Program Learning Outcomes Assessment at UCSB:

Group 3 Reintroduction

Open these slides on your computer!

https://tinyurl.com/UCSBassessment2023

Please introduce yourselves!

- Name and department
- If you are here with someone else from your department, please ask them to introduce themselves after you do

Assessment: who's here to help?

Josh Kuntzman
Assessment coordinator

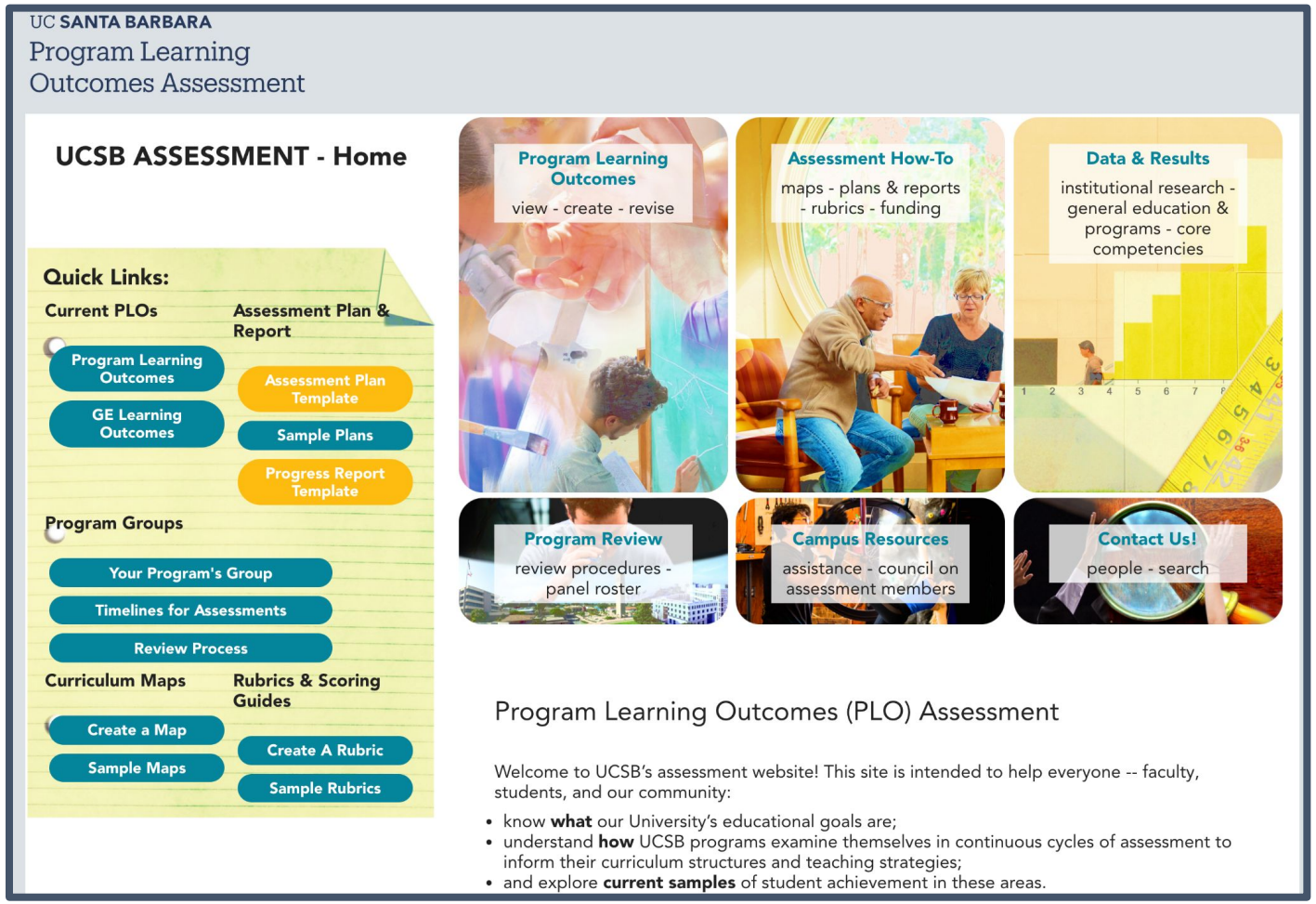
Jin Sook Lee
Associate Dean, Grad Division
Professor, GGSE

Linda Adler-Kassner
Faculty Director, CITRAL
Accreditation Liaison Officer

Amanda Brey
Director, Program Review and Accreditation
Co-Chair, Council on Assessment

Laurel Wilder, Associate
Director, Institutional Research

Assessment.ucsb.edu - a fantastic resource!



Assessment: why?

Because it's our privilege to identify what we want students to learn and know how to do and our responsibility to help them achieve the goals we set.

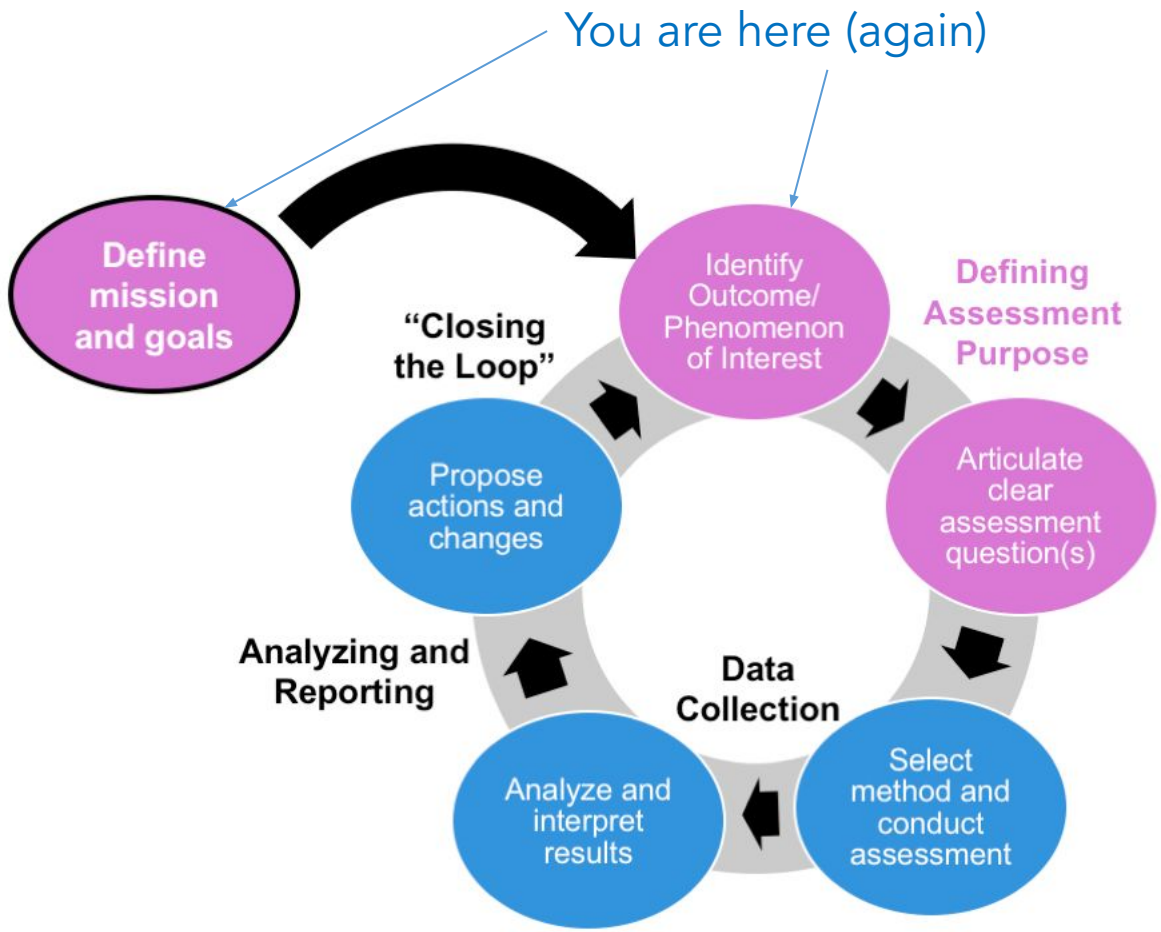
Assessment helps us to do that, and to make adjustments when necessary.

- Are *we creating an environment where all students can meet expectations for learning*? If not, what changes can we make to our environment?

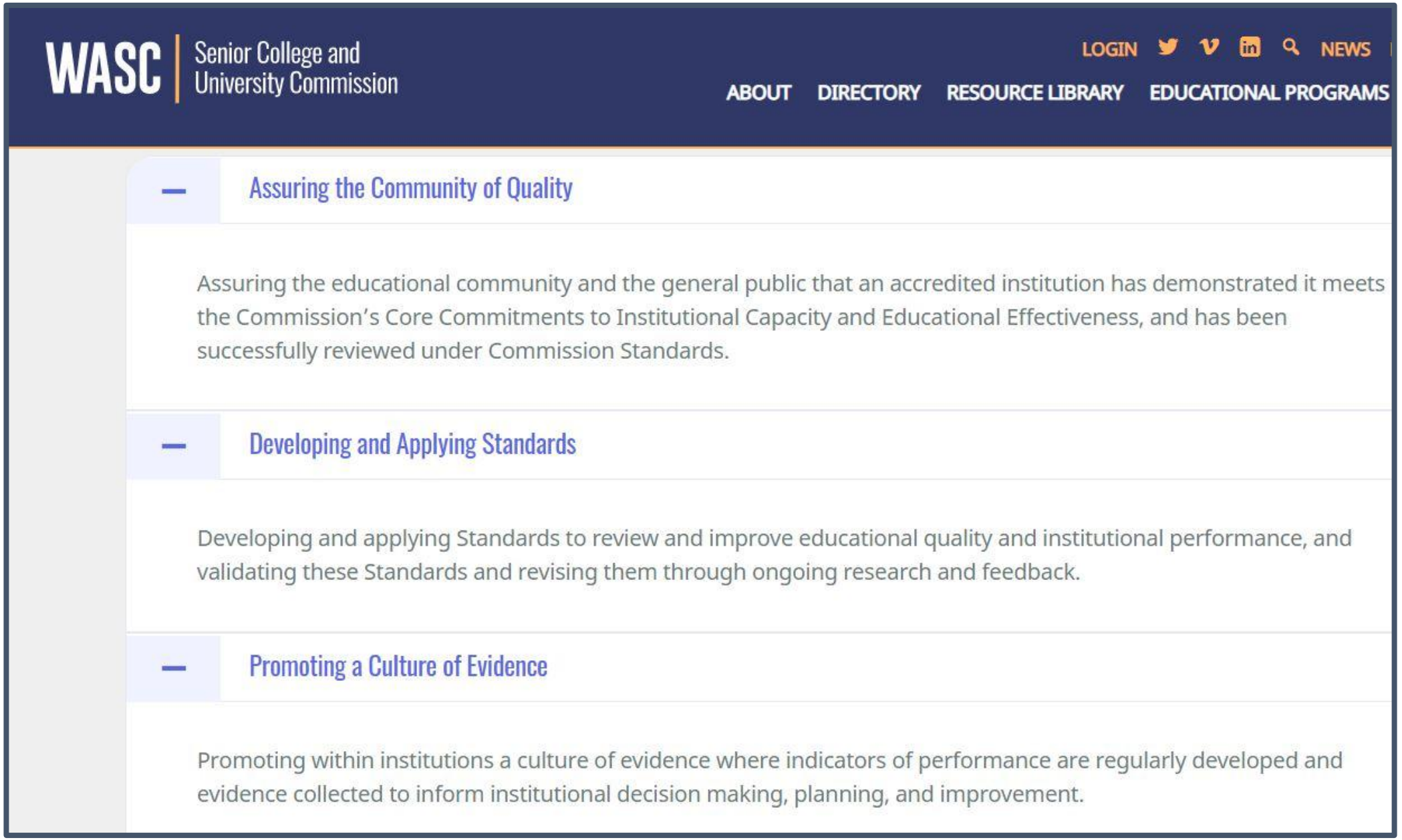
All institutions that receive federal funding must be accredited. This includes:

- Federal grants
- Financial aid
- …and other forms of federal monies.

To be accepted to accredited graduate schools, students must graduate from accredited institutions.


You are here (again)
Define mission and goals
Identify Outcome/ Phenomenon of Interest
Defining Assessment Purpose
Articulate clear assessment question(s)
Select method and conduct assessment
Data Collection
Analyze and interpret results
Analyzing and Reporting
Propose actions and changes
"Closing the Loop"

https://www.wscuc.org/about/



Program Review and PLO Assessment

PLO Assessment is required for Program Review

- All assessments (beginning with first cycle) and any progress reports
- Also must reflect on assessment in the Self-Assessment written by the department

PLO Assessment is required to be included during your External Review Committee (ERC) visit

- An ERC member will have a formal/scheduled meeting with your assessment faculty during your visit

Timeline for PLO Assessment Reports:

2021 - now

Conclude prior (2021-2023) assessment(s)

These are the assessments that you proposed as your round 2 efforts.

January 2024

Submit assessment plans

Assessment plans include **results from prior assessment** and **plans for next (2024-2026) assessment**

January-April

Assessment plans reviewed by CoA

You will receive a memo approving your assessment or asking for revisions (including explanations of possible revisions). **Revisions are due in June/July 2024.**

September 2024-2026

Undertake new assessment

Choosing your plan's focus:

Intriguing Questions

Start Here

Look at - Institutional Data:
dept. profiles, equity dashboards, course grade distributions on Tableau; other pertinent data from UCSB/UCOP; etc.

Ask - Questions about UG/G Learning in your Program:

What details in the data do you find interesting, thought-provoking?
What issues do these raise?
Who is being impacted?
Where/when in degree prog. is this important?

Prioritize - Areas of interest *most* important:

For *equitable* achievement of student learning.

List -

Other Useful Data

Related to this topic of interest.

Target - Learning outcomes related to program courses and instruction.

PLO

and *Direct* / *Indirect* Evidence of this.

Sharpening the focus: Equity and Student Learning

With regard to your questions:

- What questions do dept data raise about who is being well/less well supported?
- What additional information might you need to learn more?
- How is this tied to your PLOs?

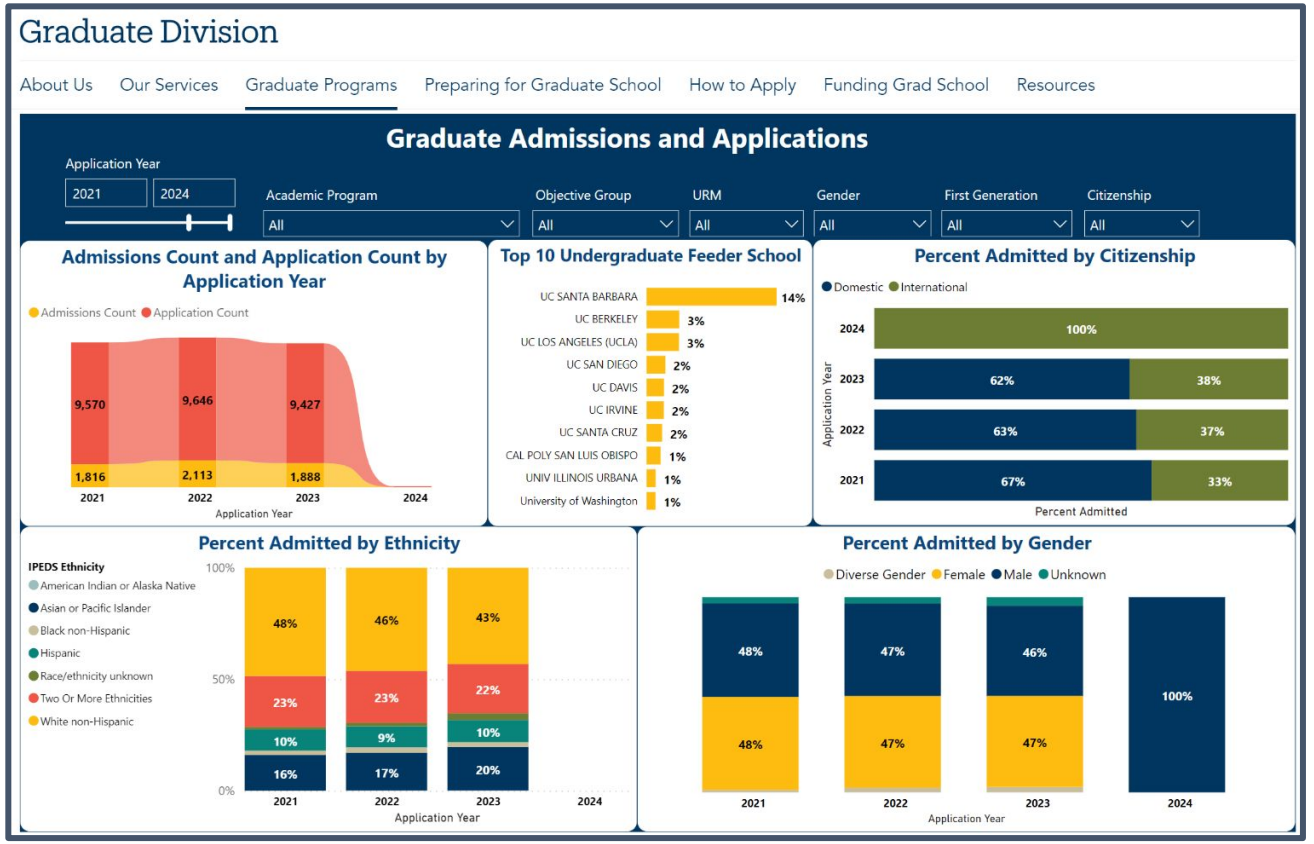
Focus: questions related to/rooted in *data* (more on this later)

Undergraduate data: Tableau

Graduate data: PowerBI and UCOP dashboards

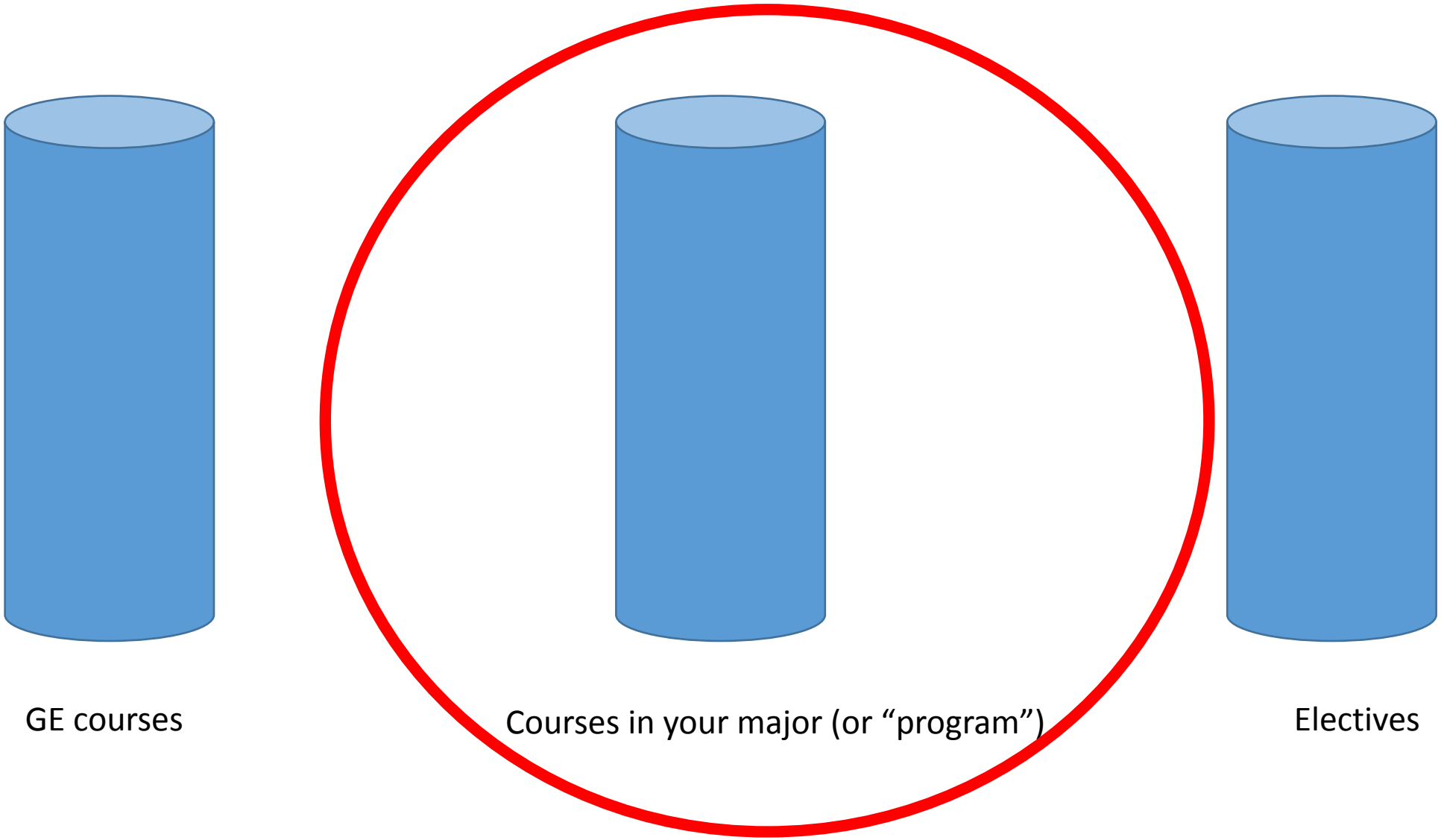
Everyone here should have Tableau access; everyone here does have access to PowerBI and UCOP dashboards

Every dept. has Access *(anyone not?)*



https://www.graddiv.ucsb.edu/graduate-statistics

Focus: courses in *your program*



Questions thus far?

Small group Breakout: 10 minutes

Talk with colleagues from other departments about at least one of the following questions:

- What did you do for your round 2 assessment?
- What did you learn?
- What went well?
- What new questions did it raise about student learning in your program(s)?

Template Review: I. Contact information

Faculty contact for this assessment

Undergrad/grad plan

Name of department/program

https://assessment.ucsb.edu/assessment/create

Sample Assessment Plans

Humanities & Fine Arts:

- Comparative Literature (Undergraduat
- Film & Media (Undergraduate)
- French (Undergraduate
- History of Art & Arc ecture

Social Sciences:

- Anthropology (Graduate)
- Economics (Undergraduate)

Math & Hard Sciences:

- Psychology & Brain Sciences (Undergrac
- Molecular Cellular & Developmental Bio
- Ecology, Evolution, & Marine Biology (G

Engineering:

- Chemical Engineering (Undergraduate +
- Mechanical Engineering (Graduate + Rubric)

Other Colleges:

- Education (Graduate)

I. CONTACT INFORMATION/DEPARTMENT/PROGRAM

The faculty assessment contact and the department chair will be included in all communication from the Council on Assessment.

1. Name/email address of a faculty contact for this assessment project:
   Prof. Jean Marie Schultz
   Prof. Didier Maleuvre

Please indicate:

X. Undergraduate plan

❑ Graduate plan

2. What department/program is this plan for?
   Department of French and Italian—French Undergraduate Program, Senior Level

Template review: II. Prior assessment

1. Describes what you did/how you did it
2. Provides a *summary* of results - what you learned, what you did with what you learned
3. Audience: People *not in your discipline.*

We completed all of the assessment from Cycle 1.

We were very pleased to find through this assessment that the vast majority of <redacted> majors who participated in the Capstone Colloquium are meeting or exceeding expectations in (A) [outcome element] and (B) [outcome element].

Do-able elements of outcomes

The numbers break down as follows:

Spring 16: 12 students total
3 assessors found on average:
61% (7.3 out of 12) of students exceed expectations
39% (4.6 out of 12) of students meet expectations
0% of students did not meet expectations

Reasonable sample size (for this major, which is small)

Spring 18: 8 students total
3 assessors found on average:
32.5% (2.6 out of 8) of students exceed expectations
50% (4 out of 8) of students meet expectations
16.25% (1.3 out of 8) of students did not meet expectations

Summary of findings

Winter 19: 14 students
3 assessors found on average:
43% (6 out of 14) of students exceed expectations
57% (8 out of 14) of students meet expectations
0% of students do not meet expectations

Actions taken based on assessment

In order to ensure success for this PLO (#8), the department has added oral presentations in several classes that lead up to the Capstone Seminar in order to allow students to practice and develop the skills necessary to meet or exceed faculty expectations. These courses are also smaller seminar-style courses in which instructors can offer sustained individual attention to students (redacted).

https://assessment.ucsb.edu/assessment/create

Sample Assessment Plans

Humanities & Fine Arts:

- Comparative Literature (Undergraduate)
- Film & Media (Undergraduate)
- French (Undergraduate + Rubric)
- History of Art & Architecture (Graduate)

Social Sciences:

- Anthropology (Graduate)
- Economics (Undergraduate)

Math & Hard Sciences:

- Psychology & Brain Sciences (Undergraduate)
- Molecular Cellular & Developmental Biology (Gradu
- Ecology, Evolution, & Marine Biology (Graduate R

Engineering:

- Chemical Engineering (Undergraduate + Rubric)
- Mechanical Engineering (Graduate + Rubric)

Other Colleges:

- Education (Graduate)

(A). What did you learn?

(i). Students clearly feel that the MCDB 221 *Proposal Writing* class is useful as a professional development opportunity and in preparing them for the Preliminary Exam and writing proposals on their own research. In each cohort, all students have passed the course with a grade of B or better and their comments on course evaluations and surveys are overwhelmingly positive (see below). With regard to the 2nd year Preliminary Exam, the outcomes are largely positive (Table 1) and although the numbers are small, the trend is certainly toward the positive.

Table 1. Outcomes of 2nd year PhD student Preliminary Exams.

Outcomes	2017-18	2018-19	2019-20
Pass	4	15	6
Conditional Pass-Repeat oral only	0	0	0
Conditional Pass-Rewrite only	3	2	0
Not Pass*	2	2	2

*All but one student, in 2018-19, passed upon re-examination.

(ii). It is not easy to develop a "perfect" writing rubric that is useful to both the writer and to the evaluator; we need to (continue to) improve ours for clarity and provide examples to help students gauge their performance and progress. However, the majority of the students used the rubric and found it useful (**Figure 1**).

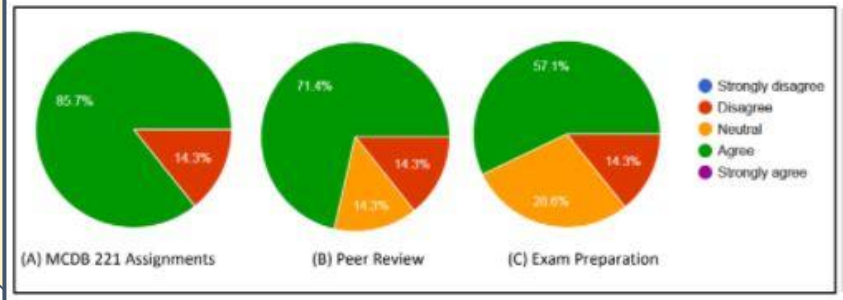


Figure 1. Student feedback on how useful the writing rubric was for their assignments in MCDB 221 (A), peer review (B), and the exam preparation (C). Responses are based on 7 of 9 solicited responses for the Fall 2019 cohort.

Template review: III. New plan

Please indicate whether, during the next three year cycle, your program will:

- Continue investigating initial question(s)/outcome(s) you investigated during the prior three year cycle?
- Pursue a modification of the initial question(s)/outcome(s) during the prior three year cycle?

with focus on equity/ incorporating departmental data

- Investigate new question(s)/outcome(s)?
- Other (please describe)

Template Review: III: New plan

Remember: your PLOs are here:

https://assessment.ucsb.edu/learning-outcomes#PLOs

Q 12:

12. What equity-focused question(s) will your department investigate in this plan? (Refer to #6 on the equity-focused guiding questions for these questions if useful.) Remember that equity-focused questions should be associated with achievement of one or more PLOs.
[Answer here.]

A. What do you already know about these issues in your program (what have you done; what have you learned)?

B. What do you still wonder about, want to know, or feel frustrated by?

C. What data did you use to formulate these questions? Please include a screenshot of relevant dashboard(s)

13. What can Change?

13. Where in the program do you see opportunity/agency for change (that this three-year investigation can inform)? This statement should address how _____ <what you will do> will address _____ <potential equity-related issue> in students' educational experiences.
[Answer here.]

A. What courses, learning processes, or departmental policies may be affected by your findings?

B. What types of changes are feasible in the short-term? In the mid-to-long-term (what are new options)? (e.g., changing when courses are offered via curriculum plan, examining changes to course policies, revising pedagogy or curriculum). Note that these need only be possibilities - you are not making firm commitments here.

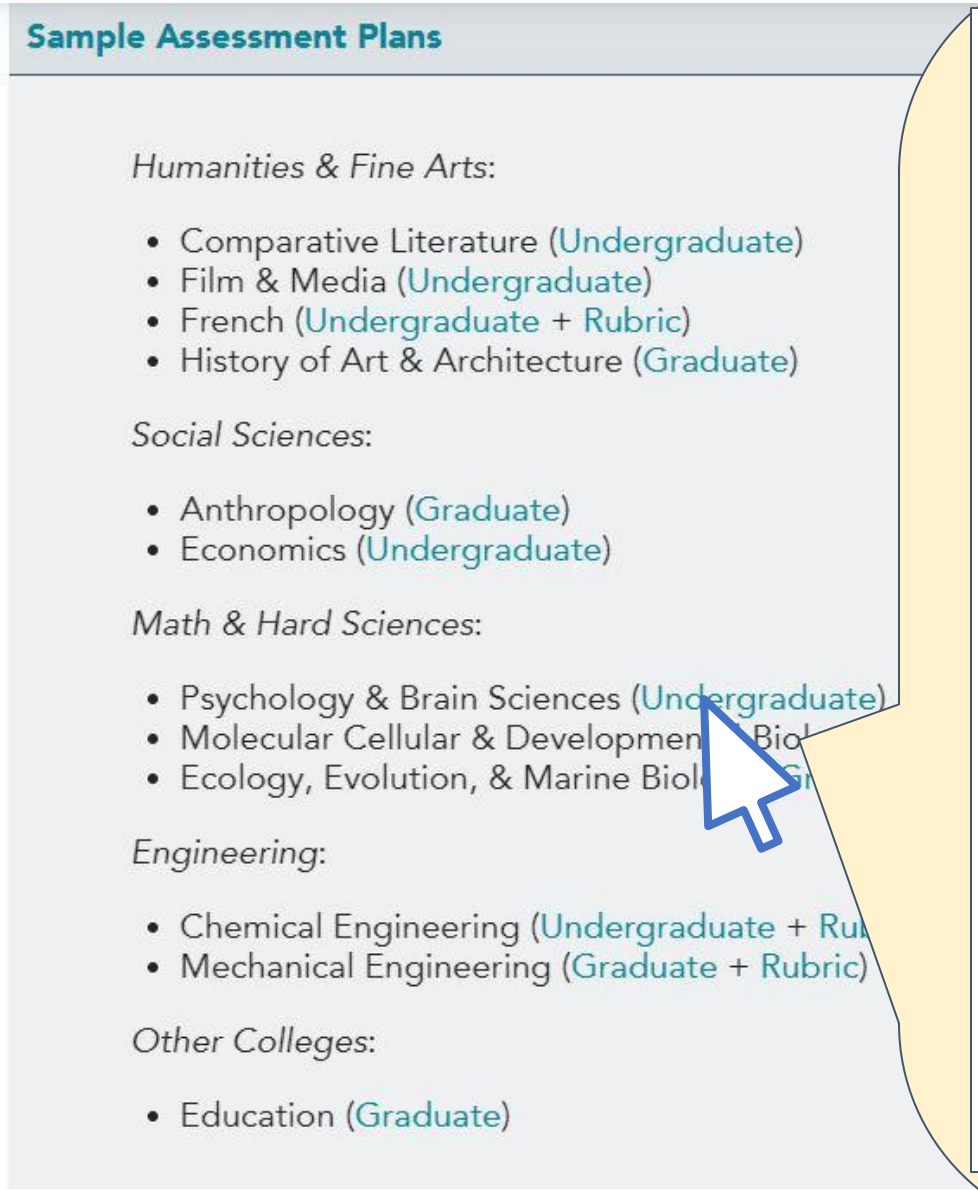
14. Direct/Indirect Evidence?

14. What quantitative or qualitative data do you *already* have related to your question or interest, if any?
[Answer here.]

A. Describe the direct evidence (actual student work) you will collect to investigate the question, and your method for evaluating this evidence. *Please ensure the sample of direct evidence is representative. Please include a rubric or scoring guide that defines levels of performance/achievement, via attributes of student work.*

B. Will any indirect evidence (student perceptions of their learning) be collected? Note: use of indirect evidence is optional.

https://assessment.ucsb.edu/assessment/create



Please describe the direct evidence (actual student work) you will collect to investigate the question. *Please ensure the sample of direct evidence is representative.*

We will collect a random sample of student papers from each laboratory class offered every quarter. The papers will be scored using a general rubric by two different graduate students so that we can assess reliability of our measure.

The assessment committee will spend the Fall quarter working with two graduate students serving as assessment coordinators to collect the paper rubrics from each laboratory course and develop a general rubric by finding the overlap in concepts and determine what represented competence in writing a APA style research paper.

Our labs range in size from 40-120 students per quarter, and so the department offers laboratory classes to 200-250 students a quarter. We would like to randomly sample 15-20% of the papers from each lab in Winter and Spring quarters.

We are planning on applying for an assessment grant (attached) to provide support to two graduate students to be assessment coordinators to help carry out this plan.

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- Education (Graduate)

Direct Evidence: Direct evidence will include samples of students' technical writing in course assignments, as well as instructors' written and graded evaluations of these samples. The introduction of technical communication is expected to be implemented as part of one course lecture in each of the target courses (ChE 5,10,120B). This strategy is currently implemented in ChE 110A. We expect that the instructor of the targeted courses will dedicate lecture time to highlight examples of one pre-selected sub-category of technical writing. An example of a writing intervention in a junior-level course would be the coverage of how to compose a technical memorandum that communicates the analysis and results of a design calculation. An example of a proposed writing assignment that has previously been used for a class involving heat transfer is attached (Appendix E: Sample Assignment). Documented lecture material as well as the instructor's evaluation using a consistent rubric (Appendix F: Sample rubric) will be collected for all students or student groups.

Experimental Methods	
Apparatus is adequately described in text, including: - Informative schematic of experimental system(s) - All relevant parts of apparatus are indicated and appropriately labeled - Manipulated / measured variables clearly labeled on schematics	
Brief outline of experimental procedure given Data being measured during experiment are clearly stated	
Data analysis procedures are briefly outlined in light of theoretical background (e.g., how GC, refractometer, etc. were used, what parameters / data were varied & measured)	
Presentation of Results	
Calculation procedure is clearly stated with reference to relevant theory & equations	
Experimental data are logically presented in figures and tables, including:	

How will you analyze?

What do different levels of performance look like *in your discipline, with this task?*

Discipline-specific

- Developed by looking at student work
- With sufficient levels of distinction - but not too granular.

*Again: Rubric making workshop coming later this quarter!

Indirect evidence: Optional

Direct evidence: Evidence of student learning. Required.

Indirect evidence: Self-reports from students about their learning. (Surveys, focus groups, interviews.) Optional.

https://assessment.ucsb.edu/assessment/create

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- Education (Graduate)

Indirect Evidence: Likert scales will be developed and administered to students exiting the 180A class to evaluate their perception of both technical writing improvement throughout the curriculum as well as their perception of where they gained proficiency in technical writing. The ChE department administers an exit survey to graduating seniors at the end of each academic year. This survey already contains several questions related to students perceived level of importance of and proficiency with technical writing.

Your new plan(s) – separate for undergrad and grad

1. Present your findings
2. Present your (new) question
3. Describe your assessment – sample size, methods, artifacts you'll analyze, etc.
4. Describe the process – what faculty will be involved? How will you conduct the assessment over a THREE YEAR PERIOD?

Equity Assessment Guiding Questions

https://docs.google.com/document/d/1qcvUuMcJxJk-xLNMKGDnVfFO6dYJM4ndl-P4MLTOdFY/copy

Start with your questions.
Today: focus on **undergraduate** dashboards (unless you don't have an undergraduate major)

Using the VPN (virtual private network)

https://www.it.ucsb.edu/ivanti-secure-access-campus-vpn/get-connected-campus-vpn

Dashboards

https://tableau.ets.ucsb.edu/#/views/UCSBUndergraduateEquityDashboard/CoverPage

https://www.graddiv.ucsb.edu/ucsb-graduate-statistics

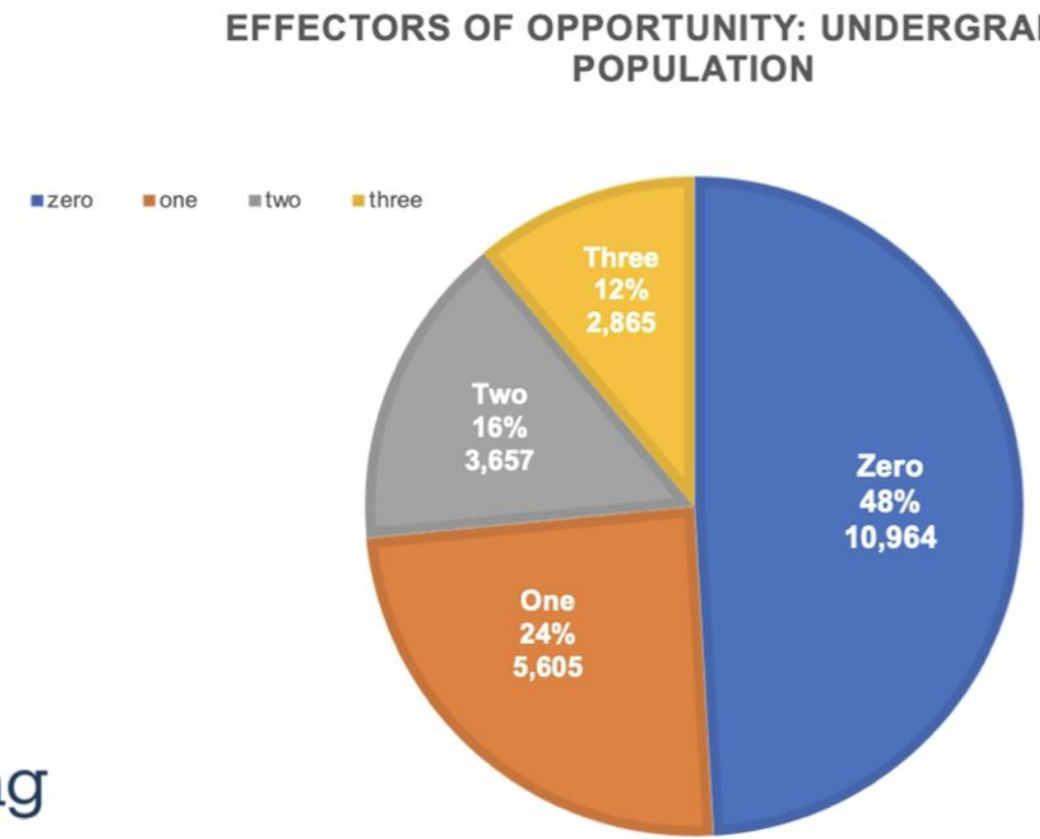
https://www.universityofcalifornia.edu/about-us/information-center/doctoral-rates

https://www.universityofcalifornia.edu/about-us/information-center/doctoral-program

Describing the data: Effectors of Opportunity

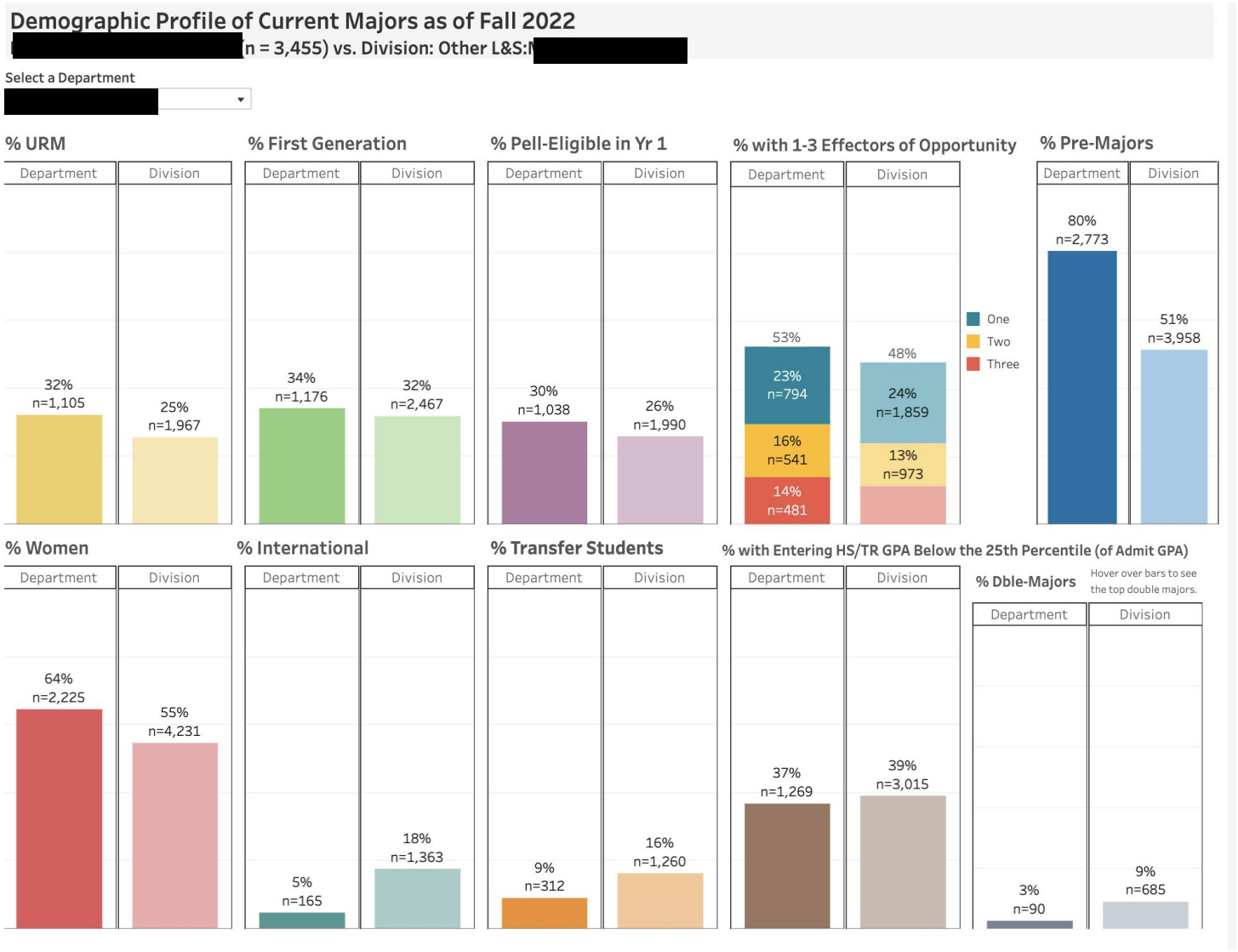
The majority of UCSB undergraduates have experienced effectors of opportunity: manifestations of systemic inequities that have been shown to have an effect on academic performances.

First Generation
Low Income
Minoritized identities



UC SANTA BARBARA
Office of Teaching and Learning

START: Current majors profile



NOTE: This is sample data (not representative of any particular department/program)

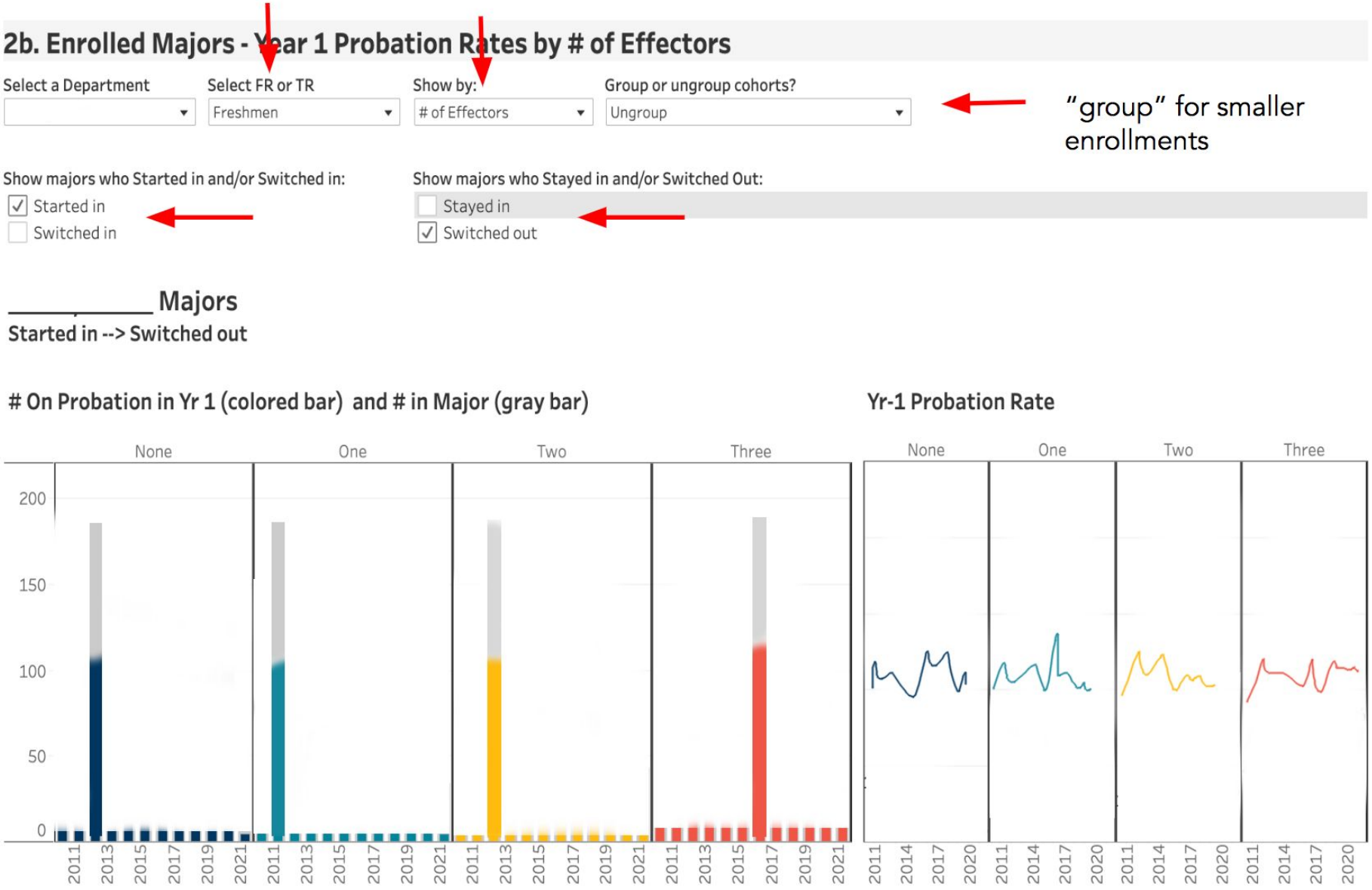
2a: Enrolled Majors: Major Changes

Possible questions to ask:

*Are there noticeable patterns in switching in/out?

*Are there differences in the rates at which students with different numbers of effectors switch in/out?

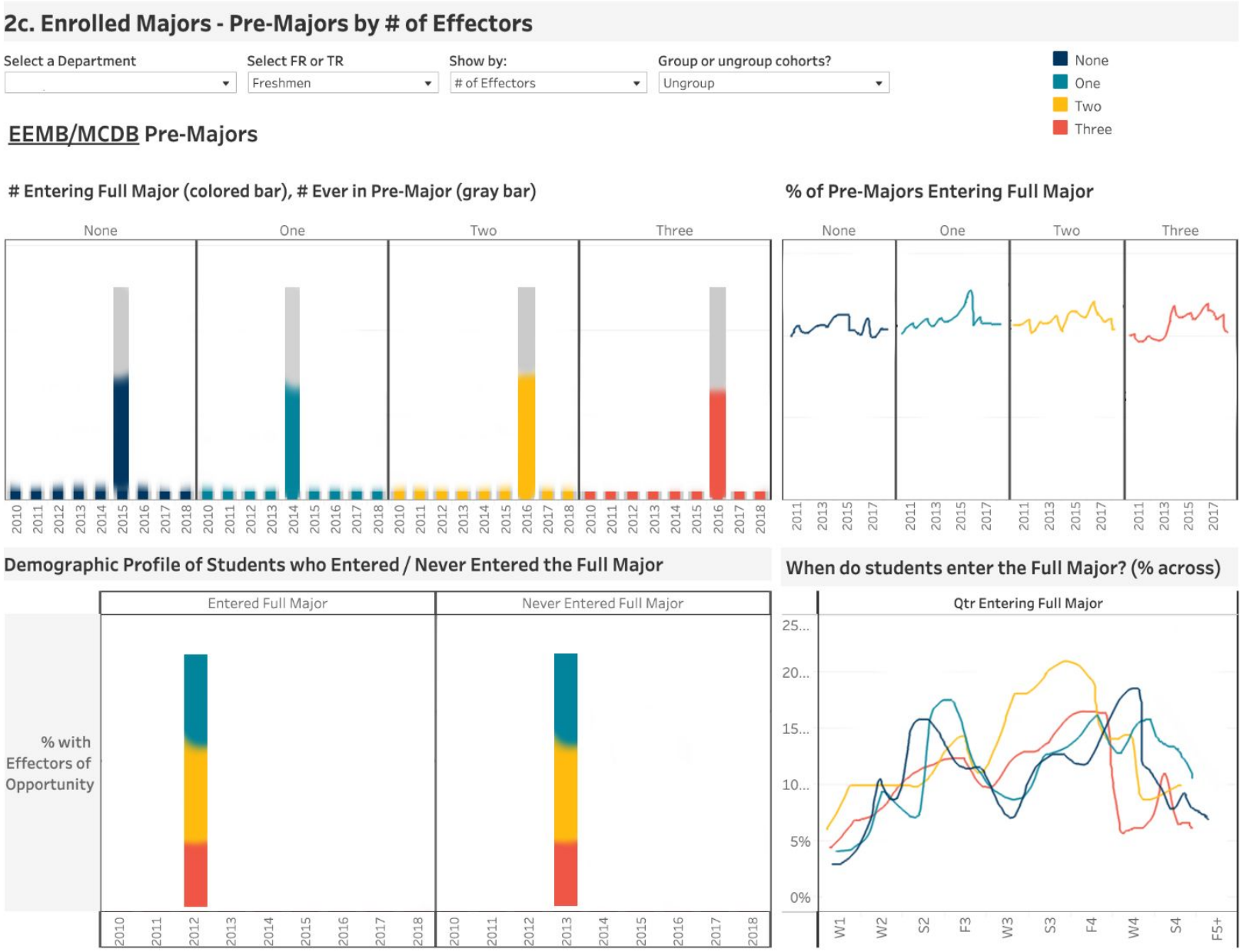
2b: Enrolled Majors: Yr1 probation rates by # of effectors (for FR/TR)



Possible questions to ask:

*Any noticeable patterns?
*If so: do these connect to
--questions about student learning
--"felt sense" of achievement of particular outcomes?
--students' experiences developing outcomes-related skills and knowledge as reflected in curriculum map?
--students' experiences developing outcomes-related skills and knowledge as reflected in course assessments and other design elements?

2c: Enrolled majors - premajor by effector group- premajor depts only

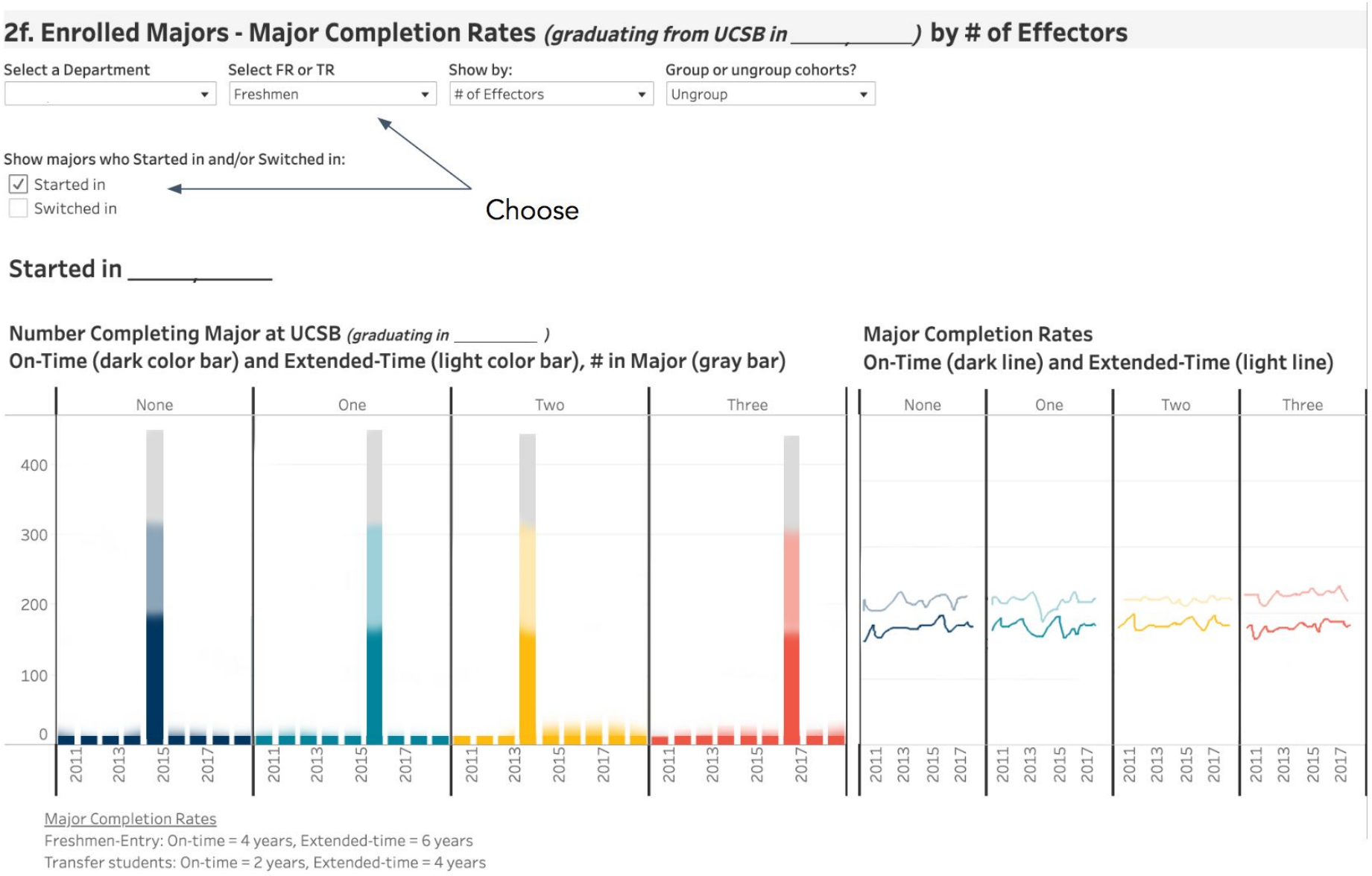


Possible questions to ask:

*Any noticeable patterns?
*If so:
How do premajor courses <u>in the department</u> provide support for skills and knowledge associated with the outcomes?
Do different groups of students experience this support differently?

For students who enter the full major:
Does the quarter of entry have any relationship to students' abilities to learn/practice with skills and knowledge associated with outcomes?

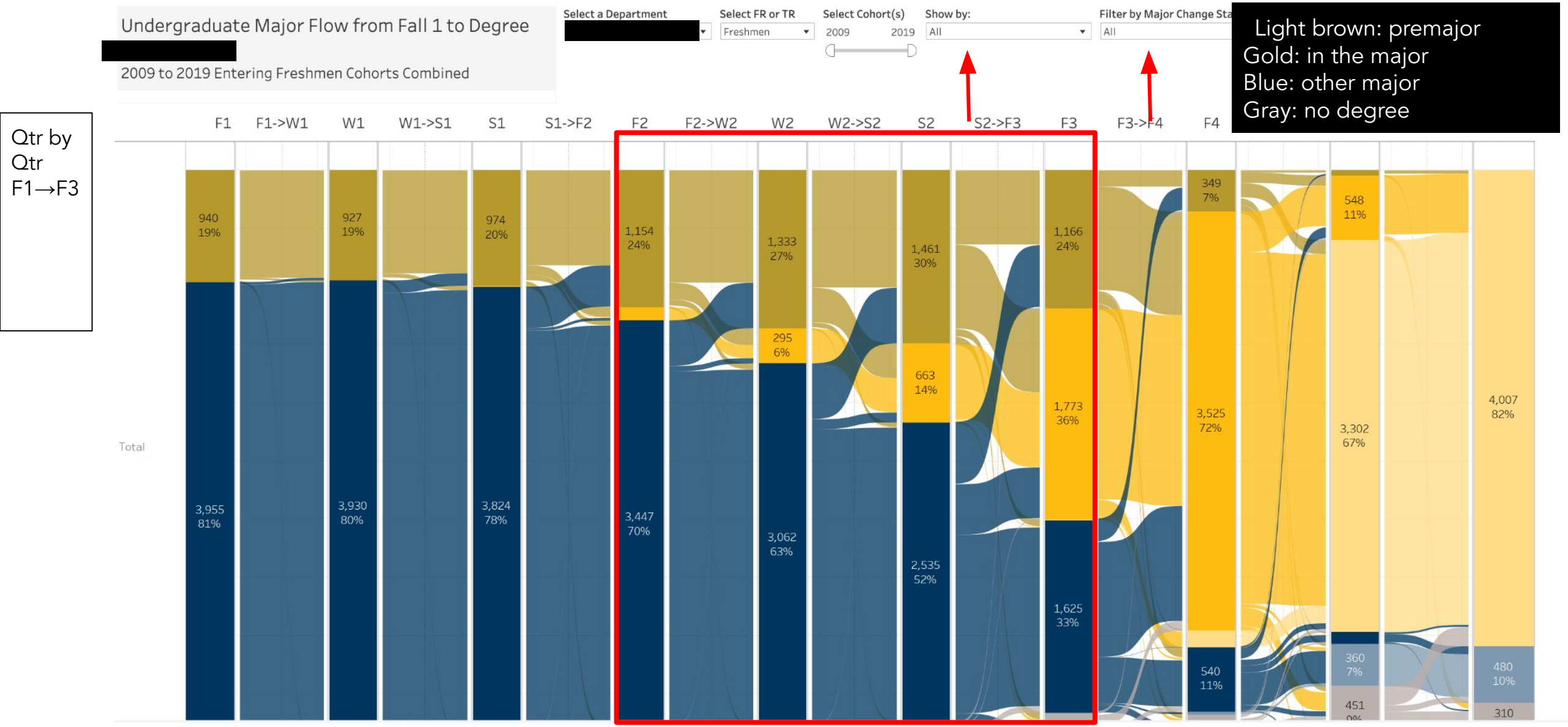
2f: Enrolled majors - major completion rates by # of effectors

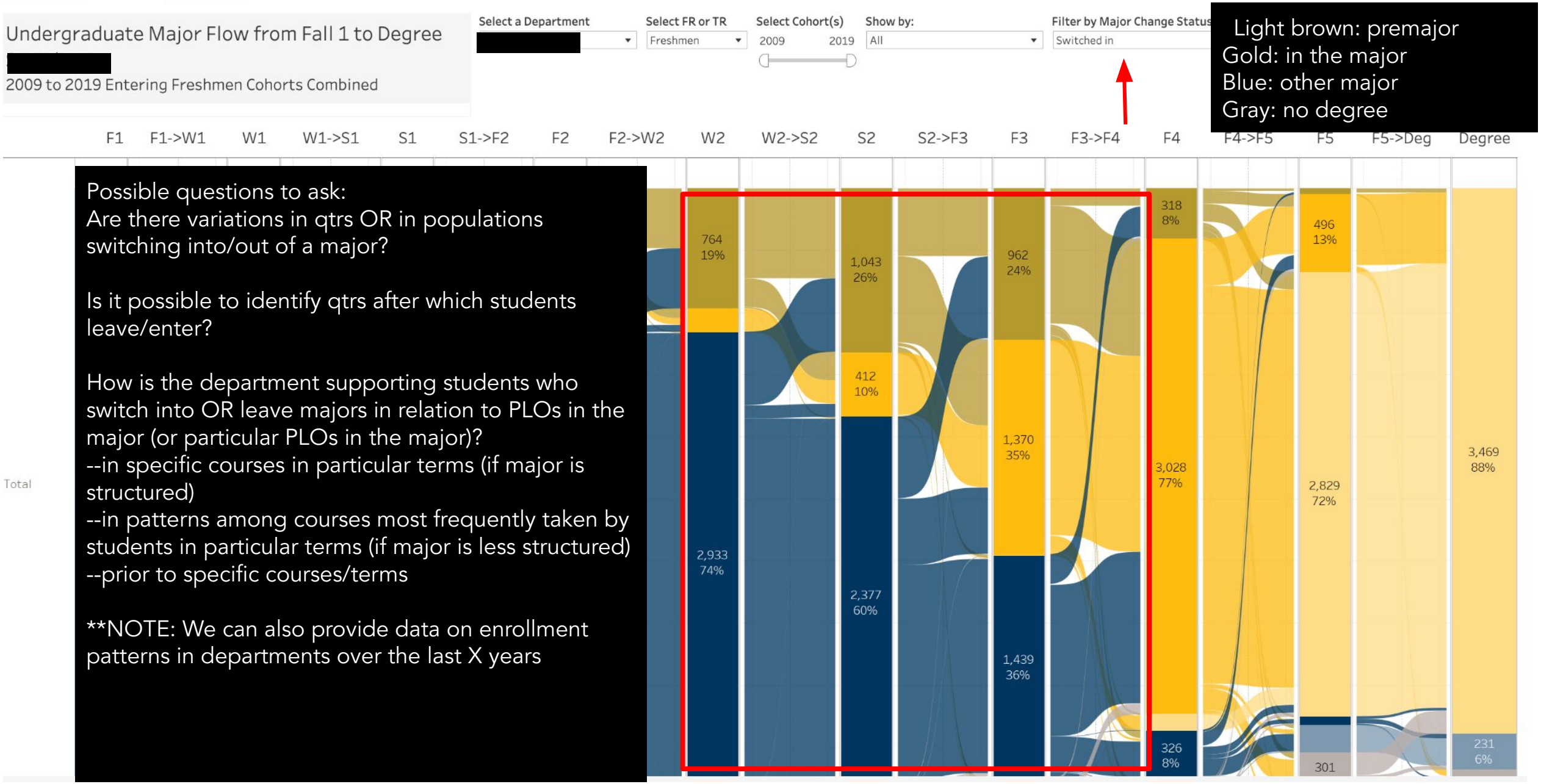


Possible questions to ask:

*Are all students graduating in the major (aka demonstrating knowledge/skills associated with PLOs) at the same rates?

*If not: Where might students be leaving the major or encountering challenges?


Undergraduate Major Flow from Fall 1 to Degree
[redacted]
2009 to 2019 Entering Freshmen Cohorts Combined
Select a Department
[redacted]
Select FR or TR
Freshmen
Select Cohort(s)
2009
2019
Show by:
All
Filter by Major Change Sta
All
Light brown: premajor
Gold: in the major
Blue: other major
Gray: no degree
Qtr by Qtr F1→F3
F1
F1->W1
W1
W1->S1
S1
S1->F2
F2
F2->W2
W2
W2->S2
S2
S2->F3
F3
F3->F4
F4
Total
940 19%
3,955 81%
927 19%
3,930 80%
974 20%
3,824 78%
1,154 24%
3,447 70%
1,333 27%
295 6%
3,062 63%
1,461 30%
663 14%
2,535 52%
1,166 24%
1,773 36%
1,625 33%
349 7%
3,525 72%
540 11%
548 11%
3,302 67%
360 7%
451
4,007 82%
480 10%
310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Select Cohort(s)
2009
2019
Show by:
All
Filter by Major Change Status
Switched in
Light brown: premajor
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Blue: other major
Gray: no degree
F1
F1->W1
W1
W1->S1
S1
S1->F2
F2
F2->W2
W2
W2->S2
S2
S2->F3
F3
F3->F4
F4
F4->F5
F5
F5->Deg
Degree
Total
764
19%
2,933
74%
1,043
26%
412
10%
2,377
60%
962
24%
1,370
35%
1,439
36%
318
8%
3,028
77%
326
8%
496
13%
2,829
72%
301
3,469
88%
231
6%
Possible questions to ask:
Are there variations in qtrs OR in populations switching into/out of a major?
Is it possible to identify qtrs after which students leave/enter?
How is the department supporting students who switch into OR leave majors in relation to PLOs in the major (or particular PLOs in the major)?
--in specific courses in particular terms (if major is structured)
--in patterns among courses most frequently taken by students in particular terms (if major is less structured)
--prior to specific courses/terms
**NOTE: We can also provide data on enrollment patterns in departments over the last X years

Course grade distribution

Questions to ask:
Referring to your program's PLO curriculum maps:

*In key courses supporting learning outcome(s) on which your assessment will focus, do you see patterns in grade distributions?

*Do these grade distributions indicate populations who are more/less supported in the course?

*What might the department focus on to affect achievement of the outcomes (as reflected in grade distributions) as a basis for action in or from the assessment?

Graduate Dashboards (UCSB and UCOP

UCSB dashboards (https://www.graddiv.ucsb.edu/graduate-statistics)

Admissions/Enrollment

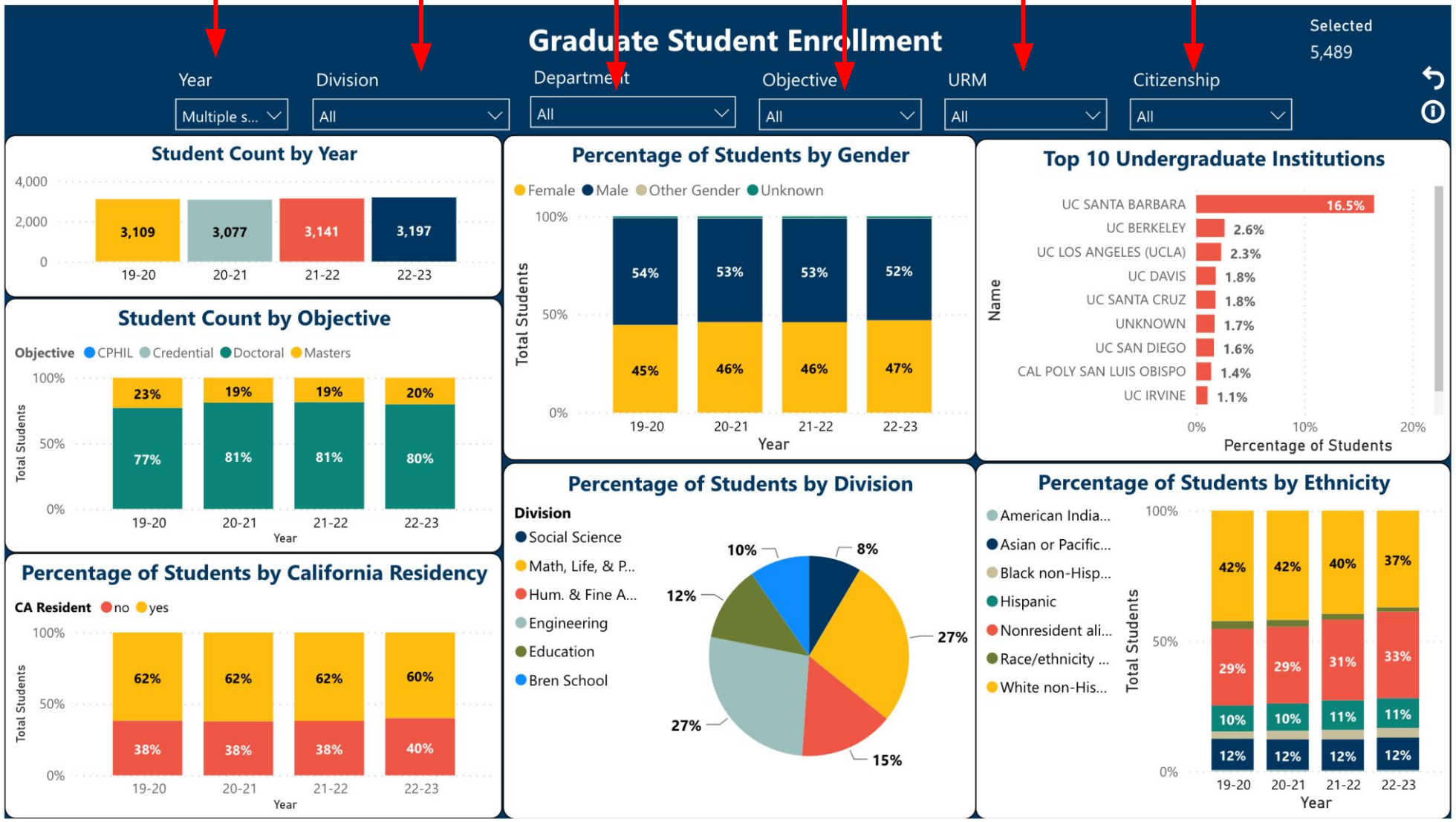
Time to degree and advancement

Exit Survey

UCOP dashboards(https://www.ucop.edu/institutional-research-academic-planning/content-analysis/graduate/index.html)

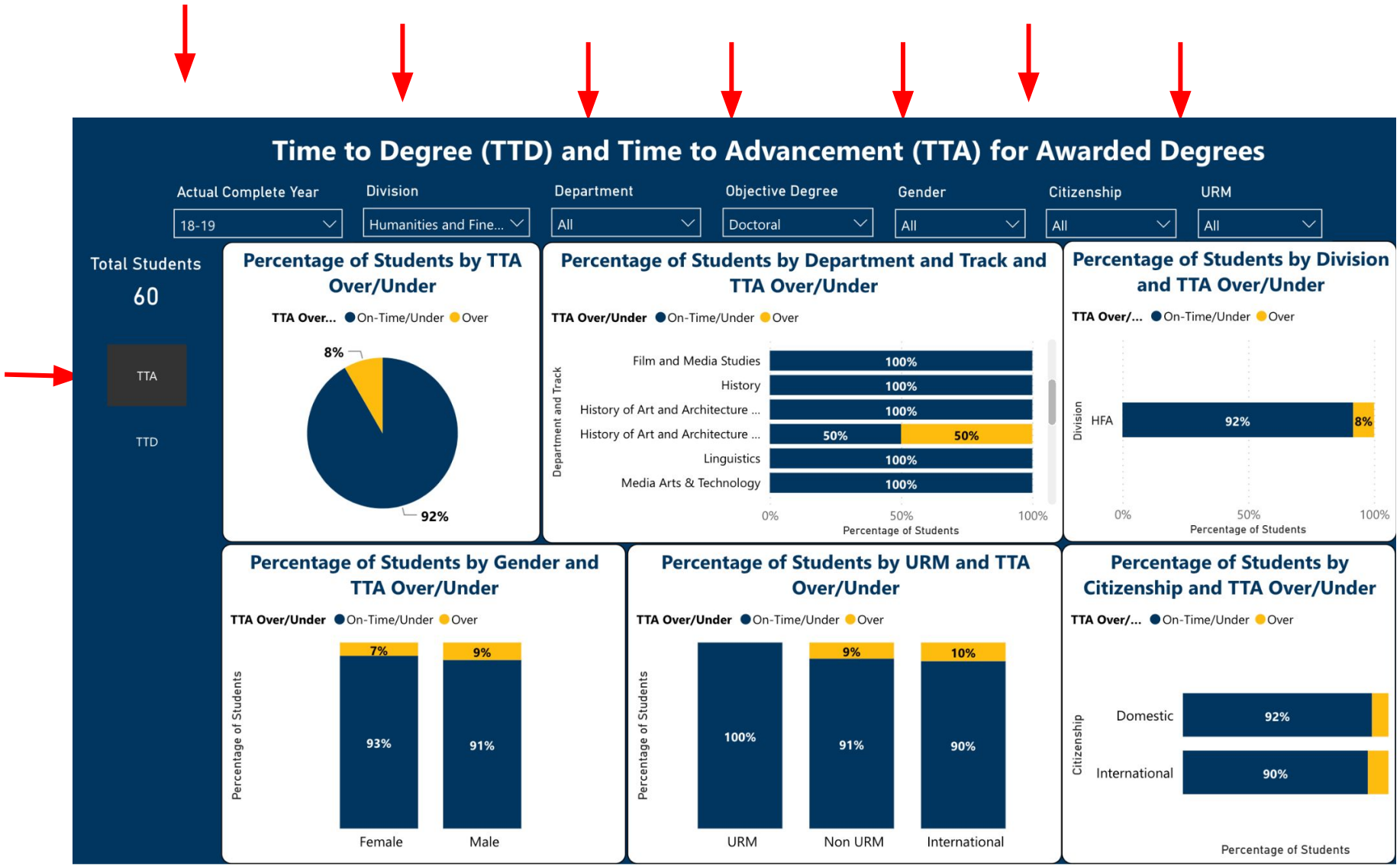
Our focus TODAY: Doctoral Experience Survey (https://www.universityofcalifornia.edu/about-us/information-center/doctoral-experience-survey)

UCSB: Student Enrollment



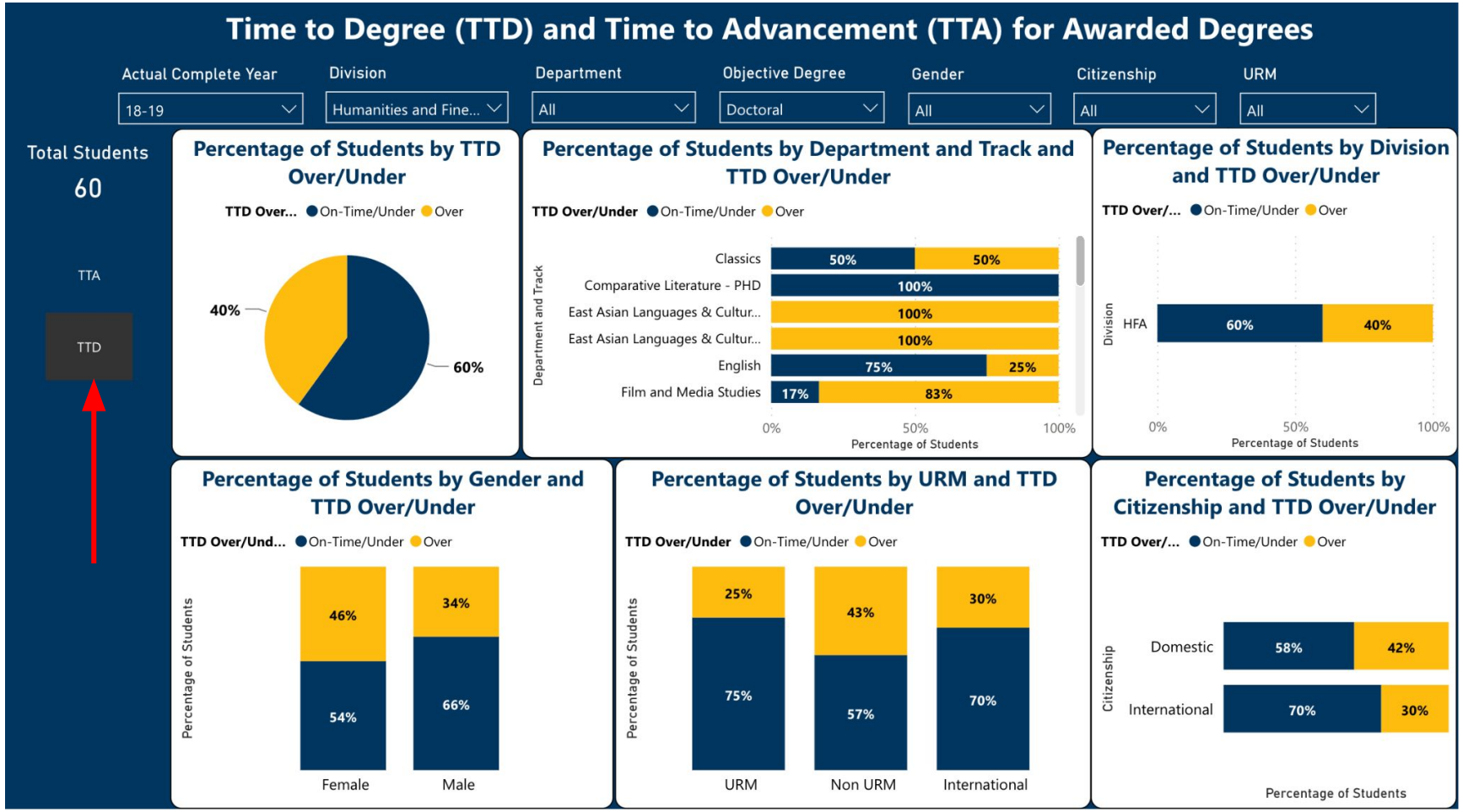
What is the overall makeup of <degree objective> students <in my program><in the division/college><at UCSB>?

UCSB: Time to Degree (TTD) and Time to Advancement (TTA) (Set to your division/department)



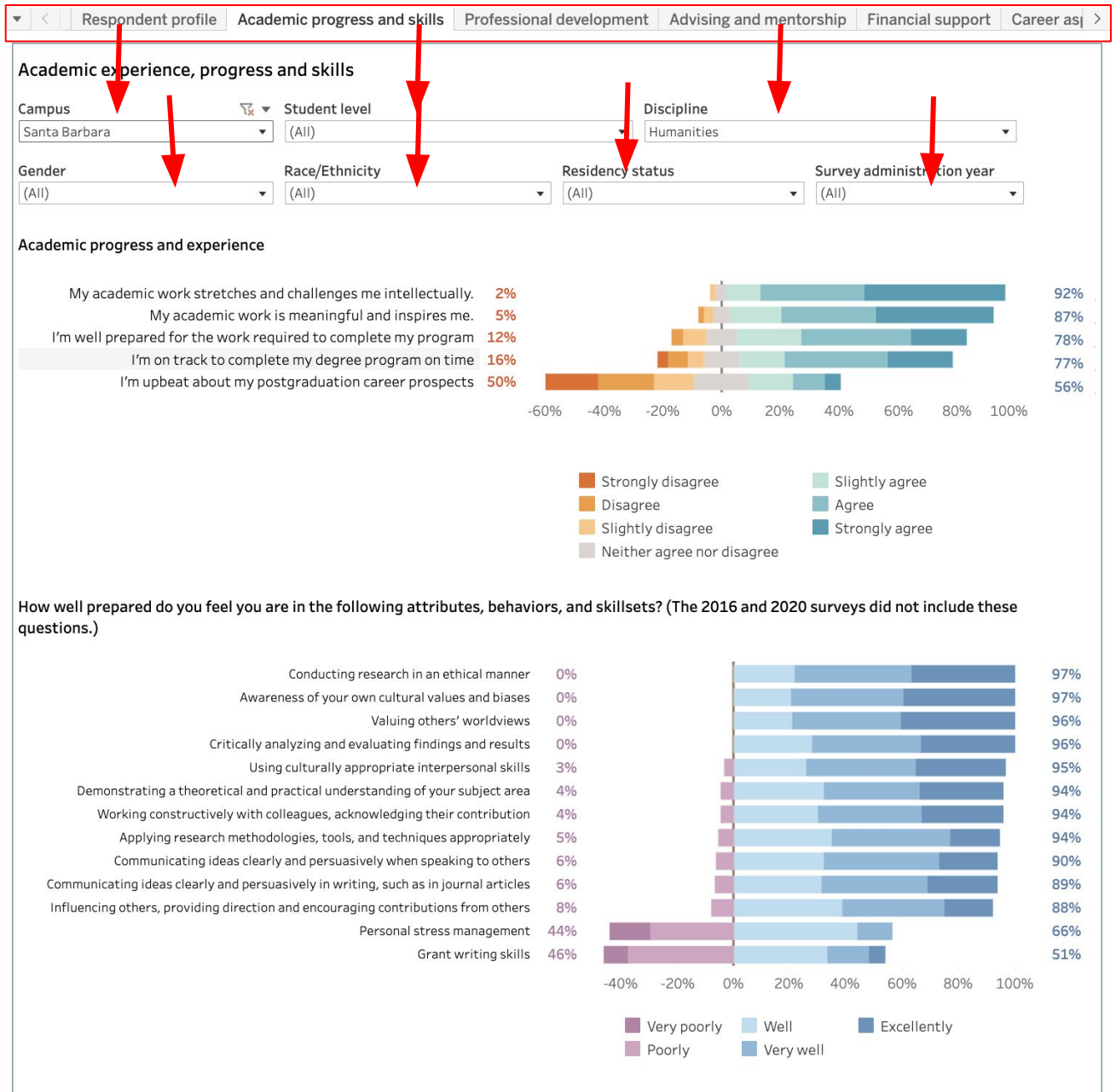
Are there noticeable patterns among students who are within normative time to advancement and those who are not?

Time to Degree (Set to your division/department)



Are there patterns among time to degree among different groups?

Exit survey data: UCOP



Possible questions to ask:
Do the data point to trends that are of interest to the department in relation to graduate PLOs?

Are there variations in results among respondents of different races/ethnicities?

Are the "attributes/behaviors/skills" questions aligned with PLOs?

Variations between respondents in relation to these questions?

Review your departmental data: UG or G (for today)

UG:

Current majors profile

2a: enrolled majors profile

2b: enrolled majors: Yr1 probation by effectors

2c: enrolled majors - premajors (if applicable)

2f: enrolled majors by completion

Course flow diagrams

Course grade distribution

G:

UCSB graduate data dashboards

UCOP dashboards:

Academic Progress and Skills

When are plans due?

JANUARY 20, 2024

Keep your plans away from your dog(s).