

Math 233 Success Rates by Math 205 Success (Spring 09)

Table 1: Math 233 Success Rates by Math 205 Success

| Success205 | | | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|---------|---------|-----------|---------|---------------|--------------------|
| Non | Valid | Non | 251 | 10.1 | 69.7 | 69.7 |
| | | Success | 109 | 4.4 | 30.3 | 100.0 |
| | | Total | 360 | 14.5 | 100.0 | |
| | Missing | System | 2122 | 85.5 | | |
| | | Total | 2482 | 100.0 | | |
| Success | Valid | Non | 475 | 21.8 | 43.1 | 43.1 |
| | | Success | 628 | 28.8 | 56.9 | 100.0 |
| | | Total | 1103 | 50.6 | 100.0 | |
| | Missing | System | 1077 | 49.4 | | |
| | | Total | 2180 | 100.0 | | |

Findings

This analysis has several flaws which may affect the results. Firstly, only Fall 00 and Fall 07 Math 205 level students were selected for this sample. For ease of examination, students prior to these terms were not included. Also, some students, although the number is likely very small, might have taken the Math 205 level again and then passed the course and then took Math 233 class, thus being included in the study.

Of the total Fall 00-Fall 07 Math 205 sample ($n=4,662$), 2180 (46.8%) passed. Of the sample, 1463 (31.38%) subsequently took a 233 course. As the Table 1 above shows, of those who did not pass the Math 205 course, 69.7% did not pass Math 233. Of those who did pass Math 205 and took the corresponding Math 233 in the targeted terms, 56.9% passed the class. The overall success rate for these Math 233 courses is 49.5%. It appears there is a slight increased likelihood of success for those who successfully complete Math 233.

As Table 2 below suggests, however, the grade a student achieves in Math 205 is predictive of future success in Math 233. To illustrate, the success rate for Math 233 drops from 62.9% to 46.3% for students who achieve an Bs to B-s respectively. And further, for students who receive C+s to Cs, the rate drops from 46.1% to 31.8%.

It appears even student who pass with less than an B may not be well prepared, obviously for many potential reasons, to pass the subsequent 233 course.

Table 2: Math 233 Success Rates by Math 205 Grade.

| | | Success233 | | Total |
|----------|---------------------|------------|---------|--------|
| | | 0 | Success | |
| Grade205 | Count | 1534 | 1481 | 3015 |
| | % within Grade205 | 50.9% | 49.1% | 100.0% |
| | % within Success233 | 67.9% | 66.8% | 67.3% |
| A | Count | 44 | 223 | 267 |
| | % within Grade205 | 16.5% | 83.5% | 100.0% |
| | % within Success233 | 1.9% | 10.1% | 6.0% |
| A- | Count | 31 | 65 | 96 |
| | % within Grade205 | 32.3% | 67.7% | 100.0% |
| | % within Success233 | 1.4% | 2.9% | 2.1% |
| B | Count | 66 | 112 | 178 |
| | % within Grade205 | 37.1% | 62.9% | 100.0% |
| | % within Success233 | 2.9% | 5.0% | 4.0% |
| B- | Count | 51 | 44 | 95 |
| | % within Grade205 | 53.7% | 46.3% | 100.0% |
| | % within Success233 | 2.3% | 2.0% | 2.1% |
| B+ | Count | 25 | 45 | 70 |
| | % within Grade205 | 35.7% | 64.3% | 100.0% |
| | % within Success233 | 1.1% | 2.0% | 1.6% |
| C | Count | 210 | 98 | 308 |
| | % within Grade205 | 68.2% | 31.8% | 100.0% |
| | % within Success233 | 9.3% | 4.4% | 6.9% |
| C+ | Count | 48 | 41 | 89 |
| | % within Grade205 | 53.9% | 46.1% | 100.0% |
| | % within Success233 | 2.1% | 1.8% | 2.0% |
| D | Count | 71 | 45 | 116 |
| | % within Grade205 | 61.2% | 38.8% | 100.0% |
| | % within Success233 | 3.1% | 2.0% | 2.6% |
| F | Count | 74 | 24 | 98 |
| | % within Grade205 | 75.5% | 24.5% | 100.0% |
| | % within Success233 | 3.3% | 1.1% | 2.2% |
| IF | Count | 4 | 1 | 5 |

| | | | | |
|-------|---------------------|--------|--------|--------|
| | % within Grade205 | 80.0% | 20.0% | 100.0% |
| | % within Success233 | .2% | .0% | .1% |
| W | Count | 102 | 39 | 141 |
| | % within Grade205 | 72.3% | 27.7% | 100.0% |
| | % within Success233 | 4.5% | 1.8% | 3.1% |
| Total | Count | 2260 | 2218 | 4478 |
| | % within Grade205 | 50.5% | 49.5% | 100.0% |
| | % within Success233 | 100.0% | 100.0% | 100.0% |