



Georgia Department of Audits and Accounts Performance Audit Division

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Why we did this review

This special examination of online education within the University System of Georgia (USG) was requested by the Senate Appropriations Committee. The Committee asked that we review the extent of the utilization of online education and other innovative delivery models across USG to reduce costs while maintaining quality for students.

We reviewed the purpose and utilization of online education across all 29 USG institutions. We compared and calculated the impact on a student's cost of taking online courses versus taking classroom courses. We also reviewed how the quality of online courses are maintained.

About online education

Online education is intended to increase access to educational opportunities for students. USG students utilize online courses to varying degrees. In the spring of 2016, 75.3% of bachelor's degree-seeking students took all of their classes in a classroom, 20.3% took a mix of classroom and online courses, and 4.4% took only online courses.

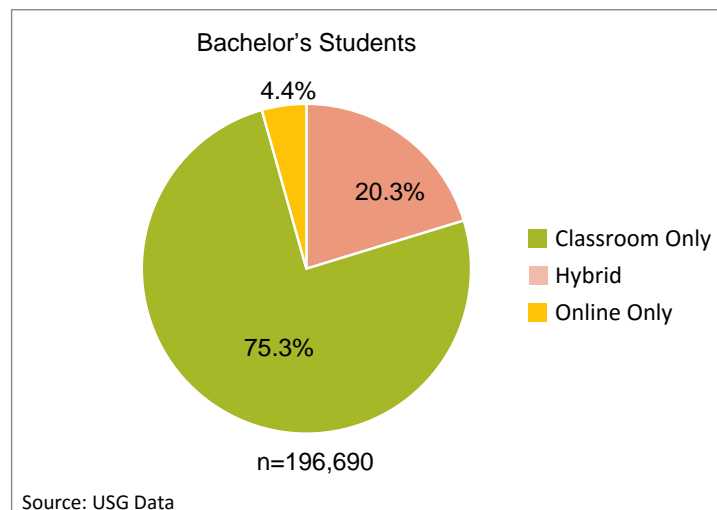
Board of Regents

Requested Information on the Use of Online Education

What we found

The primary purpose of the University System of Georgia's (USG) online education is to increase access to educational opportunities for students, not necessarily to reduce costs. During fiscal year 2016, 15% of undergraduate courses were offered online. Institutions set their own online tuition rates under broad policy guidance from the Board of Regents (BOR). The cost of online courses at 18 of 29 USG institutions was higher than their in-state tuition for classroom courses.

Students have three options when they enroll. They can take only online courses, only classroom courses, or a combination of classroom and online courses (hybrid). During spring 2016, 25% (48,489 of 196,690) of undergraduate, bachelor's degree-seeking students enrolled in at least one online course.



The rate of online enrollment varied when various demographics were considered. For example, part-time and adult students tended to enroll in online courses at higher rates than full-time or traditional students.

BOR sets classroom tuition rates, but each institution has been permitted to set the online tuition (eTuition) rates for the courses it creates. The two distinct tuition rate-setting processes resulted in discrepancies between online and classroom tuition rates and wide variation in tuition for online courses. Among USG institutions, eTuition was 0% to 58% higher than in-state tuition for classroom courses across USG during fiscal year 2016. Higher tuition rates for online courses at 18 USG institutions increased the total cost of attendance for in-state students taking both online and classroom courses. These students paid \$20.7 million more in tuition than if they had taken all of their courses in a classroom. Conversely, out-of-state students could lower their tuition by taking online courses. In-state and out-of-state students paid the same amount for online courses.

In addition to online courses created by individual institutions, students can enroll in online core classes offered through a USG online initiative called eCore. The cost of eCore courses is set at \$169 per credit hour. The eCore rate may be higher or lower than the eTuition charged by the institutions for their online courses. As a result, taking an eCore course may result in either higher or lower costs to the student.

In fiscal year 2016, hybrid students paid the same fees as students taking only classroom courses. Generally, the fees paid by students taking only online courses were less than the fees paid by hybrid or classroom only students. If an institution charged higher tuition for online courses, the higher tuition rate would partially offset the cost savings of the limited fees charged to online only students.

The quality of online courses at USG institutions is currently monitored and maintained in the same manner as classroom courses. All online and classroom courses are subject to curriculum approval and are taught by the same faculty. Additional quality control mechanisms for online courses include: supplemental training for faculty, a centralized platform to host all online courses, specific criteria of accreditation by the Southern Association of Colleges and Schools (SACS), and industry standards and best practices.

What we recommend

The report is intended to answer questions by the Senate Appropriations Committee. We hope that this report provides pertinent information to help inform policy decisions.

***BOR's Response:** BOR reports that its commitment to growing online education is reflected in the percentage of students taking a course load either fully or partially online and the use of its eCampus initiative. Online education “creates more options for students to earn degrees in a way that is affordable, provides the same rigor and academic standards as face-to-face courses, and is efficient for our institutions.” BOR indicated that it needs to improve oversight of how online tuition is determined to ensure online learning is an affordable and quality option. To that end, the Board of Regents approved a policy change at its January 11, 2017 meeting. The changed policy now requires institutions to obtain Board approval for their online tuition rates like other tuition rates. BOR will review any proposed tuition rates to ensure that it maintains affordability for students while maintaining its ability to both develop and offer online courses.*

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Purpose of the Special Examination

This review was conducted at the request of the Senate Appropriations Committee. The Committee asked that we review the extent to which the University System is utilizing online courses or other innovative delivery models to reduce costs while maintaining quality for students. Additionally, they asked if other states are reducing costs through online courses. Based on this request we addressed the following questions:

1. What is the purpose of online education?
2. To what extent are students utilizing online courses offered by USG?
3. How are online tuition rates determined and what impact does taking online courses have on costs for students?
4. Is the utilization and cost of online courses by students seeking an associate's degree similar to bachelor's degree-seeking students?
5. How is the quality of online courses and degrees maintained?
6. To what extent are other innovative delivery models being utilized by USG?

Online courses and degrees may be offered at the undergraduate or graduate level. However, the competitive environment for online graduate degrees differs significantly from undergraduate online courses and degrees. We focused on undergraduate online courses taken by undergraduate bachelor's degree-seeking students. A limited analysis of undergraduate online courses taken by associate's degree-seeking students was also included.

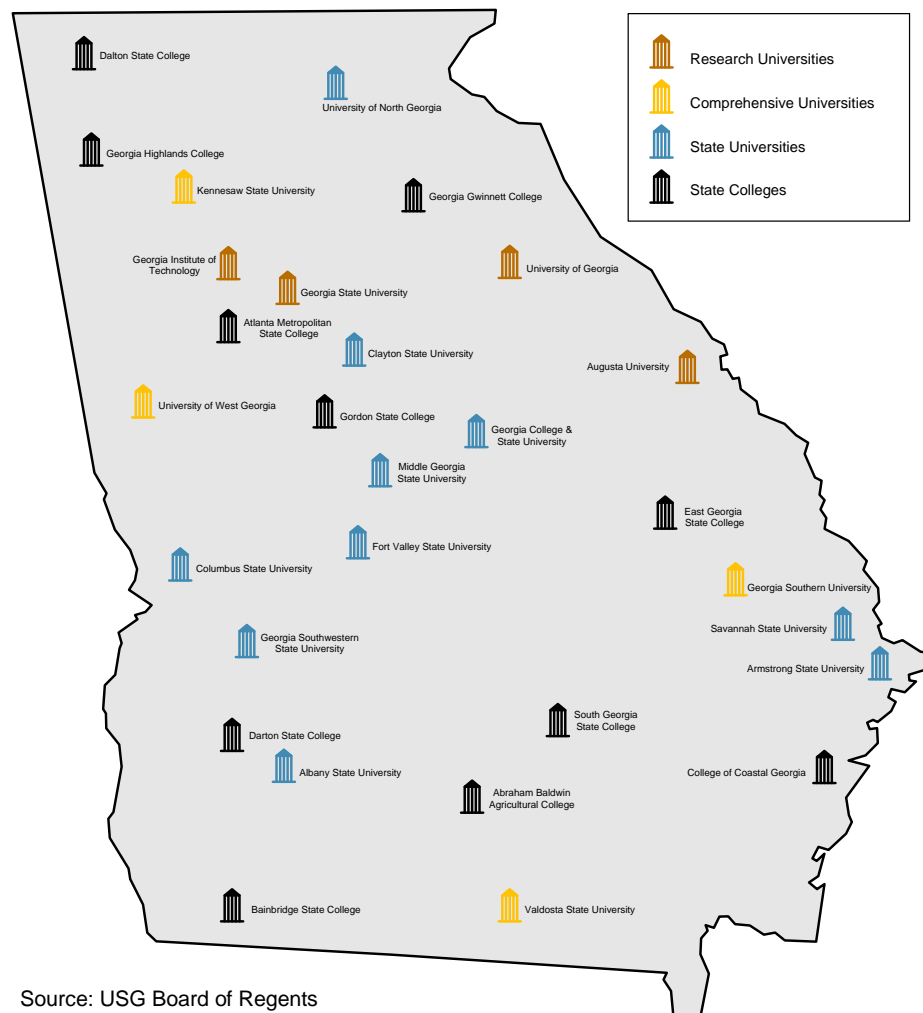
A description of the objectives, scope, and methodology used in this review is included in [Appendix A](#). A draft of the report was provided to the University System of Georgia for its review, and pertinent responses were incorporated into the report.

Background

University System of Georgia

Under the Constitution and laws of the state of Georgia, the Board of Regents (BOR) of the University System of Georgia (USG) was created to govern, control, and manage a system of public institutions providing quality higher education for the benefit of Georgia citizens. BOR oversees 29 colleges and universities, including four Research Universities, four Comprehensive Universities, 10 State Universities, and 11 State Colleges. **Exhibit 1** on the following page shows the name and location of each institution. The collective mission of USG is to drive economic development and produce more educated individuals contributing to a better quality of life in the state.

Exhibit 1 Locations of Institutions within University System of Georgia



Source: USG Board of Regents

Curriculum

To earn an undergraduate degree, a student must complete curriculum requirements established by both USG and the institution the student attends. As shown in **Exhibit 2**, USG's core curriculum is divided by subject area and is referred to by letter (Areas A through F).

In addition, each USG institution has lower division and upper division major requirements that bachelor's degree-seeking students must complete. Lower division courses are required by a degree program and may be prerequisites to major courses at higher levels. Lower division courses are typically completed during a student's freshman and sophomore years. Upper division courses are required by a degree program and are focused on a specific major. Upper division courses are typically completed during a student's junior and senior years. Undergraduate courses may be taken for credit towards either a bachelor's or an associate's degree.

Exhibit 2
USG Undergraduate Core Curriculum Areas A through F

Area	Area Name	Course Description	Hours Required
A1	Communications Outcomes	Learning outcomes in writing in English	At least 6 hours
A2	Quantitative Outcomes	Learning outcomes in quantitative reasoning	At least 3 hours
B	Institutional Options	General education learning outcomes of the institution's choosing	At least 3 hours
C	Humanities, Fine Arts, and Ethics	Learning outcomes in humanities, fine arts, and ethics	At least 6 hours
D	Natural Science, Mathematics, and Technology	Learning outcomes in the natural sciences, mathematics, and technology	At least 7 hours. At least 4 of these hours must be in a lab science course
E	Social Sciences	Learning outcomes in social sciences	At least 6 hours
F	Lower Division Major Requirements	Lower division courses required by the degree program and courses that are prerequisites to major courses at higher levels.	18 hours
Source: USG			

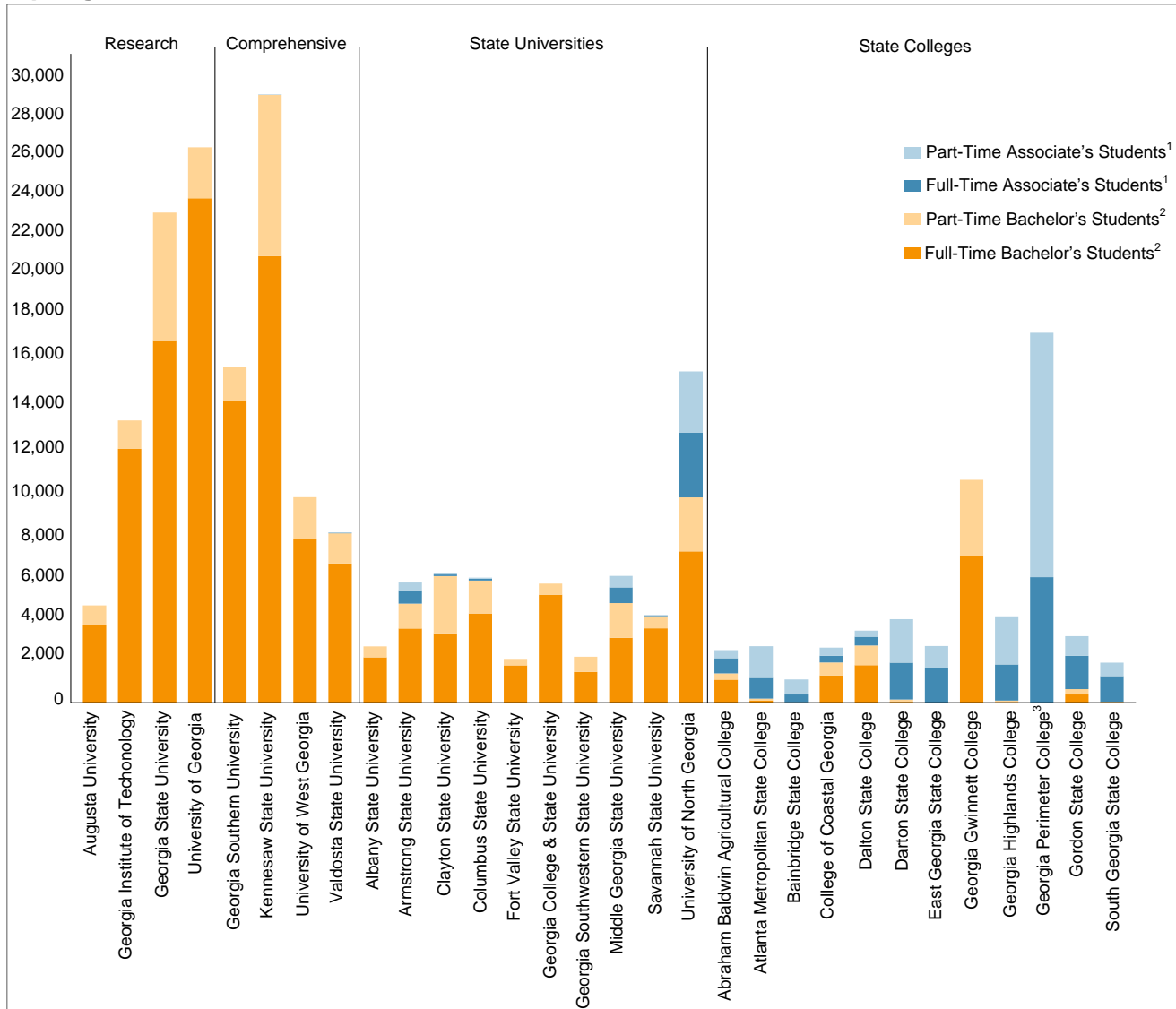
Enrollment

In the spring term of 2016, there were 244,214 undergraduate bachelor's and associate's degree-seeking students enrolled in at least one course at a USG institution. Students are classified as either full time or part time dependent on their total credit hours. Undergraduate students taking 12 or more credit hours are considered full time and students taking less than 12 credit hours are considered part time. As shown in Exhibit 3, the total enrollment varied by institution.

Exhibit 3

Undergraduate Student Enrollment by Institution

Spring 2016



¹Of the 47,524 associate's degree seeking students, 248 were excluded from this analysis due to unavailable total credit hours attempted data.

²Of the 196,690 bachelor's degree seeking students, 213 were excluded from this analysis due to unavailable total credit hours attempted data.

³Georgia Perimeter College did not offer bachelor's degrees. In Fall 2016, Georgia Perimeter College was consolidated with Georgia State University.

Source: USG Enrollment Data

Online Education

Undergraduate students enrolled at USG institutions may take courses in either a classroom or online setting. For tuition and other purposes, USG defines online courses as courses delivering 95% or more of the educational content through the internet. Courses may be live or recorded, provide materials online, and are formatted as either synchronous or asynchronous.

- **Synchronous:** Students attend class virtually through the internet at the specific time where live content (i.e., a professor's lecture) is presented. The students interact with the instructor and other students in the class through tools such as online chat and videoconferencing.
- **Asynchronous:** Students attend class virtually through the internet at a time of their choosing and view previously recorded video or audio. The students interact with the instructor through tools such as email and message boards.

USG students may take individual online courses and, in limited instances, earn a complete undergraduate degree online.

- **Online courses:** Students may take a course for credit in which 95% of the content and testing are administered online. These online courses may be taken for credit towards a degree in combination with other courses offered in a traditional classroom setting. Students may take both online and classroom courses in the same academic term (hybrid). USG institutions offer undergraduate online courses to fulfill the core curriculum and courses required by a specific major (e.g., Bachelor's in Accounting).
- **Online degrees:** 14 USG institutions offer bachelor's degrees that are obtained by taking all courses for credit online. USG also offers online degrees through programs that are available to students at multiple institutions.

A USG institution's classroom courses may also have online components. For example, students may receive and submit assignments online or may receive some course content online (i.e., video).

Individual Institutions' Online Programs

Each USG institution can create and offer online courses and degrees. They are available for credit for students that have been admitted and are enrolled at that institution. Individual USG institutions may develop online courses that meet USG core curriculum and institution-specific curriculum requirements, including lower and upper division requirements for each major.

eCampus

eCampus is a USG initiative in which students enroll in online classes (through eCore) and online degrees (through eMajor). eCampus is offered for credit to students at 24 of the 29 USG institutions.¹ The number of eCampus affiliated schools increased in 2015 from 14 to 24 through a resolution passed by BOR. Currently, the University

¹The four Research Universities (University of Georgia, Georgia State, Georgia Tech, and Augusta University) and Georgia College and State University do not participate in eCampus.

of West Georgia manages eCampus and the creation of all new eCampus courses. eCampus courses are taught by professors at various USG institutions.

eCore courses are online courses that meet USG core curriculum Areas A and C-E (See **Exhibit 2**), and in fiscal year 2016 there were 26 eCore courses available. eMajor offers four undergraduate degrees: Organizational Leadership, Criminal Justice, Financial Technology, and Business Administration. The program is included in the accreditation of the University of West Georgia through the Southern Association of Colleges and Schools (SACS). See [Appendix B](#) and [Appendix C](#) for all eCore and eMajor courses and degrees.

Other USG Online Efforts

USG manages and supports three additional efforts that provide online educational opportunities to students.

- **WebBSIT:** a fully online undergraduate degree in Information Technology offered at Georgia Southern, Clayton State, Columbus State, and Georgia Southwestern State.
- **Georgia On My Line:** a website that serves as a single point of entry for searching online courses and degrees at participating institutions.
- **Massive Open Online Courses (MOOCs):** MOOCs allow a large number of students to enroll but do not always offer credit towards a degree. Currently, Georgia Tech and Kennesaw State offer MOOCs for credit.

Public Higher Education Funding

Annual state appropriations for higher education funding are determined through a funding formula. The formula approximates the total cost of educating students based on credit hour production (number of students being educated). Generally, the portion of the cost not funded by state appropriations is funded by tuition and fees. While the General Assembly appropriates state funds to USG, BOR determines the amount of state funds to be allocated to each institution.

Tuition

Tuition is defined as payment for credit-based instruction and related services charged to students. Tuition rates vary dependent upon the student's institution type, residency, and course load. There are two classroom tuition models applied across USG. As shown in **Exhibit 4**, the flat rate model charges one rate for undergraduate students taking six hours or less and one rate for undergraduate students taking more than six hours, regardless of the total hours attempted.

Exhibit 4
Four USG Institutions Use a Flat Rate Undergraduate Tuition Model
Fiscal Year 2016

Type of Institution	Undergraduate In State		Undergraduate Out of State	
	Part Time	Full Time	Part Time	Full Time
Research University¹	\$1,318-\$2,916	\$3,296-\$4,906	\$4,260-\$8,903	\$10,650-\$15,002
State University²	\$2,125	\$3,590	\$7,574	\$12,764
¹ Augusta University, Georgia Tech, and the University of Georgia charge a flat tuition rate. ² Georgia College & State University is the only state university that charges a flat tuition rate. Source: USG Data				

As shown in Exhibit 5, the majority of USG institutions (25) use a credit hour rate to determine tuition based on the total number of credit hours attempted. The per credit hour rate applies up to 15 hours.

Exhibit 5
25 USG Institutions Use a Credit Hour Rate Undergraduate Tuition Model
Fiscal Year 2016

Type of Institution	Undergraduate In State	Undergraduate Out of State
Research University¹	\$285	\$892
Comprehensive University	\$174-\$177	\$615-\$626
State University²	\$109-\$178	\$402-\$630
State College	\$91-\$128	\$344-\$478
¹ Georgia State University is the only research university that charges a per credit hour rate. ² Georgia College & State University was not included because it charges a flat tuition rate. Source: USG Data		

Tuition for online courses (eTuition) may be different than an institution's classroom tuition. eTuition was the same for both in-state and out-of-state students and varied within institution types. As shown in Exhibit 6, the eTuition rates ranged from \$91 to \$327² per credit hour for fiscal year 2016. A typical course is three credit hours.

²This is the calculated per credit hour rate at Georgia Tech. It was calculated using the flat tuition rate and assuming a 15 hour course load.

Exhibit 6
eTuition Rates for Undergraduate Students Varied by Institution Type
Fiscal Year 2016

Type of Institution	Undergraduate eTuition per Credit Hour
Research University	\$220-\$327
Comprehensive University	\$204-\$277
State University	\$169-\$275
State College	\$91-\$136
Source: USG Data	

Mandatory Student Fees

According to BOR policy, a mandatory fee is any fee or special charge that is required to be paid by all undergraduate students at an institution or by all undergraduate students in a specific degree program. There are many types of mandatory student fees including, but not limited to, fees for intercollegiate athletics, student activities, student health services, parking, transportation, and facilities development. As shown in Exhibit 7, the total mandatory student fees charged by each institution ranged from \$427 to \$1,196 per semester.

Exhibit 7
Total Mandatory¹ Student Fees for Full-Time² Undergraduate Students
Varied by Institution Type
Fiscal Year 2016

Type of Institution	Mandatory Fees per Semester
Research University ³	\$845-\$1,196
Comprehensive University	\$981-\$1,058
State University	\$427-\$995
State College	\$465-\$852
¹ This excluded meal plans and housing, including the Commuter Meal Plan Fee at Kennesaw State and Georgia Gwinnett College. ² Part-time students were also required to pay mandatory fees, but the amount was generally prorated. ³ Georgia Perimeter College was not included because they did not merge with Georgia State until fall 2016. Source: USG Data	

Students taking only online courses or enrolled in online degree programs received fee waivers for most fees required of classroom students. As a result, students taking only online courses were generally subject to only the Special Institutional Fee and the Technology Fee.³ As shown in Exhibit 8, those two fees combined ranged from \$235 to \$651 in fiscal year 2016.

³Some institutions charged additional fees, such as Columbus State University who also charged online only students the Student Activity Fee as well as the Technology and Special Institutional Fee.

Exhibit 8
Special Institutional and Technology Fees by Institution Type
Fiscal Year 2016

Type of Institution	Special Institutional and Technology Fee Rates Per Semester
Research University	\$405-\$651
Comprehensive University	\$345-\$390
State University	\$252-\$344
State College	\$235-\$285
Source: USG Data	

eCampus

eCampus is financially self-sustaining and funded through tuition. The cost of all eCore courses is \$169 per credit hour. Therefore, a typical three hour course costs \$507. eMajor course tuition is \$199 per credit hour regardless of the degree program. The total tuition cost of an online degree by taking eCore and eMajor courses is \$22,080.

The courses are funded through a tuition sharing model between the University of West Georgia, the institution that employs the faculty member, and the student's home institution. The home institution of the faculty member teaching an eCampus course receives \$5,500 for a three credit hour class. The student's home institution receives \$42 of the tuition, the remainder is retained by the eCampus program.

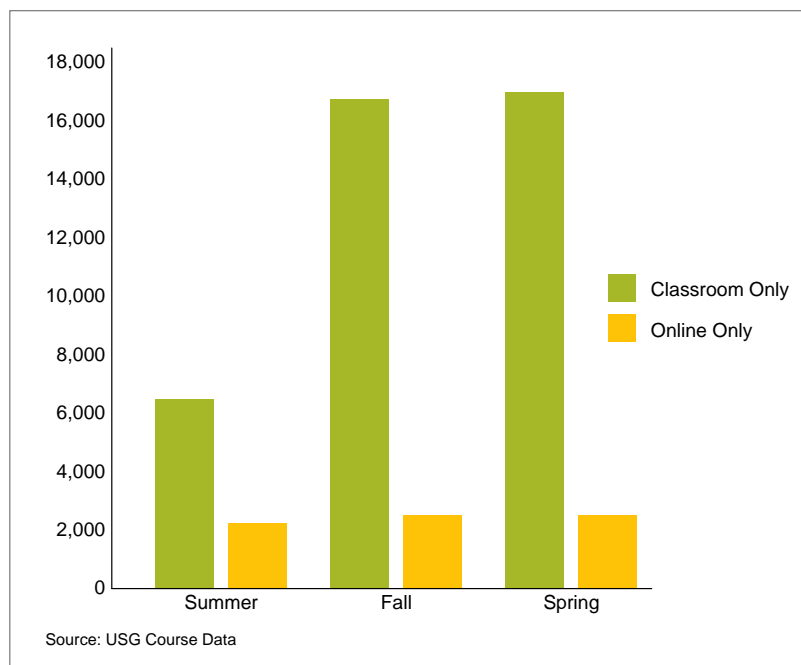
Requested Information

What is the purpose of online education?

The primary purpose of online education is to increase access to educational opportunities for students. A survey of seven USG institutions⁴ found that online courses allow institutions to reach students beyond typical geographic boundaries and to provide educational opportunities to students with different learning styles. Only two institutions cited reducing students' cost of attendance as another purpose of offering online courses.

Institutions indicated that their online courses allow them to improve access by diversifying academic offerings and creating additional course sections, regardless of classroom space and schedules. During the spring of 2016, all institutions except Georgia Gwinnett College offered at least one online course. Across these 28 institutions, 2,456 online courses were conducted. As shown in Exhibit 9, 15% of all courses were offered online.

Exhibit 9
15% of Institutional Undergraduate Courses were Online Courses
Fiscal Year 2016



Institutions indicated that eCampus courses help them to supplement their course catalogue and to allow additional students to enroll in courses should the institutions' versions reach capacity. eCampus is offered for credit to students at 24 of the 29 USG institutions. In fiscal year 2016, there were 26 eCore courses available (See [Appendix](#)

⁴We selected and surveyed a sample of institutions regarding the purpose and use of online education. Institutions surveyed include: Armstrong State University, Atlanta Metropolitan State College, Columbus State University, Darton State College, Georgia Southern University, Georgia State University, and Kennesaw State University.

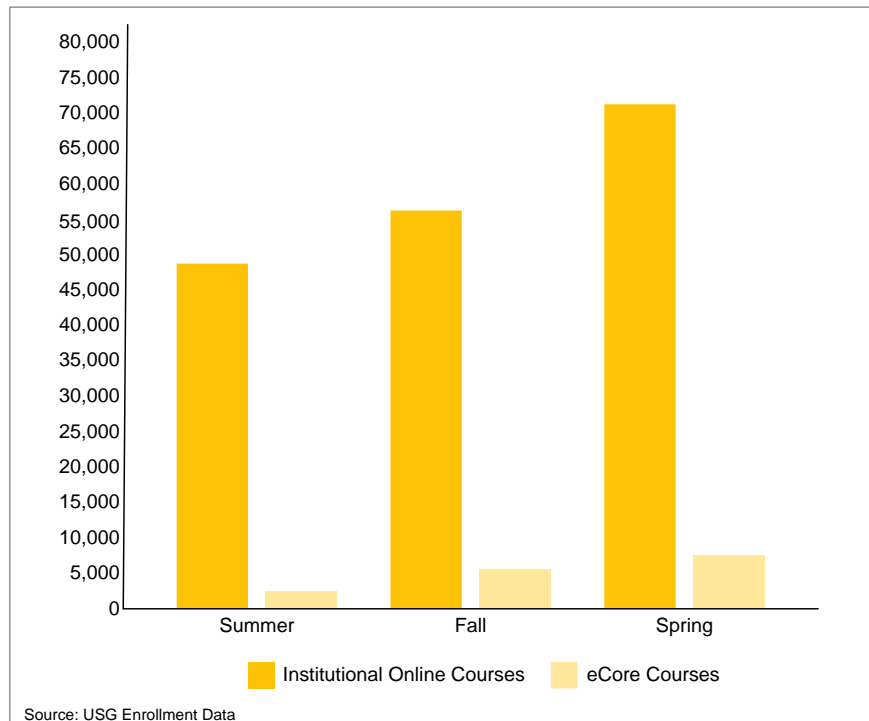
eCampus: a USG initiative offering online courses and degrees to students at 24 institutions

eCore: online core courses through the eCampus program

B). Institutions may also choose to create their own online versions of core courses.⁵ In the case of duplication, the eCore version serves as an additional course section for students.

Together, eCore and institutions create additional opportunities for students to enroll in classes by offering online courses. As shown in Exhibit 10, the majority of online enrollment was in institution-developed courses.

Exhibit 10
91% of Bachelor's Students' Online Enrollment was in Online Courses offered by Institutions
Fiscal Year 2016



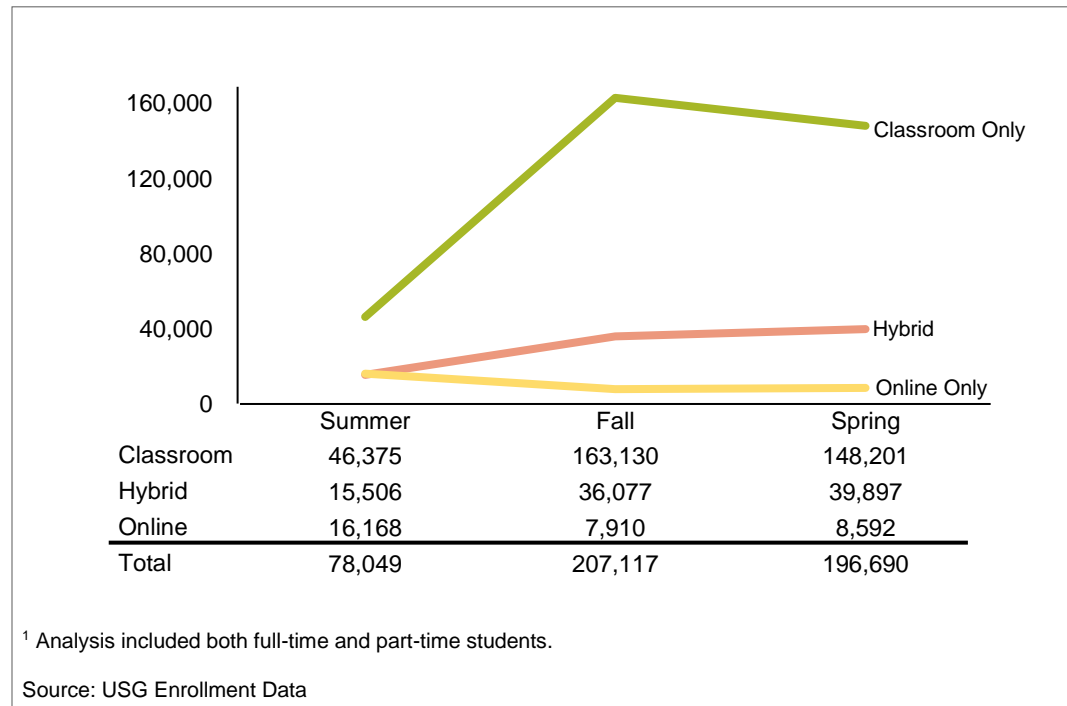
⁵All 26 eCore courses were duplicated by at least one institution during fiscal year 2016. The most commonly duplicated eCore courses were entry level, prerequisites: Political Science 1101, English 1102, Psychology 1101, Sociology 1101, and Math 1111.

To what extent are students utilizing online courses offered by USG?

Hybrid Student: a student taking both online and classroom courses in the same academic term

Twenty-five percent (48,489 of 196,690) of undergraduate bachelor's degree-seeking students enrolled in at least one online course during spring 2016. Of those bachelor's students taking online classes, 18% (8,592 of 48,489) enrolled in only online courses and 82% (39,897 of 48,489) enrolled in both online and classroom courses (hybrid). Exhibit II shows the breakdown of the three enrollment options students selected in fiscal year 2016.

Exhibit 11 Bachelor's Students Enroll as Hybrid Students More Frequently than as Online Only Students Fiscal Year 2016¹



The rate of online enrollment varied when various demographics were considered. For example, part-time and adult bachelor's students (ages 24 and older) tended to enroll in online courses at higher rates than full-time or traditional bachelor's students (ages 18 to 23). The utilization of online courses by these groups is discussed in more detail below.

Full-Time Bachelor's Students

Approximately 23% (36,021 of 154,724) of full-time bachelor's students took an online course in spring 2016. As shown in Exhibit 12, 77% of full-time bachelor's students were enrolled in only classroom courses. Approximately 2% of full-time bachelor's students were enrolled in only online courses. As shown in Exhibit 13, the rate of utilization of online courses was higher among full-time adult bachelor's students, with 38% taking at least one online class.

Exhibit 12
Full-Time Bachelor's Students' Utilization of Online Courses
Spring 2016

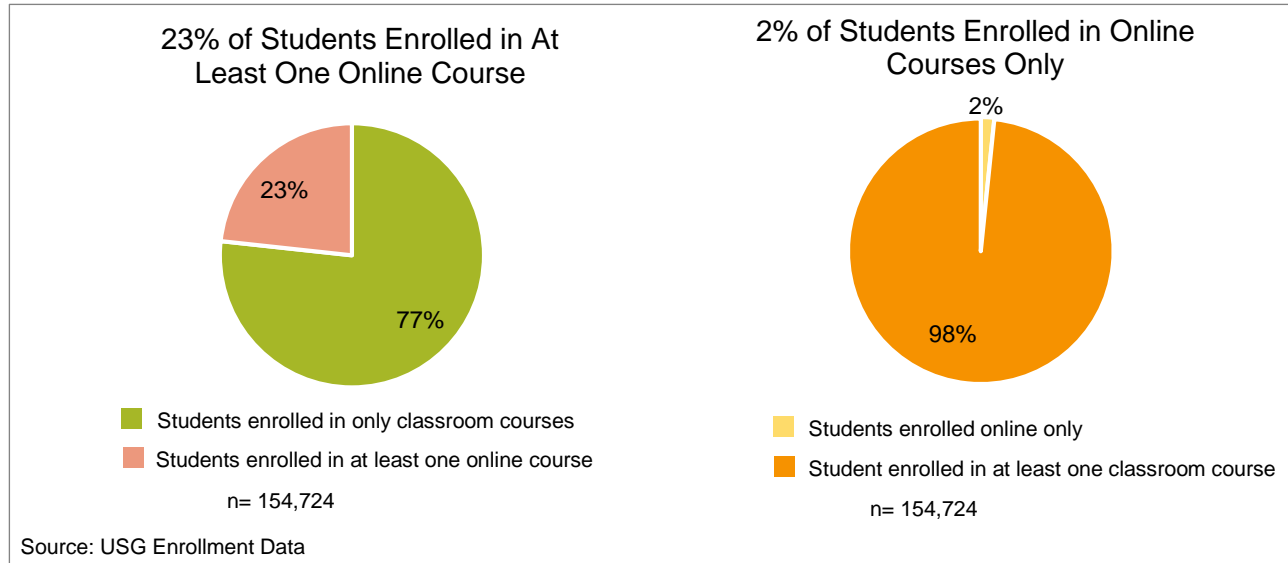
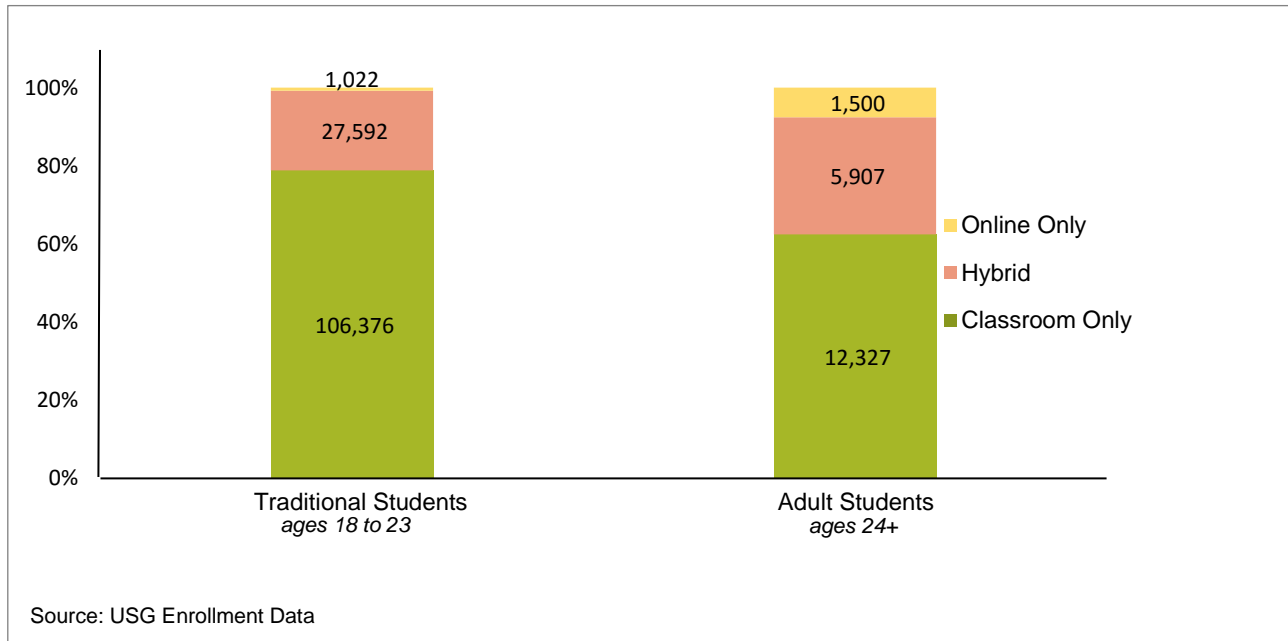
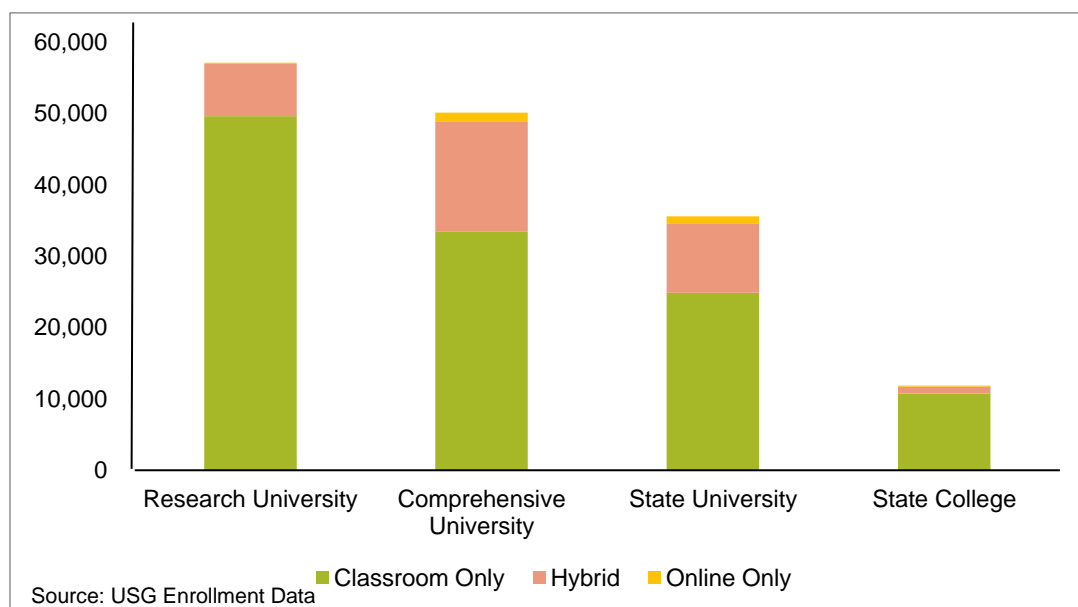


Exhibit 13
Full-Time Adult Bachelor's Students Enrolled in Online Courses More Frequently than
Full-Time Traditional Bachelor's Students
Spring 2016



As shown in Exhibit 14, full-time bachelor's student enrollment in online courses varied by institution type. The highest utilization of online education was at Comprehensive Universities where 33% (16,643 of 50,121) of full-time bachelor's students enrolled in at least one online course. The lowest utilization rate was at State Colleges where 10% (1,140 of 11,882) of full-time bachelor's students enrolled in an online course.

Exhibit 14
Enrollment in Online Courses Varied by Institution Type for Full-Time Bachelor's Students with the Highest Enrollment at Comprehensive Universities
Spring 2016



Part-Time Bachelor's Students

Approximately 30% (12,463 of 41,753) of part-time bachelor's students took at least one online course in spring 2016. As shown in Exhibit 15, approximately 70% of part-time bachelor's students took only classroom courses. During the same time period, 15% (6,065 of 41,753) of part-time bachelor's students took only online courses. As shown in Exhibit 16, part-time adult bachelor's students enrolled in online courses at a higher rate compared to part-time traditional bachelor's students. In spring 2016, 41% of part-time adult bachelor's students and 21% of part-time traditional bachelor's students enrolled in at least one online course.

Exhibit 15
Part-Time Bachelor's Students' Utilization of Online Courses
Spring 2016

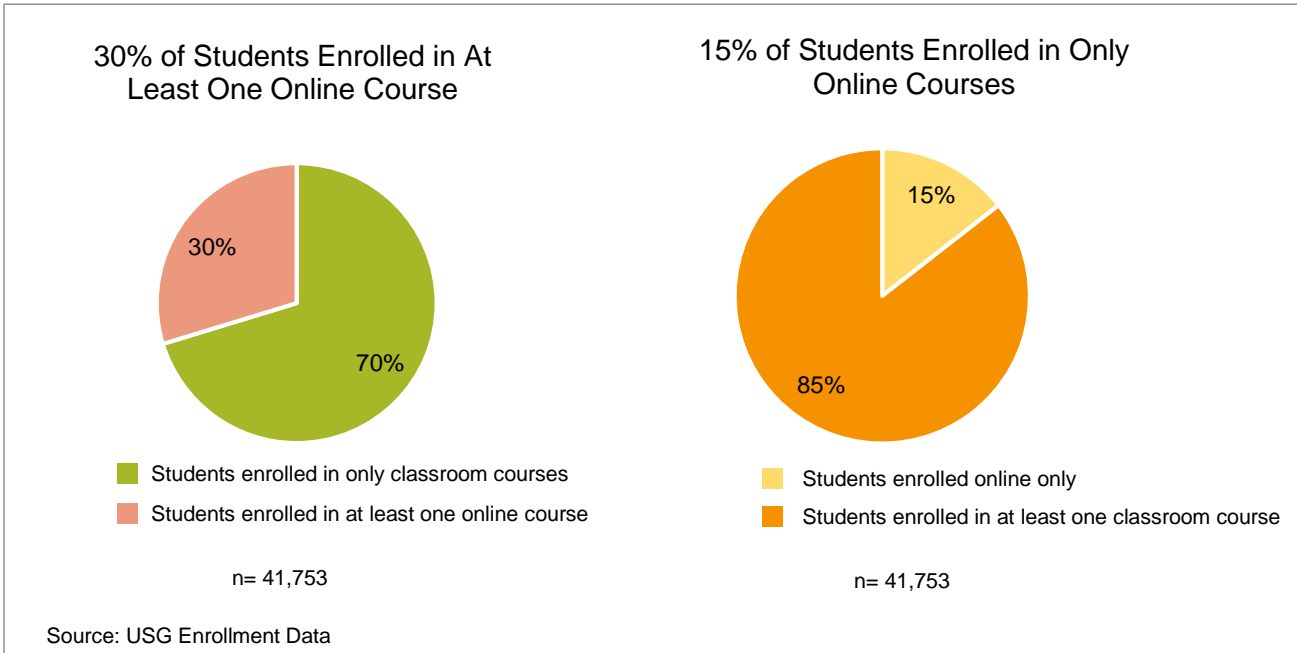
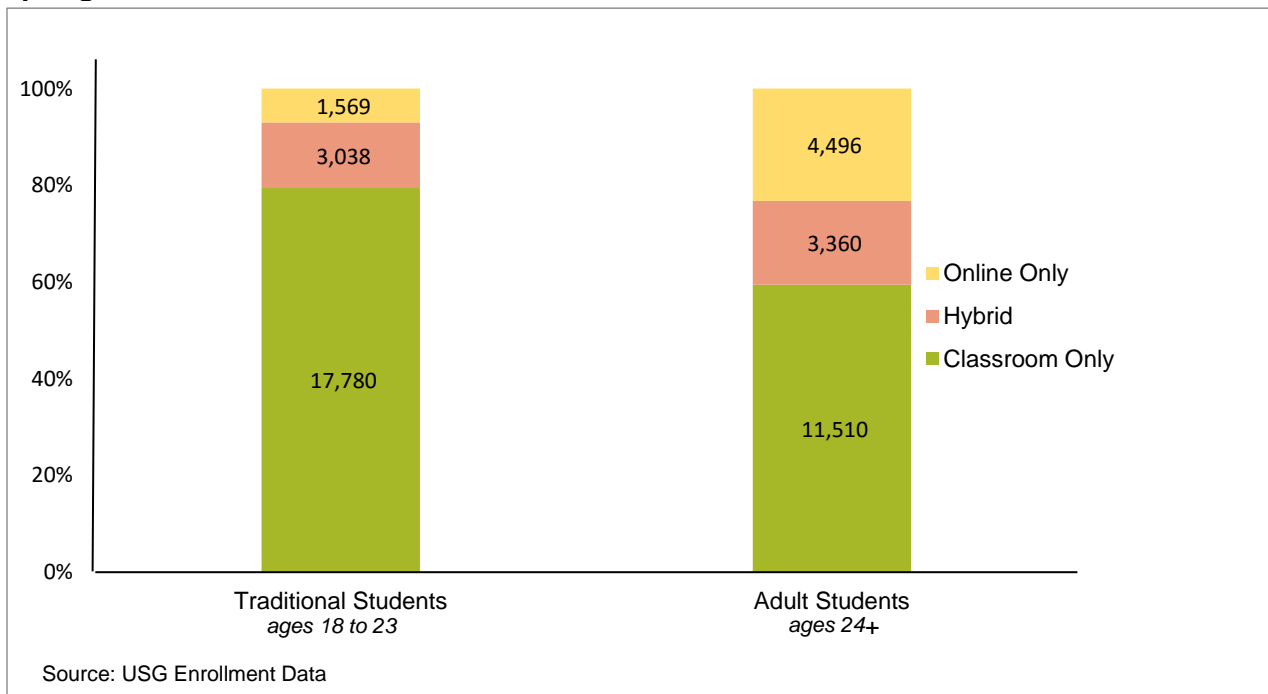
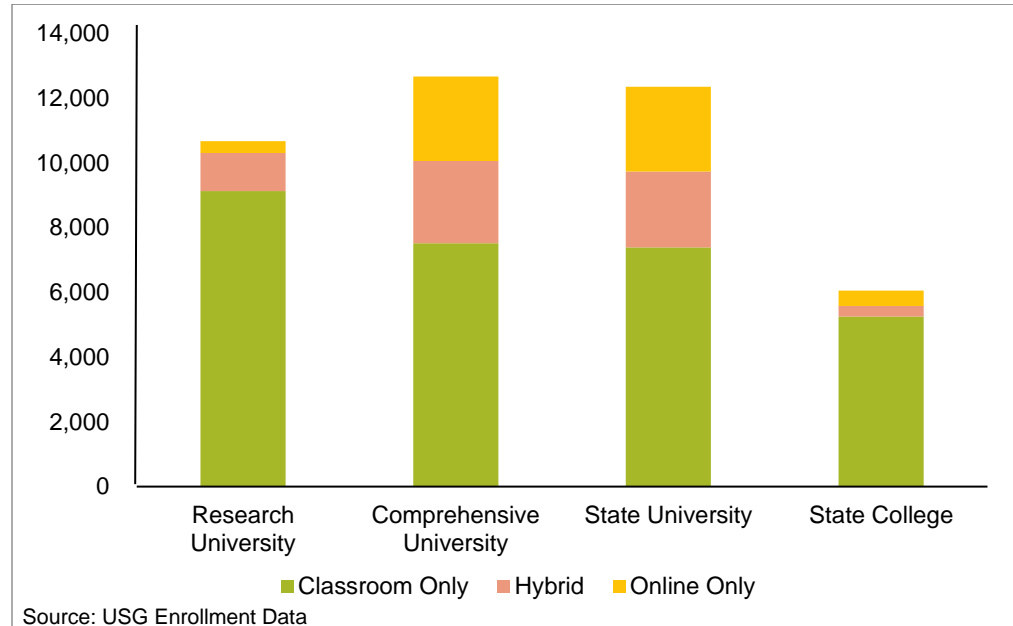


Exhibit 16
Part-Time Adult Bachelor's Students Enrolled in Online Courses More Frequently than
Part-Time Traditional Bachelor's Students
Spring 2016



As shown in **Exhibit 17**, enrollment by part-time bachelor's students in online courses varied by USG institution type. The highest utilization of online education was at Comprehensive Universities where 41% (5,152 of 12,667) of part-time bachelor's students enrolled in at least one online course. The lowest rate was at State Colleges where 13% (799 of 6,054) of part-time bachelor's students enrolled in at least one online course.

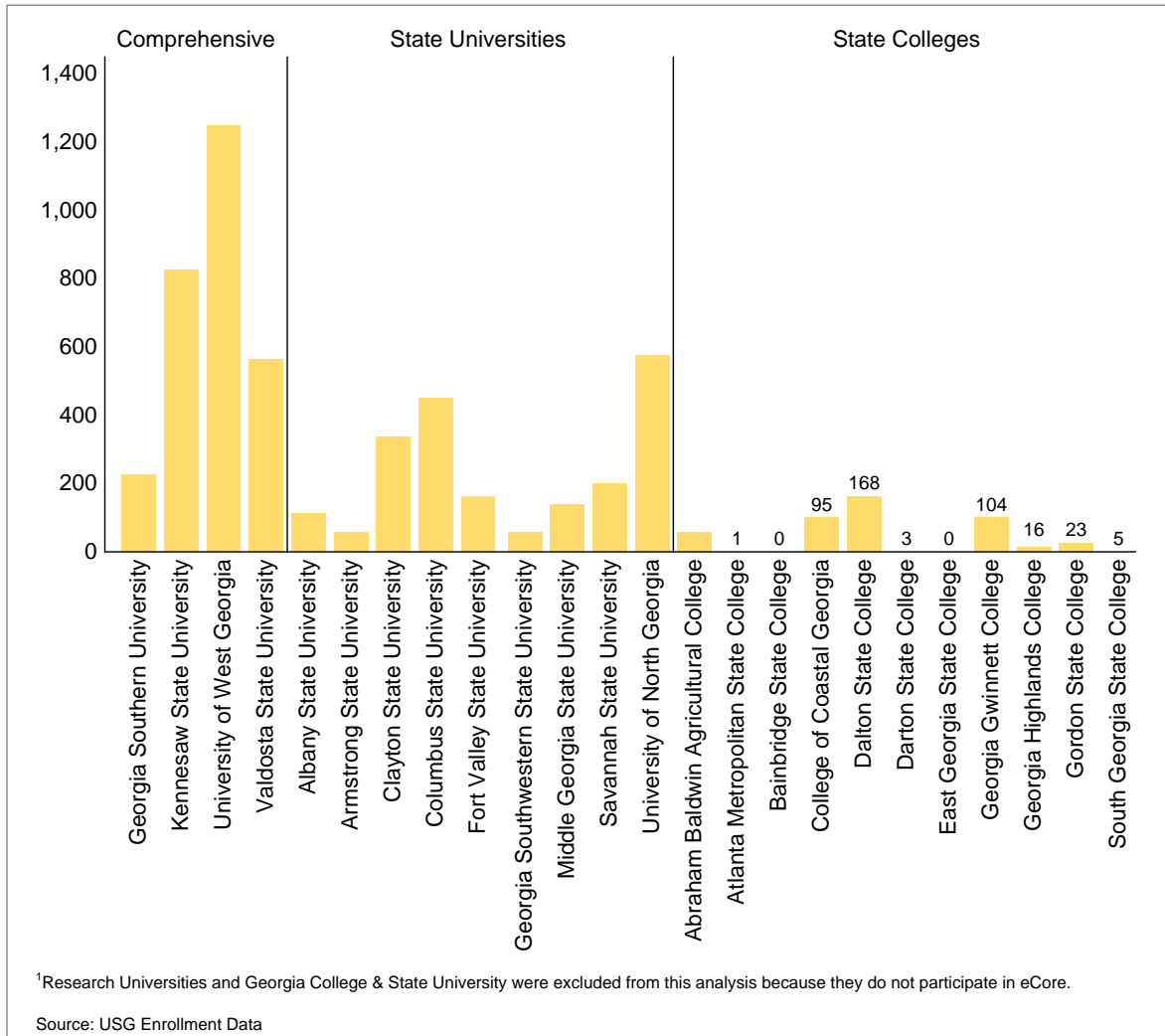
Exhibit 17
Part-Time Bachelor's Students' Enrollment in Online Courses Varied by Institution Type
Spring 2016



eCore

As shown in **Exhibit 18**, bachelor's students' enrollment in eCore varied across institutions from no students at several schools to 1,248 at the University of West Georgia in spring 2016. Other institutions with high eCore enrollment included Kennesaw State University (835), University of North Georgia (588), and Valdosta State University (569). Together, these four institutions constituted 59% (3,240 of 5,450) of the total number of students enrolled in at least one eCore course in spring 2016.

Exhibit 18
Bachelor's Students' Enrollment in eCore Varied Significantly by Institution
Spring 2016¹



How are online tuition rates determined and what impact does taking online courses have on costs for students?

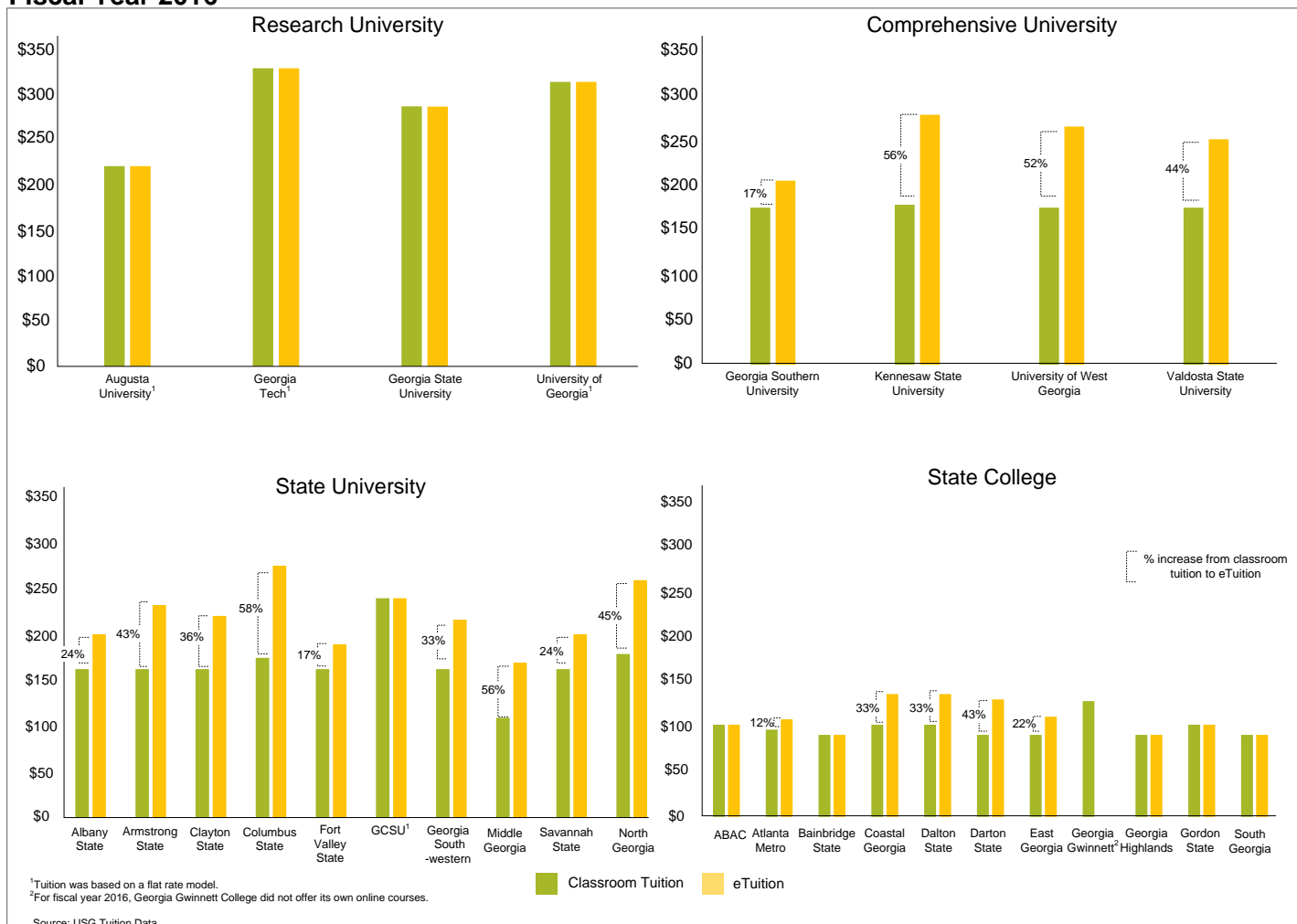
BOR determines the process for setting tuition rates and has different processes for determining the rates for classroom courses, eTuition, and eCampus. Among USG institutions, eTuition rates were 0% to 58% higher than in-state tuition rates for classroom courses in fiscal year 2016. A description of how these various tuition rates are set is provided below.

eTuition: the tuition rate charged for online courses at individual institutions

- **Classroom Tuition:** Each year, BOR establishes tuition rates for all USG institutions. Funding is provided through multiple revenue sources including state appropriations, tuition, and student fees. Annual state appropriation levels are determined through an established funding formula. Generally, the portion of the formula requirement not provided for by state appropriations is funded by tuition and fees. BOR's tuition-setting process also distinguishes between in-state and out-of-state students. Students who qualify for Georgia residency status pay a lower tuition rate. For example, at Georgia Southern University, the per credit hour in-state tuition rate was \$174 and the out-of-state rate was \$615 for fiscal year 2016.
- **eTuition:** Each USG institution is authorized to establish tuition rates for their own online courses. BOR policy allows USG institutions to set eTuition rates no lower than in-state and no higher than out-of-state classroom tuition, without BOR approval.
- **eCampus:** The tuition for eCampus courses is set by program administrators and approved by BOR. eCore is set at \$169 per credit hour and eMajor at \$199. These rates are set to cover the costs associated with operating the eCampus program.

As shown in **Exhibit 19**, the different tuition rate setting processes resulted in consistency for classroom tuition and wide variation in tuition for online courses.⁶

⁶The HOPE Scholarship applies to the classroom tuition rate. Any amount above the classroom tuition rate charged as eTuition is not covered by the HOPE Scholarship.

Exhibit 19**Online Tuition was Higher than In-State Classroom Tuition at 18 of 29 Institutions
Fiscal Year 2016**

We requested information from seven USG institutions regarding the factors that are considered in determining eTuition. The institutions reported considering factors such as the online education market, the tuition they believe the market would support, their classroom tuition rates, and the cost of technological components required for online education. While three of seven indicated using online implementation costs to determine eTuition rates, we identified inconsistencies and incomplete cost reporting utilized between these three institutions.

The seven institutions indicated that costs incurred to create, implement, and deliver online courses overlap with the costs related to classroom courses because costs such as faculty, staff, and technology resources are shared. Therefore, institutions were not able to calculate the incremental cost of an online course versus a classroom course.

eCore Tuition

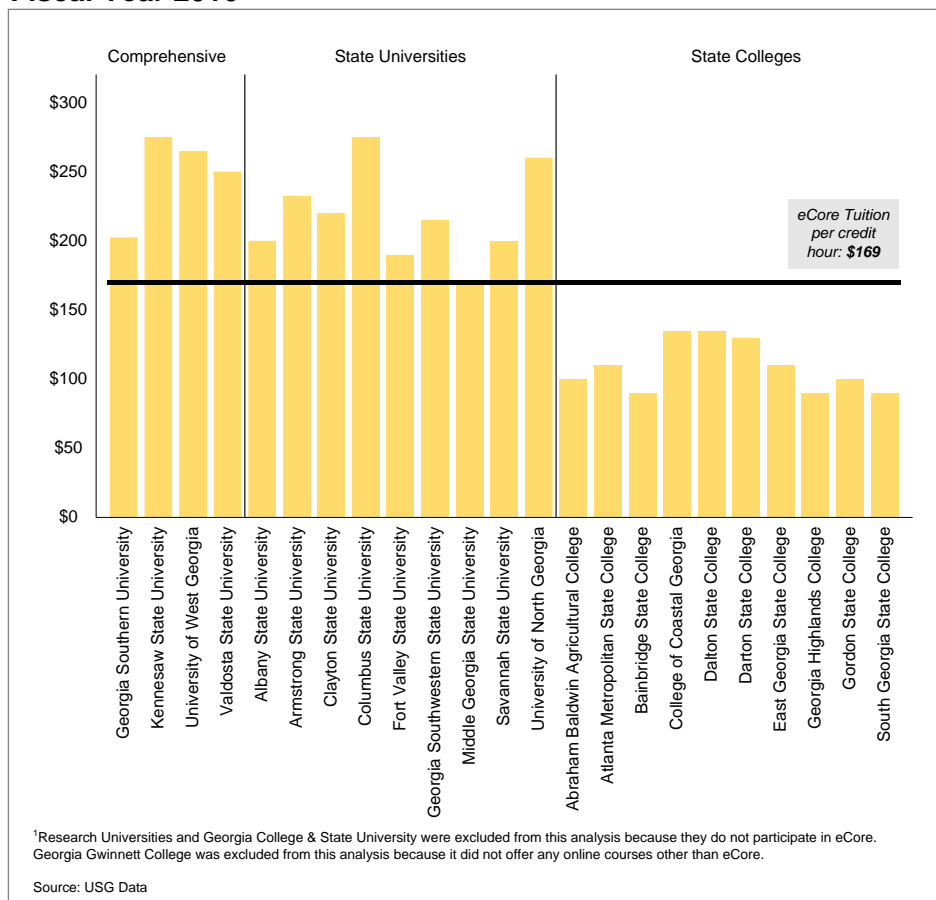
Program administrators reported using historical cost data to determine the necessary tuition rates needed to generate sufficient revenue to fund the program. In fiscal year 2016, the eCore tuition rate was set at \$169. As seen in **Exhibit 20**, the eCore rate may

be higher or lower than the eTuition rate charged by individual institutions. Because of the wide variation in eTuition rates among USG institutions, there were also discrepancies between each institution's online tuition and the eCore tuition.⁷

Exhibit 20

eTuition is Higher than eCore Tuition at 12 of 23 Institutions¹

Fiscal Year 2016



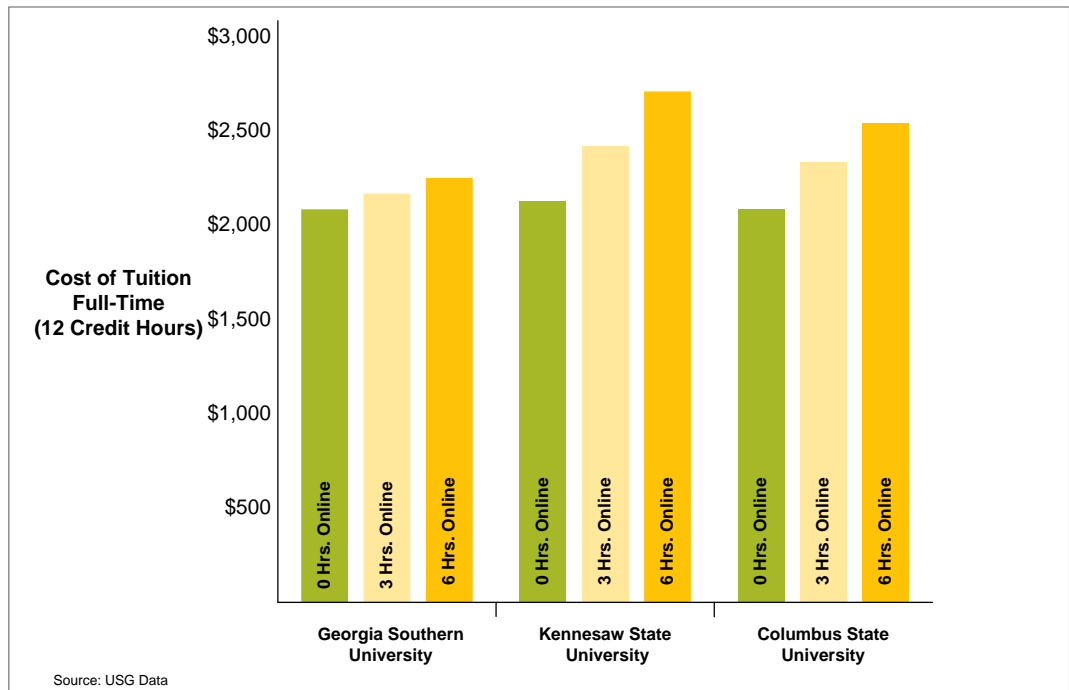
Impact on Cost for Students

Generally, for those institutions (18 of 29) with a cost differentiation between the tuition rates charged for classroom courses and online courses, the result was a higher tuition for in-state students. In-state, hybrid students accounted for 19% (37,322 of 196,690) of undergraduate bachelor's degree students in spring 2016. These in-state, hybrid students paid \$17.4 million more in tuition to take online courses than if they had taken all of their courses in a classroom. Comparatively, out-of-state students can pay lower tuition by taking online courses. **Exhibits 21 and 22** show the effect of the different tuition rates as both in-state and out-of-state students enroll in more online courses.

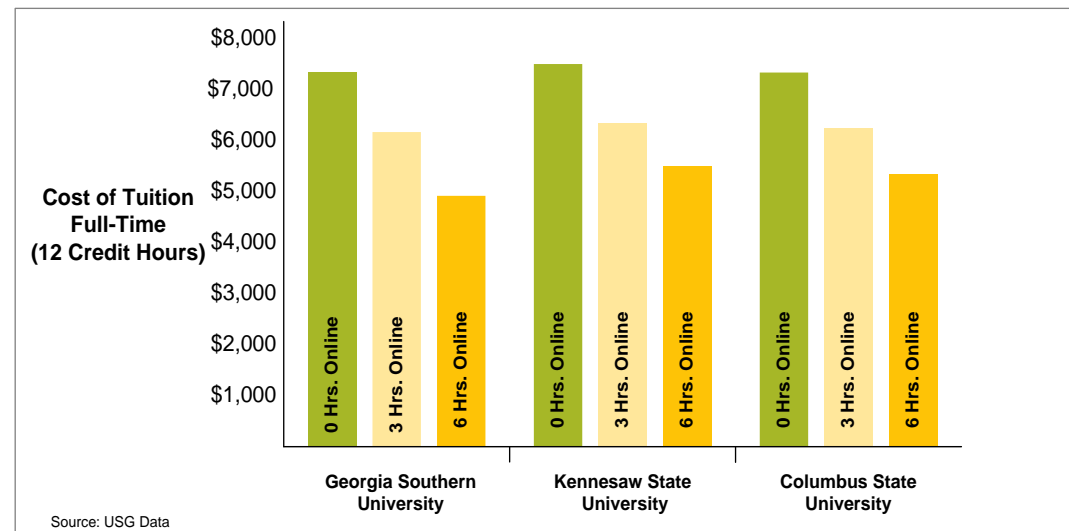
⁷Dartmouth staff reported charging the eCore rate rather than their institutional eTuition rate if they considered the courses to be duplicates.

Exhibit 21

**In-State Bachelor's Students Experience Increasing Costs as they Increase the Number of Online Credit Hours from 0 to 6
Fiscal Year 2016**

**Exhibit 22**

**Out-of-State Bachelor's Students Experience Decreasing Costs as they Increase the Number of Online Credit Hours from 0 to 6
Fiscal Year 2016**

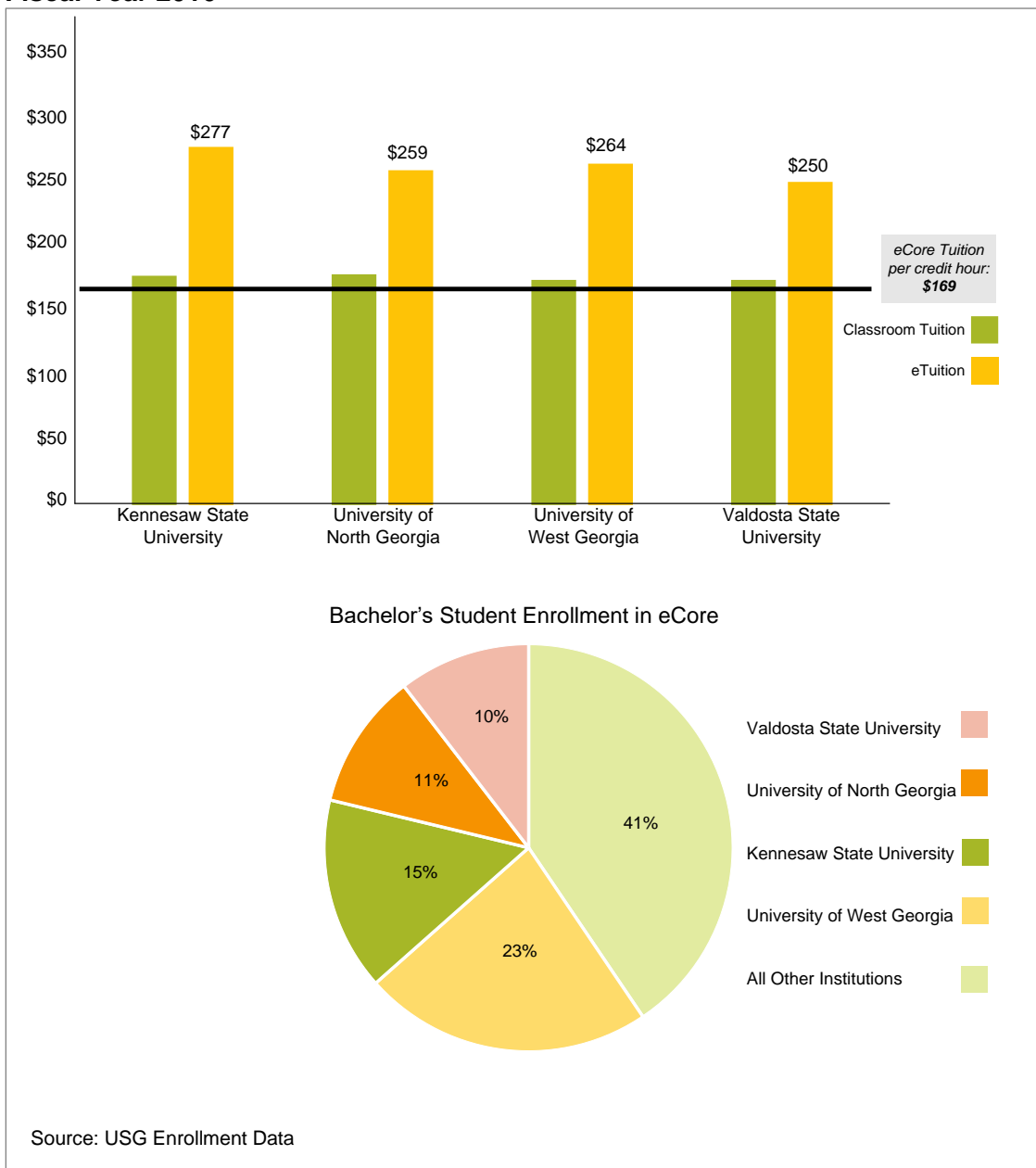


Impact of eCore on Student Cost

As shown in Exhibit 20 on page 20, students at 12 institutions were charged a higher eTuition rate compared to the eCore rate. During the 2016 fiscal year, students paid \$1.6 million less by taking eCore courses rather than online courses offered by their institution.

As shown in Exhibit 23, students at four institutions constituted 59% of students taking at least one eCore course in spring 2016. These students paid \$744,440 less to take eCore courses than if they had taken their institutions' online courses.

Exhibit 23 eTuition was \$81 to \$108 Higher than eCore Tuition at the Four Institutions Enrolling 59% of the eCore Students Fiscal Year 2016



Impact on Student Fees

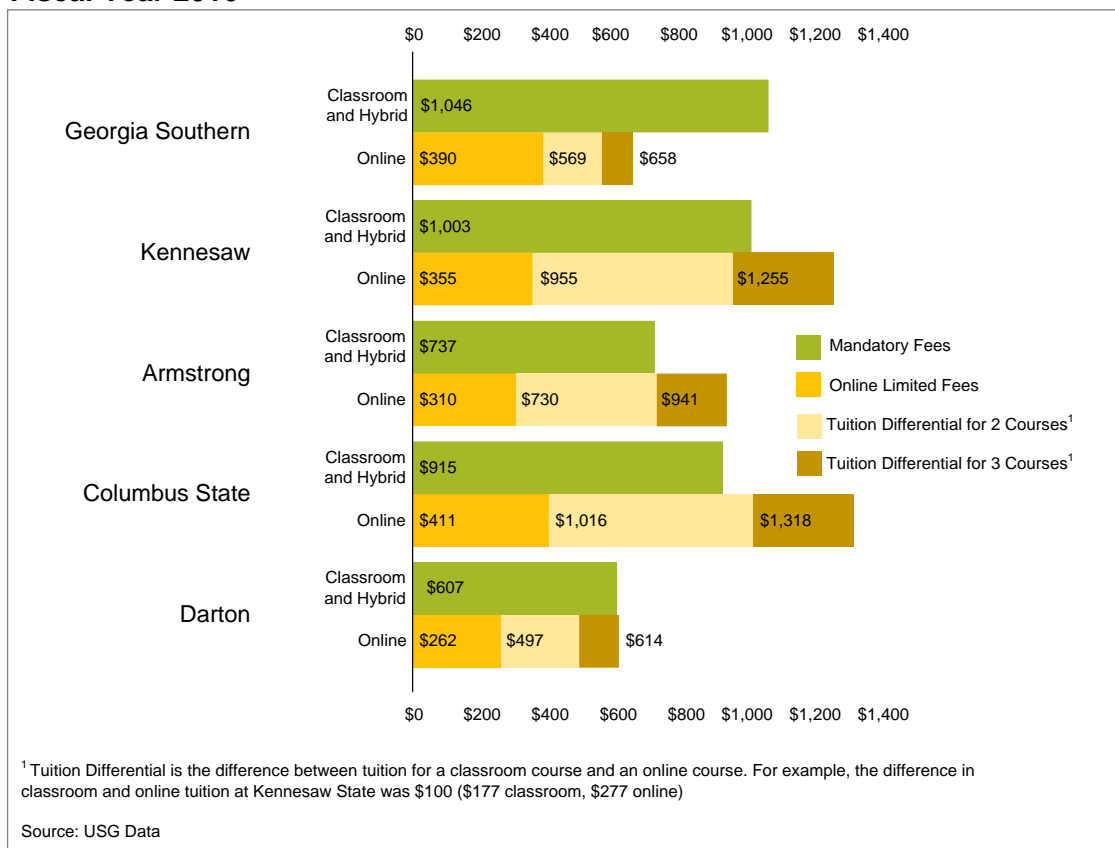
As shown in **Exhibit 24**, students taking both online and classroom courses paid the same fees as students taking only classroom courses. Generally, the fees that students taking only online courses paid were limited to the Special Institutional Fee and the Technology Fee.

Exhibit 24

Students Taking Any Classroom Courses Paid More Fees than Students Taking Exclusively Online Courses, Sample Schools Fiscal Year 2016

Fee	Fee Amount	Classroom and Hybrid Students	Online Only
Access	\$10-\$15	✓	
Activity	\$49-\$200	✓	✓ ¹
Athletic	\$40-\$277	✓	
International	\$11-\$19	✓	
Library	\$5	✓	
Parking	\$47-\$93	✓	
Recreation	\$30-\$170	✓	
Special Institutional	\$200-\$404	✓	✓
Student Center	\$36-\$110	✓	
Sustainability	\$3-\$10	✓	
Technology	\$40-\$100	✓	✓
Transportation	\$30-\$58	✓	
Wellness and Health	\$3-\$94	✓	
Total	\$504-\$1,555		
¹ Of the seven institutions surveyed, only Columbus State charged online only students the Student Activity Fee.			
Source: USG data			

Cost savings experienced from the limited fees online only students paid was partially offset when eTuition was set higher than classroom tuition. As shown in **Exhibit 25**, the difference in the classroom and online tuition rates was only advantageous to some students. As a student enrolled in more online courses, the savings of the online fee waivers declined.

Exhibit 25**Cost Savings Created by Lower Online Fee Rates Declined as Students Enrolled in More Online Courses Because of Higher Online Tuition Rates
Fiscal Year 2016****Other States**

Other states generally employed one or a combination of the following policies: online tuition rates are the same across all institutions, online tuition is the same as classroom tuition, or students are charged the online rate of their home institution when taking online courses at other institutions. The result of these policies is a consistent total cost for the student. The mechanisms reported by the state systems and institutions surveyed are discussed below⁸.

- **State University System of Florida:** The tuition rate is the same for all institutions and for all students taking both online and classroom courses. However, a distance learning fee is charged to online students; the fee is capped by state statute. Institutions may charge other fees for online courses that are adjusted annually on a cost recovery basis. The University of Florida's institute of online learning is statutorily required by the state to set the tuition for online degrees at no more than 75% of the tuition rate of \$105.07, specified in the General Appropriations Act. They cannot charge the distance learning fee.

⁸ We selected and surveyed universities and university systems in six states: Arizona, Florida, New York, North Carolina, Pennsylvania, and Texas.

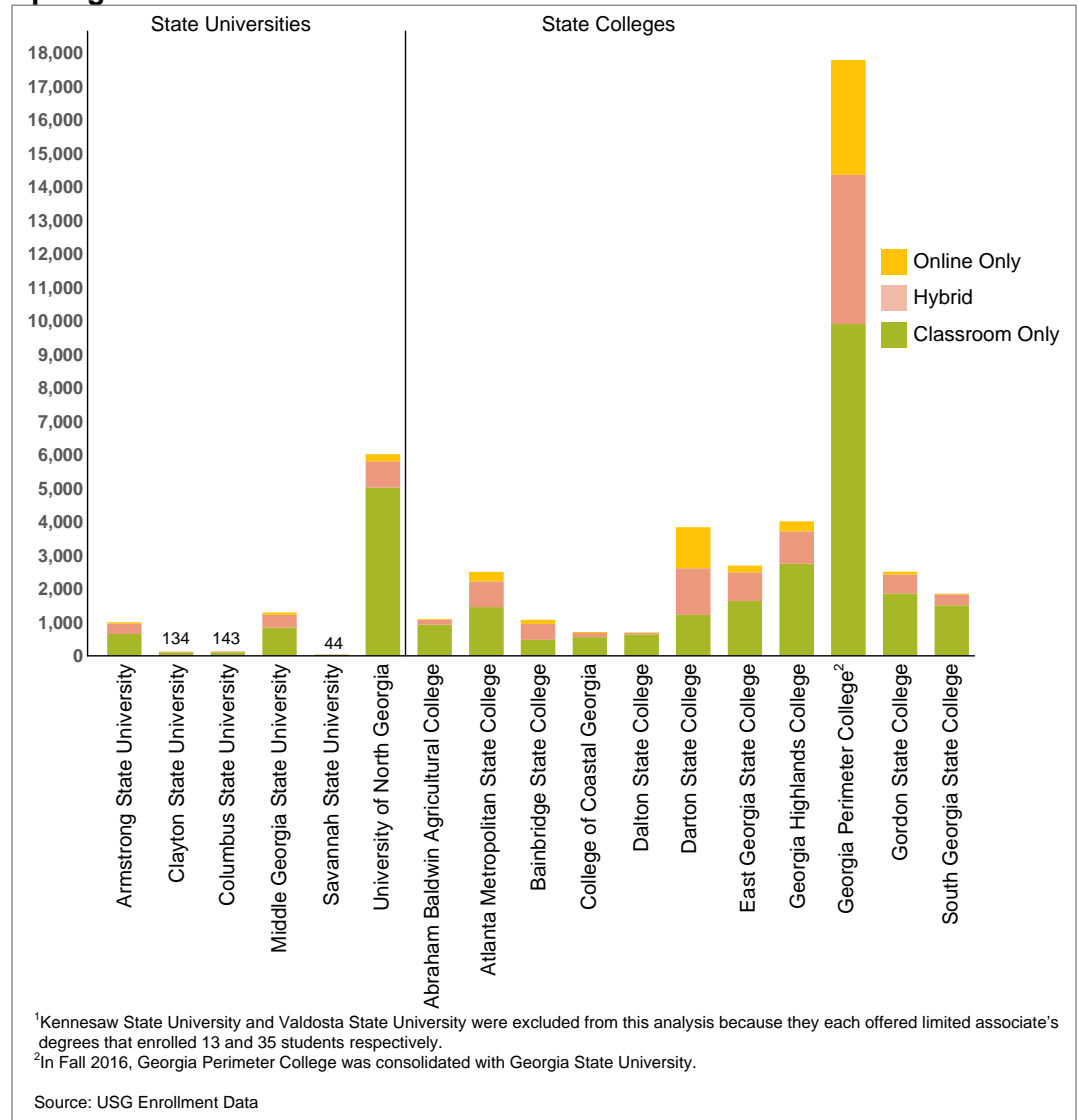
- **University of North Carolina System (UNC):** The tuition for all online courses is set by the North Carolina General Assembly and the University of North Carolina General Administration. Full-time students in the UNC system enrolled in a UNC Online course do not incur any additional charges. The system offers a cross registration program allowing students to enroll in online courses offered at other UNC system institutions at no additional cost.
- **Pennsylvania State University (PSU):** The tuition rates charged for online courses are dependent on a student's program and the number of registered credits. The rates for the institution's online courses are subject to approval by the institution's Board of Trustees. In-state students taking an online course are charged the in-state rate of their home PSU campus. If a full-time, in-state student enrolls in an online course in addition to a classroom course, no additional tuition is charged for the online course.
- **State University of New York System (SUNY):** SUNY system institutions set their own tuition rate for both their classroom and online courses subject to approval by the System's Board of Trustees. The rates for in-state students enrolled in online courses is the same as the institution's classroom tuition rate. The Board of Trustees is authorized by state statute to establish a new tuition category for out-of-state students enrolled in online courses.
- **University of Texas System (UT):** The individual institutions set their own tuition rates for online and classroom courses. The online tuition rate is the same as the classroom tuition rate for 13 of 14 institutions. UT system institutions are allowed to charge students enrolled in an online course an \$80 distance education fee, capped by the Board of Regents.
- **Arizona State University (ASU):** The tuition rates for online courses at ASU are dependent upon the individual departments and range from \$490 to \$553 per credit hour. However, Arizona State's online degree program's tuition is set at a national rate.

Is the utilization and cost of online courses by students seeking an associate's degree similar to bachelor's degree-seeking students?

As shown in Exhibit 26, similar to bachelor's degree students, associate's degree students have three enrollment options: classroom only, online only, or hybrid. Nineteen USG institutions offered associate's degrees and associate's degree-seeking students constituted 19% (47,524 of 244,214) of all undergraduate students in spring 2016.

Exhibit 26

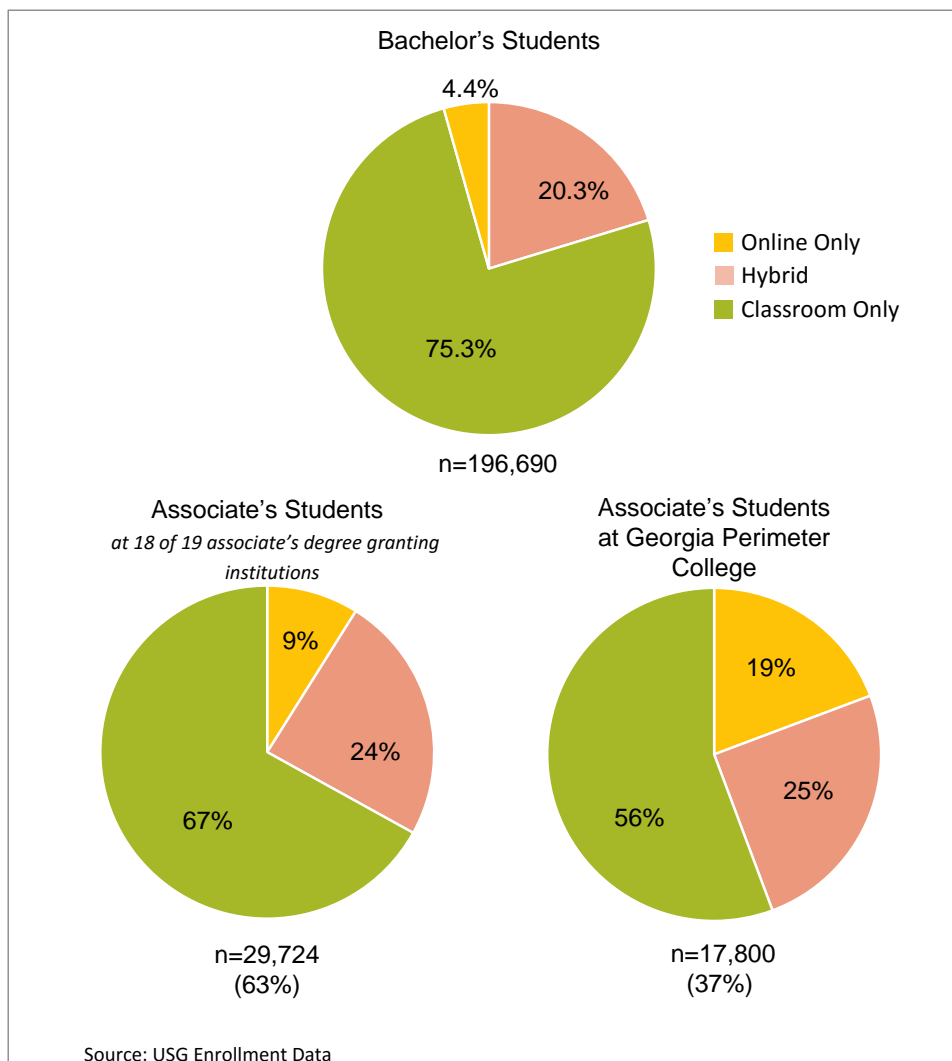
Associate's Degree-Seeking Students' Enrollment and Use of Online Varied by Institution Spring 2016



As shown in Exhibit 27, associate's degree-seeking students utilized online courses at a higher rate, both as online and hybrid students, than bachelor's degree-seeking students. Georgia Perimeter College accounted for approximately 37% (17,800 of 47,524) of associate's degree-seeking students and had the highest enrollment in online courses when compared to the other associate's degree-granting institutions.

Exhibit 27

Associate's Degree-Seeking Students Utilized Online Courses at a Higher Rate than Bachelor's Degree-Seeking Students Spring 2016



Similar to bachelor's degrees, for those institutions (15 of 19) with a cost differentiation between the tuition rate charged for classroom courses and eTuition, the result was higher tuition for in-state, hybrid associate's students. These in-state, hybrid students paid an additional \$3.3 million in tuition than if they had taken all of their courses in a classroom. Additionally, in fiscal year 2016, in-state, hybrid associate's students paid an additional \$103,653 to take an eCore course rather than an online course offered by their institution.

How is the quality of online courses and degrees maintained?

The quality of online courses at USG institutions is monitored and maintained in the same manner as classroom courses. All online and classroom courses are subject to curriculum approval and are taught by the same faculty. Additional quality control mechanisms for online courses include: supplemental training for faculty, a centralized platform to host all online courses, specific criteria of accreditation by the Southern Association of Colleges and Schools (SACS), and industry standards and best practices.

- **Curriculum and Course Development:** All of the seven institutions surveyed require online courses and degree curriculums to go through the same curriculum development process as their classroom counterparts. This includes input and approval from the academic department offering the course or degree, review and approval from institutional leadership, and typically input from instructional designers that work with all departments.
- **Faculty Assignments and Training:** Faculty members at the institutions surveyed may teach online or classroom courses interchangeably. These faculty are subject to administrative monitoring in both course types. Individual institutions offer training and guidance for faculty involved in online learning. In addition, USG offers optional, supplemental training for faculty across institutions on a wide range of topics, including online learning.
- **Uniform Platform:** Online courses at 28 of the 29 USG institutions⁹ are hosted on the same Learning Management System (D2L). D2L provides a uniform interface and communication tools such as group chat and instant messaging. USG also coordinates the use of supplemental software and enhancements such as WebEx.
- **Accreditation:** All USG institutions are accredited by SACS. This includes a review of all courses and degree programs offered by the institution. Online courses are subject to additional SACS requirements such as testing the various modes of instruction offered through technology and student access to those delivery modes.
- **Industry Quality Standards:** Six of the seven institutions surveyed use the nationally accepted online education certification tool Quality Matters (QM). QM is used to certify courses and faculty through substantive, constructive, measurable, and specific recommendations with regard to both course strengths and areas for improvement. eCore and eMajor also use Quality Matters.

Other States

Other states reported maintaining the quality of online courses through system-wide course design, faculty training, reporting to a nationally recognized accrediting body, and peer review rubrics such as Quality Matters. Two states reported coordinating and offering optional technological infrastructure for online courses.

⁹Georgia Tech uses a different Learning Management System.

- Four of six states surveyed offer online development training and instruction for the system's faculty teaching online courses.
- Florida shares a Learning Management System across institutions, but adoption is optional. New York provides a recommended list of tools and software to its institutions for online development.
- All states surveyed include their online course offerings in the review by their accrediting body.
- Four of six states surveyed also use Quality Matters; the two that do not have developed an internal mechanism to measure quality or subscribe to a similar service.

To what extent are other innovative delivery models being utilized by USG?

Innovative delivery models utilized by USG institutions include dual enrollment (Move on When Ready), open education resources (Affordable Learning Georgia), Competency Based Education (CBE), and Massive Open Online Courses (MOOCs).

Dual Enrollment

Move on When Ready is a dual enrollment initiative supported by USG, the Georgia Department of Education (DOE), and the Georgia Student Finance Commission. The initiative allows qualifying high school students to enroll in USG institutions and receive college credit while completing their high school graduation requirements. The Georgia Student Finance Commission was appropriated \$58,318,219 in fiscal year 2017 to fund dual enrollment statewide. There is no cost to the student, tuition is covered by the state appropriation, and mandatory fees and required textbooks are funded by the institution.

Open Resources

Affordable Learning Georgia is an effort to convert class resources from hard copy to online and reduce the cost to zero for students. The program is ongoing and system wide. As of fiscal year 2016, all but two eCore courses utilize free, online texts.

The institutions surveyed have experienced varying levels of implementation with open education resources. For example, Columbus State University currently has 20 faculty members that have received grants for the purchase and/or development of open education resources. In addition, Georgia State University encourages their faculty to utilize open education resources and provides assistance to those faculty members in obtaining free textbooks.

Competency Based Education (CBE)

USG's efforts in establishing CBE is limited to two institutions. Middle Georgia State University (MGA) and Valdosta State University (VSU) have CBE experiments underway, though they are not degree-granting programs.

At MGA, a Lean Healthcare certificate program helps meet the needs of local healthcare providers through an online, self-paced program for working nurses. The program has enrolled five students. The total cost of delivery for the program's pilot implementation was \$13,616 and the total cost of development was approximately \$70,000. VSU offers a competency based K-5 Teacher Certification Science Endorsement with 10 students from the immediate area enrolled. The total tuition generated from this pilot implementation was \$9,100 (no fees were assessed to the students) with a total cost for delivery and development of \$14,510 and \$45,353 respectively.

Additionally, USG has studied and, in some cases, experimented with accelerated degree programs and prior learning assessments. Both models attempt to shorten the total time to earn an undergraduate degree by accelerating the graduation schedule or granting credit for work completed outside of the classroom.

Massive Open Online Courses (MOOCs)

Kennesaw State University (KSU), in an attempt to award credit and reduce the costs of attendance to students, developed a Freshman U for Free program that utilizes

massive open online courses hosted through a third party. Students enrolled in these courses do so at no cost but do not initially receive credit. The program is designed as prep courses for College Level Examination Program (CLEP) exams that students can take for college credit at KSU.

Other States

North Carolina, Texas, and Pennsylvania also allow high school students within their state to earn credit toward a college degree through their dual enrollment programs. New York is the only state surveyed pursuing open education resources to lower costs to their students.

As seen in **Exhibit 28**, three other states offer competency based education programs. For example, Florida has 15 institutions with CBE programs underway through the state funded Complete Florida program. In addition, Florida rewards credit toward a degree through prior learning assessments and accelerated learning programs. North Carolina is in the development stage of expanding their current CBE offerings, funded by the Gates Foundation.

Exhibit 28

USG Utilizes Four Other Innovative Delivery Models Utilized in Surveyed States

Fiscal Year 2016¹

University System	Dual Enrollment	Open Education Resources	Competency Based Education	MOOCs
University System of Georgia	✓	✓	✓	✓
University of North Carolina System	✓		✓	
State University of New York System		✓		
University of Texas System	✓		✓	✓
State University System of Florida			✓	
Pennsylvania State University	✓			
Arizona State University				✓
Source: USG; Other States				

Appendix A: Objectives, Scope, and Methodology

Objectives

This report examined the use of online education across the University System of Georgia. Specifically, our examination set out to determine the following:

1. What is the purpose of online education?
2. To what extent are students utilizing online courses offered by USG?
3. How are online tuition rates determined, and what impact does taking online courses have on costs for students?
4. Is the utilization and cost of online courses by students seeking an associate's degree similar to bachelor's degree-seeking students?
5. How is the quality of online courses and degrees maintained?
6. To what extent are other innovative delivery models being utilized by USG?

Scope

This special examination generally covered activity related to online education and innovative delivery models at all University System of Georgia institutions that occurred during the summer, fall, and spring semesters of fiscal year 2016. Information used in this report was obtained by reviewing relevant laws, rules, and regulations; interviewing agency officials and staff from USG as well as subject-matter experts in the field of innovative delivery models; surveying USG institutions and other state university systems and institutions, analyzing student enrollment data provided by USG; and prior audit work.

We obtained student enrollment and course data for fiscal year 2016. The data was provided by USG and includes student level information related to courses and demographic information for each student. Enrollment data contained records of all students enrolled in USG institutions in each academic term. Course data contained records of all courses taken by students during each term. We assessed the data used for this examination and determined that the data used were sufficiently reliable for our analyses.

Methodology

To determine the purpose of online education, we reviewed literature on online education, interviewed USG staff and subject-matter experts in the field of online education, and surveyed both USG institutions and other state university systems and institutions (other states). We used data on the number of online courses offered by each of the 29 USG institutions during fiscal year 2016 to identify a sample of seven institutions to survey regarding their use of online education. We used interviews with USG staff and the National Center for Education Statistics (NCES) Integrated Postsecondary Education System's (IPEDS) 2015 Data Feedback Reports to identify the six other states to survey regarding their use and management of online education and other innovative delivery models.

To determine to what extent students are utilizing online courses offered by USG, we compiled and analyzed USG provided fiscal year 2016 enrollment data on undergraduate students seeking bachelor's degrees and course data on undergraduate courses taken for degree-seeking credit by students seeking either a bachelor's or an associate's degree. We also surveyed the previously selected seven sample USG institutions.

To determine how online tuition rates are determined and what impact does taking online courses have on costs for students, we compiled and analyzed the 2016 USG published tuition rates and mandatory fees for undergraduate, bachelor's degree-seeking students of the 29 USG institutions for both classroom courses (classroom tuition) and online courses (eTuition), we surveyed and collected data from the seven selected sample institutions, and we identified the method other states used to set their online tuition rates. For specific analyses, we divided the course data by type of offering (online or classroom) and divided the enrollment data by the modality of courses taken by the students (only online, a mix of online and classroom courses – hybrid, and only classroom courses). We also compared the utilization of eCore to online courses created by the individual USG institutions.

To determine if the utilization and cost of online courses by students seeking an associate's degree similar to bachelor's degree-seeking students, we compiled and analyzed USG provided fiscal year 2016 enrollment data on undergraduate students seeking associate's degrees and course data on undergraduate courses taken for degree-seeking credit by students seeking either a bachelor's or an associate's degree. We also compiled and analyzed the 2016 USG published tuition rates for undergraduate, associate's degree-seeking students of the 29 USG institutions and Georgia Perimeter College for both classroom courses and online courses (eTuition). For specific analyses, we divided and analyzed the data in the same manner as the analysis for bachelor's degree-seeking students.

To determine how the quality of online courses and degrees are maintained, we reviewed literature on online education, interviewed USG staff and subject-matter experts in the field of online education, and surveyed the previously selected seven USG institutions and six other states on their measures to maintain the quality of their online courses and degrees.

To determine to what extent other innovative delivery models are being utilized by USG, we reviewed literature on online education, interviewed USG staff and subject-matter experts in the field of innovative delivery models, and surveyed the previously selected seven USG institutions and six other states on their participation in innovative delivery models.

This special examination was not conducted in accordance with generally accepted government auditing standards (GAGAS) given the timeframe in which the report was needed. However, it was conducted in accordance with Performance Audit Division policies and procedures for non-GAGAS engagements. These policies and procedures require that we plan and perform the engagement to obtain sufficient, appropriate evidence to provide a reasonable basis for the information reported and that data limitations be identified for the reader.

Appendix B: eCore Courses

Field of Study	Course Title	Course Name
Communication	COMM 1100	Human Communication
Communication	ETEC 1101	Electronic Technology in the Educational Environment
English	ENGL 1101	English Composition I
English	ENGL 1102	English Composition II
English	ENGL 2111	World Literature I
English	ENGL 2112	World Literature II
English	ENGL 2131	American Literature I
English	ENGL 2132	American Literature II
Government	POLS 1101	American Government
History	HIST 1111	World History I
History	HIST 2111	United States History I
Math	MATH 1101	Mathematical Modeling
Math	MATH 1111	College Algebra
Math	MATH 1113	Precalculus
Math	MATH 1401	Introduction to Statistics
Math	MATH 1501	Calculus I
Philosophy	PHIL 2010	Introduction to Philosophy
Psychology	PSYC 1101	Introduction to Psychology
Science	ENVS 2202	Environmental Science
Science	CHEM 1211K	Principles of Chemistry I and Lab
Science	CHEM 1212K	Principles of Chemistry II and Lab
Science	GEOL 1011K	Introductory Geosciences I and Lab
Science	PHYS 1211K	Principles of Physics I and Lab
Sociology	SOCI 1101	Introduction to Sociology
Spanish	SPAN 2001	Intermediate Spanish I
Spanish	SPAN 2002	Intermediate Spanish II
¹ SPAN 1001 and SPAN 1002 were created for an accelerated degree program at Columbus State and approved for eCore.		
Source: eCore Website		

Appendix C: eMajor Degrees

Degree	Partner Institution(s)
Bachelor of Science in Organizational Leadership	Albany State University; Dalton State College; Fort Valley State University; University of West Georgia
Bachelor of Science in Criminal Justice	Dalton State College; Georgia Southwestern State University
Associate of Science in Financial Technology	Middle Georgia State University
Bachelor of Business Administration	Georgia Southwestern State University
Source: eMajor Website	

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