CAL STATE LA
CALIFORNIA STATE UNIVERSITY, LOS ANGELES

Assessment of GE course

B4 Quantitative Reasoning

EDFN 1090 and EDFN 1092
Introduction to Statistics and Data Interpretation
College of Education

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Outline

Background: EO 1110

Course Redesign

Assessment Results 2019-2023

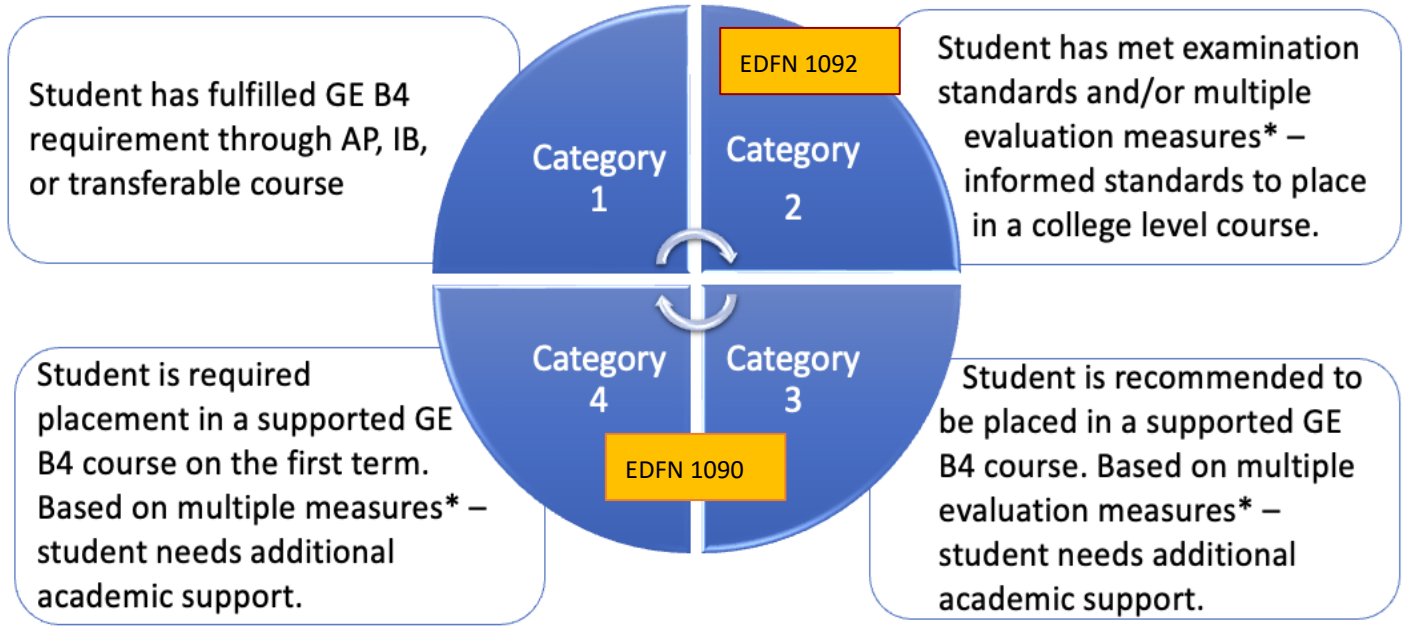
The purpose of the study

Assess closing the **equity gap** and improve **completion rates** based on:

- Course redesign
- Student behavioral data
- One-on-one assessment and intervention in the classroom
- Faculty assessment on a sense of belonging for the teaching team of lecturers

EO1110

- An **Executive Order 1110** (effective 2018)
- It **eliminated stand-alone** (non-credit bearing) developmental prerequisites
- **Four categories** upon admission
- **Goals of EO1110** included improving student success significantly by
  - Increasing degree completion
  - Closing the persistent equity gaps Pell Gap, Under-Represented Minority Gap (URM), Gender Gap and First-Generation Gap.



*Multiple evaluation measures refer to the following: CAASPP/EAP Math Exam, SAT Math Test, ACT Math Test, highs school courses, high school GPA, and high school Math GPA, as well as Advanced Placement (AP) Test, International Baccalaureate (IB) Test, College level examination program (CLEP) and college transfer coursework.

Basis of the Course Redesign

Cultural wealth of students

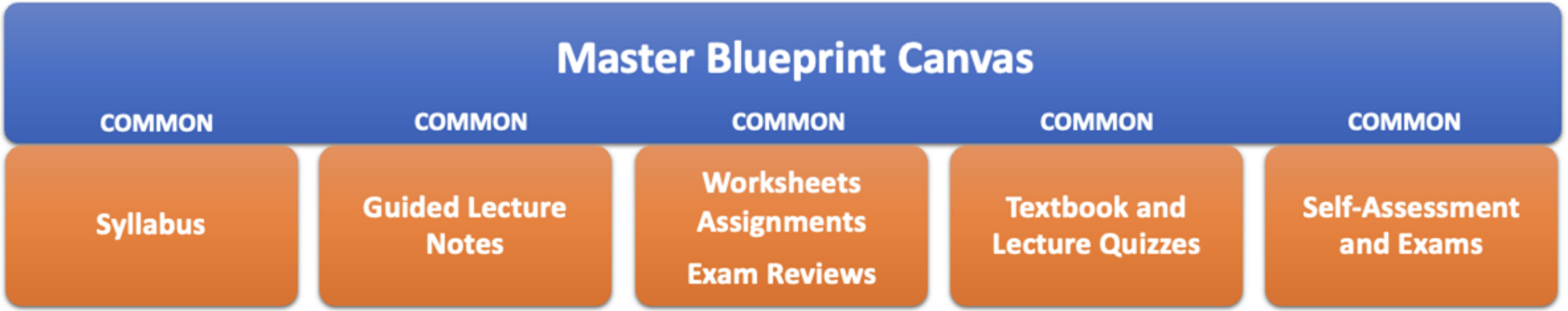
The course builds on the cultural wealth of the students. All students have high aspirations and stories of resilience, having overcome many barriers to get to a four-year college. For example, we understand that our first-generation college students have a strong desire to succeed for their family. The course maximizes these assets.





Growth mindset conversations undergird the course with reflective and motivational activities embedded throughout the course. Such activities include motivational videos and discussions, goal-setting, reflections of their experience of the course, and student to student connections and student to instructor connections.

Master Blueprint



CAL STATE LA STUDENT SUCCESS COLLABORATIVE

Partnership with CENTER FOR ACADEMIC SUCCESS (Peer-led Undergraduate Studies leaders inside and outside the classrooms)

Contents

A rhythmic progression as building blocks





What we did.

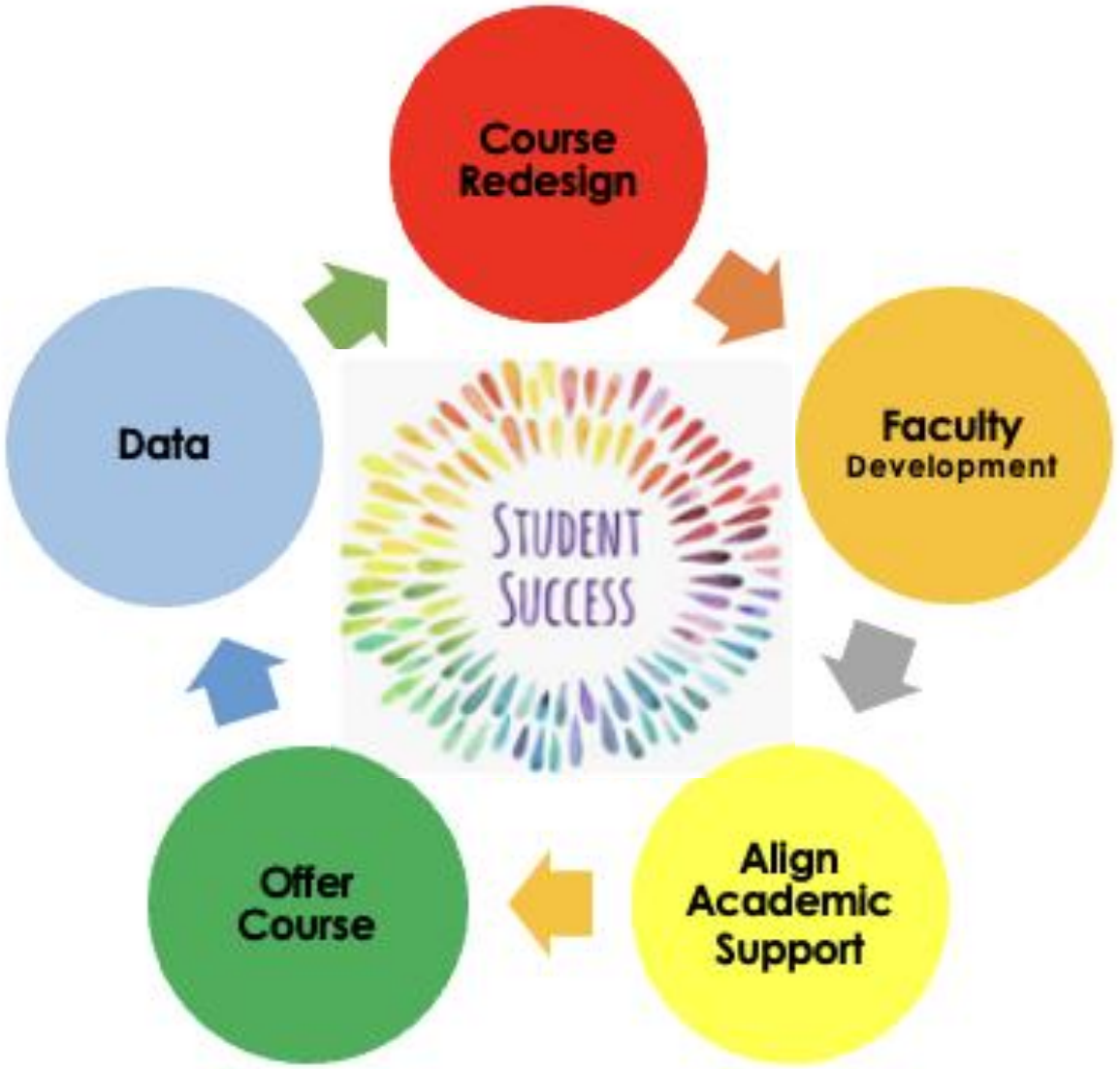
Course Redesign

Faculty Development

Align Academic Support

Offer Course

Data



Results

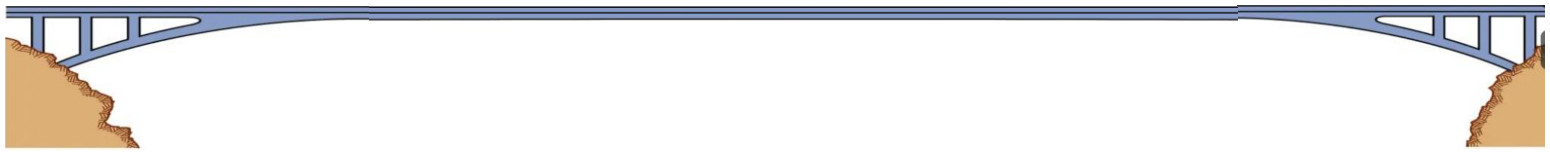
Pass Rate

Equity Gap

Predictors of Success

One-on-one intervention

A sense of Belonging – faculty team building



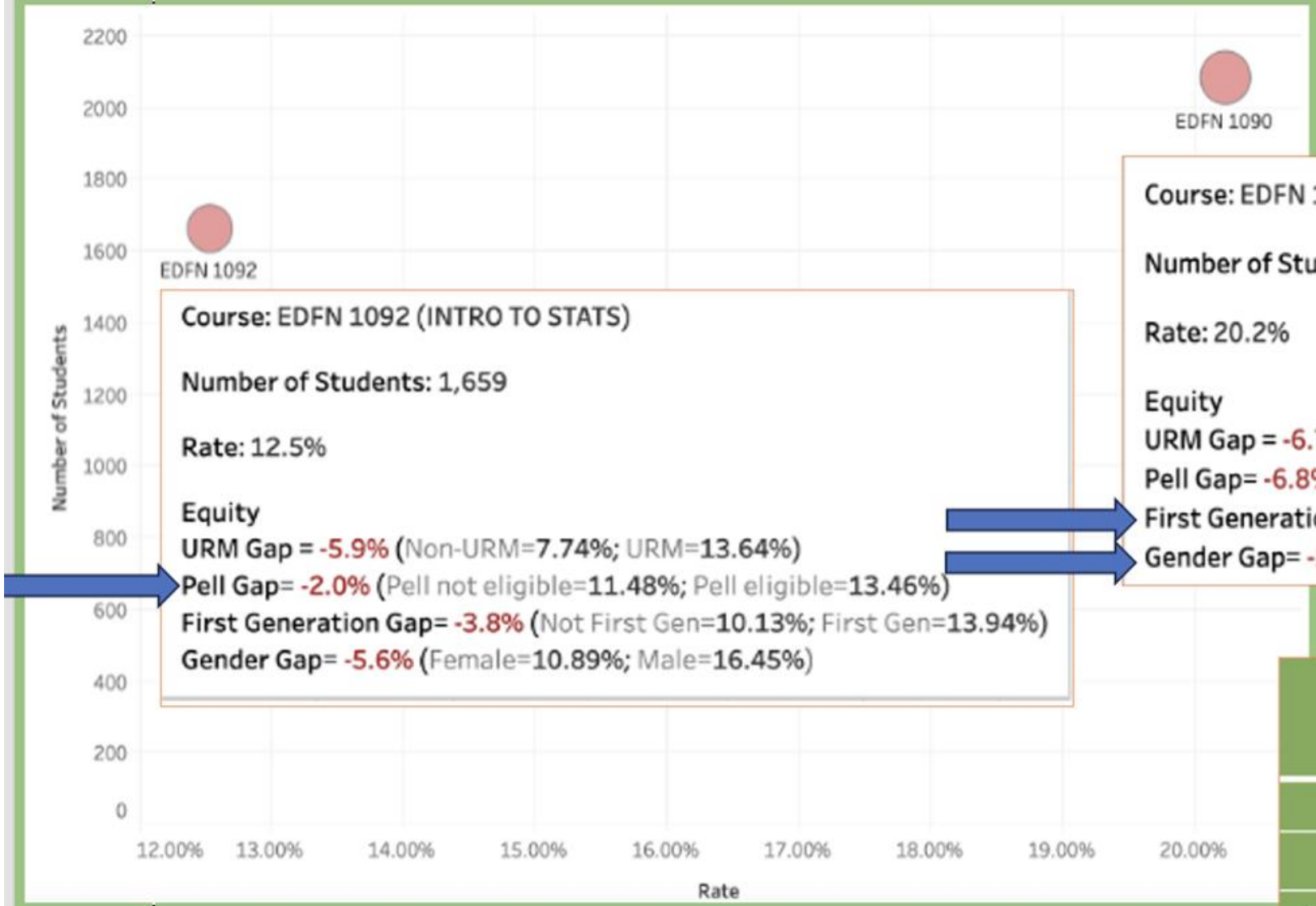
PASS RATES BY SEMESTER (2019 - 2023)

Course	Fall 2019	Fall 2020+	Fall 2021+	Fall 2022++	Fall 2023	Five-year Average
EDFN 1090	**80.8%**	**83.3%**	**76.2%**	**82.7%**	**77.4%**	**79.8%**
GPA (# of Cat. 3 & 4 students)	2.76 (198)	2.86 (396)	2.62 (501)	2.88 (468)	2.52 (517)	2.71 (2,080)
EDFN 1092	**89.4%**	**86.1%**	**88.3%**	**86.0%**	**88.5%**	**87.5%**
GPA (# Cat. 2 students)	2.93 (161)	3.24 (281)	3.24 (324)	3.19 (451)	3.27 (442)	3.20 (1,659)
Semester Average	**84.7%**	**84.5%**	**81.0%**	**84.3%**	**82.5%**	**83.2%**
GPA (Total number of students)	2.83 (359)	3.02 (677)	2.86 (825)	3.03 (919)	2.86 (959)	2.93 (3,739)

+Remote Instruction, ++Partial Remote Instruction

Total number of students who took the class 6,503 (Fall & Spring = 5,500, Summer = 1,003)

FIVE-YEAR SUMMARY OF EQUITY GAPS (2019-2023)



Course: EDFN 1092 (INTRO TO STATS)

Number of Students: 1,659

Rate: 12.5%

Equity
URM Gap = **-5.9%** (Non-URM=**7.74%**; URM=**13.64%**)
Pell Gap= **-2.0%** (Pell not eligible=**11.48%**; Pell eligible=**13.46%**)
First Generation Gap= **-3.8%** (Not First Gen=**10.13%**; First Gen=**13.94%**)
Gender Gap= **-5.6%** (Female=**10.89%**; Male=**16.45%**)

Course: EDFN 1090 (INTRO TO STATS)

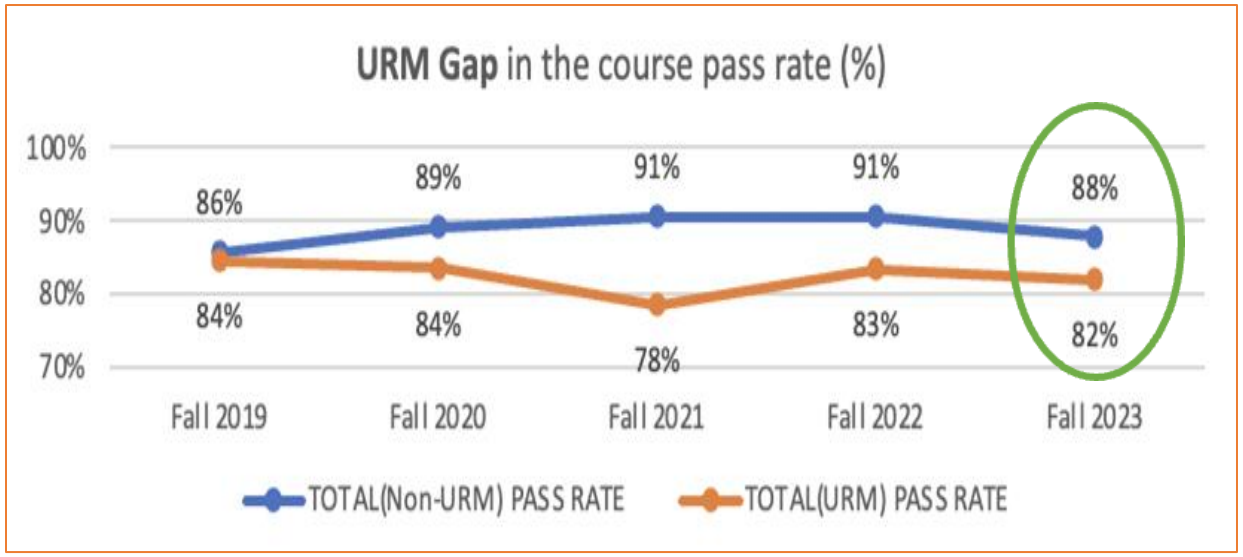
Number of Students: 2,080

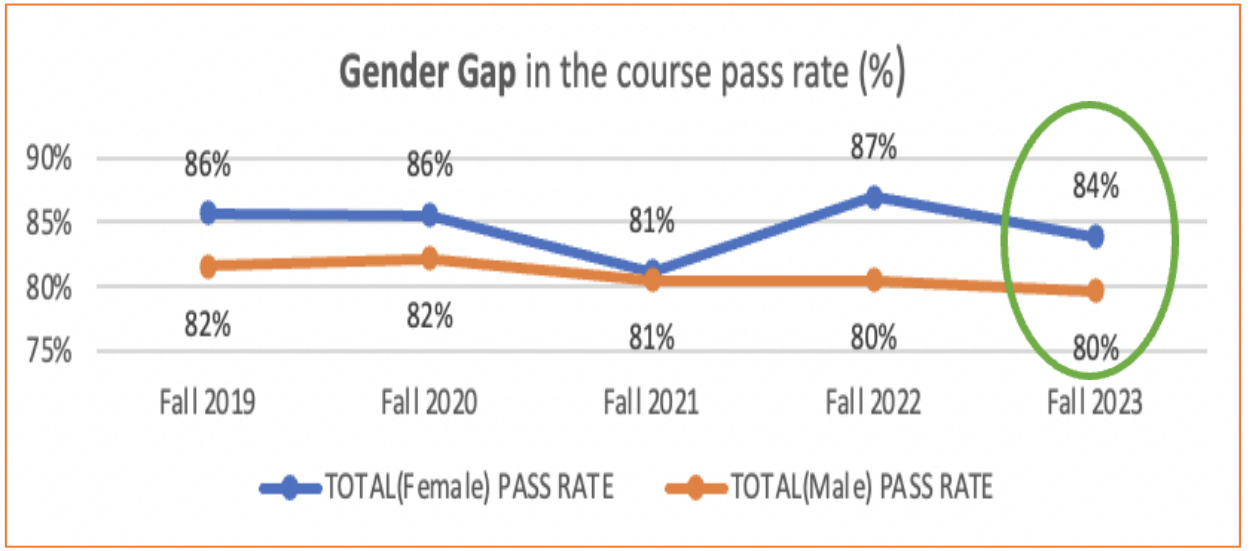
Rate: 20.2%

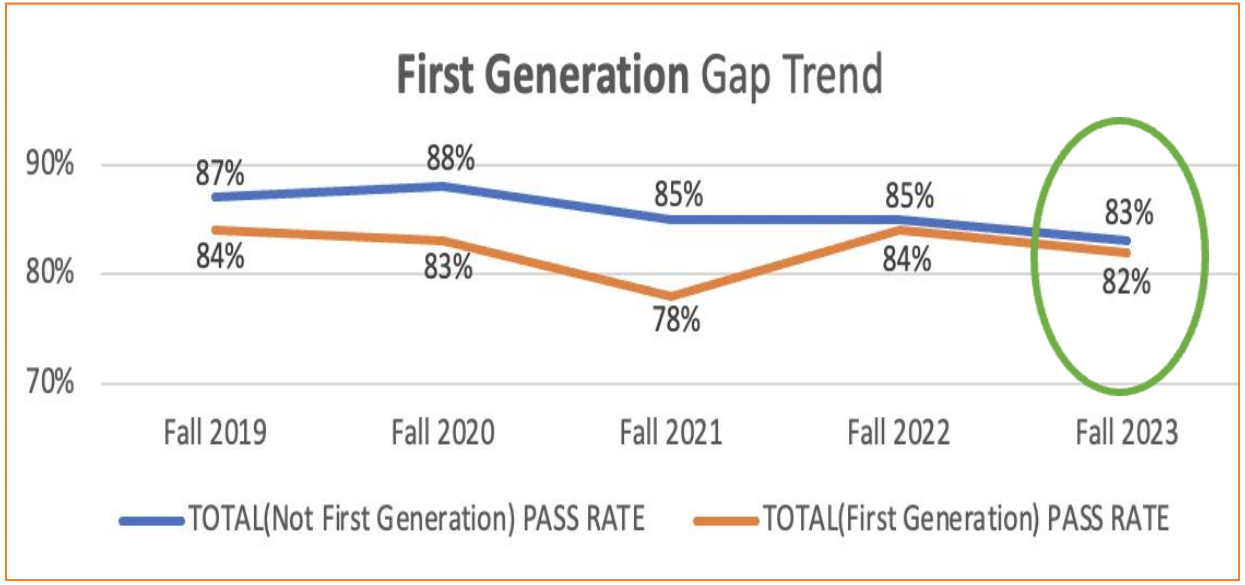
Equity
URM Gap = **-6.7%** (Non-URM=**14.34%**; URM=**21.02%**)
Pell Gap= **-6.8%** (Pell not eligible=**16.02%**; Pell eligible=**22.84%**)
First Generation Gap= **-2.1%** (Not First Gen=**18.89%**; First Gen=**20.99%**)
Gender Gap= **-1.4%** (Female=**19.74%**; Male=**21.13%**)

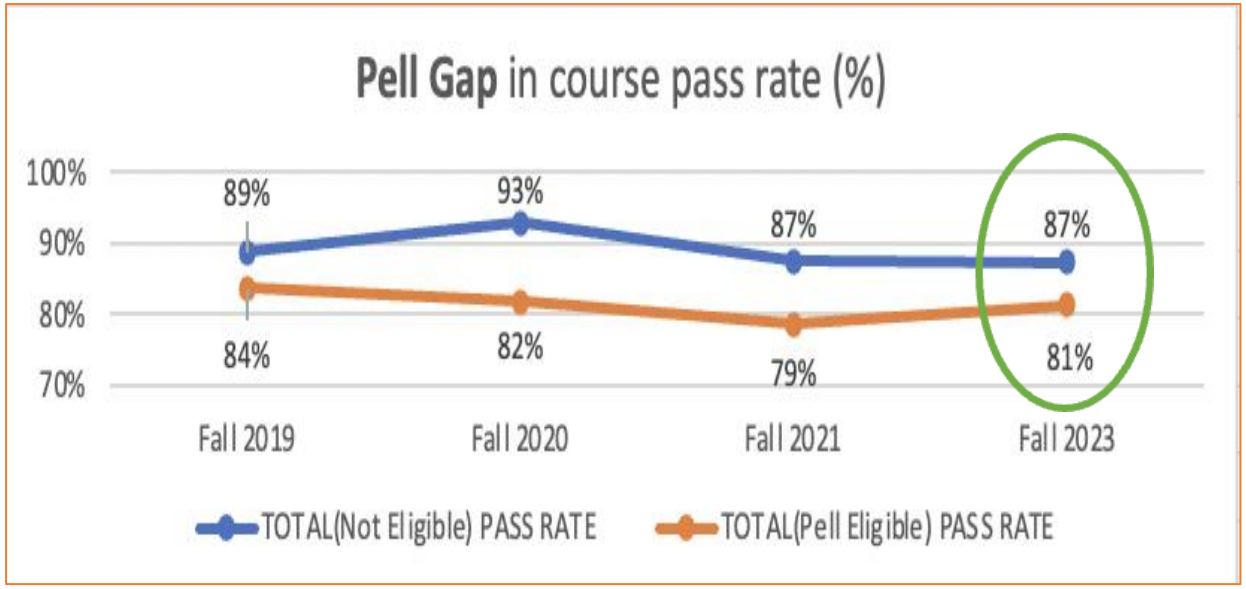
Equity Gap	All Other B4	All Other GE 1000 level courses
URM Gap	-17.3	-9.7
Pell Gap	-2.5	-2.6
First Generation Gap	6.6	4.3
Gender Gap	-2.8	-4.3

FIVE-YEAR EQUITY GAP TRENDS (EDFN 1090 & 1092 combined)









Assessment based on student behavior

Regression Analysis on Course Grade as the Dependent				
Variables	**B**	**β**	**t**	**Sig**
Attendance	.477	.427	26.56	p < .001
Time on Canvas	.002 (min.)	.128	9.53	p < .001
Exam 1 Score	.468	.484	30.95	p < .001

TAILORED ACTION PLAN: ONE-ON-ONE INTERVENTION

Fall 2023, Category 2 students (EDFN 1092 [N = 442])

Group	Check Point 1	Check Point 2	Check Point 3	# of students	% of Total
1	Passing	Passing	PASSED	373	84.39%
2	Passing	At Risk	PASSED	**6**	**1.36%**
3	At Risk	At Risk	PASSED	**3**	**0.68%**
4	At Risk	Passing	PASSED	**9**	**2.04%**
5	Passing	Passing	NOT PASSED	3	0.68%
6	Passing	At Risk	NOT PASSED	1	0.23%
7	At Risk	At Risk	NOT PASSED	33	7.47%

Intervention

*Intervention Result=1.36%+0.68%+2.04%=**4.08%**

TAILORED ACTION PLAN: ONE-ON-ONE INTERVENTION

Fall 2023, Category 3 & 4 students (EDFN 1090 [N = 517])

Group	Check Point 1	Check Point 2	Check Point 3	# of students	% of Total
1	Passing	Passing	PASSED	368	71.17%
2	Passing	At Risk	PASSED	**5**	**0.97%**
3	At Risk	At Risk	PASSED	**15**	**2.90%**
4	At Risk	Passing	PASSED	**12**	**2.32%**
5	Passing	Passing	NOT PASSED	7	1.35%
6	Passing	At Risk	NOT PASSED	23	4.45%
7	At Risk	At Risk	NOT PASSED	79	15.28%

Intervention

*Intervention Result=0.97%+2.90%+2.32%=**6.19%**



- Belonging strategies for the faculty team
- Professional development



Faculty and Family Picnics









Fall Faculty Launch Meeting

August 11, 2023







Five-Day Experiential Learning Institute

First Year Connections

June 2023

Professional Development for Faculty



43rd First Year Experience National Conference

Poster presentation

Seattle, WA.
February, 2024

In what ways do you feel a **sense of belonging** as the teaching team? (Spring, 2024)

"It can be summarized in great leadership. To be specific, I feel like **our voice matters** in this group. When we express an opinion, it is heard, and it is acknowledged. I feel like we are like a family." NM

"We can **speak up**" ZN

"Appreciation – we appreciate each other and demonstrate it with action.

Consideration – we are considerate of each others' thoughts and ideas, as well as our feelings.

Respect – we treat each other with upmost **respect** and **trust**.

Individually – **we are valued** for who we are, culturally, as we are a diverse team.

But most of all we allow ourselves to have **fun** while preparing for the semester and while serving our community through teaching." RM

"We **value** our role in this team: (1) we **encourage** each other by sharing concerns, successes, advice, and ideas. I feel I've **grown** in capabilities in this teamwork. (2) Good leadership: listening, providing guidance, advising, and supporting us via teamwork makes me feel **connected** with my colleagues." WK

Implications

The study results:

- Show supportive results toward
  - EO 1110 goals
  - CSLA mission and commitment for inclusivity and diversity, as well as Retention and Graduation Initiative, 2025
- Highlight specific areas of need in our work to further close the equity gap through
  - On-going faculty professional development on instruction
  - On-going course redesign
  - On-going coordinated work that centers on cultural responsiveness for equity-minded instruction.



Thank you!