <.001 | 2.681 | .102 | 68.8% | 65.5% |
| Unknown Ethnicity (<i>n</i> = 1315) | 75.8% | 65.2% | 14.349 | <.001 | 6.551 | .010 | 75.2% | 67.8% |

Notes:

Deceased students omitted.

Logistic regression analyses were used to control for ACT scores and high school rank. These two variables were entered in the first step of the analyses, followed by LC membership in the second step.

Table 5. Four-Year Retention Rates for First-Year Learning Community Participants and Nonparticipants, Fall 1998 to Fall 2005 Cohorts

| Cohort and Group | Simple Analyses | | | | Analyses Controlling for High School Rank and ACT Composite | | Adjusted Retention Rates | |
|-----------------------------|-----------------|--------------------|-----------------|--------|---|--------|--------------------------|--------|
| | LC Participants | LC Nonparticipants | χ^2 (1 df) | P | χ^2 improvement (1 df) | P | LC | Non-LC |
| Fall 1998 Cohort | | | | | | | | |
| Total (n = 3789) | 80.4% | 66.9% | 68.087 | < .001 | 27.190 | < .001 | 76.8% | 69.0% |
| Women (n = 1771) | 80.1% | 67.2% | 31.642 | < .001 | 11.160 | .001 | 76.7% | 69.5% |
| Men (n = 2018) | 80.8% | 66.7% | 35.945 | < .001 | 16.852 | < .001 | 77.2% | 68.5% |
| Non-minorities (n = 3343) | 80.9% | 68.0% | 57.734 | < .001 | 25.556 | < .001 | 77.6% | 69.6% |
| Minorities (n = 259) | 64.4% | 56.5% | 1.172 | .279 | < 0.001 | .995 | 59.3% | 59.4% |
| Unknown Ethnicity (n = 187) | 96.7% | 65.0% | 12.064 | .001 | 15.488 | < .001 | 96.1% | 68.6% |
| Fall 1999 Cohort | | | | | | | | |
| Total (n = 4008) | 78.8% | 66.5% | 71.415 | < .001 | 30.258 | < .001 | 76.1% | 68.6% |
| Women (n = 1825) | 79.1% | 68.1% | 27.710 | < .001 | 8.274 | .007 | 76.0% | 70.5% |
| Men (n = 2183) | 78.5% | 65.3% | 42.289 | < .001 | 22.483 | < .001 | 76.4% | 67.2% |
| Non-minorities (n = 3488) | 80.5% | 66.6% | 81.025 | < .001 | 33.338 | < .001 | 77.3% | 68.9% |
| Minorities (n = 336) | 63.8% | 62.6% | 0.056 | .812 | 0.061 | .805 | 62.0% | 63.7% |
| Unknown Ethnicity (n = 184) | 74.5% | 71.4% | 0.175 | .676 | 0.504 | .478 | 77.2% | 71.7% |
| Fall 2000 Cohort | | | | | | | | |
| Total (n = 4271) | 78.4% | 65.1% | 80.531 | < .001 | 28.266 | .001 | 74.9% | 67.3% |
| Women (n = 1929) | 79.5% | 67.6% | 31.481 | < .001 | 7.817 | .005 | 75.7% | 70.2% |
| Men (n = 2342) | 77.3% | 63.2% | 47.480 | < .001 | 20.678 | < .001 | 74.2% | 64.9% |
| Non-minorities (n = 3696) | 80.0% | 65.8% | 81.357 | < .001 | 30.322 | < .001 | 76.4% | 63.3% |
| Minorities (n = 345) | 67.3% | 56.6% | .4.128 | .042 | 1.375 | .241 | 65.4% | 59.0% |
| Unknown Ethnicity (n = 230) | 69.6% | 64.9% | 0.418 | .518 | 0.098 | .754 | 67.5% | 65.4% |
| Fall 2001 Cohort | | | | | | | | |
| Total (n = 4591) | 75.7% | 66.1% | 470.55 | < .001 | 10.517 | .001 | 72.8% | 68.4% |
| Women (n = 2085) | 76.7% | 68.7% | 15.135 | < .001 | 1.233 | .267 | 73.2% | 71.3% |
| Men (n = 2506) | 74.9% | 63.9% | 32.344 | < .001 | 10.595 | .001 | 70.3% | 66.1% |
| Non-minorities (n = 3915) | 76.8% | 67.1% | 40.943 | < .001 | 9.894 | .002 | 73.7% | 69.2% |
| Minorities (n = 411) | 70.2% | 59.2% | 5.392 | .020 | 0.970 | .346 | 67.1% | 62.4% |
| Unknown Ethnicity (n = 265) | 68.4% | 59.8% | 1.719 | .190 | 0.726 | .394 | 69.7% | 64.0% |
| Fall 2002 Cohort | | | | | | | | |
| Total (n = 4154) | 77.6% | 66.5% | 60.104 | < .001 | 17.291 | < .001 | 74.7% | 68.9% |

| | | | | | | | | |
|--------------------------------------|-------|-------|---------|--------|----------|--------|-------|-------|
| Women (<i>n</i> = 1909) | 77.4% | 69.1% | 15.196 | < .001 | 2.175 | .140 | 74.1% | 71.3% |
| Men (<i>n</i> = 2245) | 77.8% | 64.0% | 49.494 | < .001 | 17.574 | < .001 | 74.9% | 66.8% |
| Non-minorities (<i>n</i> = 3553) | 79.0% | 67.9% | 53.002 | < .001 | 16.952 | < .001 | 76.1% | 76.1% |
| Minorities (<i>n</i> = 367) | 67.8% | 57.0% | 4.554 | .033 | 0.578 | .447 | 64.3% | 60.5% |
| Unknown Ethnicity (<i>n</i> = 234) | 73.7% | 58.9% | 4.875 | .027 | 3.140 | .076 | 73.6% | 60.9% |
| | | | | | | | | |
| <u>All Cohorts Combined</u> | | | | | | | | |
| Total (<i>n</i> = 20866) | 78.1% | 66.3% | 323.623 | < .001 | 108.887 | < .001 | 74.5% | 65.8% |
| Women (<i>n</i> = 9556) | 78.6% | 68.2% | 119.852 | < .001 | 27.252 | < .001 | 75.2% | 70.7% |
| Men (<i>n</i> = 11310) | 77.6% | 64.6% | 201.936 | < .001 | 84.663 | < .001 | 74.8% | 66.7% |
| Non-minorities (<i>n</i> = 18041) | 79.4% | 67.1% | 309.129 | < .001 | 111.7454 | < .001 | 76.2% | 69.2% |
| Minorities (<i>n</i> = 1721) | 67.4% | 58.4% | 14.500 | < .001 | 1.971 | .160 | 64.4% | 61.2% |
| Unknown Ethnicity (<i>n</i> = 1104) | 74.2% | 63.7% | 10.628 | < .001 | 6.969 | .008 | 74.5% | 65.8% |

Notes:

Deceased students omitted.

Logistic regression analyses were used to control for ACT scores and high school rank. These two variables were entered in the first step of the analyses, followed by LC membership in the second step.

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