UNIVERSITY SYSTEM OF GEORGIA

Outcomes by Course Modality

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Research and Policy Analysis

RAC-IRP

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Do students perform better in face-to-face or online courses?

- Course-level analysis
  - Comparison of grades earned in courses that were taught both face-to-face and online
    - Ex: PSYC 1101 face-to-face and PSYC 1101 online at ABAC in spring 2022
- Student-level analysis
  - Comparison of grades earned in online courses compared to face-to-face courses for students who enrolled in a mix of course types
    - Ex: student enrolled in 2 online and 3 face-to-face courses at ABAC in spring 2022
- Outcomes: pass rate, course GPA, % As earned, DFW rate
- https://www.usg.edu/research/publications

Course-Level Analysis (undergraduate)

Population: Undergraduate course section enrollment in spring 2022 for courses with at least 1 online section and at least 1 face-to-face section

Definitions:

- Undergraduate course = course level < 5000
- Online course = at least 95% of course content delivered via internet

Other Considerations:

- eCore courses excluded
- Pass/fail courses excluded
- Course withdrawals excluded, except for %DFW
- Courses with high number of missing grades excluded

Course-Level Analysis Outcomes

Each outcome was created for online course sections and face-to-face course sections. The outcomes were compared for the same course.

Course GPA = [4(#As) + 3(#Bs) + 2(#Cs) + 1(Ds)]/Total students enrolled in course*

Pass rate = # students who earned C or better/Total students enrolled in course*

Percent of As earned = # students who earned an A/Total students enrolled in* course

Percent of DFWs earned = # students who earned D, F, W, or WF/Total students enrolled in course

*excluding students who withdrew

Online v. Face-to-Face: Grades in Eight Courses with Highest Online Enrollment Spring 2022 System Total

Course	Online						Face-to-Face					
	Total Enrolled	Av. Class Size	Av. Course GPA	% A	Pass Rate	DFW Rate	Total Enrolled	Av. Class Size	Av. Course GPA	% A	Pass Rate	DFW Rate
POLS1101	7,944	41	2.68	41.3%	79.9%	24.4%	10,729	33	2.72	36.6%	80.7%	22.2%
ENGL1102	6,596	21	2.64	40.5%	78.9%	26.8%	20,518	19	2.91	46.8%	85.4%	18.3%
PSYC1101	3,782	37	2.73	38.8%	81.8%	24.0%	5,080	33	2.67	38.2%	80.1%	23.7%
ENGL1101	3,354	19	2.14	33.8%	65.8%	39.0%	7,360	18	2.03	26.9%	62.4%	41.3%
SOCI1101	2,822	37	2.99	58.5%	86.4%	16.9%	4,298	33	2.87	46.3%	85.7%	17.1%
ECON2106	2,487	44	2.71	38.8%	84.9%	19.7%	3,037	36	2.52	27.9%	81.3%	24.2%
MATH1401	2,416	28	2.16	27.6%	69.3%	37.4%	4,183	24	2.41	30.0%	74.7%	30.6%
BIOL1103*	1,366	27	2.11	28.0%	68.2%	38.1%	1,851	24	2.53	32.0%	76.4%	28.6%

Online v. Face-to-Face: Grades in Eight Courses with Highest Online Enrollment Spring 2022 System Total

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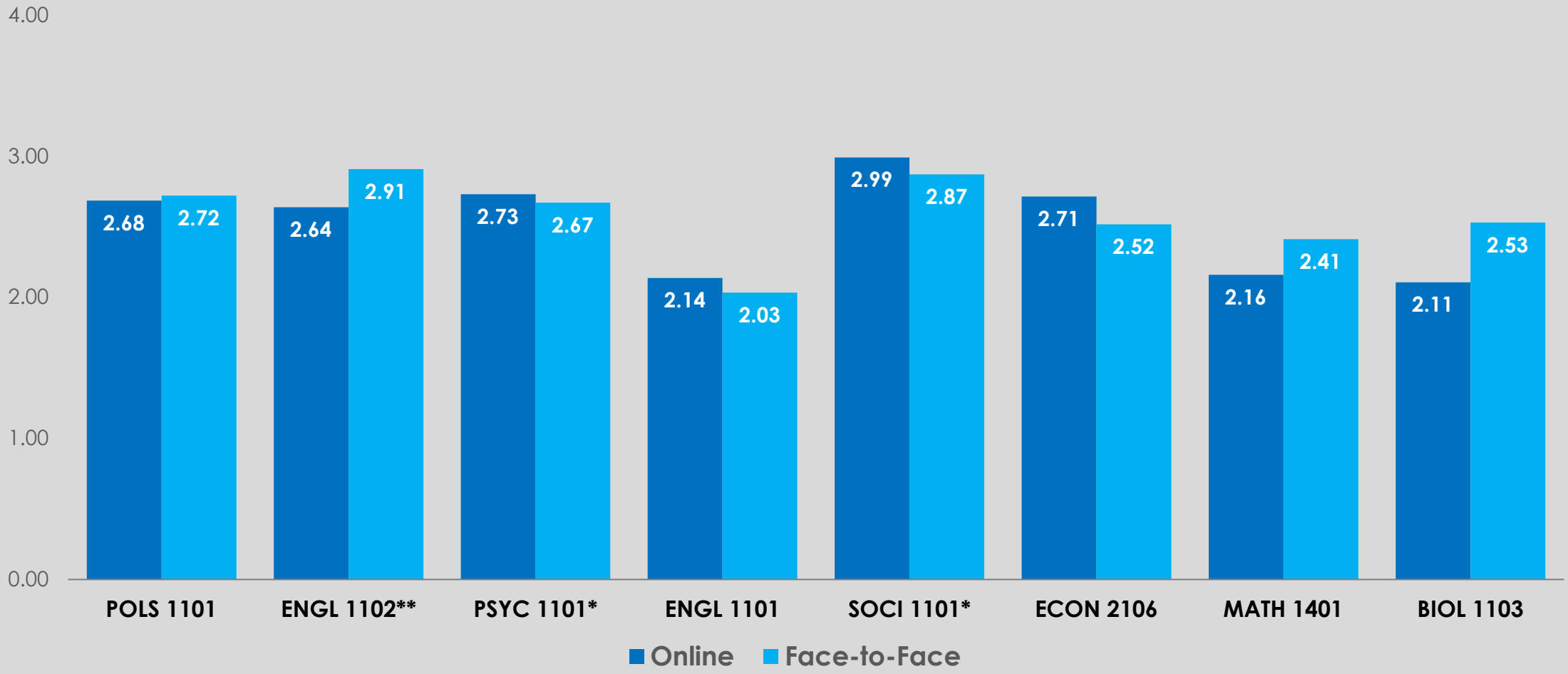
PSYC1101	3,782	37	2.73	38.8%	81.8%	24.0%	5,080	33	2.67	38.2%	80.1%	23.7%
ENGL1101	3,354	19	2.14	33.8%	65.8%	39.0%	7,360	18	2.03	26.9%	62.4%	41.3%
SOCI1101	2,822	37	2.99	58.5%	86.4%	16.9%	4,298	33	2.87	46.3%	85.7%	17.1%
ECON2106	2,487	44	2.71	38.8%	84.9%	19.7%	3,037	36	2.52	27.9%	81.3%	24.2%
MATH1401	2,416	28	2.16	27.6%	69.3%	37.4%	4,183	24	2.41	30.0%	74.7%	30.6%
BIOL1103*	1,366	27	2.11	28.0%	68.2%	38.1%	1,851	24	2.53	32.0%	76.4%	28.6%

Average Course GPA



* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Student-Level Analysis (undergraduate)

Population: Undergraduate students who enrolled in at least 1 online and 1 face-to-face course in spring 2022

Definitions:

- Undergraduate student = student level < 60
- Online course = at least 95% of course content delivered via internet

Other Considerations:

- eCore courses excluded
- Students who enrolled in only online or only face-to-face courses are excluded (a subset of the Course-Level Analysis)
- Analysis does not compare outcomes in the same course

Student-Level Analysis Outcomes

Same kind of outcomes as Course-Level Analysis, but created in a different way

- course GPA
- pass rate
- % of As earned
- DFW rate

Student Enrollment Examle Spring 2022	
Online	**Face-to-Face**
ENGL1101 (A)	MATH 1001 (A)
PSYC 1111 (B)	HIST 2112 (B)
	BIOL 1103 (C)

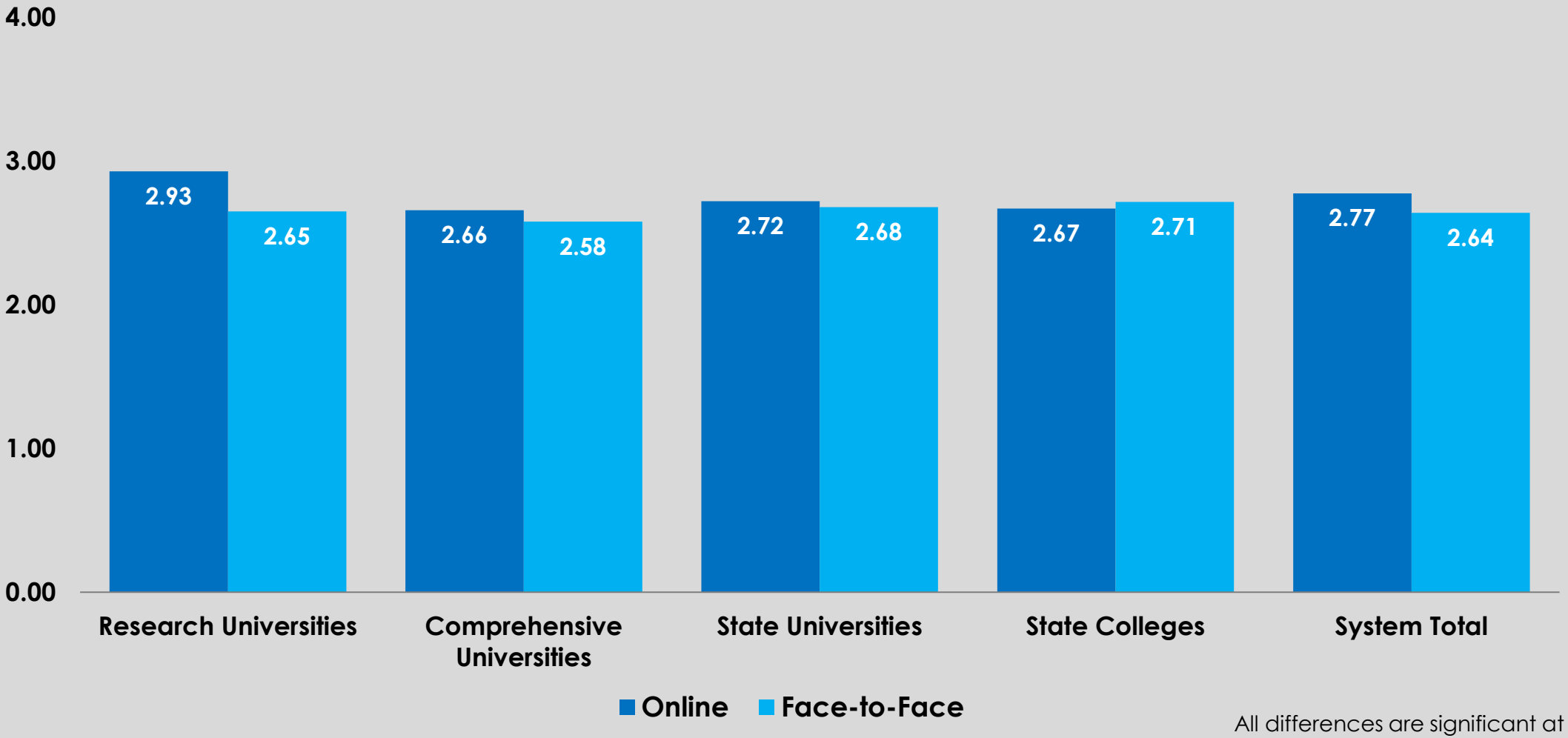
Online and face-to-face student and then we compared the institutions, sectors, and for a varie

	Online	Face-to-Face
GPA	3.50	3.33
Pass Rate	100%	100%
% A	50%	33%
% DFW	0%	0%

Online v. Face-to-Face: Average Student Outcomes by Sector Spring 2022

	Online						Face-to-Face					
	Total # of Online Records	Av. # of Online Courses	Av. Course GPA	Av. % A	Av. Pass Rate	Av. DFW Rate	Total # of Face-to-Face Records	Av. # of Face-to-Face Courses	Av. Course GPA	Av. % A	Av. Pass Rate	Av. DFW Rate
Research	47,440	1.8	2.93	51.1%	83.9%	15.6%	77,708	2.9	2.65	42.1%	79.7%	17.0%
Comp.	38,557	1.7	2.66	43.7%	76.9%	16.7%	68,855	3.1	2.58	38.3%	76.9%	18.9%
State Univ.	24,422	1.8	2.72	42.3%	79.5%	18.1%	39,059	2.8	2.68	40.6%	79.7%	16.2%
State Colleges	12,402	1.7	2.67	41.8%	78.0%	21.4%	17,766	2.4	2.71	41.1%	79.9%	19.3%
System Total	**122,821**	**1.7**	**2.77**	**46.1%**	**80.2%**	**17.1%**	**203,388**	**2.9**	**2.64**	**40.5%**	**78.9%**	**17.7%**

Average Course GPA



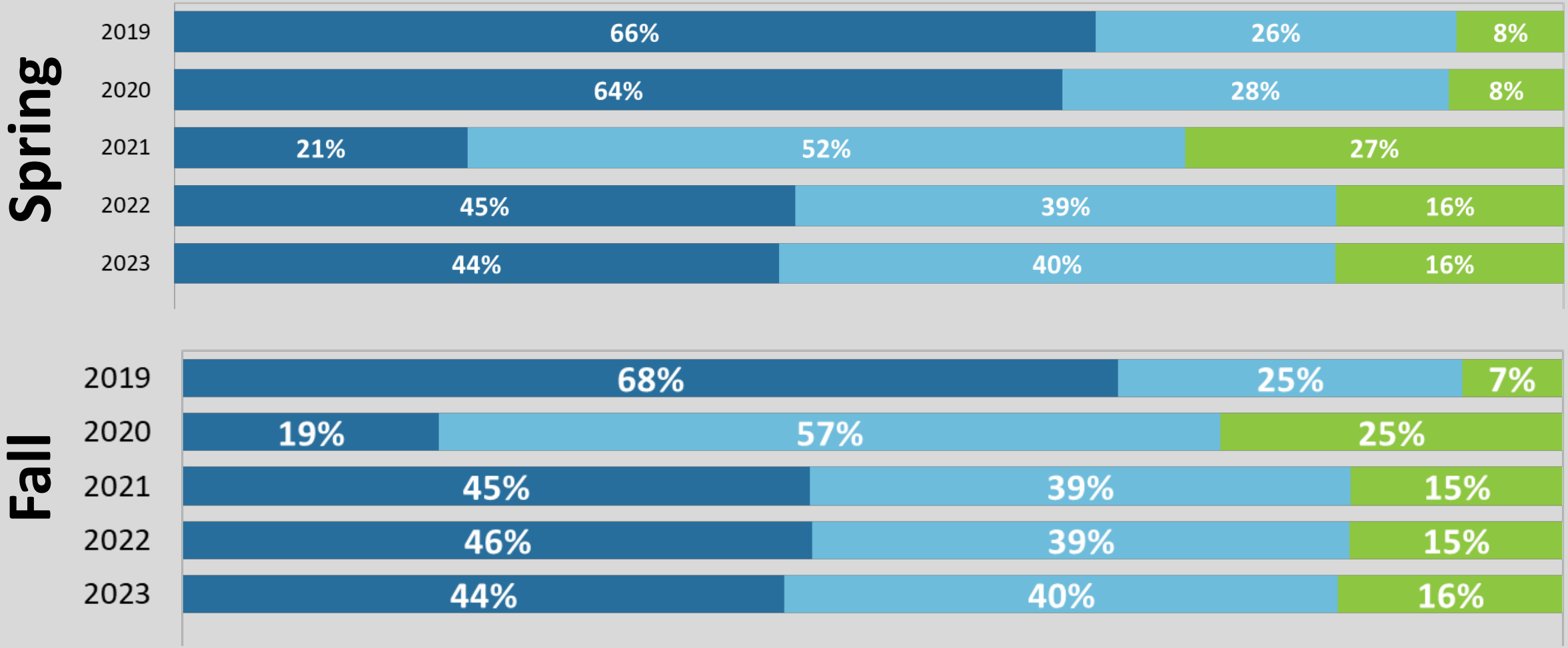
All differences are significant at the $p < 0.001$ level

Outcomes by Student Characteristics

- Findings are consistent across race/ethnicity, gender, Pell status, first generation status, and residency

- There are a few exceptions where students performed better in face-to-face courses:
  - Certificate and associate degree seekers
  - DE students and freshmen
  - Students with HS GPA between 2.0-3.0

Undergraduate Online Course-Taking



Next Steps

- Request from Board to look at how online participation impacts longer term outcomes
- Current idea: For undergraduates enrolled in fall terms, how does online participation impact fall term GPA, fall term % credit hours earned, fall-to-spring retention, and fall-to-fall retention
- How to measure online participation?
  - Took any online course (Y/N)
  - % of online courses
- Other considerations/ideas?

Questions

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Modality & Retention

Comparison of Business eMajor (online) students and Business Traditional (face-to-face) students

RAC-IR Meeting – April 17, 2024

Brian Mallett, Director Institutional Research

GSW
GEORGIA SOUTHWESTERN STATE UNIVERSITY

Modality & Retention

- GSW experience with **student outcomes in online classes** (e.g. withdraw/failure rate; course completion) matches the network finding …

"… in some cases, online sections outperform face-to-face sections, and in other cases, face-to-face sections outperform their online counterparts …"

- GSW experience with **student retention in online only programs** (Business eMajor - online only compared to Business Traditional – face-to-face) shows …

"… a consistent pattern of higher retention for business students in the face-to-face program compared with their eMajor online counterparts …"

  - **BBA eMajor =** fully online; Bachelors in Business Administration
  - **BBA Traditional =** face-to-face; Bachelors in Business Administration

Modality & Retention

Retention Analysis for eMajor Students - Fall 2019 to Fall 2023												
Rev: 12-5-2023												
	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	AVERAGE	sd
eMajor BBA Students (major code with "O")												
Students in the term, n=	*279*	*357*	*339*	*354*	*337*	*389*	*355*	*369*	*345*	*396*		
Students' average age	*31.4*	*32.0*	*32.1*	*32.2*	*32.3*	*32.1*	*31.7*	*32.1*	*32.1*	*32.1*		
%Retention to the next term*	**77%**	**82%**	**84%**	**86%**	**80%**	**80%**	**80%**	**83%**	**82%**		**81%**	3
%Retention 1-year**	**69%**	**76%**	**78%**	**74%**	**70%**	**73%**	**74%**	**76%**			**74%**	3
%Retention 2-year**	**68%**	**71%**	**70%**	**66%**	**65%**	**67%**					**68%**	2
Traditional BBA Students (not major code with "O")												
Students in the term, n=	*391*	*312*	*309*	*300*	*278*	*285*	*259*	*289*	*255*	*277*		
Students' average age	*24.9*	*22.2*	*22.2*	*21.3*	*21.6*	*20.8*	*21.2*	*20.7*	*20.9*	*20.8*		
%Retention to the next term*	**83%**	**95%**	**85%**	**91%**	**81%**	**92%**	**82%**	**90%**	**83%**		**87%**	5
%Retention 1-year**	**81%**	**84%**	**80%**	**78%**	**79%**	**80%**	**78%**	**76%**			**79%**	2
%Retention 2-year**	**76%**	**77%**	**74%**	**72%**	**72%**	**70%**					**74%**	3
*Fall to Spr or Spr to Fall; retained or graduated												
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Modality & Retention

"… the retention lag for online students is mitigated when they interact with support services like Tutor.com or the library … the more students engage with others and ask for help, the more chance they have for advancing …"

Retention Analysis for eMajor Students - Fall 2019 to Fall 2023						
Rev: 12-5-2023						
	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021
eMajor BBA Students (major code with "O") using services:						
Transcript Evaluation - n	*0*	*11*	*16*	*16*	*17*	*19*
Transcript Evaluation - Retention (2-year)	-	82%	81%	81%	71%	74%
Libray - n	*14*	*18*	*17*	*14*	*13*	*15*
Library - Retention (2-year)	79%	89%	82%	86%	92%	73%
Call Cycles - n	*201*	*295*	*312*	*329*	*319*	*355*
Call Cycles - Retention (2-year)	80%	78%	73%	69%	69%	73%
Tutor.com - n	25	40	41	39	41	41
Tutor.com - Retention (2-years)	88%	90%	83%	85%	88%	85%