



## **Bridge to Success: Addressing Equity Gaps through a Summer Enrichment Program**

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## Disclosure

I have received no reimbursement, nor have I any financial disclosures related to this presentation or this project including those with companies associated with any product utilized in the project or mentioned in this presentation.

# Learning Outcomes

Describe a Bridge to Junior Success Program designed to reduce attrition in junior year and reduce equity gaps

Discuss lessons learned and strategies for future work

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## Why focus on retention?

Projected nursing shortage

Diversified workforce essential for improving health, reducing health inequalities.

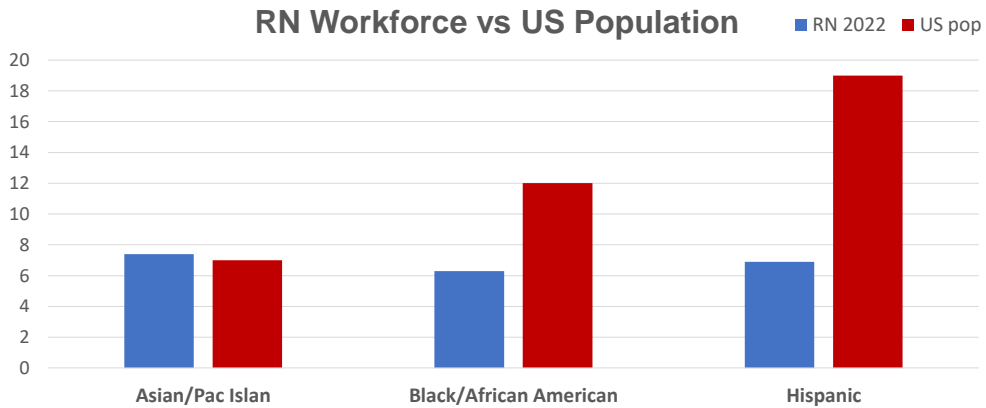
Underrepresented minority (URM) students may be more at risk due to

- inequities associated with secondary education in economically disadvantaged communities.
- Nonacademic barriers
- Social isolation, caregiving demands, lack of mentorship, inadequate financial resources.

AACN (2017), Jeffreys (2013). Villarruel et al (2015), Williams and Dahan (2022),

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# RN Workforce



2022 National Nursing Workforce Survey. National Council of State Boards of Nursing, April 2021; US Census 2020, <https://www.census.gov/>

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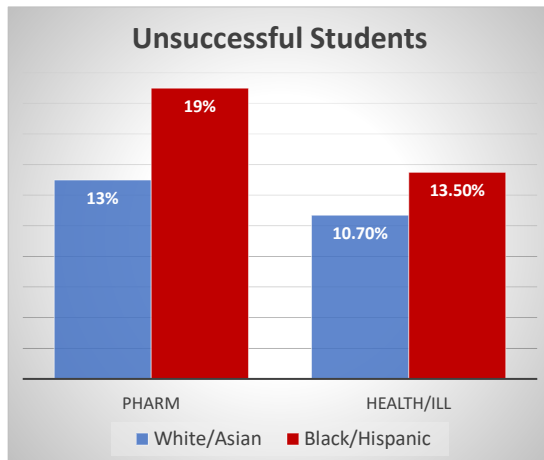
## Demographics

- Designated Minority Serving Institution (MSI)
- 800+/- prelicensure students
- 56% ethnic/racial background from underrepresented groups
- 55% first generation college student
- 93.3% freshman retention rate
- 81% 6-year graduation rate
- 97% first time NCLEX Pass Rate (3rd quarter 2023)



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# Program Assessment



Achievement gap in Pharmacology and Health and Illness (2018-2020)

Rutgers DEI database 2018-2020

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# Success Strategies




## Campus

- Center for Learning and success
- Wellness Center
- “TRIO” student support
- Freshman supports, including imbedded A & P tutors
- TEAS testing-Early identification of at-risk students
- Dean of Students

## School of Nursing

- Early warning and communication (Student Success Management software)
- Nursing Success Coach and Retention Specialist
- Faculty Curriculum review
- Imbedded RN course assistants
  - 50% teacher support (grading, proctoring)
  - 50% student support
- Mandatory remediation policies for course or standardized testing failures.

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## Bridge Course design

- Input from Pharmacology and Health and Illness professors
- Reviewed Nationally-normed standardized testing and course unit exams for opportunities
- Used ATI solutions (no additional cost to students)
  - ATI Pharmacology Made Easy modules
  - ATI E-books
- No cost to students
- Non-credit bearing
- Administered in the summer prior to junior year

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## Recruitment Bridge program

- Surveyed juniors spring 2022
  - Used survey results in email recruitment to sophomores April-May 2022
- Visited sophomore classrooms to recruit.
- Reviewed GPA, final grades in sophomore classes (foundations, health assessment and clinical pathophysiology)-
  - All C+ students personally invited to participate.

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# Sample

Summer 2022 cohort n=78 (50% of rising junior cohort)

Race / Ethnicity	Did not Participate	Participated	Fall 2020 Population
N	78	78	970
Asian	8 (10.3%)	16 (21.1%)	143 (14.7%)
White	41 (52.6%)	37 (48.7%)	479 (49.4%)
African American	12 (15.4%)	5 (6.6%)	139 (14.3%)
Hispanic	14 (18.0%)	12 (15.8%)	159 (16.4%)
All other groups	3 (3.9%)	6 (7.9%)	50 (6.1%)
Female	64 (82.1%)	65 (85.5%)	830 (85.6%)
Male	14 (17.9%)	11 (14.5%)	140 (14.4%)

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## Course schedule

- **Six week course** once/week for 1.5 hours via synchronous zoom. Zoom sessions recorded
- 45 min **adult health/pharmacology/clinical pathophysiology topics**
  - CV, Resp, fluid and electrolytes, acid-base, endocrine, neuro, infection topics
- 45 min **applied success strategies- Weekly work product submitted**
  - Prepping for class
  - Time management
  - Effective note taking
  - Utilizing ATI resources
  - Creating concept maps
  - Self assessment



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# Student requirements



## Weekly attendance

Synchronously by zoom  
Asynchronously if unable to attend  
EMAIL IF UNABLE TO ATTEND  
SYNCHRONOUS MEETING



## Submit weekly success assignments

Short reflections, concept map, notes, self-created quiz in ATI learning system  
dynamic quizzing, self assessment, pre and post survey. **FEEDBACK provided on assignments**



## Submit weekly pharmacology modules and posttest (total of 8)

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# Weekly schedule (example)

### Prep

- Reading assignment in E-book- take notes and submit screenshots
- Complete Pharm Made Easy Module and posttest (due prior to class)

### Class:

- Acid base and ABGs (review)
- Asthma and COPD patho review
- Intro: Medications to treat airflow disorders (reinforce from module)
- Application practice questions (**polling in zoom**)
- **Success strategy- Concept maps**

### Post class:

- Submit concept map on asthma

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## End of program student survey: n=64 (80%)



5-point Likert scale: Strongly agree- Strongly disagree



“Helped me be **more confident** for the Fall- **87%** agree/strongly agree.



“Helped me be **better prepared** for the Fall”- **83%** agree/strongly agree.



“Helped me be **more successful** in the Fall”- **81%** agree/strongly agree



“Would **recommend** to other students”- **93%** agree/strongly agree.

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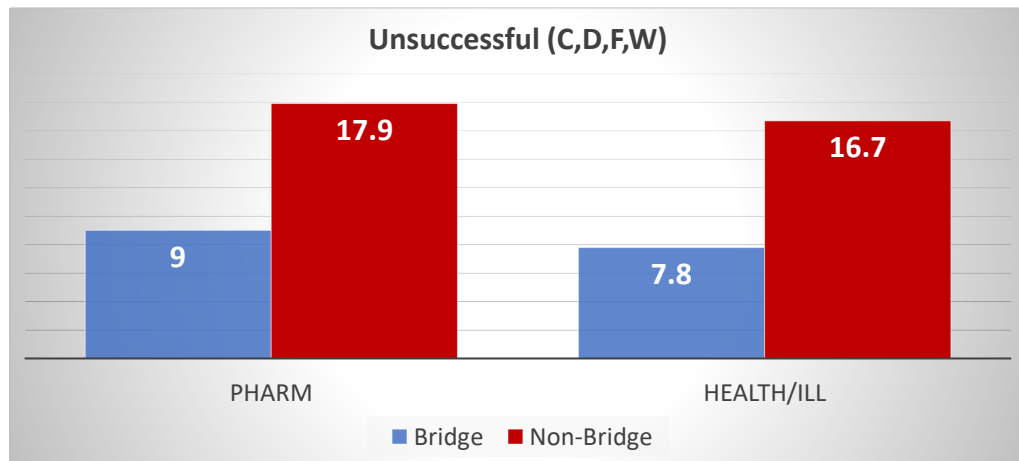
## Results

- 78 students participated in the Bridge. Their outcomes are compared to 78 students that did not participate.
- Outcomes are compared for participants vs. non-participants and then disaggregated by ethnicity (Underrepresented minorities vs. Asian/White).
  - The composition of the two groups was roughly equal in terms of ethnicities (bridge = 33% URM, non-bridge = 37% URM; these proportions not significantly different ( $p=.51$ ))

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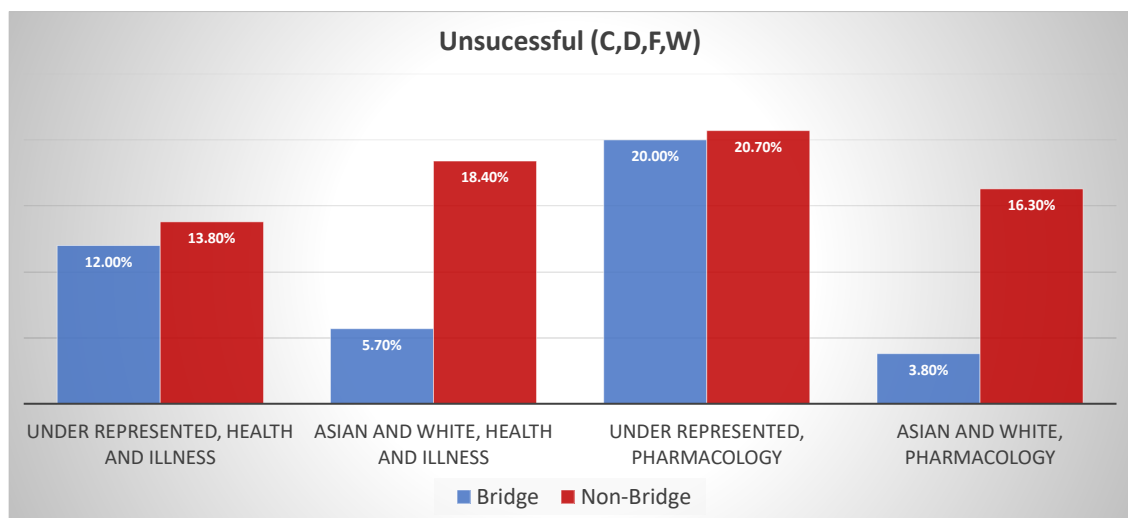


## Academic: % Unsuccessful



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## Academic: % Unsuccessful



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## Limitations/Considerations

- Curricular quality improvement
- One School of Nursing
- One strategy within **holistic student success program**
- Significant **time investment** faculty/coach
- Learner motivation not considered with first cohort
  - *Modified Motivated Strategies for Learning questionnaire (MSLQ) added*
- Non-academic factors not considered in first cohort



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## Recommendations

- Use programmatic data to identify opportunities
- RCQI: Revise based on student feedback and outcomes
- Use LMS and zoom analytics to better monitor participation in asynchronous zoom
- Incentivize *completion*
- Analyze impact of student motivation and use of learning strategies on outcomes (Motivated Strategies for Learning: MSLQ)
- Analyze outcomes for AY 23 summer cohort
- Address non-academic success factors



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## Summary

Summer bridge programs may help to address structural inequities within nursing programs.

- Targeted based on programmatic outcomes
- Part of a comprehensive success strategy



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