## **Priming the Pump**

Residential Learning Community Effects on Engagement

Presented by:

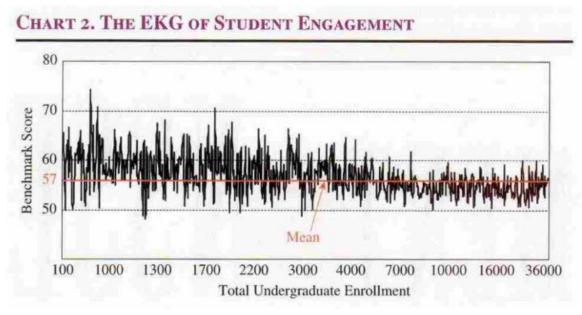
Kelly Finley, program director residential colleges





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#### **ENGAGEMENT SPECTRUM:**



"...we've got to probe more deeply into the nature of the student experience at a particular institution, and not assume that all colleges of a certain type and size are comparable"

George Kuh, 2003

Kuh, G. D. (2003). What we're learning about student engagement from nsse: benchmarks for effective educational practices. *Change: The Magazine of Higher Learning*, 35(2), 24-32.



## WHAT TO EXPECT

- Describe Bucknell
- Describe Residential College program
- Describe the study conducted by Dr. Amy Wolaver, economics
- Share results
- Discussion: what do you think?



## **MEET BUCKNELL UNIVERSITY**



Small, private, liberal arts with both engineering & management

9:1 faculty to student ratio

Around 93% retention rate

Residential campus, just under 4,000 undergrads

Predominately White Institution, located in rural PA



## MEET BUCKNELL'S RESIDENTIAL COLLEGES



Founded in 1986

Seminar courses linked by theme

Themes housed together

Two peer mentors per floor - RA and JF

Programming budget for each theme to support outside of class learning

About 30% of FY class opt in



## RESIDENTIAL COLLEGE LEARNING GOALS

Develop capacities consistent with being a member of a community of engaged learners and citizens

Demonstrate a deep level of understanding as a result of connecting classroom learning with experiential learning

By integrating the living environment with academics, students will understand and appreciate competing perspectives and viewpoints both inside & outside the classroom





#### PROPOSE OF OUR STUDY:

Measure outcomes of Res College experience on student engagement:

- Participation in other High Impact Practices (HIPs)
- Participation in Leadership positions
- Engagement with diverse groups
  - measured by having serious conversations with students from different backgrounds



#### CONCEPTUAL FRAMEWORK

- Astin's (1993) "Input → Environment → Outcome" Model
  - Students come to college with skills, or "inputs"
  - Controlling for "inputs" helps isolate outcomes attributed to the environment

Astin, A. W. (1993). What matters in college? Four critical years revisited. San Francisco, CA: Jossey-Bass.



#### **DATA:**

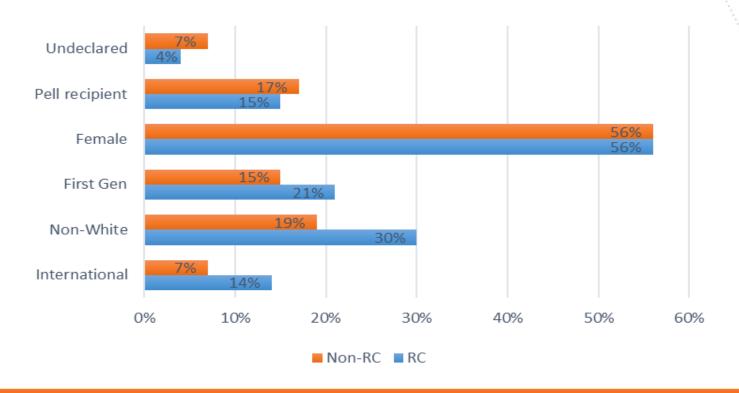
Before-College Survey of Student Engagement (BCSSE) & National Survey of Student Engagement (NSSE) data ideal for measuring these outcomes.

Office of Institutional Research provided de-identified data from the 2010, 2013, & 2016 BCSSE and the 2011, 2014 & 2017 NSSE.

They matched student records from the BCSSE & NSSE using student id numbers, making it possible to examine the affect of the Res College from the end of FY 2011, 2014 & 2017, and the end of Senior Year from 2014 & 2017

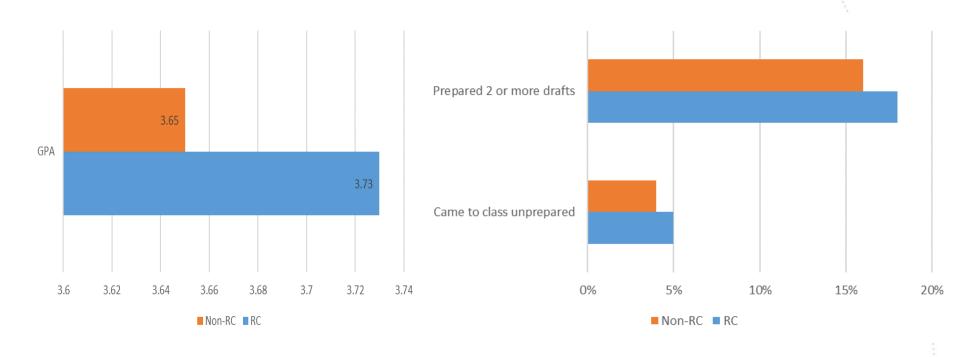


## **INPUTS: DEMOGRAPHICS**



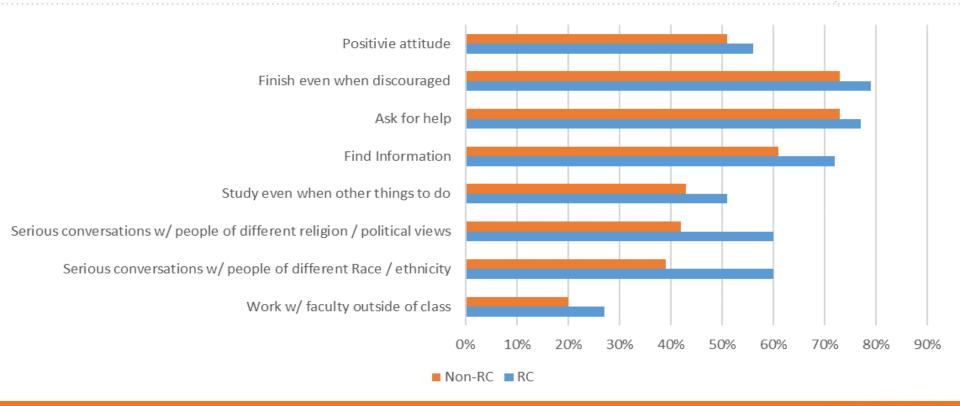


## INPUTS: HIGH SCHOOL ENGAGEMENT





## **INPUTS: BEFORE-COLLEGE EXPECTATIONS**





#### **ENVIRONMENT**

- 1. Res College participant

  NSSE sample size: FY= 256, SY = 223
- 2. Res College Resident, non-participant NSSE sample size: FY = 37, SY = 49
- 3. Non-resident, non-participant

  NSSE sample size: FY = 361; SY =427

Students included in sample size, also took BSSE



## Analysis: Multivariate regressions using NSSE outcomes

## Regression form controlling for Inputs:

$$Y_i = \alpha + \beta_1 RLC_i + \beta_2 Resident, nonparticipant_i i + \beta_3 X_i + \beta_4 HS_i + u_i$$

Y = Student engagement

 $\alpha$  = constant term

RLC = Program participant

Resident, nonparticipant = Res College Resident, non-participant

X = Student inputs: Demographics

HS = Student inputs: High school engagement & college expectations

U = Error term



#### **OUTCOME: PARTICIPATION IN OTHER HIPS & LEADERSHIP**

By senior year, RC participants:

- Completed 1.15 more HIPs than those who weren't
- 2.55 times more likely to have engaged in research\*
- 2.30 times more likely to have held a leadership position\*

\*significant to .01 level



## **OUTCOME: ENGAGEMENT WITH DIVERSE GROUPS**

Participation in RC increases likelihood White students report engaging often/very often in conversation with student of different race/ethnicity:

- 1.66 times more likely during first year\*
- 1.65 times more likely during senior year\*



<sup>\*</sup>significant to .05 level

### **OUTCOME: SPILLOVER EFFECTS**

We found that living in a RC community, without taking part in the RC academic components, had no effect on student engagement.

- In First Year, they are more likely to engage conversation with diverse others, but the effect disappears by Senior Year
- Implies both structural diversity and cross-cultural interaction are necessary



## **OUTCOME: PARTICIPATION IN NSSE**

RC participants less likely to take BCSSE, but more likely to take NSSE at end of first year, and at end of senior year.

Taking survey a measure of engagement?

- If so, we're comparing most engaged students, do we fully capture the program effect?
- We don't know about the students that don't take it



#### **CAVEATS:**

- One program, at one institution
- Controlling for biases:
  - BCSSE good option, but may not capture all the inputs
  - Just taking NSSE can be associated with engagement



## **DISCUSSION:**

Thoughts, comments, questions?



#### **FURTHER READING:**

Inkelas, K. K., Jessup-Anger J. E., Benjamin, M., & Wawrzynski, M. R. (2018). Living learning communities that work: a research-based model for design, delivery, and assessment. Sterling, VA: Stylus Publishing.

Jayakumar, U. M. (2008). Can Higher Education Meet the Needs of an Increasingly Diverse and Global Society? Campus Diversity and Cross-Cultural Workforce Competencies. *Harvard Educational Review*, 78(4), 615-651.

Forthcoming: Special Issue on Residential Learning Communities in *Learning Communities Research and Practice* online journal



## **THANK YOU FOR COMING**



**RES COLLEGE PEER MENTORS 2019-20** 



# PLEASE REMEMBER TO SUBMIT YOUR EVALUATION ON GUIDEBOOK!



