



Spring 2022 MA Early College PLC Series

Using Data for
Program
Improvement
9:30 A.M.

Today's Agenda



Welcome and Session Goals



Early College Data Review



Using Data for Program Improvement



Data Processing for Informed Decisions



Data Timelines for Forecasting



Review the Data Dashboard



Questions and Reflections about the Data

Introductions- The NS4ed Team



Dr. Joseph Goins

Chief Executive Officer



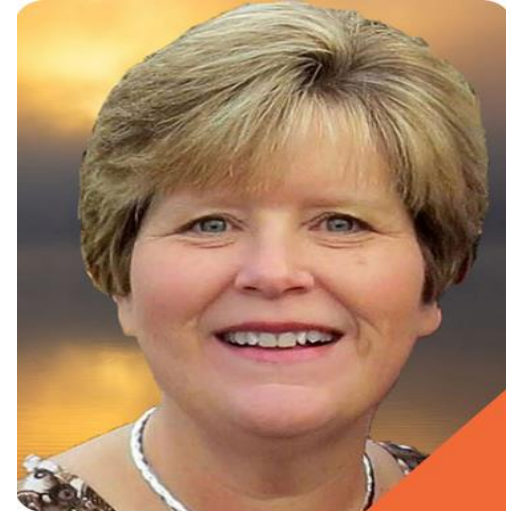
Dr. Luvon Hudson

Vice President, Professional
Development



**Dr. Jamisa
Williams**

Executive Director of Early
College and Leadership
Initiatives



Kelly Kennedy

Education Program Specialist

Introductions



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Today's Goal

- Goals for using data for Early College program improvement:
 - Review data dashboard uses
 - Review data dashboard content
 - Review relevant cohort data
 - Overview research related to cohort data
 - Discuss how to use data for program improvement
 - Explore possible timelines for data analysis and forecasting
 - Login to data dashboard and become familiar with content
 - Reflective review of the data dashboard



DESE Data Dashboard

How are reported data being used?

- 1. Track number of students and credits enrolled to reimburse colleges**
- 2. Monitor program needs**
- 3. Evaluate Early College (EC) student outcomes**

Data collected at K12 and Higher Ed Levels (More to come in Data Sessions)

K-12 Data

Student Information Management System (SIMS) formal DESE collection on student information that meets state, federal reporting requirements and includes student demographic and location data. SIMS is the formal way that DESE identifies EC students.

Student Course Schedule (SCS) formal DESE collection on student course information. SCS helps to identify the courses that EC students are taking for postsecondary credit. SCS is the formal way that DESE will confirm postsecondary course enrollment as part of high school schedules.

Higher Education Data

Higher Education Information Reporting System (HEIRS) formal DHE collection that includes information on student demographics, enrollment, programs/majors, course records, degree completion, and financial aid. HEIRS will be the formal way that DESE/DHE will identify the number of credits in which EC students are enrolled for public IHEs.

National Student Clearinghouse (NSC) student-level data reported by Colleges nation-wide. NSC data includes enrollment information and can confirm degree completion but is otherwise limited.

Data Definitions for Today

- **Aggregate data** refers to numerical or non-numerical information that is (1) collected from multiple sources and/or on multiple measures, variables, or individuals and (2) compiled into data summaries or summary reports, typically for the purposes of public reporting or statistical analysis (opposite of disaggregate).
- **Cohort** refers to a group of individuals who have something in common. In education, cohort is typically applied to students who are educated at the same period of time—a grade level or class of students (for example, the graduating class of 2004) would be the most common example of a student cohort.
- **Student retention** is the measure of students that enroll, continue, and finish their academic studies in the same school...Think about **student retention** as student success or successful completion.

Definitions from www.edglossary.org and www.study.com.

Cohort Data Analysis

- Agree on the data definitions
- Keep the data accurate with timely reporting
 - What are the timelines for your district, state?
 - Who owns the data reporting?
- Create a data profile before disaggregation
 - What is in the data bucket? Race, gender, income, ethnicity?
- Decide who is included in the cohort
 - Early College students only? All students in grade level?
- Analyze
 - What are you using the data to inform? Why



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Components of Cohort Data

May include the following:

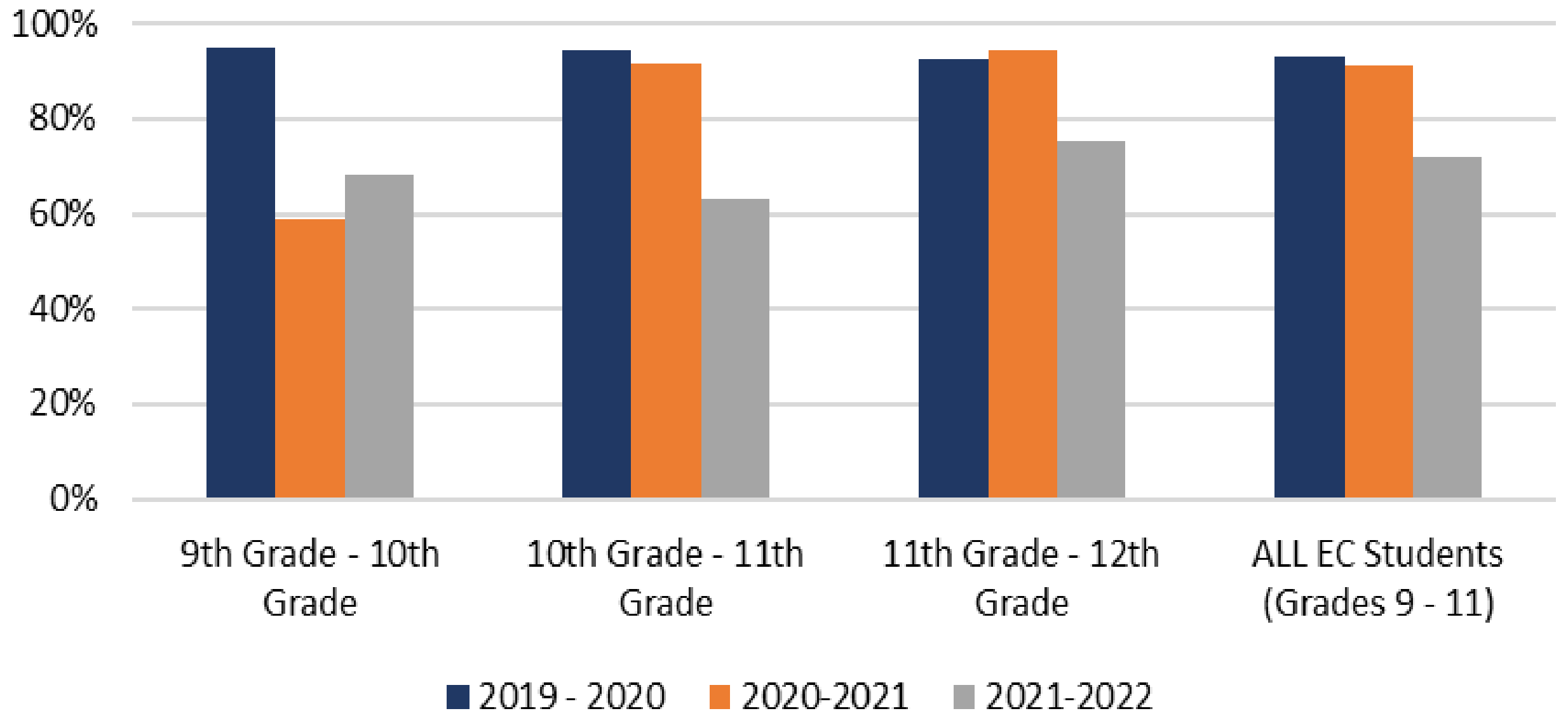
- Student characteristic/demographic data
- Student progress data
 - Grades
 - GPA
 - College course credits
 - Outcome data
 - Final GPA
 - Course completion
 - Graduation Requirements (met/unmet)



Early College Student Year-to-Year Retention

	2019 – 2020 Retention	2020-2021 Retention	2021-2022 Retention
9th Grade - 10th Grade	95%	59%	68%
10th Grade - 11th Grade	94%	92%	63%
11th Grade - 12th Grade	92%	94%	75%
ALL EC Students (Grades 9 - 11)	93%	91%	72%

Early College Student Year-to-Year Retention



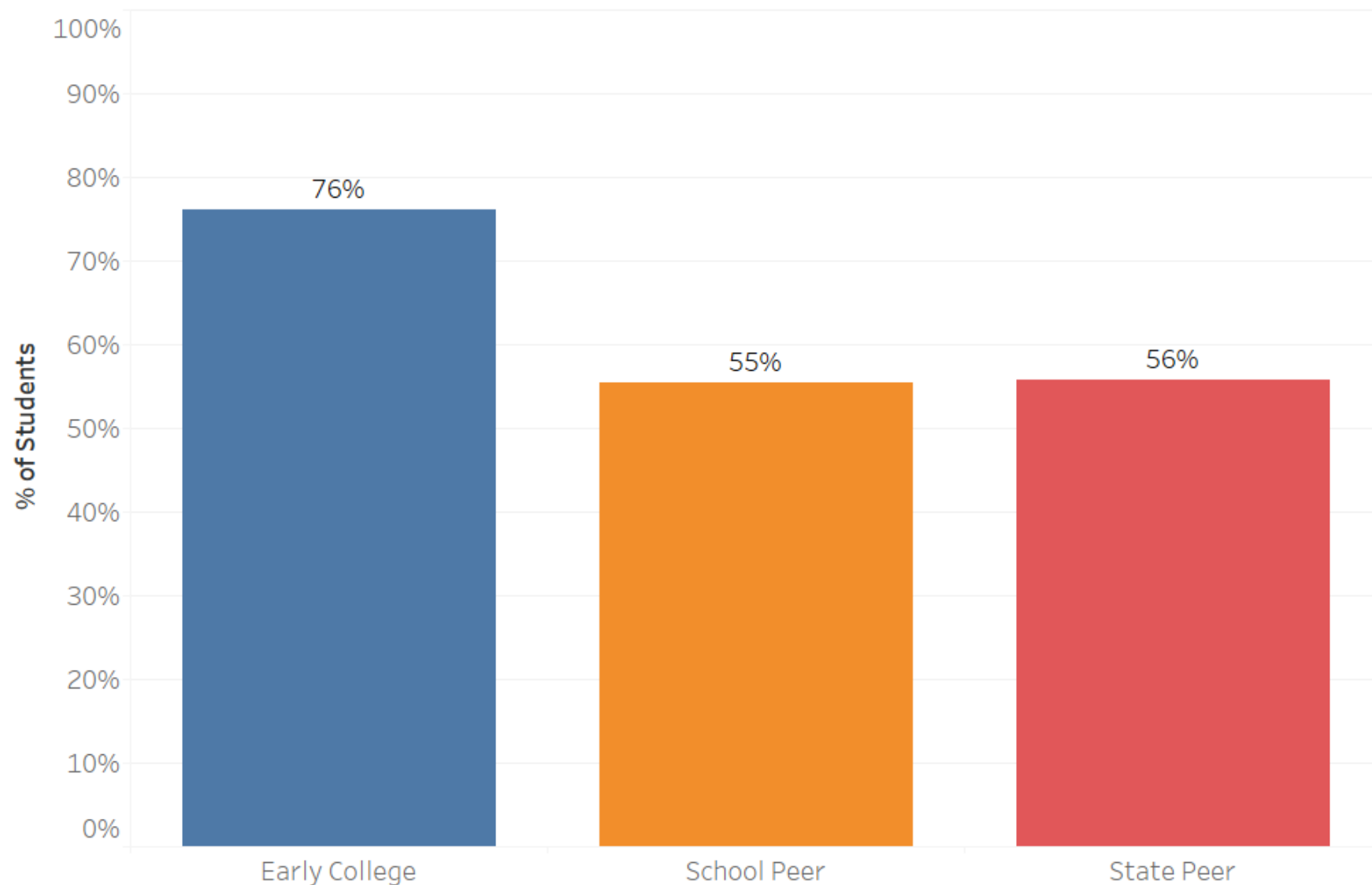
Early College Student Year-to-Year Retention

	2019 - 2020			2020-2021			2021-2022		
	# Enrolled	# Retained	% Retained	# Enrolled	# Retained	% Retained	# Enrolled	# Retained	% Retained
9th --> 10th	117	111	95%	114	67	59%	296	201	68%
10th --> 11th	214	202	94%	311	285	92%	498	314	63%
11th --> 12th	461	426	92%	950	895	94%	1479	1111	75%
Overall	792	739	93%	1375	1247	91%	2273	1626	72%

**Note - 2021 Numbers are Excluding Lowell High School 9th Graders*

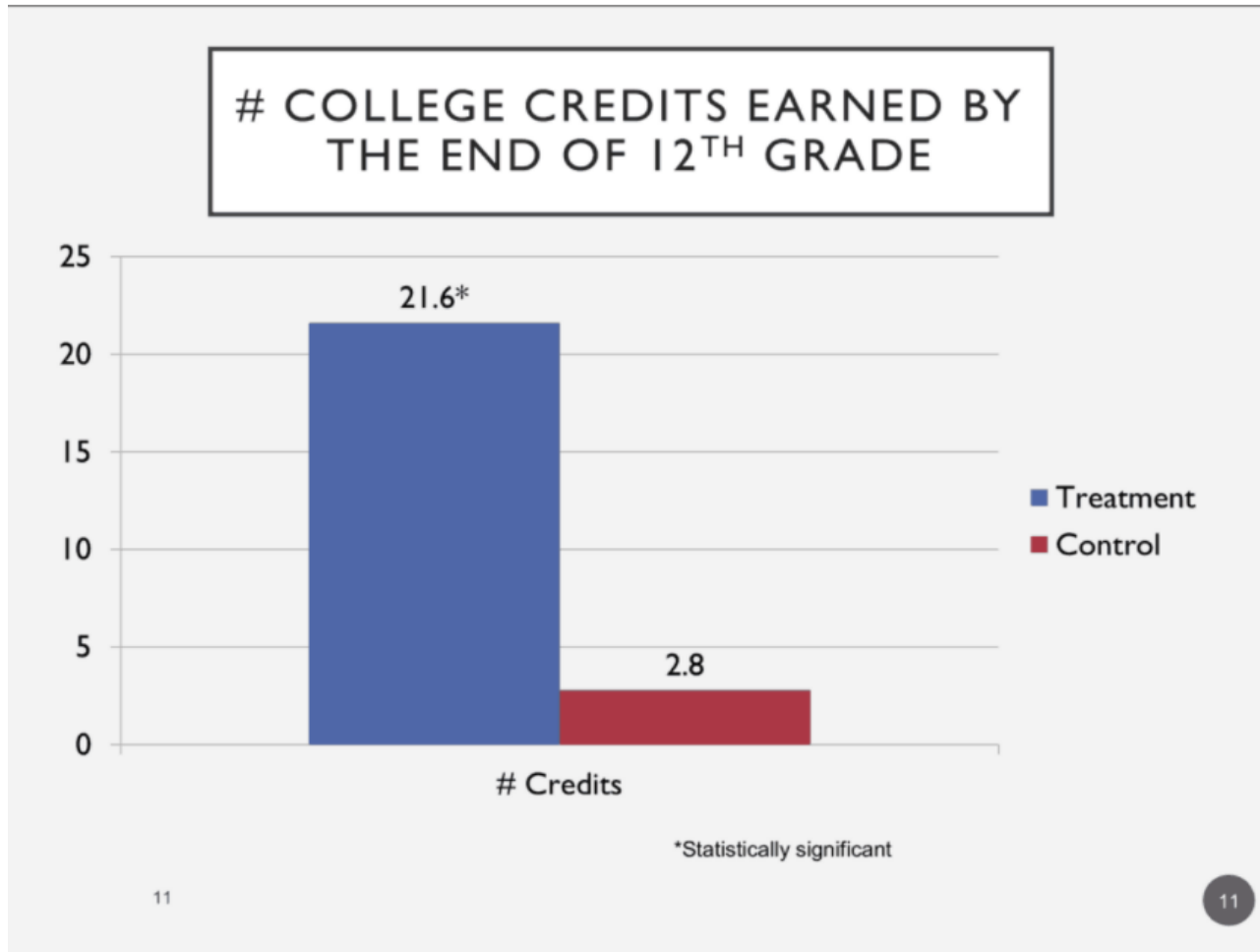
2019 Massachusetts EC Graduates Enrolled in College at Higher Rates:

College Enrollment Within 6 Months of Graduating High School



Source: National Student
Clearinghouse (NSC)

Why does cohort student data matter?

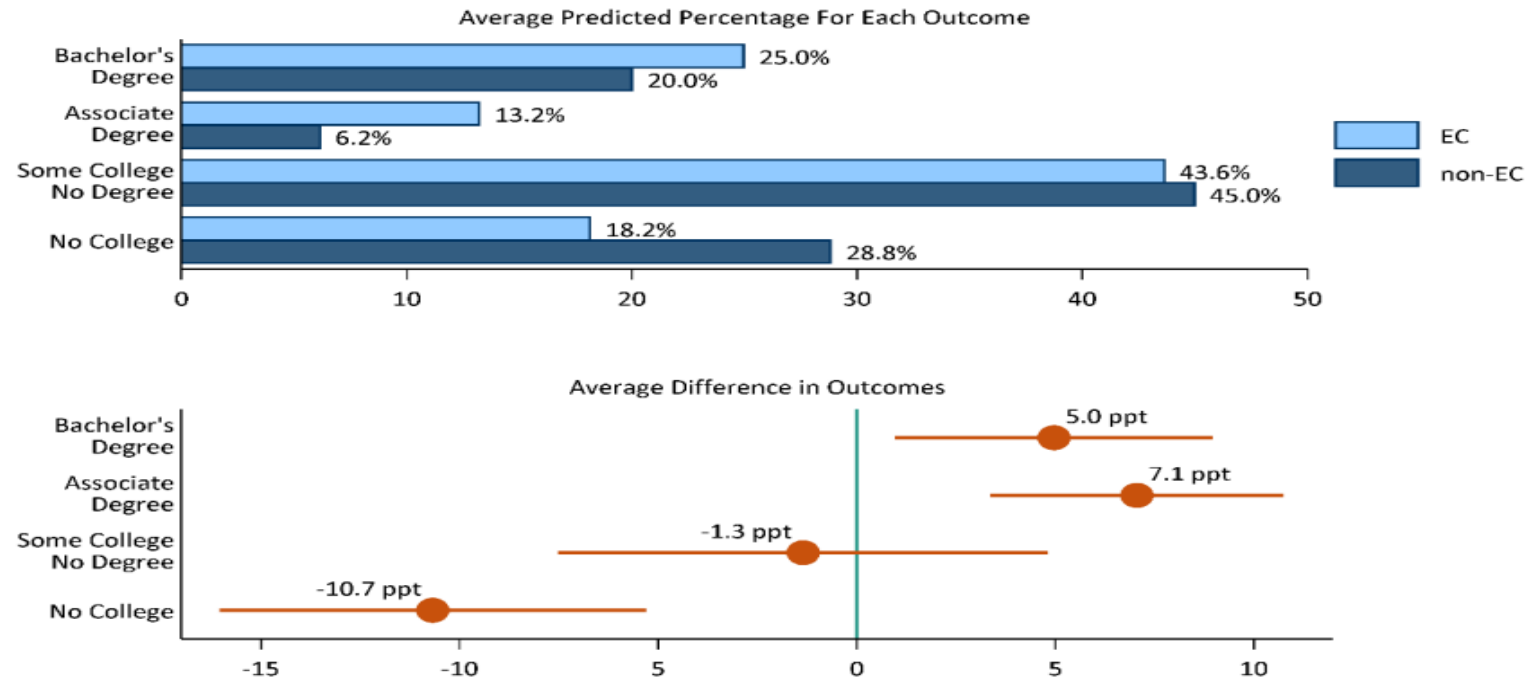


There was also a positive impact, however, on attainment of four-year degrees, which occurred after students left the early college. This suggests that the early college might be providing students with other benefits—beyond increased academic skills—that are influencing students' likelihood of getting a degree.

– Dr. Julie Edmunds

Why does cohort student data matter?

Figure 1. Estimates of the Impact of Early College Enrollment on College Enrollment and Completion Outcomes, 6 Years After Expected High School Graduation



Notes. $N = 2,458$ (1,044 EC students; 1,414 non-EC students). ppt = percentage points. 95% confidence intervals on the estimated average difference are shown in the lower panel of the figure. The estimates presented here are the treatment-on-the-treated estimates. We present additional impact results in Appendix B that include intent-to-treat estimates.

The Cost-Benefit Analysis

“The estimated impact results indicated that EC students were more likely to attend college and more likely to complete their postsecondary education with an associate degree or a bachelor’s degree. Using existing studies that quantified the monetary private and public returns of postsecondary education, we estimated the benefits attributable to EC enrollment through increased postsecondary education attainment. Using average estimates of benefits, we calculated that EC enrollment resulted in benefits of almost \$58,000 per student, with nearly \$34,000 of benefits going to the individual student and approximately \$24,000 of benefits going to the public at-large.”



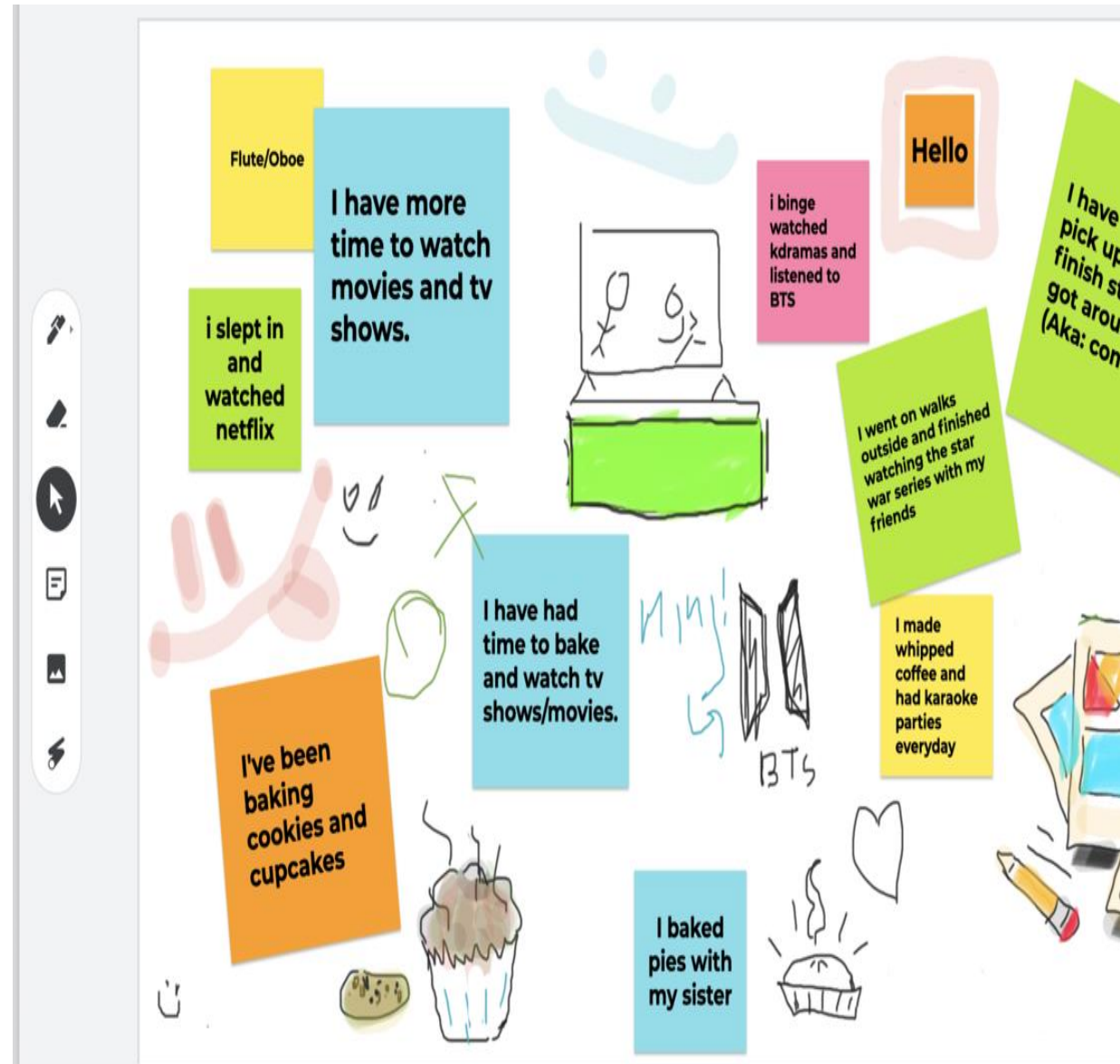
Taken from *The Cost and Benefits of Early College Enrollment*

by Drew Atchison | Kristina L. Zeiser | Salma Mohammed | Jesse Levin David Knight University of Washington

In what way do you use data for program improvement?

- You will be put into breakout groups.
- Using the Jamboard link in the chat, take a moment to add your ideas for using the data contents we have reviewed for program improvement.
- You will have about 5 minutes to discuss and add your ideas before returning to the main room.

Program Improvement Jamboard



Program Improvement Ideas

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graph TD; A[Program Improvement Ideas] --> B[Student/Community Impact]; B --> C[Equitable Outcomes]; C --> D[Refinement/Expansion]; D --> B;
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Student/Community Impact

- Evaluate student success or areas of opportunity and make adjustments to increase impact
- Review longitudinal data with relevant community impact and determine scale

Refinement/ Expansion

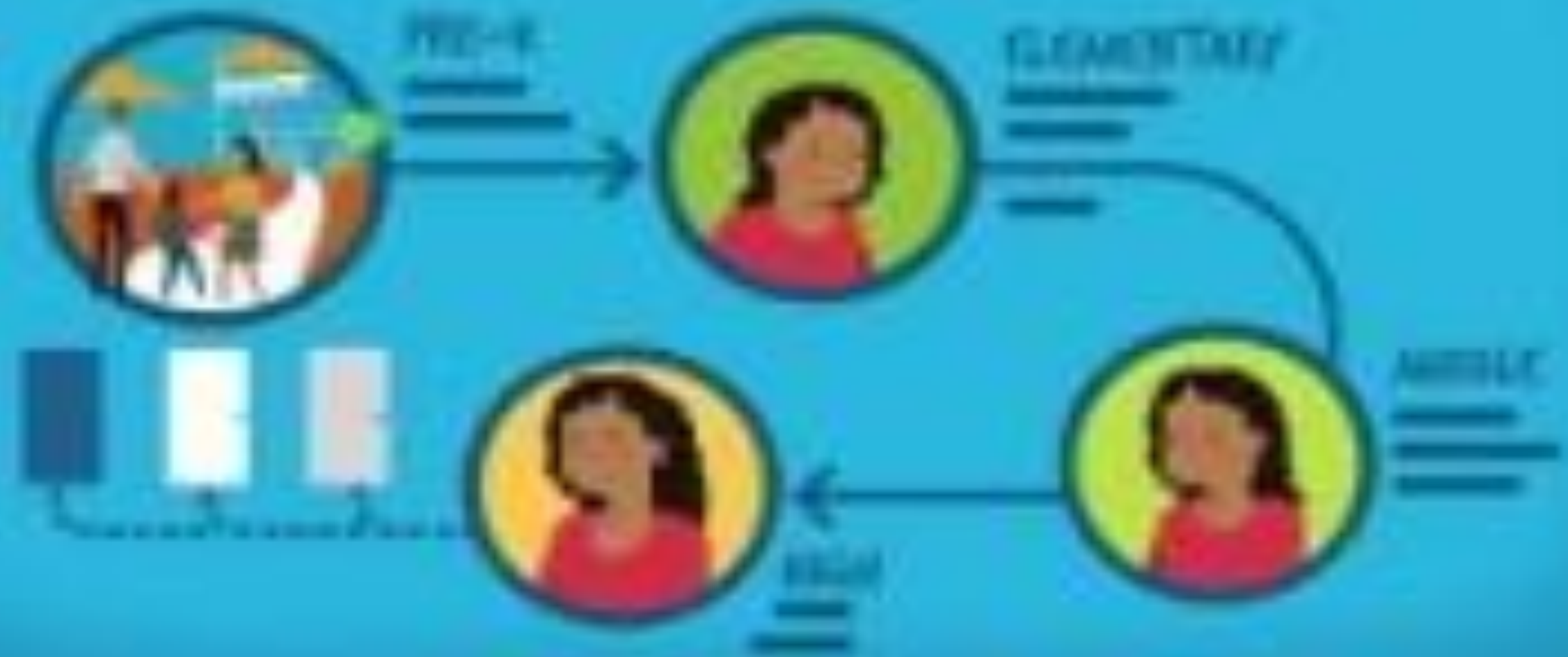
- Refine current offerings, pathways, curriculum, etc.
- Expand course offerings, student support options, or IHE partnerships

Equitable Outcomes

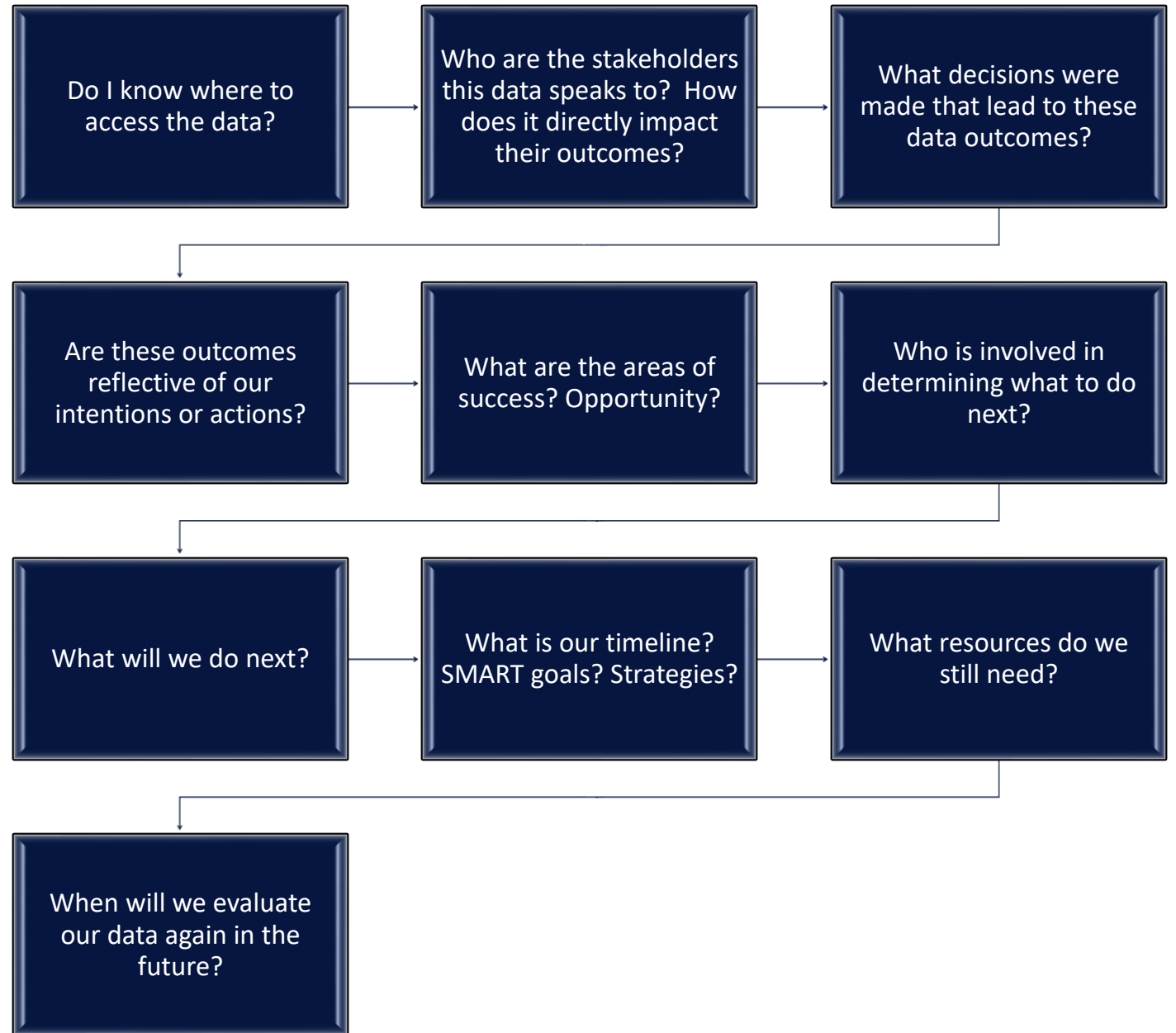
- Seek increased opportunities for students to be successful
- Evaluate program metrics and adjust to increase equitable outcomes for students

Data Processing for Informed Decisions

MY EDUCATION JOURNEY



Data Processing Questions for Informed Decision Making



Let's Explore!



During today's presentation, you received a private chat of your login information for the data dashboard.

You will now use that login information to access your account.

You will have 3 minutes to login and provide a thumbs up that you are successfully logged in.

Then, you will be placed in partnerships to answer some questions about the data dashboard as you explore its contents. This will take about 8 minutes before you are returned to the main group.

Questions for discussion :



What pertinent data points are in the system?



Does your data look and feel accurate to you? Why or why not?



Where do you still need support? Or have questions.



What stands out to you?



What data do you feel is most important for tracking cohorts? Is this available to you in this system?



How will you use the data you have access to for informed decision-making/program improvements?

Next steps...

What..

Today we explored the data dashboard and how to use data for program improvement.

So
what...

- Are my perceived expectations?
- Are my questions?
- Am I willing to do with the information I have?

Now
what...

- How will I communicate next steps with my school-based leadership team?
 - How will I make use of the data dashboard as a best practice in decision making?
 - Is the main learning I will take from this reflection?
 - Why does this experience matter?
-



Problems of Practice

As you consider today's session, we welcome your questions, quandaries, and queries about using the data dashboard for digging deep into program improvement.

Feel free to join us on Thursday, March 3 at 9am for a *Problems of Practice* session to hear from your peers about their findings and to help create solutions.

This session is optional!

Meeting ID: 871 2355 0844

Passcode: MAECP

Optimistic Closure

**Be patient
with yourself.**

Nothing in nature
blooms all year.

GH