The overarching purpose of assessment in General Education (GE) is to enhance and improve undergraduate student learning experiences afforded by the GE program at Cal State East Bay. Looking beyond the CSU Chancellor's Office and WASC accreditation requirements which necessitate GE assessment (EO 1100, Section 6.2.5), the true value of GE assessment extends from how we collaboratively make meaning of assessment results to inform improvements in GE.

GE learning outcomes are aligned to the Institutional Learning Outcomes (ILOs), WASC Core Competencies, and AAC&U's LEAP Essential Learning Outcomes, all of which express the knowledge, skills, and values CSUEB graduates are expected to attain. Collectively, CSUEB's GE learning outcomes and ILOs distinguish who we are, what we value, and how we expect students to demonstrate their learning. Thus, the assessment of GE outcomes enables our campus community to gauge how effective we are in helping our students attain these outcomes. The General Education Long-term Assessment Plan for 2018-2026 (18-19 CAPR 2) details a consistent, rigorous assessment process and necessitates the development of new assessment tools for each GE area.2

WASC, robust and meaningful assessment of GE at key "checkpoints" (also known as guidepost assessment) is extremely valuable in informing improvements, which help move GE into a more coherent, intentional, and scaffolded program. Performing guidepost assessment of student knowledge allows us to gauge how well students develop the ability to reason quantitatively as

First-time freshmen at CSUEB are expected to attempt completion of GE Area B4 Quantitative Reasoning during their first year (EO 1110) and are required to pass the B4 course with a minimum C-/CR by the end of their sophomore year (EO 1100). Which math or statistics course (B4) pathway students take depends on two criteria: (1) math placement category (Categories I-IV), and (2) major or area of interest. For Category I students in STEM or Business, the major may require math/stat courses beyond the completed GE B4 requirement (See Fig. 1).
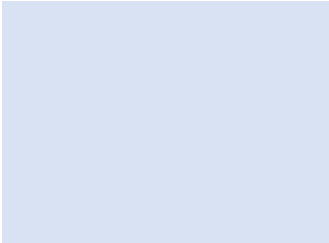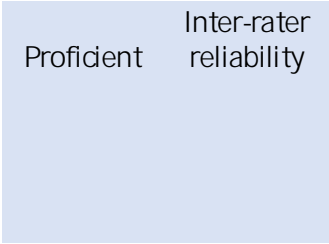
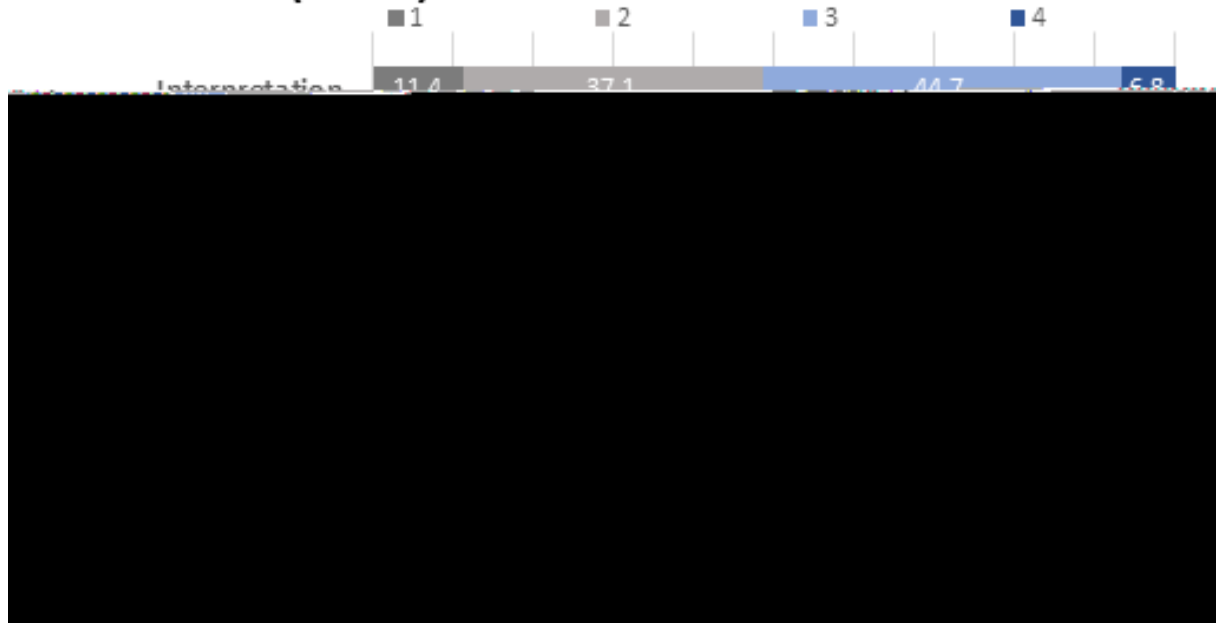| MATH 2019 (N = 40)	% Students by Performance Level				%	
	4	3	2	1	Proficient	Inter-rater reliability

MATH 2020 (N = 66)

	■1	■2	■3	■4
Interpretation	11.4	37.1	44.7	6.8

The following figure shows the proficiency differences in Math 115, Fall 2019 and Fall 2020 (COVID)
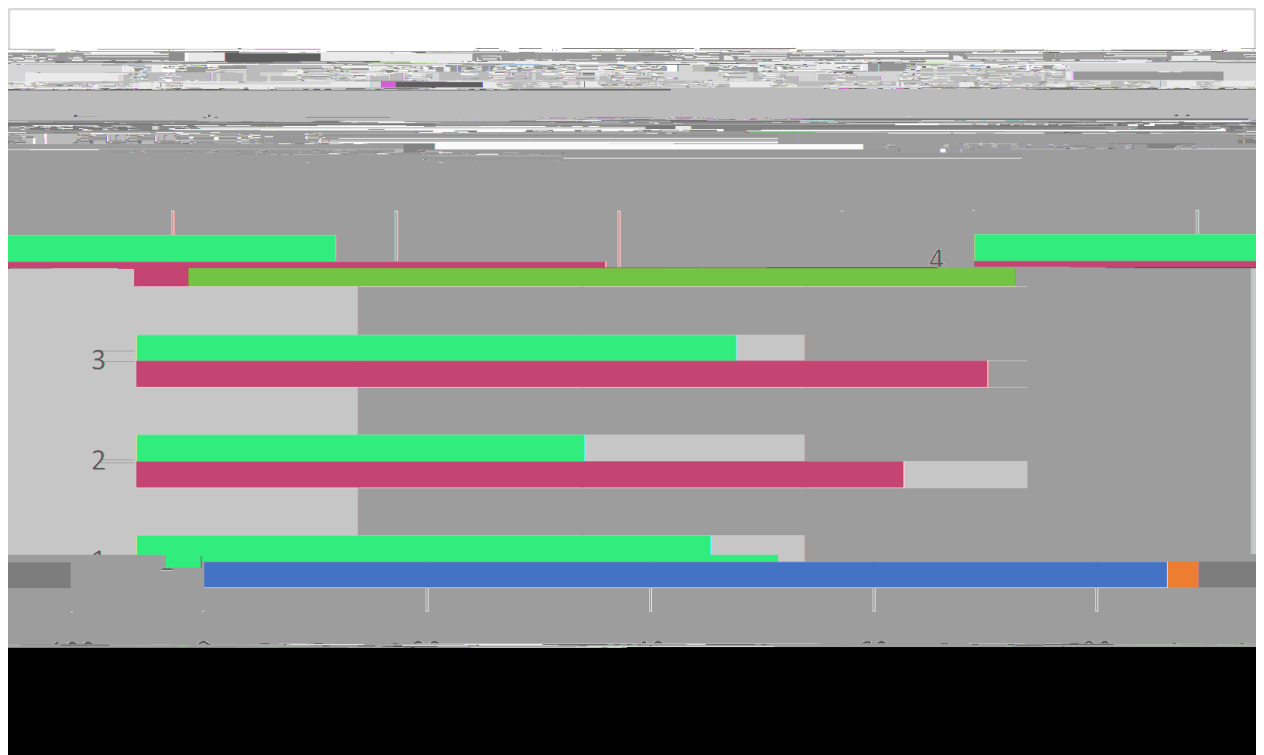
MATH 115 DFW rate for Freshmen on their first attempt at B4

	TOT ENROLL	% PASS (A,B,C,CR)	% NOT PASS (D,F,W,WU,I,NC)

STAT 2019 (N = 32)

% Students by Performance Level

4			1		%
				Proficient	Inter-rater reliability
				98.5	96.9
				73.4	84.4
				76.6	90.6
				71.9	96.9

STAT 2020 (N = 12)

% Students by Performance Level

4	3	2	1		%
				Proficient	Inter-rater reliability
				75	66.7
				75	66.7
				62.5	41.7
				45.8	41.7

% of Students by Performance Level

STAT 2020

■ 1 ■ 2 ■ 3 ■ 4

Interpretation 8.3 16.7 37.5 37.5

% of Students by Performance Level
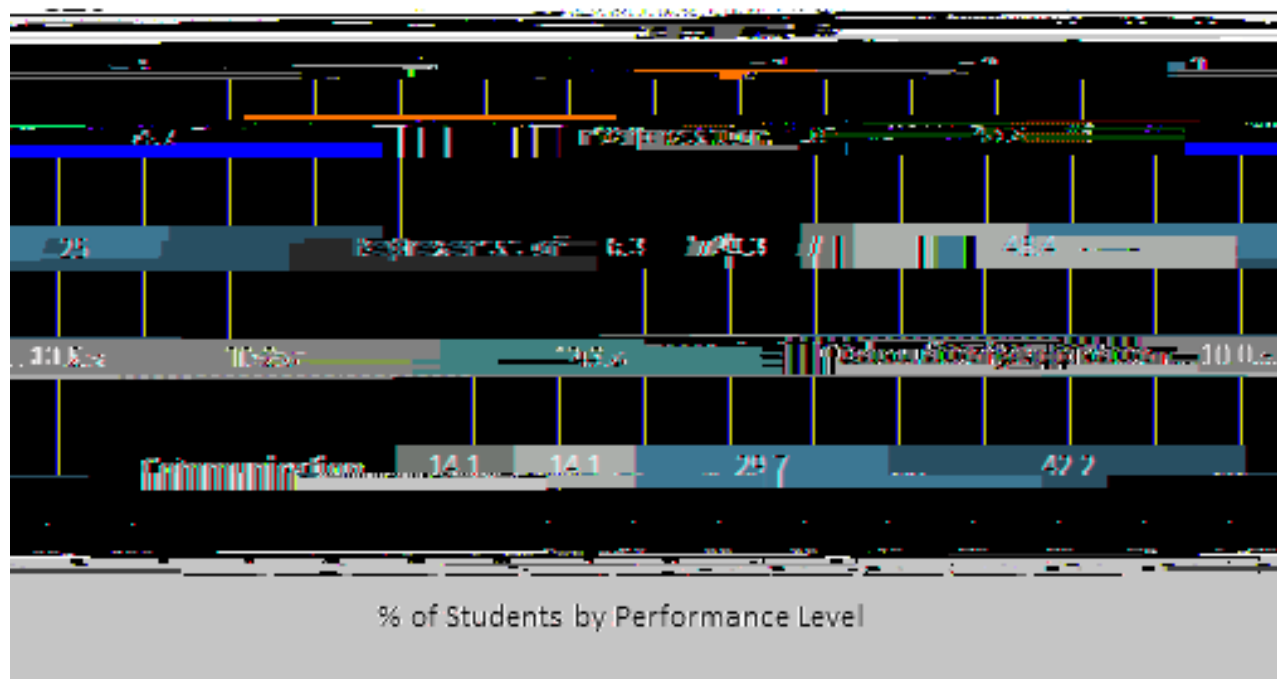
The following figure shows the proficiency differences in STAT 100, Fall 2019 and Fall 2020 (COVID)

STAT 100 DFW rate for Freshmen on their first attempt at B4

	TOT ENROLL	% PASS (A,B,C,CR)	% NOT PASS (D,F,W,WU,I,NC)

Review the B4 Quantitative Reasoning Rubric and possible assignments for the next assessment.

Additional calibration and discussion to improve inter-rater reliability during the next assessment.

Explore pass rates and success of students in B4 courses in both MATH and STAT.

Explore if equity gaps exist for each of the rubric criterion and how to address them.

Continue to discuss ways to increase the alignment between GE and ILO rubrics.

A mini retreat for B4 faculty could be scheduled in the future to further engage faculty from Math and Statistics in assessment. Sharing the rubric, assignments, and learning outcomes with faculty teaching MATH 115 and STAT 100 and making revisions as needed will lay the groundwork for future assessments. Reaching out to Community College faculty for Math about B4 learning outcomes and assessment may be valuable as well.

Assessment of GE Area B4 Quantitative Reasoning should take place more frequently than every five years. In MATH 115 a concept map is being used for the final. If the concept map was used for assessment, it would be easier to ask all faculty teaching the course to use it.

Other next steps are to revise B4 learning outcomes and develop course characteristics for B4 courses, with a focus on skill development.

Departments and faculty who teach GE courses need to engage in discussions and actively work to reduce DFW/Equity gap percentages. The goal of the Graduation Initiative 2025 is to have a 0% equity gap in all courses.

Discussions are needed on a broader level about General Education, to overhaul outcomes, criteria, and analyze what we really want to capture.