Research and Policy Brief

Graduate Course Outcomes by Modality: Online versus Face-to-Face

January 16, 2024

pass rates; no academic area had a statistically significant difference in pass rate and Columbus State University was the only institution where the difference was statistically significant.

An accompanying data file that provides descriptive comparisons between online and face-to-face course sections for the eight academic areas and courses that have the highest online enrollment system-wide as well as for each sector and institution is available upon request.

Descriptive Analysis

<u>System Summary: Academic Area</u>

At the system level, across the eight academic areas with the highest online enrollment, students in the face-to-face section tend to outperform their online counterparts. The system level outcomes and

students in the online section earned As at a higher rate than their face-to-face counterparts (85% vs. 74%, respectively).

Six academic areas had a higher pass rate in face-to-face sections compared to online sections (see Figure 3). Differences in pass rate were usually within two percentage points. Online students in education and social sciences had marginally higher pass rates than their face-to-

Business and computer and information sciences are the two academic areas that are in each

academic areas with the highest online enrollments, though the order slightly varies. The state university sector only offers online courses in five academic areas.

Paired T-Tests

The paired t-tests allow us to compare pass rates for online and face-to-face courses by academic area and by USG institution. Moreover, the results of this test are used to determine whether the difference in outcomes is statistically significant. This analysis includes all academic areas, based on 2-digit CIP code, and USG institutions with at least one graduate-level course offered in both an online and face-to-face format. The t-tests are limited to pass rates since pass rates are the most applicable at the graduate

Table 2

Pass Rate: Online versus Face-to-Face
Paired T-test Results by Academic Area (2-digit CIP)

Academic Area	# of Course Pairs	Online Pass Rate	Face-to-Face Pass Rate	Difference	t	Significance
Computer and Information Sciences (11)	73	0.95	0.95	0.00	-0.092	