## Comparison of Students Taking Distance Education Courses and Regular Courses

## Research Brief \#21

## Summer 2006

- Differences in demographic profiles of Fall 2005 undergraduate students taking distance education and regular courses were investigated. Students displaced because of hurricane Katrina were excluded from the analysis.
- Students taking distance education courses include students that registered for at least one distance education course. They may or may not have registered for any regular courses. Students taking regular courses include students that registered for regular courses only and no distance education courses.
- Table 1 shows that the average age of students taking distance education courses is higher than students taking regular courses only. T-test indicated that there is a statistically significant $(t(13,168)=9.999, p<0.05)$ difference in average age between the two groups of students.

| Table1. Average of Age of Students |  |  |
| :---: | :---: | :---: |
| Type of Course | Size of Group (N) | Average Age |
| Distance Ed | 2,821 | 24.0 |
| Regular Only | 10,347 | 22.6 |

- Table 2 shows that female students took distance education courses at a higher rate than male students. On the other hand, male students took regular courses at a higher rate than female students.

| Table 2. Distribution of Students by Gender |  |  |
| :---: | :---: | :---: |
| Type of Course | Female | Male |
| Distance Ed | $23.3 \%$ | $18.4 \%$ |
| Regular Only | $76.7 \%$ | $81.6 \%$ |

Chi Square test on gender and type of courses taken variables indicated a statistically significant $\left(X^{2}(1, N=13,168)=42.876, p<0.05\right)$ association between them.

- Table 3 indicates that a slightly higher percentage of white students took distance education courses as opposed to black or other ethnicity students. Chi Square test indicated that there is no statistically significant relationship between the type of courses taken and ethnic group variables $\left(\mathrm{X}^{2}(2, \mathrm{~N}=13,168)=2.917, \mathrm{p}>0.05\right)$.

| Table 3. Distribution of Students by Ethnicity |  |  |  |
| :---: | :---: | :---: | :---: |
| Type of Course | White | Black | Other |
| Distance Ed | $21.7 \%$ | $20.6 \%$ | $19.5 \%$ |
| Regular Only | $78.3 \%$ | $79.4 \%$ | $80.5 \%$ |

- Table 4 shows that percentage of full-time students taking distance education courses is higher than the percentage of part-time students taking distance education courses. Chi Square test indicated that there is a statistically significant ( $X^{2}(1, N=13,168)=$ 20.603, $\mathrm{p}<0.05$ ) relationship between the type of courses taken and enrollment status variables.

| Table 4. Distribution of Students by Enrollment Status |  |  |
| :---: | :---: | :---: |
| Type of Course | Full-Time | Part-Time |
| Distance Ed | $22.1 \%$ | $17.8 \%$ |
| Regular Only | $77.9 \%$ | $82.2 \%$ |

- Table 5 shows that the average ACT of the Fall 2005 Beginning Freshmen cohort is lower for those who took distance education courses as opposed to regular courses.

| Table 5. Average ACT Composite Score of Fall 2005 Beginning Freshmen Cohort |  |  |
| :---: | :---: | :---: |
| Type of Course | Size of Group (N) | Average ACT <br> Composite |
| Distance Ed | 151 | 20.58 |
| Regular Only | 1,940 | 20.98 |

T-test showed that there were no significant differences $(t(2,091)=-1.661, p>0.05)$ in the average ACT composite scores of students in the two groups. Although the differences were not statistically significant, a report produced by NCES titled "A profile of participation in distance education: 1999 - 2000 " indicated that students who take more remedial courses and who have more factors that put them at a higher risk of not completing post secondary education, tend to take more distance education courses. Although the report does not look specifically at ACT scores, research at Southeastern shows students with a low ACT are at a higher risk of not graduating. This may explain the low average ACT Composite score for students taking only distance education courses.

- Table 6 indicates that the average high school GPA of the Fall 2005 Beginning Freshmen cohort is slightly higher for those who took regular courses as opposed to distance education courses. T-test showed that the difference in average High School GPA's were not statistically significant $(\mathrm{t}(1,989)=-1.015, \mathrm{p}>0.05)$.

Table 6. Average High School GPA of Fall 2005 Beginning Freshmen Cohort

| Type of Course | Size of Group (N) | Average <br> High School GPA |
| :---: | :---: | :---: |
| Distance Ed | 140 | 3.015 |
| Regular Only | 1,849 | 3.059 |

- Table 7 shows that for the Fall 2005 Beginning Freshmen cohort, students in the 1-50 rank range take distance education courses at higher rates than students in the 51-100 rank range. Chi Square test showed that there is no statistically significant $\left(X^{2}(1, N=1,975)=\right.$ 3.332, $p>0.05$ ) relationship between the type of course taken and high school rank range variables.

| Table 7. High School Rank Range of Fall 2005 Beginning Freshmen Cohort |  |  |
| :---: | :---: | :---: |
| Type of Course | $\mathbf{1 - 5 0}$ | $\mathbf{5 1 - \mathbf { 1 0 0 }}$ |
| Distance Ed | $8.4 \%$ | $6.3 \%$ |
| Regular Only | $91.6 \%$ | $93.8 \%$ |

## Summary

It is evident that there are some clear differences in the demographics of undergraduate students taking distance education courses and only regular courses. We see that a significantly higher percentage of female and older students tend to take distance education courses as opposed to only regular courses. No statistically significant differences were seen when ACT Composite score, High School GPA and High School Class Rank Range were compared for the Fall 2005 Beginning Freshmen Cohort.

Note: Distance Education Courses include courses that have $50 \%$ or more of their class meetings over the internet, compressed video and public broadcast courses.

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[^0]:    U.S. Department of Education, National Center for Education Statistics. A Profile of Participation in Distance Education, NCES 2003-154, by Anna C. Sikora. Project Officer: C. Dennis Carroll, Washington, DC: 2002.

