# Academic Performance and the Student Learning Experience

#### From the 2018-23 Strategic Plan...

• Student-Centered Experience

GOAL 1: Enhance the student experience through programs that promote student and alumni success

Academic Excellence

GOAL 2: Deliver a dynamic curriculum that engages students and advances contemporary optometry

#### • Effective Foundational Support

GOAL 8: Attract the brightest and most motivated students with demonstrated leadership potential

# Academic Performance and the Student Learning Experience

- Recent NBEO performance raises some concerns
  - Part 1: While a large majority of students pass first time, a recent increase in failures and repeat failures is a concern
  - Part 2: consistently high (but with 14 TMOD fails in class of 2020)
  - Part 3: variable, consistently around national average
  - Overall ultimate pass rate at graduation remains high (around 95%)
- Academic performance is generally high, but appears to be bimodal
  - A large percentage of students excel in the curriculum Deans list data
  - Program completion averages 94.7% over 10 years
  - 15-20% of students are in academic difficulty Course and Standing data
- Student climate has become a concern
  - Reports from Student Affairs indicate troubling trends on student perceptions of the program, the curriculum, self-confidence, and well-being...

Part 1 performance has been variable with a slight decline, but keeping steadily above the national average.



NBEO Part I (Applied Basic Science)\*

\*SUNY students take Part I in the targeted March administration except for one student who sat for the exam in August.

Part 2 performance has declined slightly to around 95%, but has remained above the national average.



NBEO Part II (Patient Assessment and Management)\* First-Time Takers

\*This section was restructured and renamed "Patient Assessment and Management (PAM)" in 2009. (It was formerly called "Clinical Sciences.") SUNY students take Part I in the targeted December administration except for one student since 2011 who sat for the exam in April.

Part 3 has been variable with a decline, and is around the national average.



NBEO Part III (Clinical Skills)\*

\*Through 2009, Part III was named "Patient Care." In 2010 it was restructured and renamed "Clinical Skills."

<sup>†</sup>In 2012, for the first time, all candidates were required to take Part III at the NBEO national headquarters in Charlotte, NC.



#### Percentage of Candidates who Passed all NBEO Parts at Graduation\*

Year of Graduation

Year of Graduation	Percentage Passing All Parts at Graduation*					
	National	SUNY				
2011	94.4	98.5				
2012	92.7	97.0				
2013	90.3	97.3				
2014	90.8	97.4				
2015	84.9	97.3				
2016	83.4	92.5				
2017	91.1	96.6				
2018	92.1	97.8				
2019	92.6	88.5				

\*Includes candidates who graduated by September 30 of designated year.

\*\*Starting in 2016, TMOD was included in these calculations.

Class of 2019 first time performance Part I 17 first time failures, 9 failed second time Part 1 performance is significantly correlated with GPA



### Class of 2020 Part I performance First time 13 failures, 11 of 13 repeat failures



Didactic

#### Student completion is high, averaging 95% over 10 years



Percent of Entering Students who:	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Graduated in 4 years*	91	87	91	94	94	95	92	95	89	88
Graduated in 5 or more years	4	1	5	5	0	1	5	1	7	0
Graduated at any time	95	89	96	99	94	96	97	97	96	**90
Left for Academic Reasons	3	6	1	0	5	1	1	2	3	4
Left for Personal Reasons	3	6	3	1	1	3	2	1	1	3
Still Enrolled	0	0	0	0	0	0	0	0	0	3

\*Includes students who graduated in the summer following their fourth year.

\*\* Includes two Advanced Standing students who entered in 2015 and graduated in 2018.

### Dean's List

#### A significant percentage of students perform well

(measured here by GPA, which is best predictor of part 1 scores)

Class of 2022				Class of 2019			
GPA	1st year	2nd year	3rd year	GPA	1st year	2nd year	3rd year
3.25 - 3.49	18			3.25 - 3.49	19	20	15
3.50 - 3.59	5			3.50 - 3.59	2	11	7
3.60 - 3.74	1			3.60 - 3.74	5	2	7
3.75 - 4.00	13			3.75 - 4.00	15	13	10
total >3.25 =	37			total >3.25 =	41	46	39
Class of 2021				Class of 2018			
GPA	1st year	2nd year	3rd year	GPA	1st year	2nd year	3rd year
3.25 - 3.49	7	5		3.25 - 3.49	12	16	12
3.50 - 3.59	5	10		3.50 - 3.59	2	9	10
3.60 - 3.74	11	7		3.60 - 3.74	6	3	8
3.75 - 4.00	22	11		3.75 - 4.00	9	14	22
total >3.25 =	45	33		total >3.25 =	29	42	52
Class of 2020				Class of 2017			
GPA	1st year	2nd year	3rd year	GPA	1st year	2nd year	3rd year
3.25 - 3.49	12	25	13	3.25 - 3.49	2	18	16
3.50 - 3.59	2	9	16	3.50 - 3.59	10	0	7
3.60 - 3.74	7	8	5	3.60 - 3.74	0	3	2
3.75 - 4.00	25	11	19	3.75 - 4.00	10	10	7
total >3.25 =	46	53	53	total >3.25 =	22	31	32

Dean's list is currently set at 3.25. Average over all years = 40% of classes. (Proposal >3.6 = 21%)



# Academic Performance and the Student Learning Experience

- Strengths
  - On average 40% of students on dean's list over last six years
  - 89% percent of students pass part first time
    - pass rate correlated with GPA
  - On average 96% percent of students pass all three parts at graduation
  - Average completion rate is 95%
- Concerns
  - Increasing number of students failing NBEO part 1 second time
  - Recent boards performance, completion rate, ultimate pass rate
  - Student perceptions and sense of well-being

### Academic Affairs initiatives...

- Rebalance and reduce course loads across curriculum (w/CC)
- Conduct curriculum and course reviews (w/CC)
- Consider standardized examination structure and delivery (w/EP)
- Expand individualized student advising and assistance (w/SA)
- Implement third year quarter system (AY 2021-22)
- Revisit 3<sup>rd</sup> year integrative seminar (w/CEC, CC)
- Follow-up and expand micro-credentials (w/CEC)
- Expand electives (w/CC)
- Implement Surgical and Advanced Procedures Course (w/CC)
- Forming a Academic Affairs working group to develop proposals

### Student Learning further considerations...

- Why do good students struggle? How can we help them succeed?
- Should we revisit pre-requisites and expectations for incoming students?
- How can we transition students better from an undergraduate mentality and prepare them for the demands of the optometry curriculum and practice in the profession?
- Can we lighten the load while improving learning?
- How do we achieve deeper learning in a growing body of information within a limited time?
- What is a good balance in delivery of core and advanced material?
- How should we use class and lab time to teach efficiently and more effectively?
- How can we improve student interest and engagement throughout the curriculum?
- Can we do assessments better? Can we assess competency and deliver formative assessment?

## Student Learning further considerations...

- Why is there a changing student climate?
  - Overall, student performance remains generally high, however, a significant proportion of students are in academic difficulty and struggle with boards
  - The majority of students pass NBEO part 1, but more are struggling (first time and on retakes)
  - A vocal group of students are disgruntled and seek change, some points are valid, some are unrealistic
  - How representative are they? Is confirmation bias at work?
- Student advising and assistance programs have been developed...
  - Students are or not always inclined to use it (should they be mandatory? offered to all?)
  - Board preparation and assistance is available but not always embraced (should it be mandatory?)
  - Should we act aggressively on early academic warning signs?
- Implement course reviews and develop for increased student success...
  - Review hours, content, learning objectives, assessments strategies, pedagogy, and student engagement
- Consider curriculum changes...
  - Balance course loads, reduced contact time for student well being without compromising preparation
  - Provide core and advanced material
  - Introduce new material when needed, eliminate redundancies and unnecessary information
  - Increase study time for deeper learning
  - Increase time for board preparation