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Classroom Supports:

Drop-In Tutoring Lab Program at Appalachian State University & The Learning Community Program at East Carolina University

Presenters:

Aburi Rote, PhD - University of North Carolina at Asheville

Alison LaGarry-Cahoon, PhD - University of North Carolina at Chapel Hill

Lunch and Learn Series

- **Student Success Innovation Lab**
  - Fund the implementation of promising student success interventions

- **Math Pathways Initiative**
  - Increase retention and completion rates in gateway and entry-level math courses

- **Select third-party evaluators from within the UNC System to:**
  - Partner with practitioners to develop the interventions
  - Analyze outcomes for interventions
  - Develop recommendations for future research

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- Attendee Engagement
  - Raise Hand: Receive technical assistance
  - Q&A: Submit question about presentation
  - Email: studentsuccess@northcarolina.edu

- Closed Captioning and Live Transcription

- Recorded Webinar: Will receive via link to video and be posted on the SSIL website.
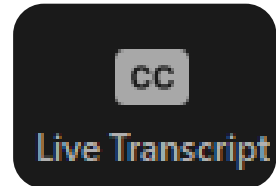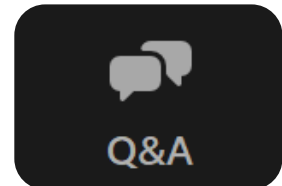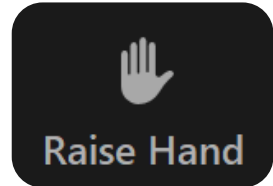
SSIL - Evaluating Classroom Supports

East Carolina University – Pirate Academic Success Center Learning Community Program

- Examined Enrollment impact of the PASC learning community program on sophomore retention at sophomore year, academic performance throughout students' college career, and years taken to graduate.

- Evaluator: Dr. Aubri Rote, Associate Professor of Health and Wellness, UNC Asheville

Appalachian State University – Drop-In Tutoring Labs Program

- Examined correlation between time spent in the labs and course GPA.

- Explored students' reasons for participation, perceived and actual benefits received and potential barriers for student learning.

- Evaluator: Dr. Alison LaGarry-Cahoon, Clinical Assistant Professor, School of Education, UNC-Chapel Hill

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SUMMATIVE EVALUATION REPORT

East Carolina University
Pirate Academic Success Center Learning Community

Aburi Rote, PhD
University of North Carolina at Asheville

PASC Learning Community Program
Purpose and Experimental Design

- **Purpose**
  - Examine if students enrolled in ECU's PASC learning community differ in academic performance, retention at sophomore year, and years taken to graduate compared to a similar group of students not in the PASC learning community

- **Experimental Design**
  - Observational study - cross-sectional analyses over 5 years

- **Data were obtained from ECU's Institutional Planning, Assessment and Research (IPAR) department**

PASC Learning Community Program
Snapshot of Key Findings/Implications

- **Academic performance was higher in PASC learning community group vs. comparison group**

- **Differences did not reach significance for retention or years to graduate**

- **Several areas for future research**
  - Key implication for future - <u>data</u> (what is collected, how it is collected, who can access it)

Who does the PASC Learning Community Program Serve?

- **75-100 students each academic year**

- **Recruitment efforts focused on admitted student profiles with specific outreach to the lowest test scores and high school grade performance**

- **Program spans fall and spring semester of freshman year**

STUDENT SUCCESS

Pirate Academic Success Center   About Us ▾   Students ▾

Learning Communities

The Pirate Academic Success Center is committed to the academic success of ECU students and houses multiple learning communities, called CREWS. PASC CREWs are designed to help you, as a new student, Freshmen or Transfer student, successfully transition to ECU. As a CREW member you will receive academic and college life transition coaching, peer academic success coaching, social and cultural activities, priority tutoring, STARFISH monitoring, enrollment in common classes, and learning center employment opportunities.

By joining a PASC CREW you will receive:

- Academic and college life transition coaching
- Academic peer success coaching services
- Social engagement and cultural activities
- Priority tutoring services
- Starfish early alert monitoring for academic issues
- Enrollment in common coursework
- Learning center employment opportunities

If you are interested in joining our Learning Community, please complete this application.

Who and Where is the PASC Learning Community Program?

- **Director - Dr. Elizabeth Coghill and several staff members**

- **Main center:**
  - Open, collaborative learning workspace with numerous worktables and study/tutoring rooms
  - Array of learning tools (screens, white boards, etc.)

- **At the time of this report, the PASC learning community program had acquired the level below their current level**
  - Welcome/wait room, common area, offices
  - Private, quiet rooms for peer mentoring/tutoring or study skill appointments for students who need a quieter space

East Carolina University – PACS's Learning Community Program Methods

- **Participants**
  - PACS Learning Community (n=281)
  - Comparison group (n=512)

- **Measures (data from AY 2014-2015 to 2018-2019)**
  - GPA for each year and semester
  - Retention at sophomore year of fall semester
  - If students graduated in 3, 4, or 5 years

- **Statistical Analyses**
  - Independent t-tests - compare GPA per semester by group
  - Two-proportion z-tests - compare retention and years to graduate by group

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East Carolina University – PACS's Learning Community Program GPA by Semester for PASC vs. Comparison Group
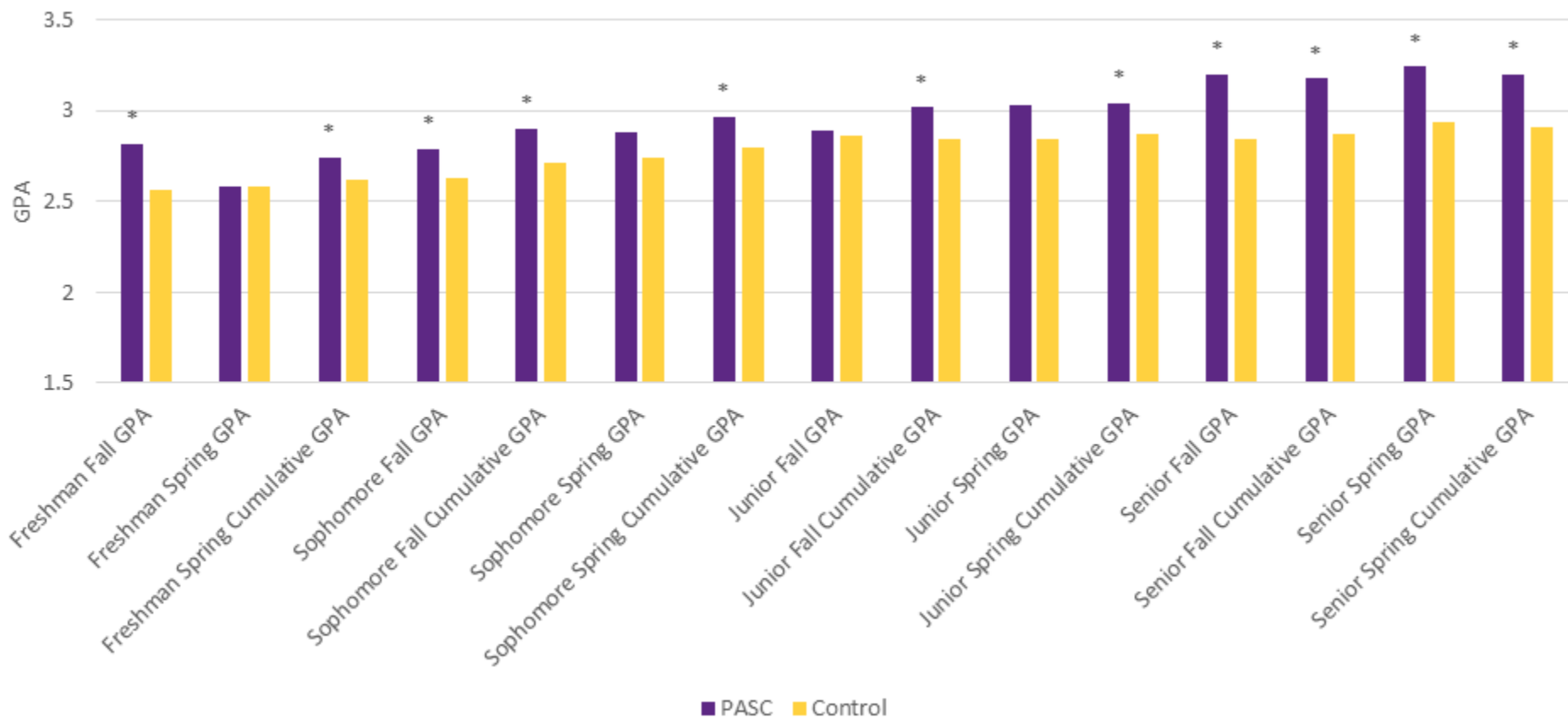
East Carolina University – PACS's Learning Community Program Comparison of Sophomore Retention by Group

- **PASC Learning Community**
  - 88.3% of students retained at sophomore year

- **Comparison Group**
  - 83.3% of students retained at sophomore year

- **Not statistically significant, potentially still meaningful**
  - Equates to an additional 14 students retained by sophomore year among PASC Learning Community group

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East Carolina University – PACS's Learning Community Program Comparison of Years to Graduate by Group

- **No statistically significant differences by group**

- **Graduated in 3 years**
  - PASC Learning Community - 11.9%
  - Comparison Group - 11.8%

- **Graduated in 4 years**
  - PASC Learning Community - 73.8%
  - Comparison Group - 74.5%

- **Graduated in 5 years**
  - PASC Learning Community - 14.3%
  - Comparison Group - 13.7%

East Carolina University – PACS's Learning Community Program Implications - Practitioners

- **Higher levels of academic performance among PASC students demonstrate the potential of programs that assist incoming students needing additional support.**

- **Data on the efficacy of programs is key for continued support and development of the program.**
  - Hiring a data/research specialist for your team
  - Connecting with faculty on campus to serve in this role
  - Partnering with institutional research units on campus

East Carolina University – PACS's Learning Community Program Implications - Researchers

- **Great potential for future studies on these programs.**

- **Fostering connections with institutional research units on campus is key.**

- **Other data to consider**
  - Data tracking the same students over entire academic career
  - Data on perceived barriers to taking part in the program
  - Measures of mental and emotional health (baseline assessments could occur via surveys at freshmen orientation)
  - Data on outcomes post-graduation

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East Carolina University – PACS's Learning Community Program Implications - Policymakers

- **Though retention did not reach significance, still potential**
  - 14 additional students were retained by sophomore year among PASC Learning Community group.
  - Data on more students may reveal more.

- **Policies around data are warranted.**
  - Data may be pulled on different days (e.g., all data pulled on census day would be helpful).
  - Some programs include withdrawals while others exclude withdrawals.
  - Access to data can be challenging.

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East Carolina University – PACS's Learning Community Program Acknowledgements

Dr. Elizabeth Coghill

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Margot Neverett

Tonya Walton

Shun Robertson

SUMMATIVE EVALUATION REPORT

Appalachian State University Drop-In Tutoring Labs

Alison LaGarry-Cahoon, PhD

University of North Carolina at Chapel Hill

Initiative Description

- Learning Lab Drop-In Tutoring for:
  - Biology, Business Math, Business (COB), Computer Science, General Math, Geological and Environment Science, Physics

Disco SLC Learning Labs

Disco SLC Learning Labs

| BIO | BusMath | COB | CS | GenMath | GES | PHY |

Biology Learning Lab

For more information, contact University Tutorial Services at apputs@appstate.edu or 828-262-3060

Drop-in tutoring via Zoom is available for:
BIO 1201, 1202, 1801, 1802, 2001, 2012, 2300, 2400, 2600, 3302, 3312, and 3800

The Biology Learning Lab is intended to provide additional support to students in Biology classes. Students can work individually or with others, and can request help from tutors as needed. The Learning Lab is a great place to ask questions or for you to simply have a good learning environment. Please note that tutors are not allowed to help with graded work, but they can help you understand concepts.

Initial Problem Statement

- Why do students elect to attend tutoring sessions at the Drop-In Learning Labs?

- What barriers exist for student learning, and how might the SLC and Learning Labs work to mitigate these barriers?

- In what ways do the Learning Labs help and/or benefit students who attend tutoring sessions?

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Short-Term Evaluation (Ad-Hoc)

- This ad-hoc program evaluation provided the opportunity to examine the initiative and currently available data sources. Results provide a launch point for a long-term, comprehensive evaluation.

- Thus, this evaluation study is neither experimental, nor quasi-experimental.

Snapshot of Findings

- Student Experience and Success
  - Tutors are highly-valued, and experience with tutors is directly tied to student satisfaction and success.

- Data Infrastructure to Support and Document Student Success and Access
  - In preparing to better assess effectiveness of the Drop-In Tutoring program, additional data should be collected.

Research Design

- Mixed Methods Evaluation

  o *Quantitative Data Analyzed*: Course GPA and total Hours at Tutoring for all Learning Lab Attendees; Attendee Responses to Survey Items (n=53)

  o *Qualitative Data Analyzed*: Attendee Responses to Open-Ended or Short-Response Survey Items

NOTE: The survey sample is not representative of ASU student demographics – particularly in terms of race/ethnicity. This leads to possible further research examining WHO accesses the learning labs, and what that means in terms of assessing/reducing potential barriers.

Participant GPA in Relation to Hours at Tutoring

Table 1: Pearson's Product-Moment Correlation Co-efficient (r) results

	r	N (cases)	sig. (if significant)
ALL DATA (Fall 2018, Fall 2019)	.030[1]	1438	n/a
FALL 2018	.068	596	n/a
FALL 2019	.004	842	n/a

Table 2: Total Visits and Total Hours

	Total Visits	Total Hours
Fall 2018	1889	2614
Fall 2019	2745	4137

There was not a significant correlation between Course GPA and Hours at Tutoring for data sets from Fall 2018 or Fall 2019.

Subject Specific Results

Table 3: Tests for Correlation Between Course GPA and Total Hours at Tutoring

	r	N (cases)	sig. (if significant)
Biology Learning Lab	.046	175	
Chemistry Learning Lab	-.057	157	
COB Learning Lab	.081	233	
Computer Science Learning Lab	.074	90	
Mathematics Learning Lab	-.018	657	
Physics Learning Lab	.234**	126	.008

** Correlation is significant at the .01 level (2-tailed)

When disaggregated by subject, only Physics Learning Lab showed a significant correlation between Course GPA and Total Hours at Tutoring.

Survey Results

- How would you rate your experience with Drop-In Tutoring Programs at ASU:
  - MEAN RATING 4.17
    - 1=Extremely Dissatisfied
    - 5=Extremely Satisfied

Table 5: Response to Q11 – How did you decide that you needed to attend tutoring sessions?

Top Reasons for Attending Tutoring	Responses	Percentage
I was struggling to keep up with the course content	31	34.4%
My best learning is done when I can have someone explain things to me individually	24	26.7%
I have used tutoring in the past and found it to be helpful to my learning.	18	20%
My grades were too low	9	10%
The professor suggested that I seek additional help	4	4.4%
Other	4	4.4%

Table 4: Response to Q13 – What was your approximate course grade when you decided to seek out tutoring?

Approximate Grade	Responses	Percentage
A	12	28.6%
A-	3	7.1%
B+	10	23.8%
B	3	7.1%
B-	3	7.1%
C+	5	12.0%
C	2	4.8%
C-	1	2.4%
D+	3	7.1%
D	0	0%
F	0	0%

It was a surprise to see that the majority of students surveyed accessed tutoring at a time when their perceived grade was in the range of A-B+.

Findings in Two Primary Areas

- Student Experience and Success

- Data Infrastructure to Support and Document Student Success and Access

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The Importance of Tutors

- Tutors were highly-valued.
- Students noted they would sign up for a session knowing a particular tutor would be present.
  - "Kyle just really knows how to explain this stuff so that I can understand."
  - "Sammi is so patient with me. I move so slowly with this material, and she doesn't judge."
- Students noted when a particular tutor wasn't a good fit.
  - "Casey couldn't seem to break things down for me. I felt like they were judging me. I stopped going to them."

Suggested Future Research Questions

- In what ways do effective tutors work to help increase student understanding and achievement?

- What qualifications, experiences, dispositions, and content knowledge are necessary for tutors to be effective?

Suggested Improvements in Data Infrastructure

- Collection of additional data point - "Approximate course grade when student decides to seek out tutoring"

- More focused data collection around peer tutor dispositions, qualifications, experiences.

- Further refine a program logic model or theory of change (particularly considering leadership changes)

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Implications

General:

- Student success is a nuanced and complex concept. Data infrastructure must attend to this complexity.
  - Data agreements with institutional research
  - Appropriate online management systems
  - Inclusion of student voice (interviews, focus groups, surveys, etc.)

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Implications for Practitioners

- Include student/peer tutors in our collective vision of *practitioners* of student support.

- Hiring for student support – peer or staff – should seriously consider appropriate knowledge, skills, and dispositions desired for tutors.

- Appropriate training and professional development could address calibration and capacity improvement for tutors.

Implications for University Policymakers

- Logistics and streamlined processes are vital in allowing students to easily access supports.
  - Online registration
  - Ex. Increased/changed hours in response to move online
- A program logic model/theory of change is a useful tool to help university committees ensure that *policy* is responsive to *process* and vice versa.

Implications for Researchers

- Inclusion of student voice in data is vital to understanding the complexities of student learning supports.

- More qualitative data collection could help in parsing out student perception of barriers to access, etc.
  - Individual Interviews, Focus Groups

- Robust data collection mechanisms do not guarantee the availability of the "right" data.
  - Qualitative data analysis can reveal opportunities for additional meaningful data points to be collected.

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QUESTIONS?

Lunch and Learn Series

February 24   Advising 2.0: Measuring the impact of an Academic Case Manager at UNC Asheville

March 12   Evaluating Classroom Supports: Drop-In Tutoring Lab Program at Appalachian State University & the Learning Community Program at East Carolina University

March 26   Living & Learning Communities at North Carolina A&T State University

April 27   Removing Barriers to Access: Completion Grants Across Four UNC System Institutions

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THANK YOU

EVALUATING CLASSROOM SUPPORTS:
DROP-IN TUTORING LAB PROGRAM AT APPALACHIAN STATE UNIVERSITY &
THE LEARNING COMMUNITY PROGRAM AT EAST CAROLINA UNIVERSITY
SESSION PRESENTERS

Dr. Aubrianne Rote is Chair and Associate Professor in the Health and Wellness Department at UNC Asheville. Dr. Rote teaches courses on chronic disease, body image, exercise science as well as currently oversees the senior capstone experience for Health and Wellness majors at UNC Asheville. Dr. Rote's research areas include decreasing weight bias and improving body image. In addition, due to Dr. Rote's passion for teaching, she also conducts research examining novel pedagogical strategies. Dr. Rote has also served as a Fellow with UNC Asheville's Center for Teaching and Learning and the Chair of UNC Asheville's Faculty Welfare and Development Committee where she focused on improving leadership development on campus and increasing equity in a variety of dimensions for faculty across campus.

Dr. Alison LaGarry-Cahoon is a Clinical Assistant Professor in the School of Education at The University of North Carolina at Chapel Hill. Dr. LaGarry-Cahoon's evaluation and consultation portfolio spans a broad range of areas, from K-12 arts-based school reform initiatives, to curricular partnerships between colleges and the manufacturing industry. Her work prioritizes qualitative research methodologies, as well as conceptual frameworks that center on equity-focused educational practices. She grounds her work in 10+ years of experience as an educator in K-16 education settings.