

Equitable Learning
Starts with SLOs:
Streamlining Data
Collection and Analysis
that Leads to
Meaningful Changes

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SCAN ME

*We will leverage interactive polling:
pollev.com/vinhnguyen321*



What do you think of when we you hear “Equitable Learning?”

What do you think of when you hear "Equitable Learning?"

IVC Grades Dashboard



Success Type
Success Rates

Term Desc
Multiple values

Course Prefix
CHEM

Course ID
CHEM 1 A

All

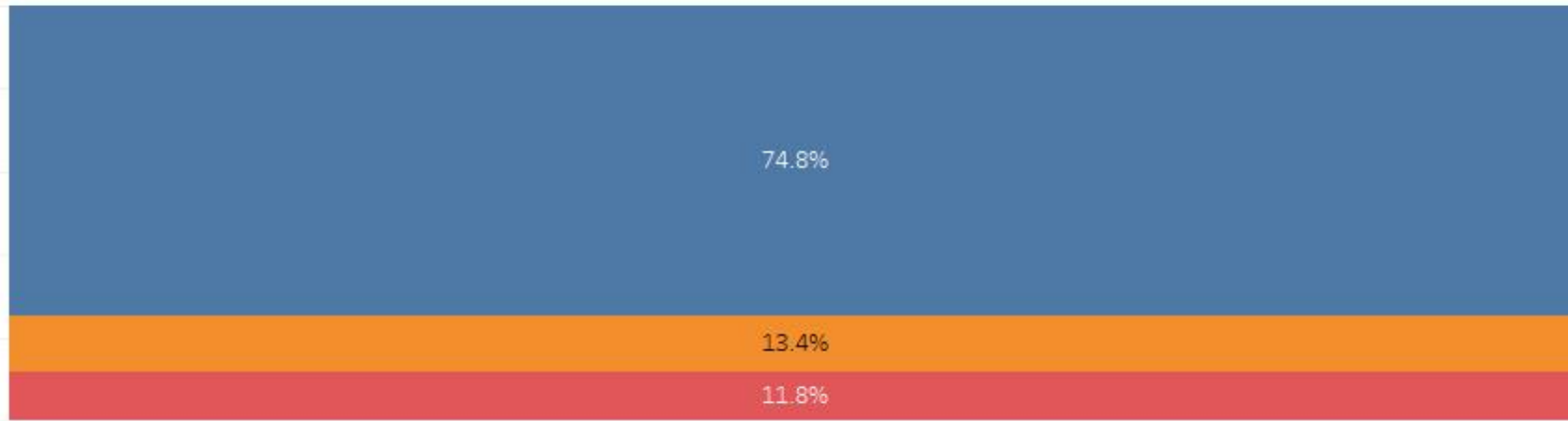
Subgroups

EW Filter
All

Success Rates

Grade Breakdown
■ Passing Grade
■ Non-Passing Grade
■ Withdrew

Comparison
■ All



All

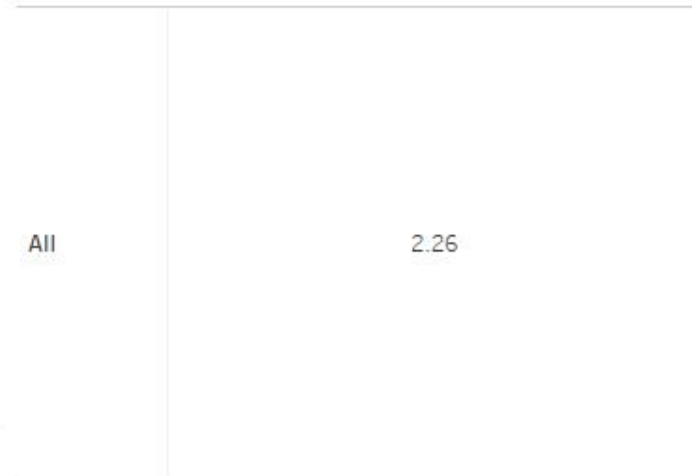
HeadCount

Average Grade

Instructors



603



All

2.26



9

IVC Grades Dashboard



Success Type
Success Rates

Term Desc
Multiple values

Course Prefix
CHEM

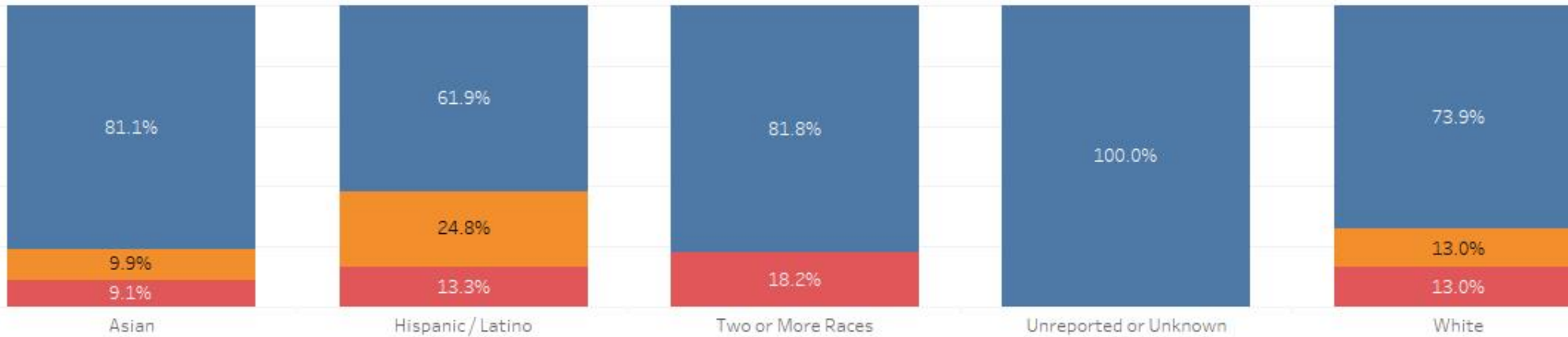
Course ID
CHEM 1 A

Subgroups
Ethnicity

EW Filter
All

Success Rates

- Grade Breakdown**
- Passing Grade
 - Non-Passing Grade
 - Withdrew
- Comparison**
- Asian
 - Hispanic / Latino
 - Two or More Races
 - Unreported or Unknown
 - White

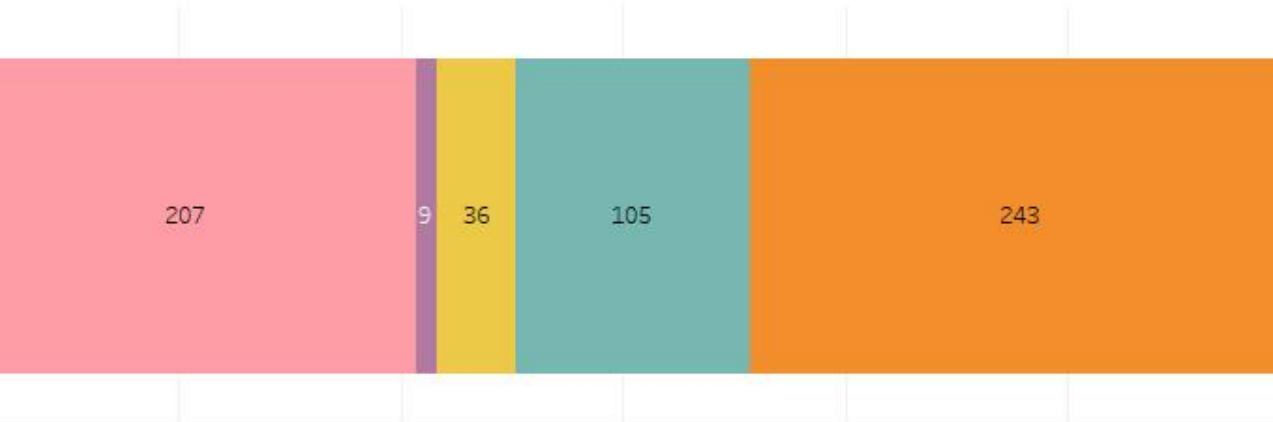


HeadCount

Average Grade

Instructors

Asian	2.45
Hispanic / Latino	1.78
Two or More Races	2.17
Unreported or Unknown	2.11
White	2.29



Grades \neq Learning

However, if learning were equitable, we wouldn't see gaps in grades

What can institutions do?

Support Services

- Early alert systems
- Counseling
- Tutoring

Optional -> Low Participation by Students

Instructional Faculty

- More welcoming / caring syllabus
- Grading policy (drop lowest, different weights)
- Flexibility in due dates
- Variation in instructor / section success rates -> professional development for faculty
- Pedagogy
- Embedded tutoring programs

Optional -> Low Participation by Faculty

Difficult to scale!

What can *institutional researchers* /
offices do to ensure equitable
learning?






(In)Equitable Learning: Where should we focus our attention?




Strategic Thinking: Students as Captive Audience

How much time does a student spend in the classroom each semester?

Activity	 One Course:	 Three Courses:
	Hours spent	Hours Spent
Admissions and Records	2	2
Financial Aid	2	2
Counseling/Advising	2	2
Tutoring	4	8
Student clubs and activities	8	8
Classroom	48	144
Total	66	166


~73% of time spent in the classroom


~87% of time spent in the classroom

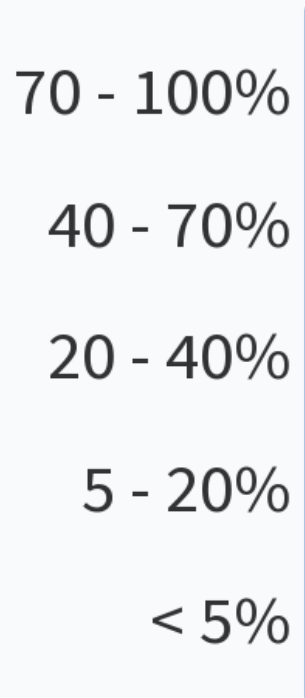
*Focus on
instruction for
widest net!*

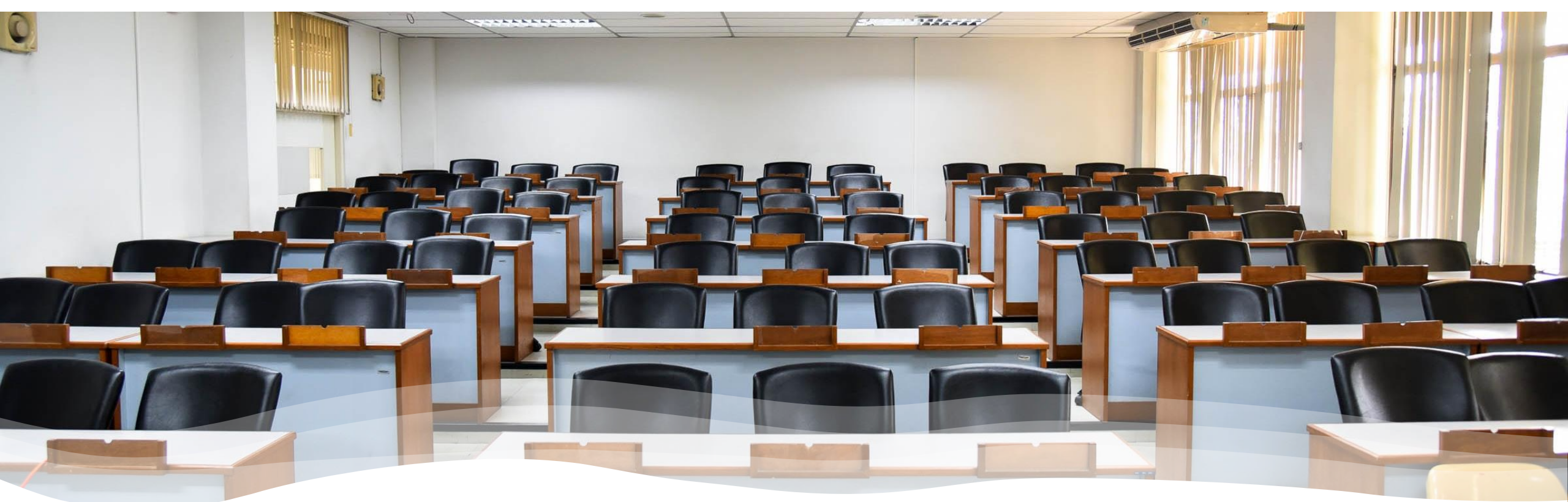
Adapted from Betancourt Lopez (2020) | Time estimates based on 3-unit courses

Faculty Participation

- Academic/faculty senate
- Academic Affairs committee
- Curriculum committee
- Participatory governance committees
- Professional development committee
- Student Equity and Achievement program
- Guided Pathways (Meta-majors, Program Mapping, Website Redesign, Student Experience, Completion / Student Success Teams, etc.)
- AB 705 implementation
- Co/extra-curricular activities with students

At your campus, what proportion of full-time and part-time faculty are actively engaged in your most popular institutional improvement efforts?





Observation: Optional -> Low Participation



Strategic Thinking: Faculty as Captive Audience

Is there an existing process that we could piggy-back on to ensure equitable learning?

Faculty Contractual Obligations (Local District)

14.4. Professional Duties within the Hours of Service

a. Each faculty member shall:

- (1) Comply with their individual workload assignments.
- (2) Comply with the applicable Course Outline of Record(s) (COR) for their assignment(s).
- (3) Participate in SLO assessment and, for full-time members, program review, college accreditation processes, and curriculum and program development, updates, and technical/program reviews, as appropriate.
- (4) Make a syllabus accessible to students and upload to a District-approved repository.
- (5) Respond to and evaluate student work regularly and consistently, inform students on a timely basis of their progress in the course throughout the term, and report final grades to Admissions, Records, and Enrollment Services by an announced deadline each term.
- (6) Respond to student academic concerns, as appropriate, in a timely manner.
- (7) Report all personal absences to the dean as required by District policy.
- (8) Complete training once every two years in Title IX (20 U.S. Code §1681 et seq.) / unlawful discrimination prevention, and any other training determined to be mandatory by agreement between the District and the Faculty Association, or by law. Part-time faculty members will receive compensation for training according to the appropriate stipend rate if required to attend.
- (9) First-year probationary faculty members will attend college and District orientation meetings during the fall semester professional development week.
- (10) Full-time faculty members shall attend commencement, or appropriate graduation ceremony, unless participating in a different coincidental District duty (e.g., a coach attending an athletic competition which coincides with the commencement ceremony). Full-time faculty who fail to attend commencement shall report their absence per District policy and will have one-half (1/2) day of appropriate leave deducted.
- (11) Full-time faculty members shall complete their professional development obligations, calculated for full-time faculty members at 4.2 hours per professional development day (for example, if the approved academic calendar has nine (9) professional development days scheduled, the total obligation is 37.8 hours). These hours may be completed at any point during the contract year and must be entered into a District-designated repository by June 15.
- (12) Full-time faculty members shall provide an average of 1 hour per week of college service as mutually agreed upon with their dean. These activities are intended to support the division, college and/or District goals through active participation in one or more of the following college service categories:
 - a) Committee work on the department, division/school, college, and/or district level-
 - b) Non-classroom college, district, or community activities
 - c) Department/division/school activities, events, or meetings
 - d) Student club advisor activities or events.

ACCJC Accreditation Standard I.B.6

The institution disaggregates and analyzes learning outcomes and achievement for subpopulations of students. When the institution identifies performance gaps, it implements strategies, which may include allocation or reallocation of human, fiscal and other resources, to mitigate those gaps and evaluates the efficacy of those strategies.



Strategy



To impact the most students, focus on instruction, and on learning outcomes (SLO's) assessments, which is a faculty contractual obligation, and is an accreditation requirement.

Note: assessment as a requirement does not imply it is done by all or is effective.



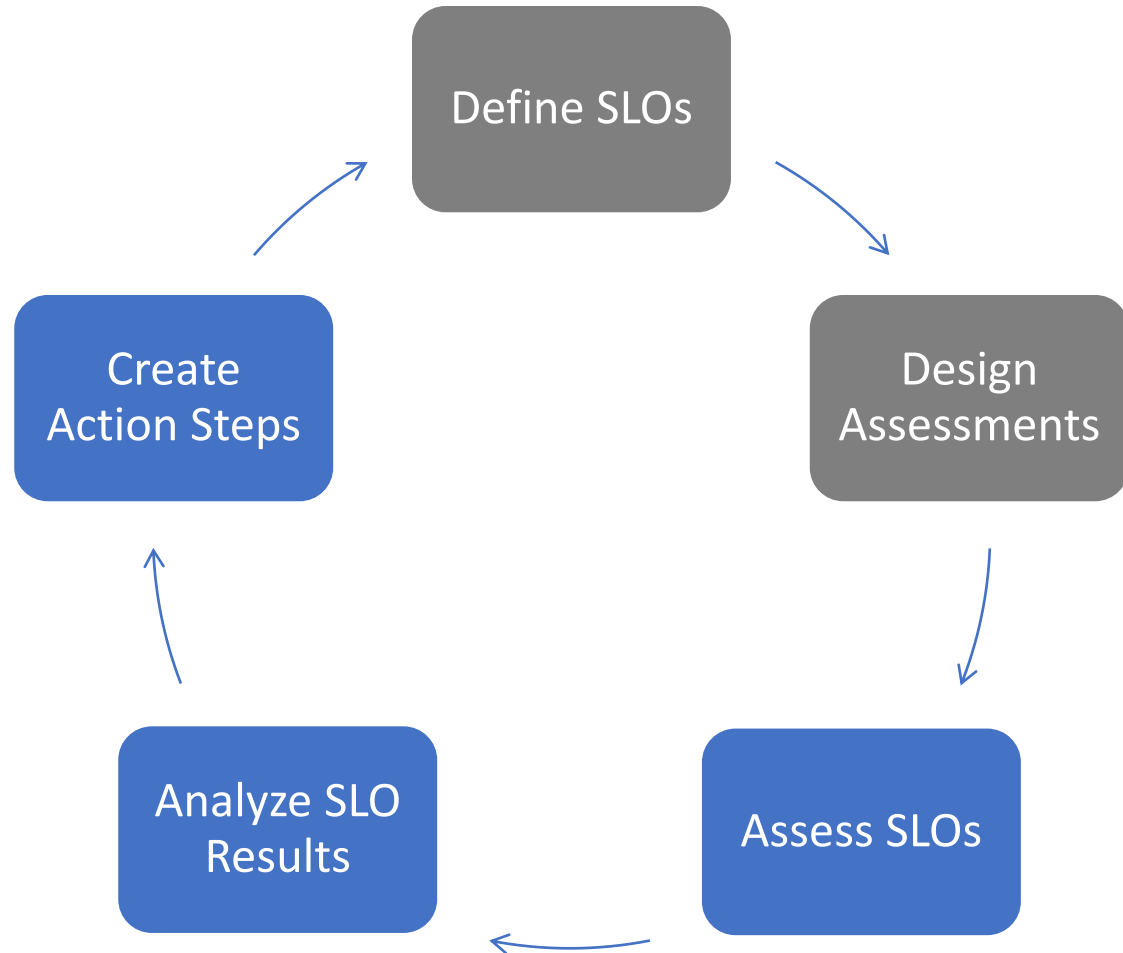
Outcomes Assessment: Difficult / Effortful

Why SLOs?



- Grades capture many aspects of performance that are unrelated to learning (e.g., attendance, promptness, access to resources, etc.)
- Course **objectives** name what students *should* learn
- Course **learning outcomes** are the measurable skills or abilities a student should be able to demonstrate after completing the course
- SLOs help identify skills gaps

SLO Assessments



6. How many students attempted the SLO assessment? * 

The value must be a number

7. Of the assessed students, how many passed the SLO assessment? *

The value must be a number

8. What were the main findings of your SLO assessment? *

Enter your answer

9. Was the criteria for successful completion of your SLO met? *

Criteria met

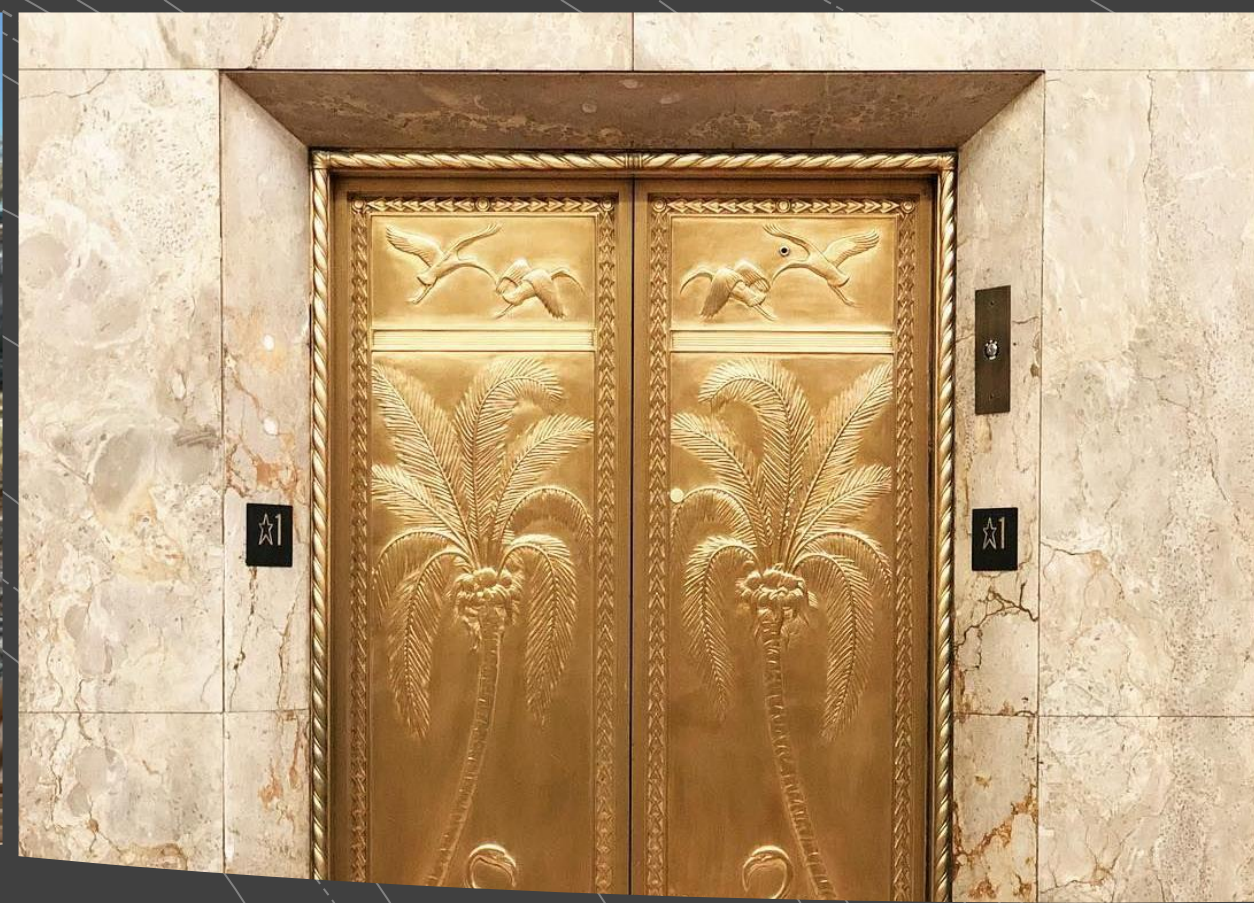
Criteria not met

10. What changes have you made that impacted the results of your SLO assessment? *

Enter your answer

11. What changes could you make to positively impact the results of your SLO assessment? *

Enter your answer



SLO creation and assessment is under faculty purview,
but how can IR make the process easier?

How are student-level SLO assessment data collected at your college? (Term, Course, Section, SLO #, Student, Mastery)

We don't collect student-level data.

Faculty collects their own data.

Faculty collects the data and enters them into a college-wide system.

Data automatically collected from assignments/quizzes and entered into a college-wide system.

I don't know.

Data Collection and Analysis: by Instructor

- Collect assessments themselves in a spreadsheet
- Collect term over term: can see trends in mastery rate, and impact to rates when changes are implemented
- How can instructors disaggregate on attributes like ethnicity?
 - Would require supplemental data provided by IR office
- Multiple instructors teaching the course, how do you combine?
 - Would require a coordinator to pool in multiple sources of data.
 - Base actions on results of a single instructor?





Ensure learning with SLO's...

- Only if we are measuring, analyzing, and making changes
- Effective only if data collection is consistent (term-to-term and instructor-to-instructor)

Simplify Data Collection & Analysis

- Assignments and quizzes in Canvas linked to learning outcomes, with rubric.
- Set in Canvas shell
- Import for a new section in new term
- Results readily available for analysis (exported and visualized)



Hover Mouse
Below to Start

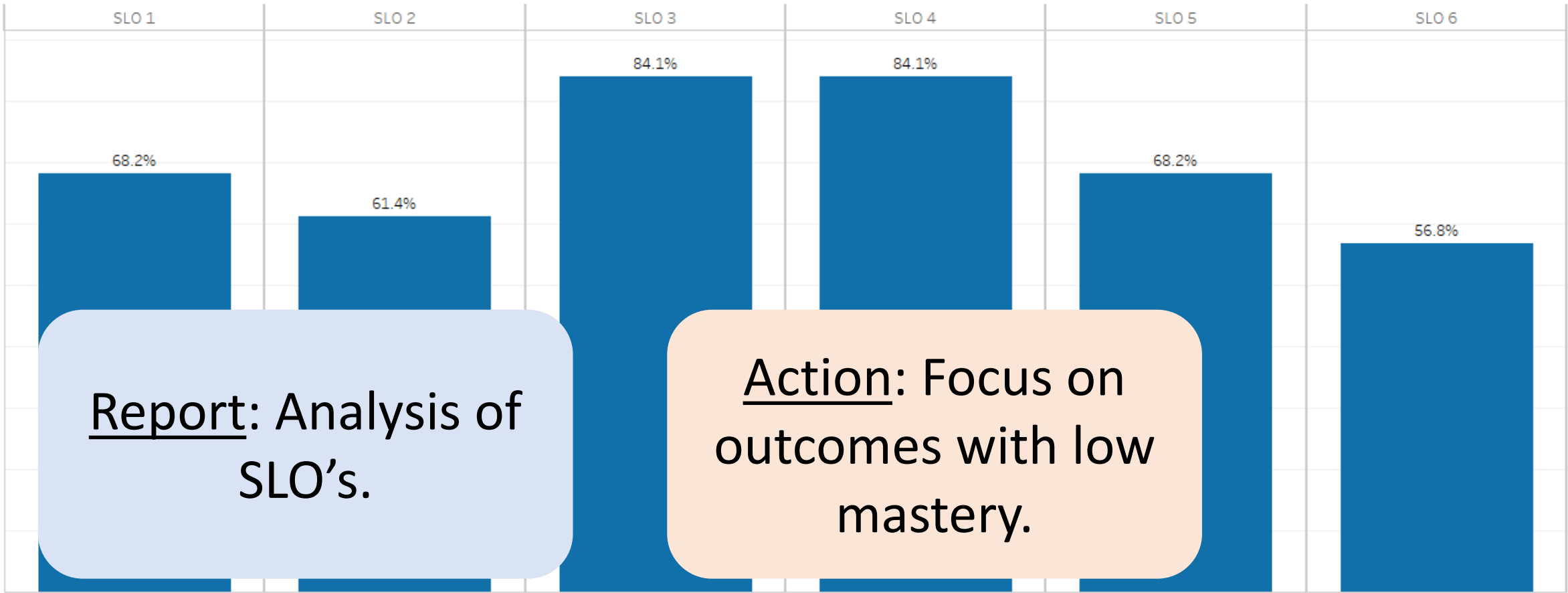
Student Learning Outcomes Report



Term: Multiple values
 Division/School: All
 Department: All
 Program: All
 Course ID: CHEM 3
 Subgroup Selection: All



Chart of Mastery Rates



Report: Analysis of SLO's.

Action: Focus on outcomes with low mastery.

Subgroups
■ All

Hover Mouse
Below to Start

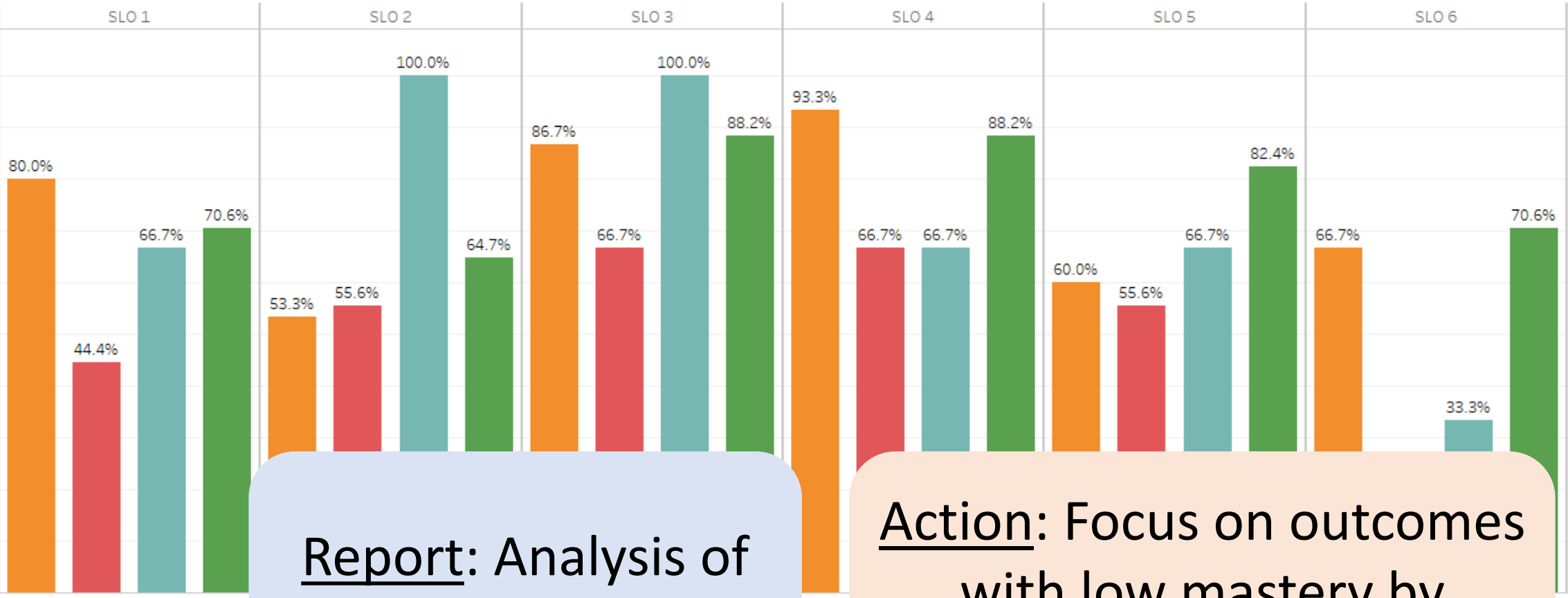
Student Learning Outcomes Report



Term: Multiple values | Division/School: All | Department: All | Program: All | Course ID: CHEM 3 | Subgroup Selection: Ethnicity



Chart of Mastery Rates



Report: Analysis of disaggregated SLO's.

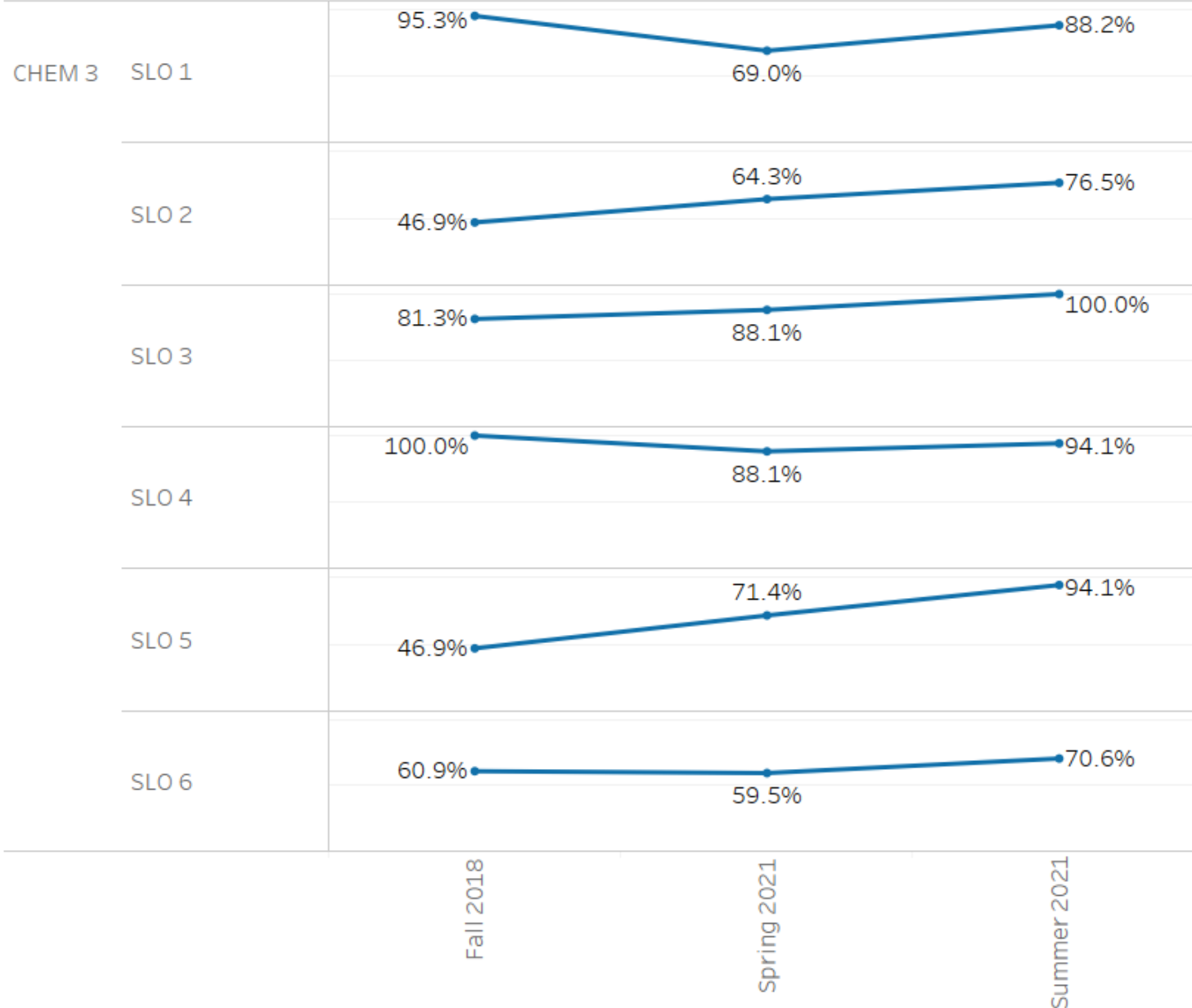
Action: Focus on outcomes with low mastery by population of interest.

Subgroups

- Asian
- Hispanic/Latino
- Other Ethnicity
- White

SLO Mastery Rates, Historical Trends by SLO

Course & SLO Historical View



Course ID
CHEM 3

Term
Multiple values

SLO
All

Subgroup Selection
All

Subgroup
All

Report: Analysis of SLO trends.

Action: Confirm that changes are working, or try something else.

SLO Mastery Rates, Historical Trends by SLO

Course & SLO Historical View

Course ID

CHEM 3

Term

Multiple values

SLO

All

Subgroup Selection

Ethnicity

Subgroup

Asian

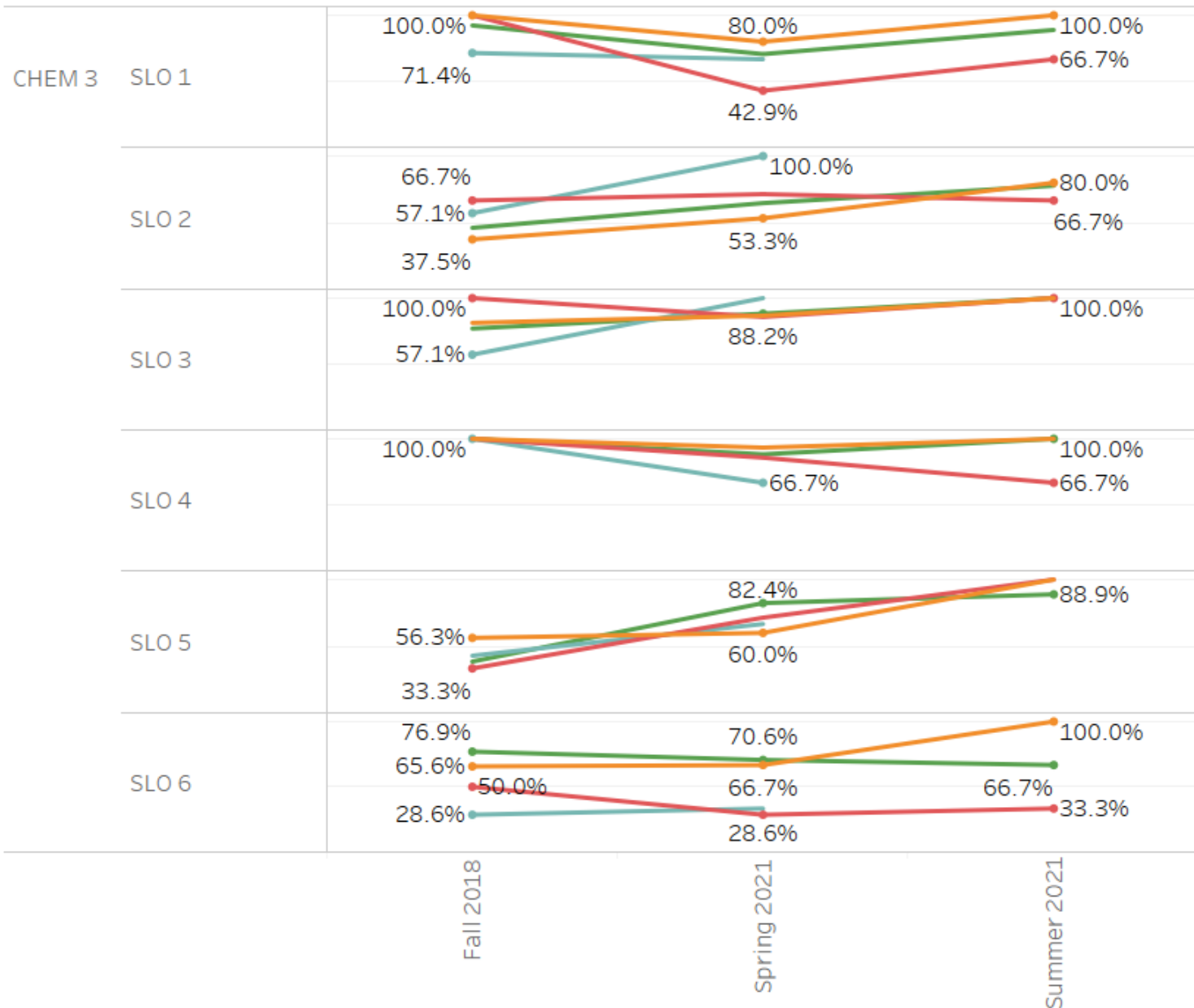
Hispanic/Latino

Other Ethnicity

White

Report: Analysis of disaggregated SLO trends.

Action: Confirm that changes are working, or try something else.



As of today, how would you rate the progress of course SLO assessments at your college for the fall 2021 semester?

75 - 100% completed

50 - 75% completed

25 - 50% completed

< 25% completed

I don't know

CANVAS Usage Data, Course Trends

[Download Excel File](#)

Division/School

Department

(All)

Chemistry

	Fall 2022	Fall 2021	Fall 2020	Summer 2020	Spring 2020	Fall 2019
CHEM 1 A # of Students with SLO Data	0	313	0	0	0	0
# of Assessments	0	1,565	0	0	0	0
# of SLOs in CANVAS	0	70	0	0	0	0
CHEM 1 B # of Students with SLO Data	0	91	0	0	0	0
# of Assessments	0	182	0	0	0	0
# of SLOs in CANVAS	0	10	0	0	0	0
CHEM 3 # of Students with SLO Data	0	2	0	0	0	0
# of Assessments	0	12	0	0	0	0
# of SLOs in CANVAS	0	6	0	0	0	0
CHEM 4 # of Students with SLO Data	0	68	0	0	0	0
# of Assessments	0	136	0	0	0	0
# of SLOs in CANVAS	0	6	0	0	0	0
CHEM 12 A # of Students with SLO Data	0	61	0	0	0	0
# of Assessments	0	61	0	0	0	0
# of SLOs in CANVAS	0	2	0	0	0	0
CHEM 12 B # of Students with SLO Data	0	15	0		0	0
# of Assessments	0	15	0		0	0
# of SLOs in CANVAS	0	1	0		0	0

Report: Data collection by course.

Action: Set up data collection on Canvas.

CANVAS Usage Data, by Instructor

Download Excel File

Term: Fall 2021 | Division/School: (All) | Department: Chemistry | Course ID: (All)

Course ID	Term Desc	BK SectionID	Primary Instructor	# of Students with SLO Data	# of SLOs in CANVAS	# of Assessments
CHEM 1 A	Fall 2021	61525	[Redacted]	17.0	5.0	85.0
		61540	[Redacted]	24.0	5.0	120.0
		61545	[Redacted]	22.0	5.0	110.0
		61560	[Redacted]	23.0	5.0	115.0
		61570	[Redacted]	22.0	5.0	110.0
		61575	[Redacted]	20.0	5.0	100.0
		61580	[Redacted]	29.0	5.0	145.0
		61585	[Redacted]	0.0	0.0	0.0
		61590	[Redacted]	26.0	5.0	130.0
		61615	[Redacted]	19.0	5.0	95.0
		61620	[Redacted]	22.0	5.0	110.0
		61630	[Redacted]	23.0	5.0	115.0
		61640	[Redacted]	23.0	5.0	115.0
		61650	[Redacted]	24.0	5.0	120.0
		61665	[Redacted]	19.0	5.0	95.0

Report: Data collection by course.

Action: Notify instructors of sections requiring data collection.

Academic Year: All

Division: All

Department: All

* Note: If there is no colored square for a given year, the course was not offered in that year.

	2018-2019	2019-2020	2020-2021	2021-2022
COMM 106B	■	■	■	■
COMM 106C	■	■	■	■
Computer Info Mgt				
CIM 45	■			
CIM 51	■			
CIM 103	■	■	■	
CIM 107	■	■	■	■
CIM 110	■	■	■	■
CIM 112.1	■	■	■	■
CIM 112.2	■	■	■	■
CIM 112.3				■
CIM 115	■	■	■	■
CIM 116.1				■
CIM 116.2				■
CIM 117	■	■	■	■
CIM 141	■	■	■	
CIM 144	■			
CIM 160	■	■	■	
CIM 161		■	■	■
CIM 168	■	■		■
CIM 170		■		
CIM 181	■	■		■
CIM 182	■	■		
CIM 201A	■	■	■	■
CIM 201B	■	■	■	■
CIM 201C	■	■	■	■
CIM 209	■	■		
CIM 210.1	■		■	
CIM 210.2	■	■	■	
CIM 212.2	■	■	■	

- (All)
- Entered
- Missing

(All)

Select

(All)

Select Department

(All)

Report: Which course did not submit assessments?

Action: Deans/Chairs can nudge instructors.

Need to enter your SLO Assessment Data?

Enter in your results in the "Enter Results" tab on the top right or go to <https://www.ivc.edu/research/slo> for more info!

Access disaggregated SLO Results from Canvas here:

https://link.ivc.edu/canvas_slo

Select a view:

Missing or Entered?

Missing

Entered: This view shows all SLO assessments completed by each department. Every unique SLO per course is counted. For example, if WR 1 submitted data for 5 SLOs in a given year, it will count as 5 submissions for English.

Missing: This view shows the number of courses that have not submitted any SLO assessments in the selected academic year.

Academic Year

(All)

Select Division

(All)

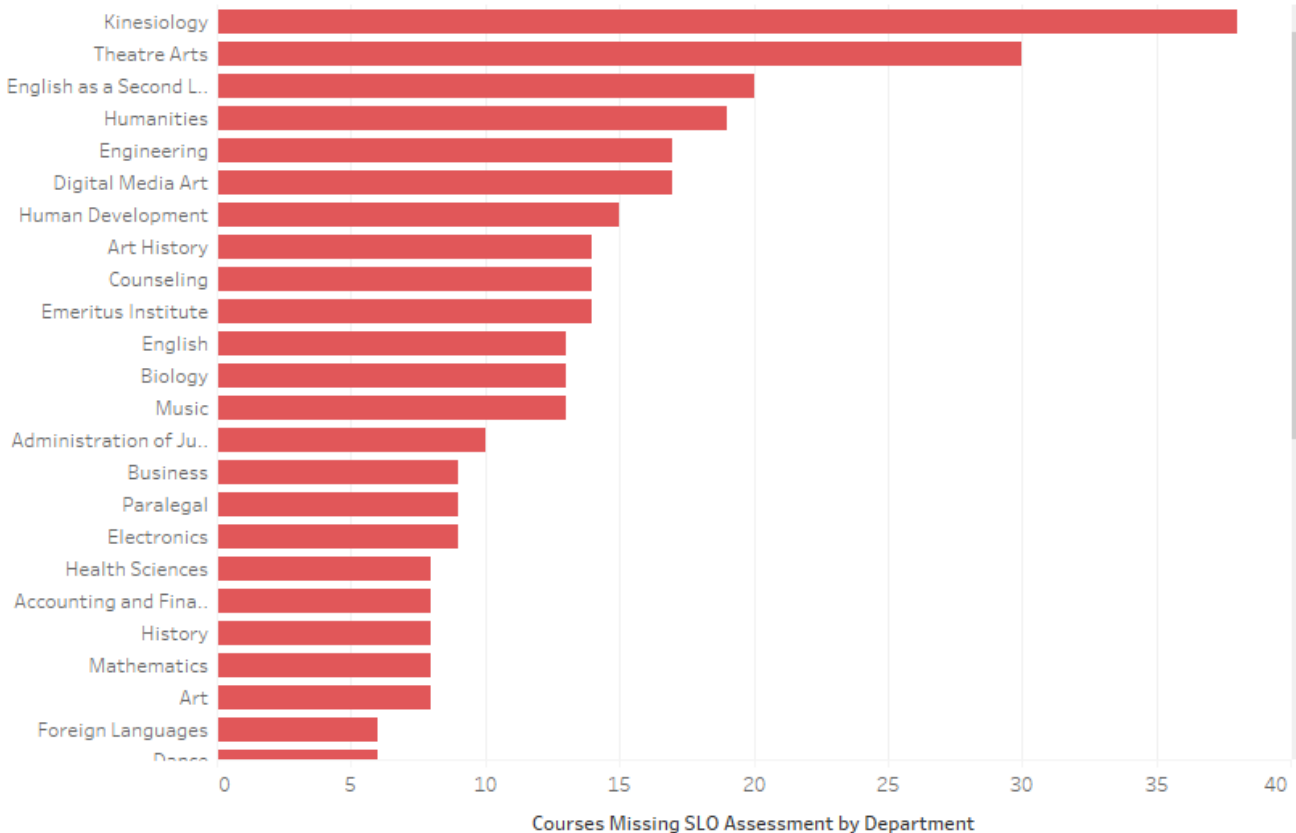
Select

(All)

Academic Year: All

Division: All

Department: All



Report: Which departments have the most **outstanding** assessments?

Action: Deans can nudge department chairs.

Select a view:

Missing or Entered?

Entered

Entered: This view shows all SLO assessments completed by each department. Every unique SLO per course is counted. For example, if WR 1 submitted data for 5 SLOs in a given year, it will count as 5 submissions for English.

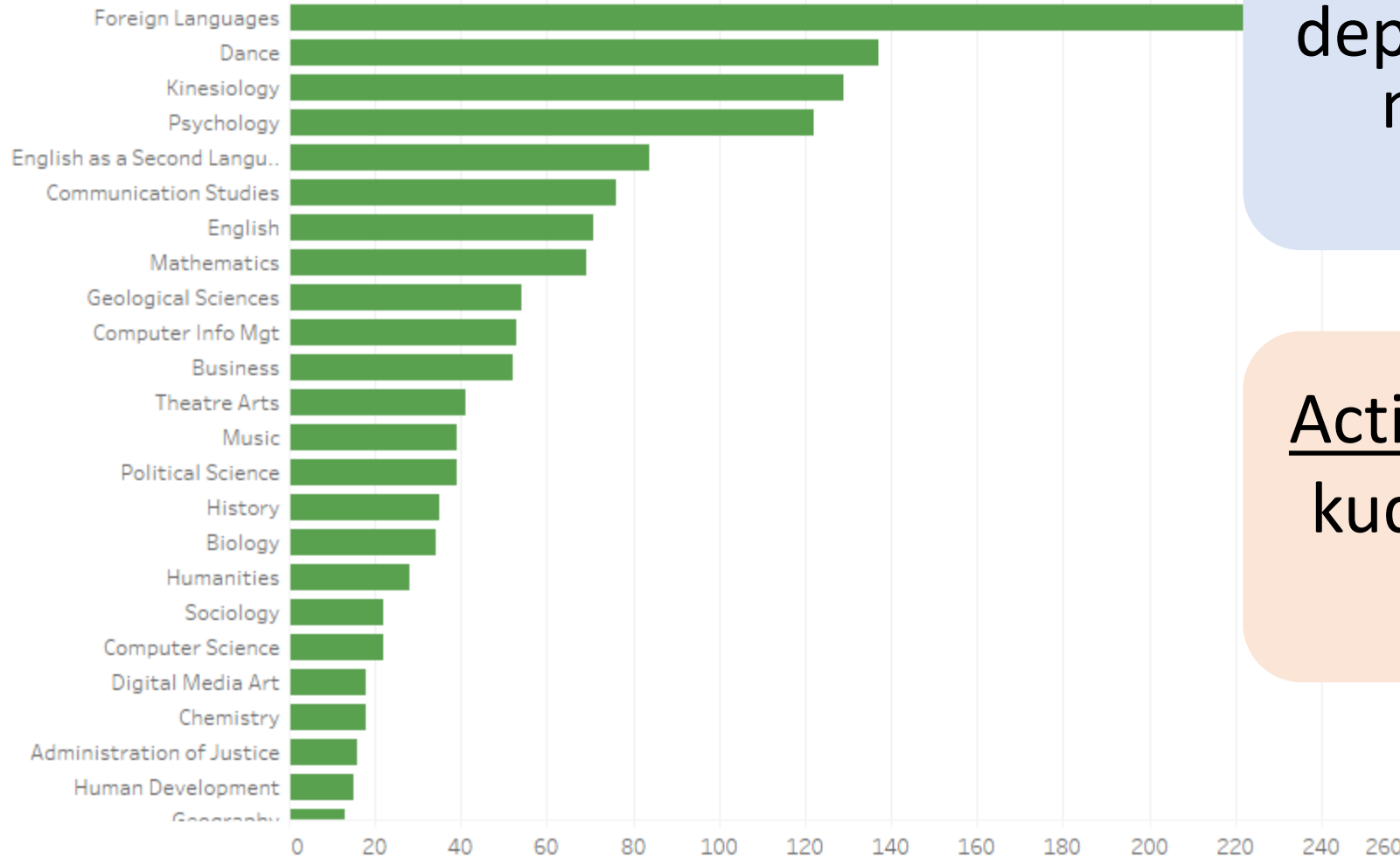
Missing: This view shows the number of courses that have not submitted any SLO assessments in the selected academic year.

Academic Year

(All)

Select Division

(All)



Report: Which departments have the most **completed** assessments?

Action: Deans can give kudos to department chairs.



Current Progress @ IVC

- Infrastructure: Data Collection in Canvas
- Infrastructure: Analysis via Reports
- Full adoption of data collection in Canvas (instructors)
- Consistent data collection (term-to-term)

Hope: the needs from accreditation report will make this a priority.



Take-aways

- What can institutional research offices do to support equitable learning?
- Student learning outcomes (SLO's) is a “way in” (carrot instead of stick)
- Help reduce the pain / effort of learning outcomes assessment
- Leverage data collection in Canvas; make analysis results readily available; make it easy for Deans/Chairs to follow up on missing assessments
- Still imperfect, but making progress



Thank you!

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