In the University System of Georgia, a distance education course is defined as one in which more than 50 percent of instruction is delivered through one or more forms of distance technology, and in which the instructor of the course and the students are separated by time and/or geographic location. University System of Georgia institutions have been delivering an increasing number of courses through distance technology since the mid- to late-1990s.

For the last four fiscal years, detailed data on distance education courses have been collected through the Curriculum Inventory Reporting system (CIR). Although still a small proportion of all types of courses, distance education has been growing rapidly in the University System of Georgia. In FY 2003, distance education activity generated 145,135 semester credit hours (SCH) for the USG funding formula. This represents 2.39 percent of the total FY 2003 credit hours produced in the USG, up from 1.16 percent in FY 2000.

The following is an analysis of how distance education activity has developed since FY 2000.

**Distance Education by Technology Used**

An examination of distance education (DE) in the University System of Georgia begins with a look at the technologies used in its delivery. In FY 2003, ten separate categories were used to classify distance instruction in the University System, including videocassette, GSAMS, two-way interactive video, cable television, Internet, other network, print-based materials, CD Rom, multiple technologies, and other technologies. Of those ten technology categories, four accounted for 96.2 of the total credit hours produced by DE courses, as shown in Figure 1 (that is a one-year increase of 2.1 percentage points in the dominance of those four technologies)\(^1\).

The Internet is the increasingly dominant delivery modality in distance education. Three-fourths of all DE credit hours generated by USG institutions in FY 2003 were delivered via the Internet. Georgia Statewide Academic and Medical System (GSAMS), a two-way interactive video system, is a distant second in DE delivery.

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\(^1\) *Distance Education Courses FY 2000 to FY 2002*, University System of Georgia, Office of Strategic Research and Analysis, February 2003.
Figure 1
Proportion of DE Credit Hours Generated by Predominant Technology Used, FY 2003

Figure 2 illustrates how the proportional production of DE credit hours by the four most frequently identified technologies, Internet, GSAMS, Videocassette, and Cable TV, has changed since FY 2000. As shown in Figure 2, the GSAMS share of total SCH output has declined in the last three years from 28 to 11 percent (down by 4 percentage points in the last year), as use of the Internet has expanded from 53 to 75 percent.

In addition to the growth of Internet and the decline in GSAMS, cable TV has doubled in its proportion of use, from 2 percent to 4 percent over the same period, and videocassette delivery has declined in use by about one-fourth, from 8 percent to 6 percent.
Total Credit Hours Generated in DE Courses

Total credit hours generated by distance education courses increased between FY 2000 and FY 2003 from 59,593 SCH to 145,135 SCH, a four-year increase of 143.5 percent. The DE proportion of total USG credit hours generated more than doubled, from 1.16 percent in FY 2000 to 2.39 percent in FY 2003. Figure 3 provides credit hour production by sector for the four-year period.

![Figure 3: Total DE Credit Hours by Institutional Sector](image)

Based on FY 2003 data, 54 percent of all DE credit hours are generated by the regional and state university sectors, and state colleges and two-year colleges produce 32 percent. Those percentages contrast with the much lower proportions of total credit hours produced by those sectors: 41 percent by regional and state universities and 21 percent by state colleges and two-year colleges. Conversely, the University System’s four research universities generate 38 percent of total USG credit hours, but only 14 percent of its distance education semester credit hours.

Number of DE Course Sections

The total number of distance education course sections taught in the University System has increased from 1,749 in FY 2000 to 3,276 in FY 2003, an increase of 87.3 percent over those four years. Total DE course sections represented 2.9 percent of all course sections taught in the University System in FY 2003, compared to 1.8 percent in FY 2000.

The number of DE course sections offered also varies by sector within the USG. Figure 4 shows total DE sections by institutional sector for each of the last four fiscal years. While the state universities offered the largest number of DE course sections, the regional universities offered the highest DE proportion of all courses offered in that sector, 5.4 percent, followed by the two-year colleges with 4.9 percent. From FY 2000 to FY 2003, among the sectors that had significant DE activity in FY 2000, research universities increased the number of DE sections the
most at 105.7 percent. State colleges, which had only 14 DE sections in FY 2000, increased that total to 117, or 735.7 percent by FY 2003.

Total Enrollments in DE Course Sections

Cumulative USG course enrollments in distance education sections also increased between FY 2000 and FY 2003. Total DE course enrollments grew from 20,245 in FY 2000 to 51,512 in FY 2003, or from 1.12 percent to 2.45 percent of total USG course enrollments. (For reference purposes, there were 2,102,531 course enrollments in USG institutions in FY 2003. Most students take more than one course.) The overall rate of increase in distance education course enrollment was 154.4 percent over the four years. Total DE enrollments by institutional sector for the same period are shown in Figure 5.

Figure 4
DE Course Sections Offered by Institutional Sector

Figure 5
Cumulative DE Course Enrollments by Institutional Sector

2 Enrollment in the CIR system is measured as the cumulative total of seats occupied by students registered in course sections for both DE and non-DE delivery, not as individual, unduplicated headcount students.
Course enrollments in distance education have grown more rapidly than the corresponding DE course sections, so the average DE class size is also increasing. Table 1 compares the FY 2003 enrollment in non-DE course sections with the corresponding average enrollment in DE courses in FY 2003. It shows that the USG average section size is smaller in DE than in non-DE courses. Only state colleges reported higher average DE than non-DE section enrollments.

### Table 1
Average Enrollment Per Course Section
Non-DE and DE, FY 2003

<table>
<thead>
<tr>
<th></th>
<th>Non-DE Students/ Section</th>
<th>DE Section Students/ Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Universities</td>
<td>17.2</td>
<td>12.8</td>
</tr>
<tr>
<td>Regional Universities</td>
<td>21.1</td>
<td>13.7</td>
</tr>
<tr>
<td>State Universities</td>
<td>19.1</td>
<td>17.7</td>
</tr>
<tr>
<td>State Colleges</td>
<td>21.6</td>
<td>23.8</td>
</tr>
<tr>
<td>Two-Year Colleges</td>
<td>20.9</td>
<td>15.7</td>
</tr>
<tr>
<td>USG Averages</td>
<td>18.9</td>
<td>15.7</td>
</tr>
</tbody>
</table>

### Changes in DE Productivity, FY 2000 to FY 2003

The growth of distance education in the University System of Georgia can best be understood in terms of its share of total University System academic productivity. The following table shows the DE proportions of total USG output, i.e., DE and non-DE instruction combined, for the three measures discussed above: course sections offered, course enrollments, and credit hours generated.

### Table 2
DE Percentage of Total USG Instructional Output

<table>
<thead>
<tr>
<th></th>
<th>Total Credit Hours</th>
<th>Total Enrollment</th>
<th>Courses Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2000</td>
<td>1.16%</td>
<td>1.12%</td>
<td>1.76%</td>
</tr>
<tr>
<td>FY 2001</td>
<td>1.80%</td>
<td>1.76%</td>
<td>2.38%</td>
</tr>
<tr>
<td>FY 2002</td>
<td>2.03%</td>
<td>2.05%</td>
<td>2.60%</td>
</tr>
<tr>
<td>FY 2003</td>
<td>2.39%</td>
<td>2.45%</td>
<td>2.93%</td>
</tr>
</tbody>
</table>
Distance Education by Level of Instruction

Credit hours generate budget dollars differentially by level of instruction, i.e., lower division, upper division, and graduate/professional levels, in the USG funding formula. Therefore, the manner in which distance education credit hours are distributed by instruction level compared with the corresponding distribution of total credit hours produced in the University System is relevant to USG funding. Those distributions for total credit hours and distance education credit hours are shown below.

A significantly larger proportion of FY 2003 distance education credit hours (26 percent) was produced at the graduate/professional level than was the case for total USG credit hours (14 percent). As a result, distance education generated relatively more revenue (i.e., at a higher rate per credit hour) for the University System in FY 2003 than did traditional, non-DE courses taught that year. That is, although distance education credit hours are still a very small percentage of all FY 2003 USG credit hours, a greater proportion of that percentage is produced at the graduate/professional level (Figure 6).

Conclusion

The data from the USG Curriculum Inventory Report show that distance education as an alternative form of instructional delivery is growing rapidly. In just four years, the production of credit hours through the delivery of courses at a distance has more than doubled, although distance education still represents a very small proportion of total USG credit hour production.

The continued growth of distance education, especially if graduate/professional level credit hour production continues to predominate, has implications for USG funding. In addition, how DE
continues to develop, especially which program areas and levels of students it serves, has implications for the USG and for institutional academic planning, student access, budget allocation and other University System policy issues.

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Copies of detailed distance education reports are available on the USG Office of Strategic Research and Analysis web site at http://www.usg.edu/admin/sra/datasys/cir/reports/.