

From Foundations to Futures

PostSecondary Readiness



This work was supported by the *National Science Foundation Robert Noyce Teacher Scholarship Program* under Grant Number 2050659. The opinions, findings, conclusions, and recommendations, however, are those of the authors and do not necessarily reflect the views of the National Science Foundation.



From Foundations to Futures

A PD Series on Readiness, Access, and Alignment



Joint Position Statement

Launch Year's

Post-
Secondary
Readiness

Pathways

Common
Content

Middle
School
Acceleration

K-8
Grade level



CONNECTICUT
Education



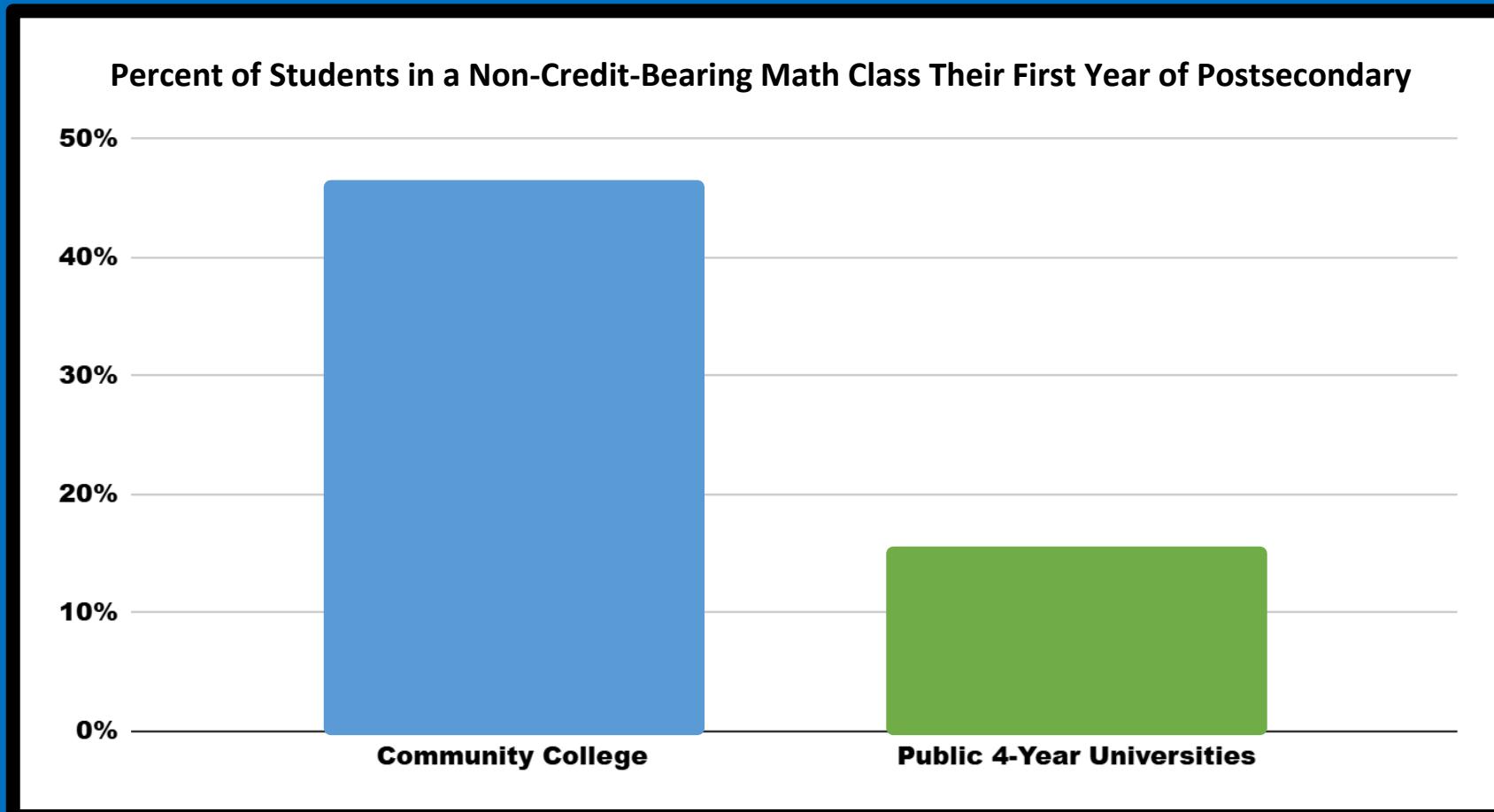
The Problem

There is a **disconnect** between **postsecondary math education** readiness and the math courses that students are encouraged to take in **high school**.





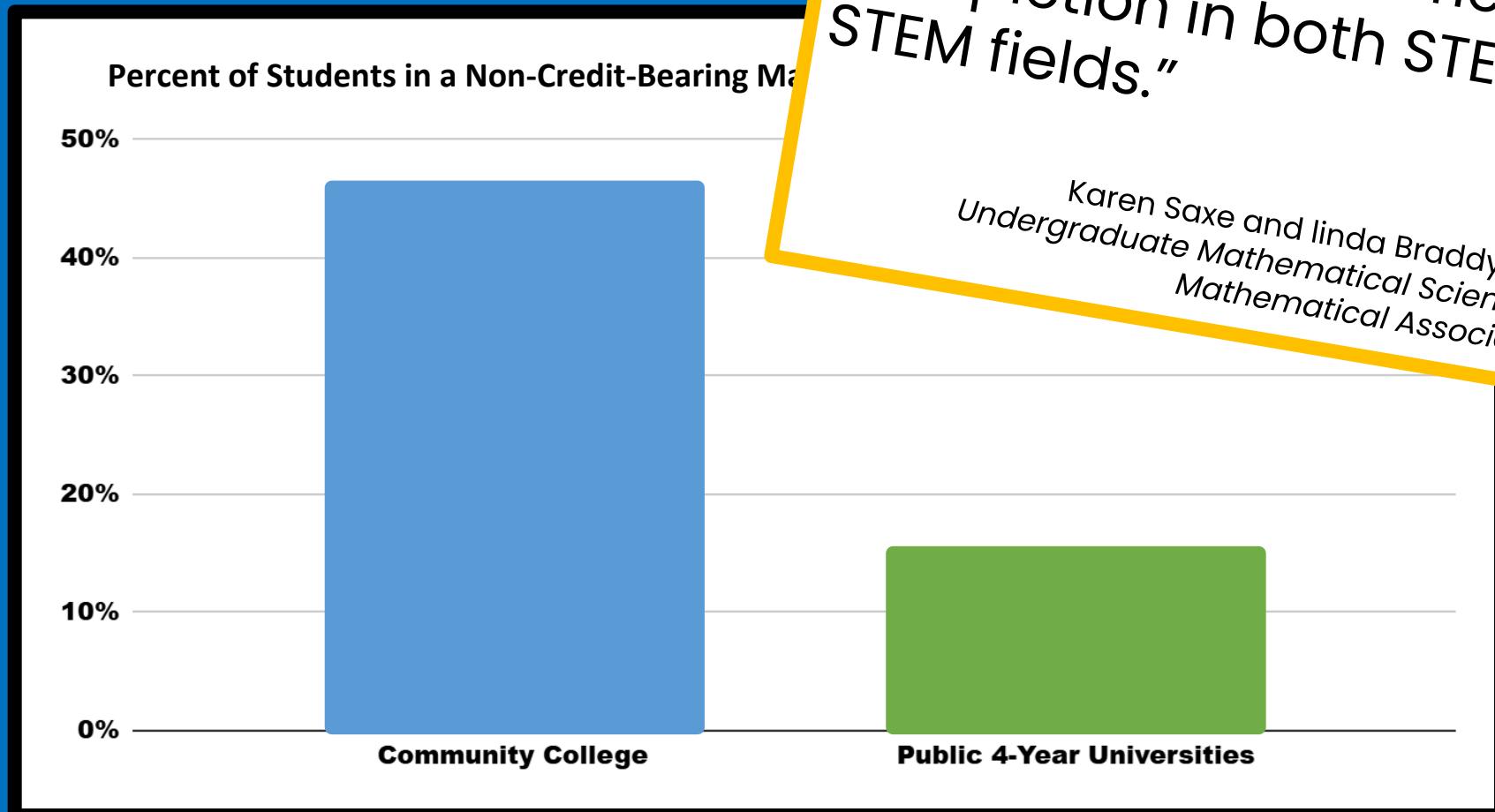
The Problem





The Problem

“Mathematics courses are the most significant barrier to degree completion in both STEM and non-STEM fields.”





Webinar Overview

This presentation will focus on

1

How to improve **support and guidance for students'** secondary mathematical journey that aligns with their post-secondary **goals and aspirations**

2

Encourage **informed adjustments** to secondary math experiences and offerings to ease students' transition from high school into postsecondary life



Webinar Overview

This presentation will focus on

1

How to improve **support and guidance for students'** secondary mathematical journey that aligns with their post-secondary **goals and aspirations**

2

Encourage **informed adjustments** to secondary math experiences and offerings to ease students' transition from high school into postsecondary life



Topic Overview

This presentation will focus on

1

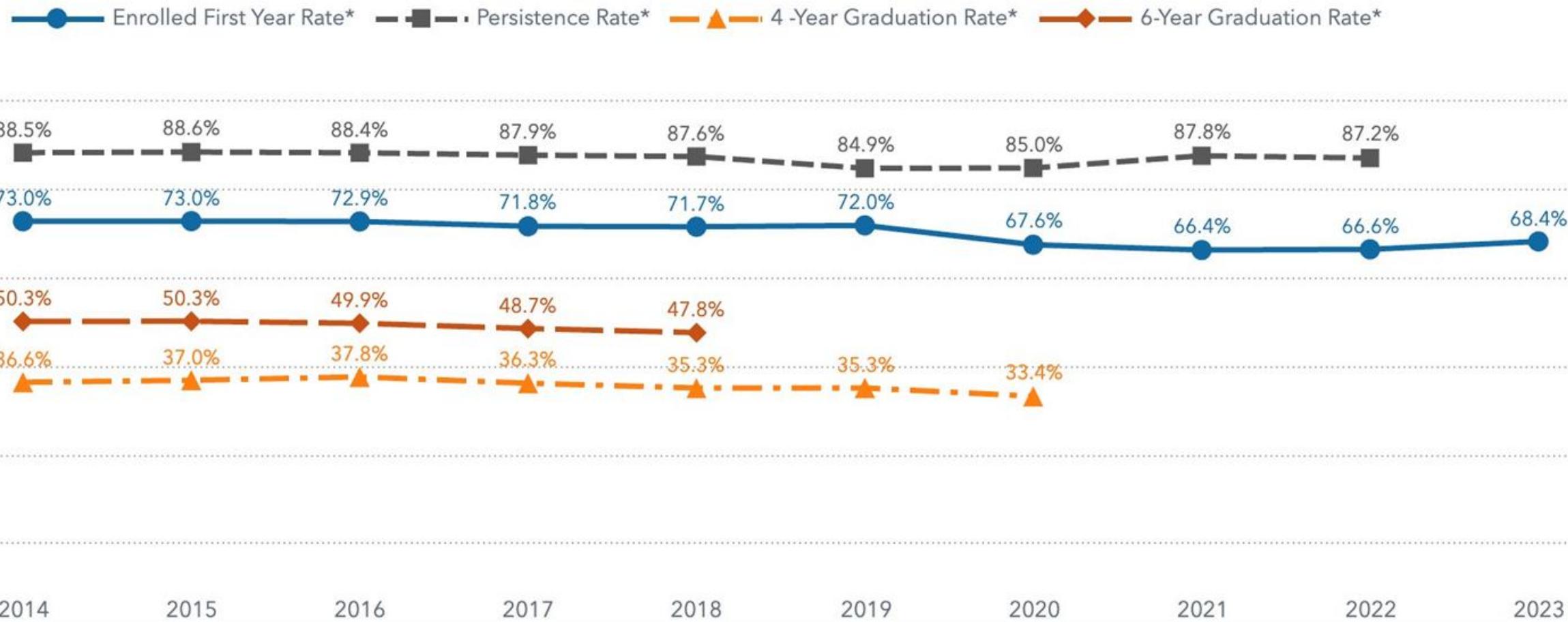
How to improve **support and guidance for students'** secondary mathematical journey that aligns with their post-secondary **goals and aspirations**

2

Encourage **informed adjustments** to secondary math experiences and offerings to ease students' transition from high school into postsecondary life



CT Data





CT Data





CT Data





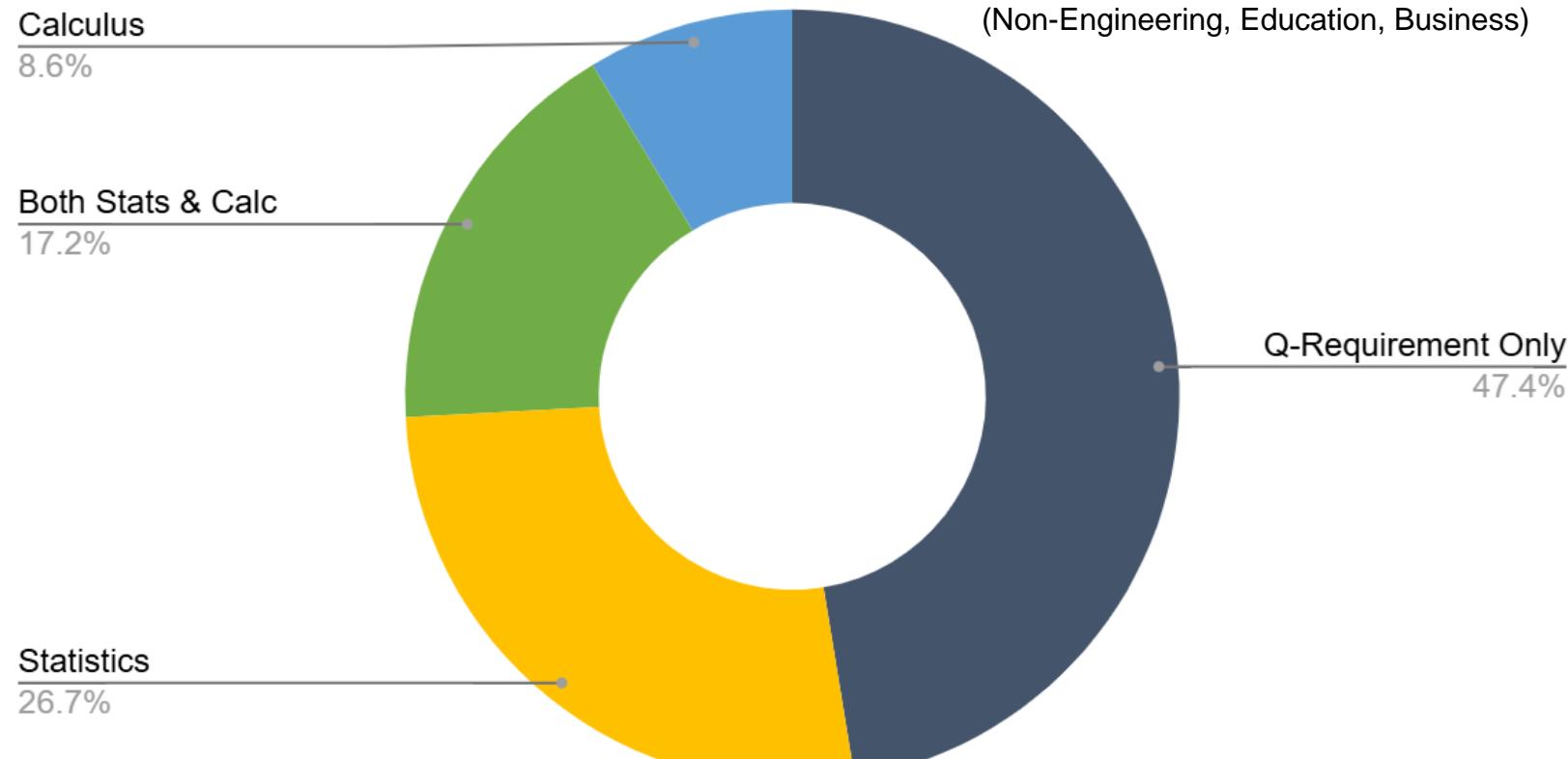
CT Data





CT University Requirements

Percentage of Majors at Public CT Universities that Require Advanced Mathematics





An Opportunity

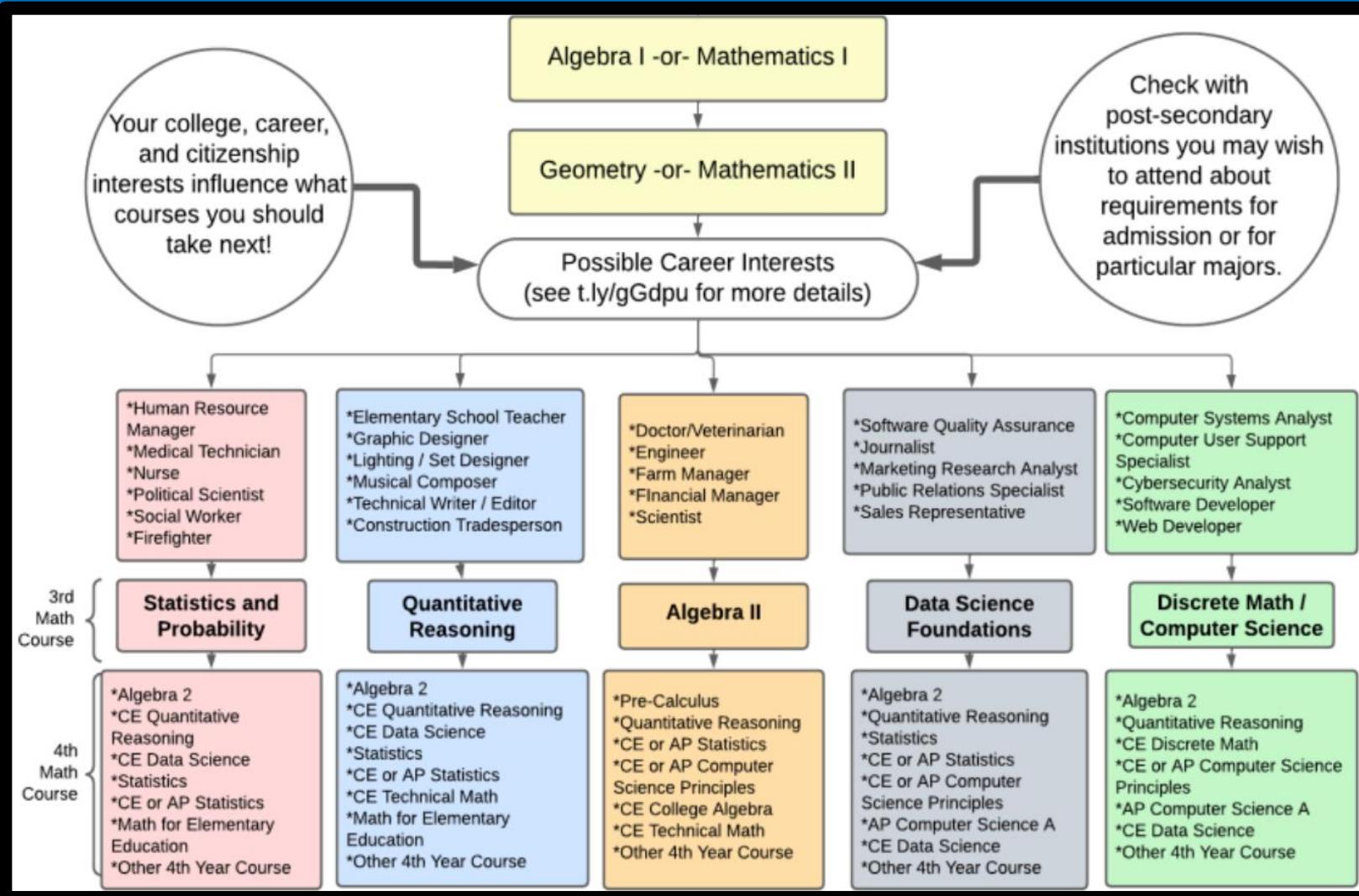
Percentage of Liberal Arts Majors

"The rise of statistics presents an opportunity to modernize high school math education for a data-driven world.

Policymakers should embrace a both-and approach: expanding rigorous alternatives like statistics and data science while preserving strong calculus pathways for students who plan to focus on STEM."

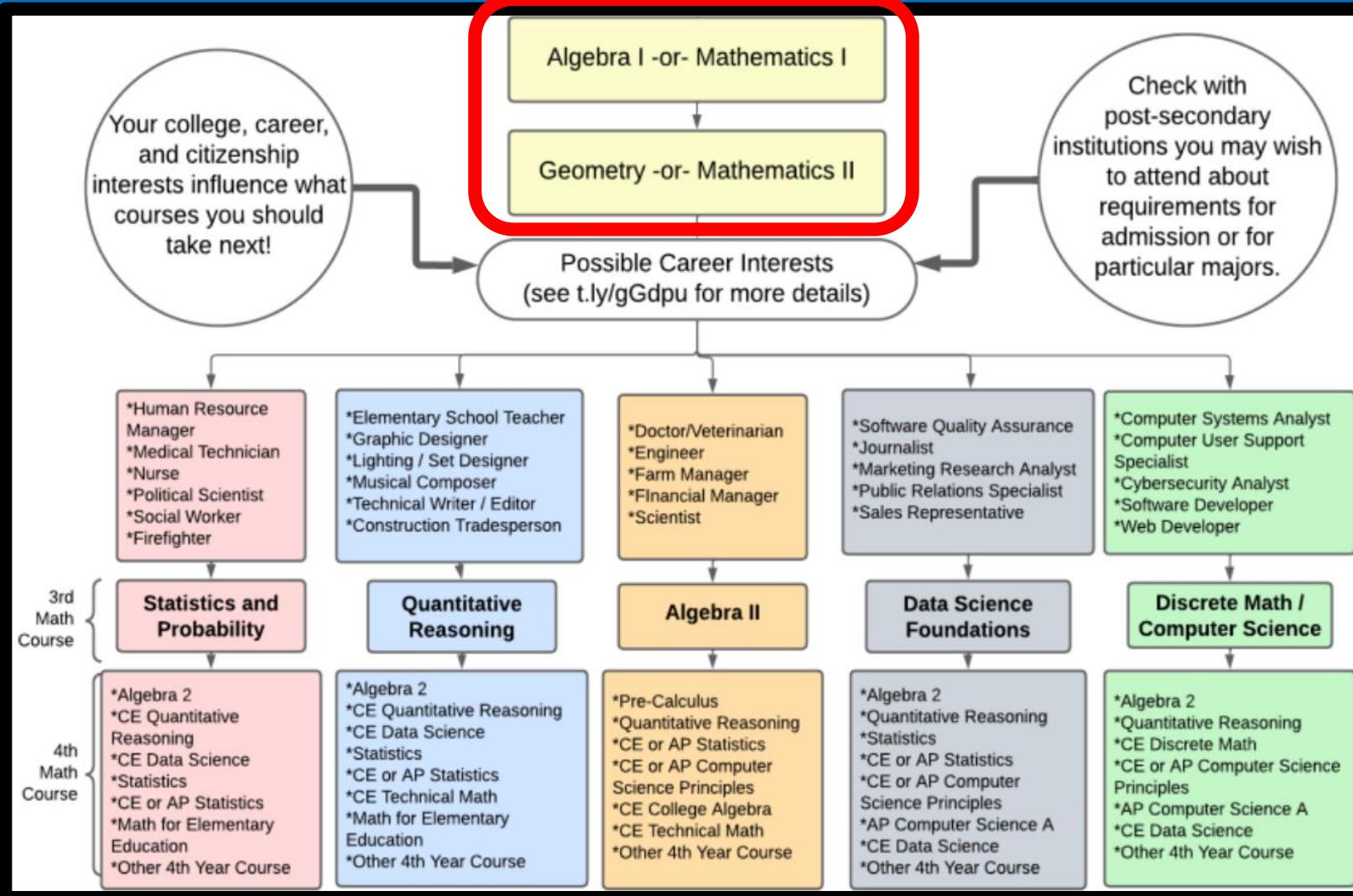


Example of What's Been Done in Maine





Example of What's Been Done in Maine



Common Pathway
in First 2 Years

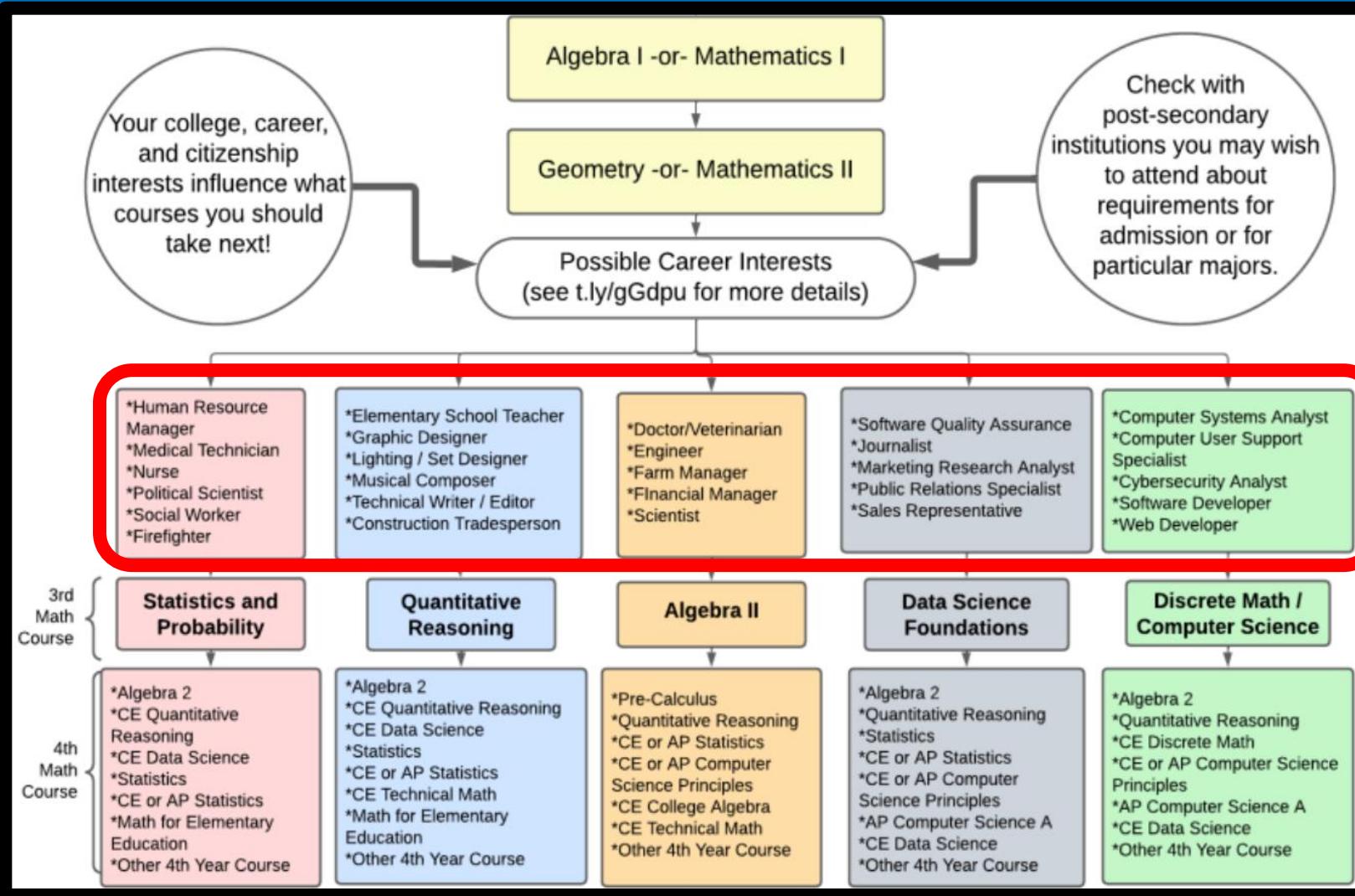
1
2
Career Discussions
After Year 2

3
Defined Third Course
Based on Career
Trajectory

4
Fourth Course
Elective Based on
Career Trajectory



Example of What's Been Done in Maine



Common Pathway in
First 2 Years

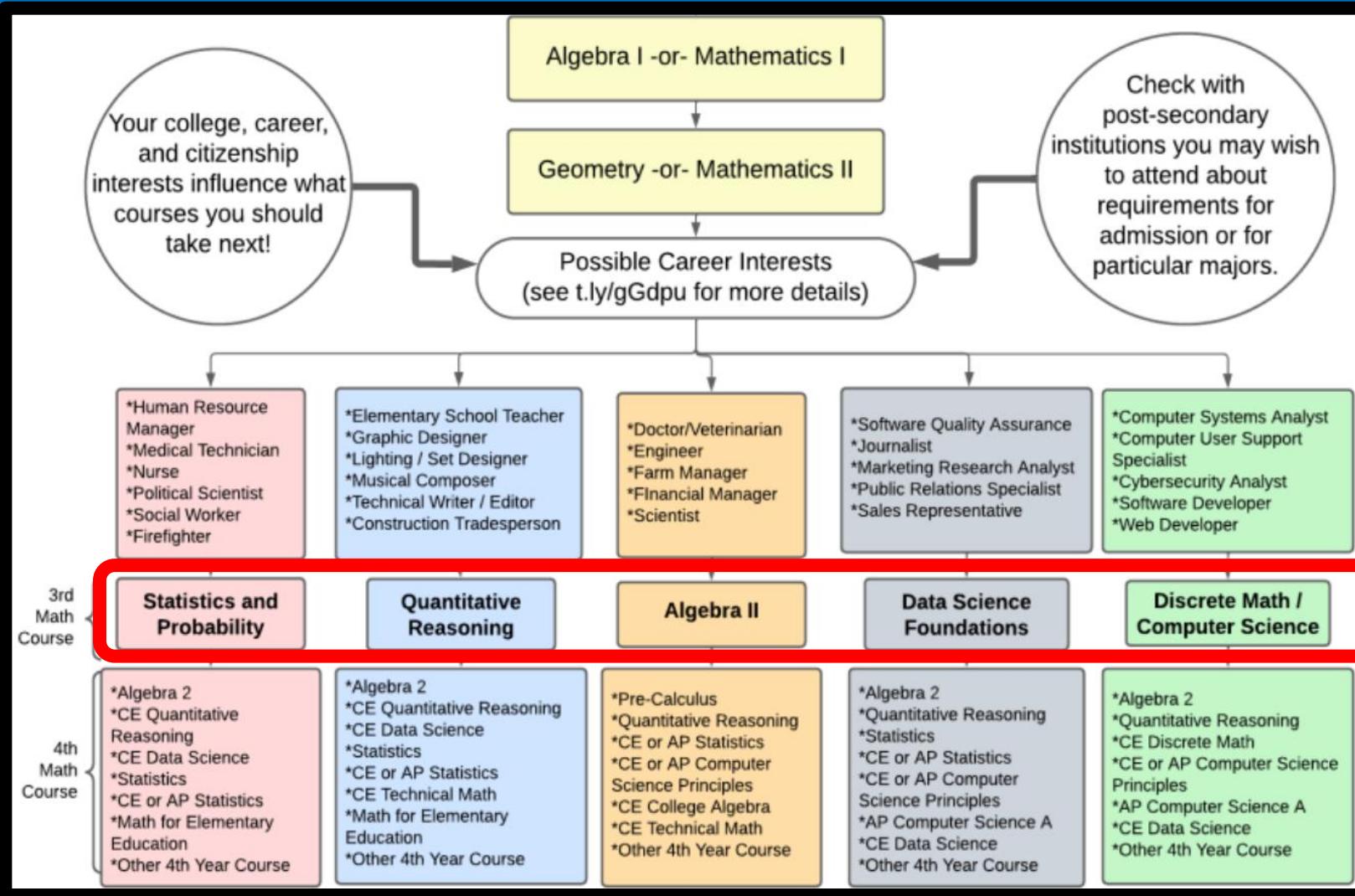
1
2
Career Discussions
After Year 2

3
Defined Third Course
Based on Career
Trajectory

4
Fourth Course
Elective Based on
Career Trajectory



Example of What's Been Done in Maine



Common Pathway in
First 2 Years

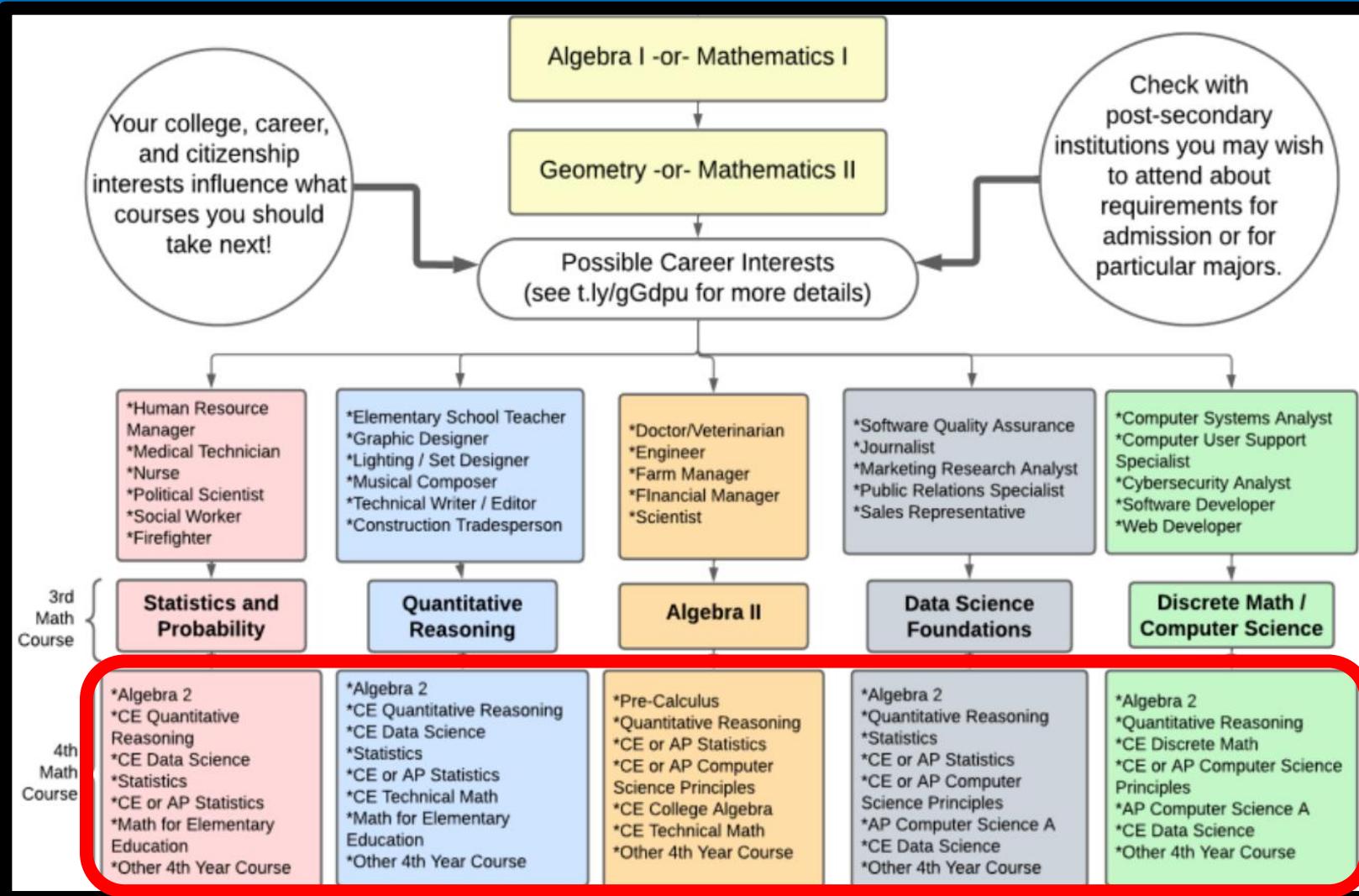
Career Discussions
After Year 2

**Defined Third
Course Based on
Career Trajectory**

Fourth Course
Elective Based on
Career Trajectory



Example of What's Been Done in Maine



Common Pathway in
First 2 Years

Career Discussions
After Year 2

Defined Third Course
Based on Career
Trajectory

Fourth Course
Elective Based on
Career Trajectory

Reflection: Bridging the Gap Between Course Offerings and Postsecondary Goals

What does YOUR School Counseling Department/staff need to:

- Stay up-to-date with postsecondary requirements?
- Create or improve materials that clearly connect requirements to course offerings?
- Feel supported and empowered to continually revise the guidance process?



Reflection: Bridging the Gap Between Course Offerings and Postsecondary Goals

What does YOUR School Counseling Department/staff need to:

- Stay up-to-date with postsecondary requirements
- Create or improve materials that clearly connect requirements to course offerings
- Feel supported and empowered to continually revise the guidance process

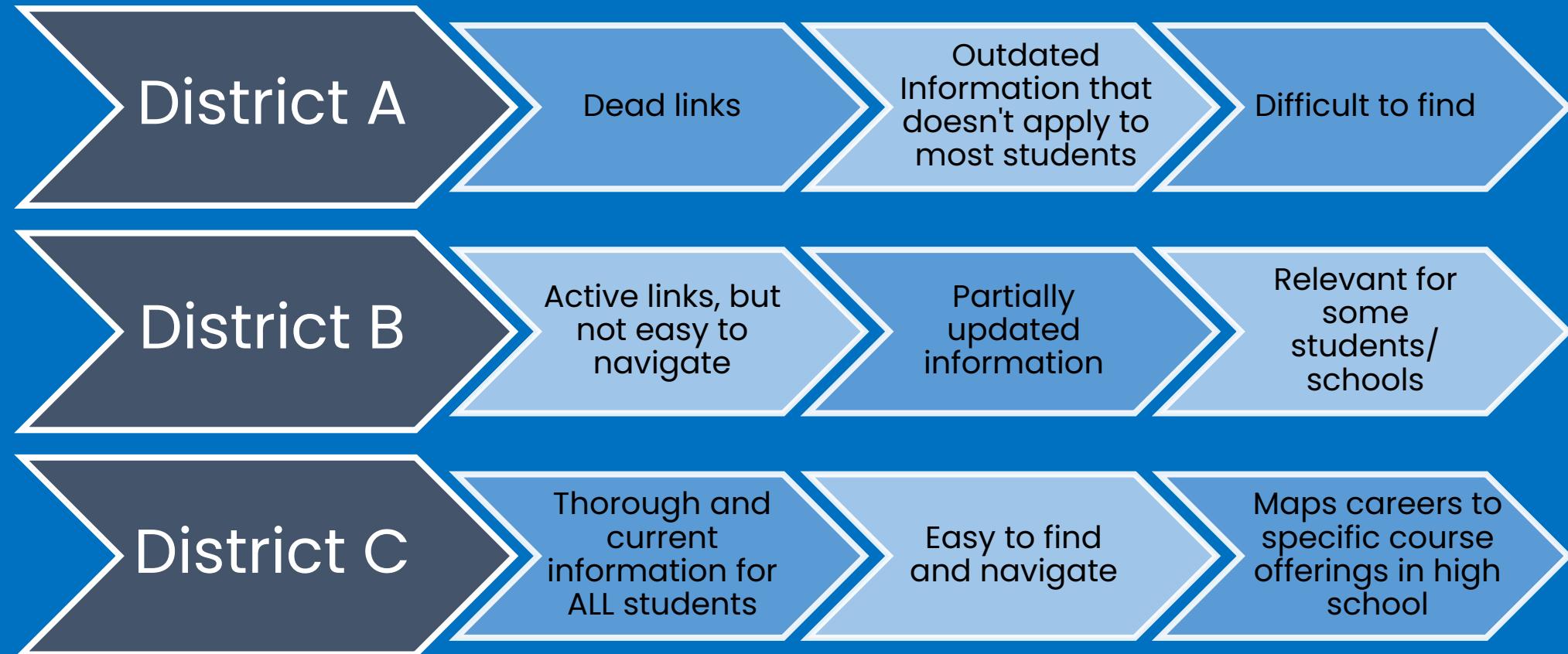


Pause here to reflect.
Resume when you are ready.



Current Resources in CT Districts

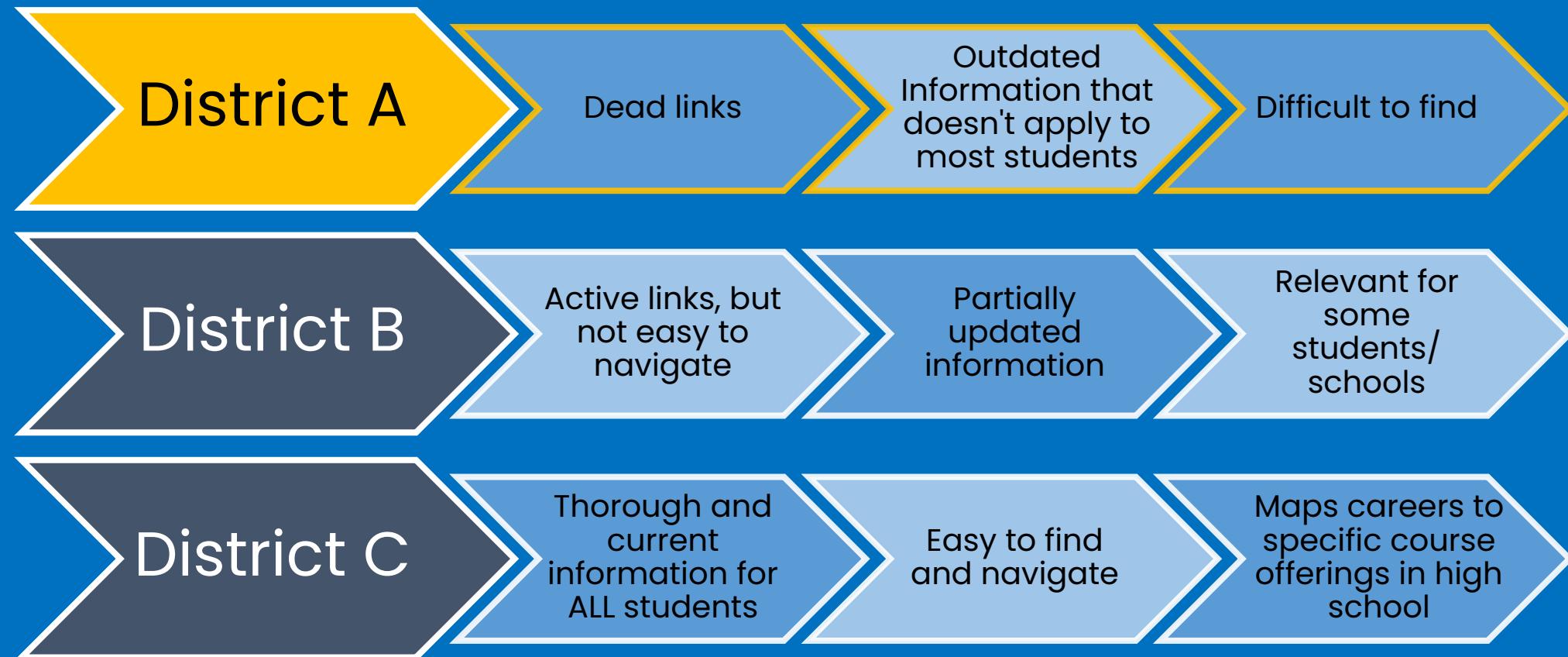
Access to resources and information on district websites across the state is tied to the funding and resources of individual districts.





Current Resources in CT Districts

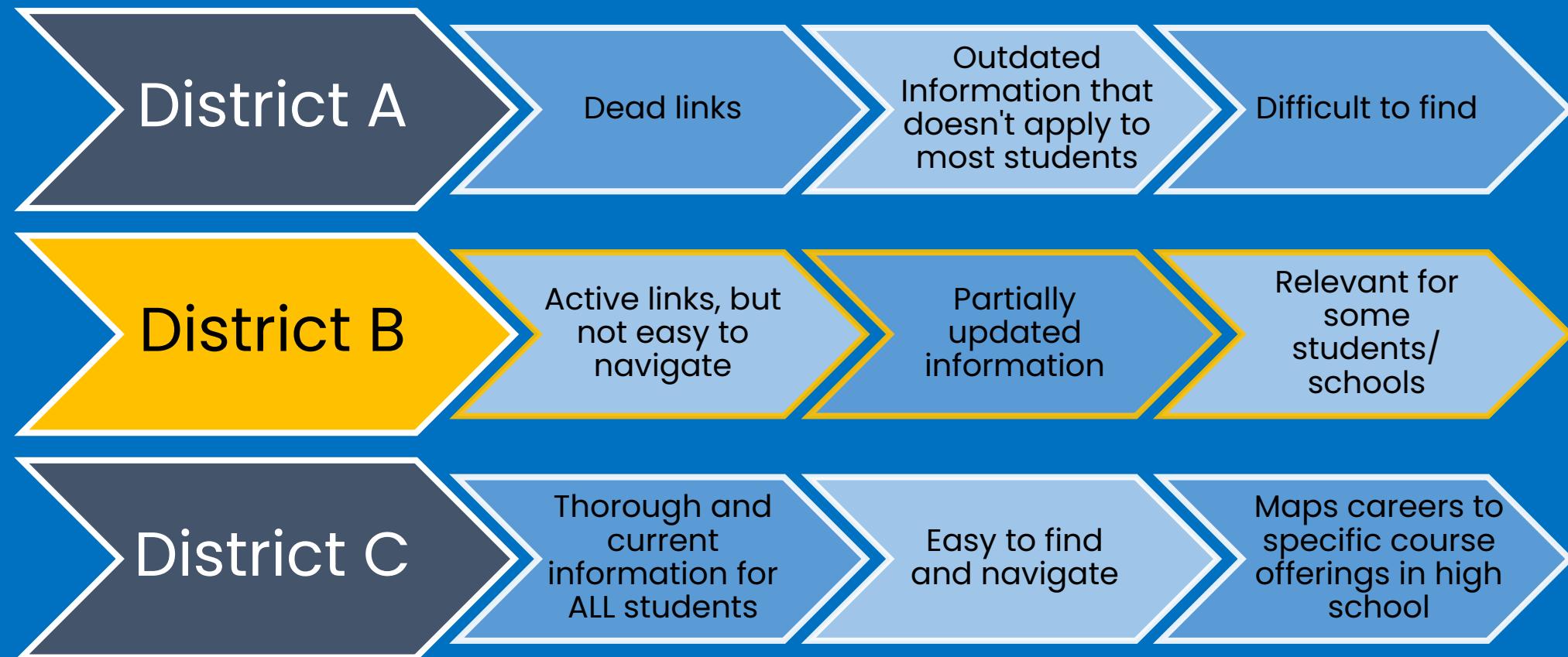
Access to resources and information on district websites across the state is tied to the funding and resources of individual districts.





Current Resources in CT Districts

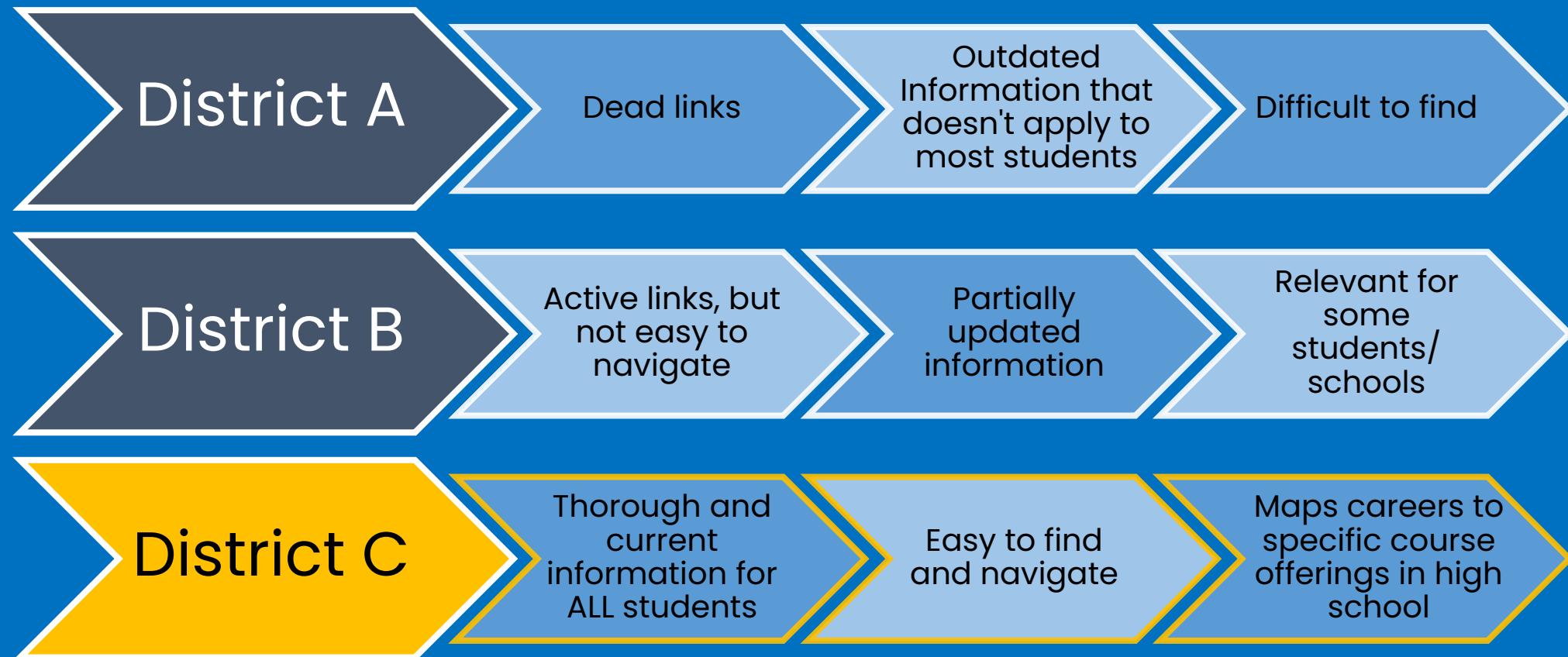
Access to resources and information on district websites across the state is tied to the funding and resources of individual districts.





Current Resources in CT Districts

Access to resources and information on district websites across the state is tied to the funding and resources of individual districts.





District Recommendations

- 1 Student-facing links and documents that are easy to navigate and understand
- 2 Information sheets about careers and majors that are best supported by course offerings at district schools
- 3 Well-informed and trained school counseling departments to support students in decision making
- 4 Easily accessible and current resources to support teachers, families, and other stakeholders



District Recommendations

- 1** Student-facing links and documents that are easy to navigate and understand
- 2** Information sheets about careers and majors that are best supported by course offerings at district schools
- 3** Well-informed and trained school counseling departments to support students in decision making
- 4** Easily accessible and current resources to support teachers, families, and other stakeholders



District Recommendations

- 1** Student-facing links and documents that are easy to navigate and understand
- 2** Information sheets about careers and majors that are best supported by course offerings at district schools
- 3** Well-informed and trained school counseling departments to support students in decision making
- 4** Easily accessible and current resources to support teachers, families, and other stakeholders



District Recommendations

- 1 Student-facing links and documents that are easy to navigate and understand
- 2 Information sheets about careers and majors that are best supported by course offerings at district schools
- 3 Well-informed and trained school counseling departments to support students in decision making
- 4 Easily accessible and current resources to support teachers, families, and other stakeholders



District Recommendations

- 1 Student-facing links and documents that are easy to navigate and understand
- 2 Information sheets about careers and majors that are best supported by course offerings at district schools
- 3 Well-informed and trained school counseling departments to support students in decision making
- 4 Easily accessible and current resources to support teachers, families, and other stakeholders



Reflection: District Resources

Are YOUR district's materials:

- Easy for students to navigate?
- Presented in a way that students can easily understand?
- Accurately showing how careers/majors are related to the school course offerings?





Reflection: District Resources

Are YOUR district's materials:

- Easy for students to navigate
- Presented in a way that students can easily understand
- Accurately showing how careers/majors are related to the school course offerings

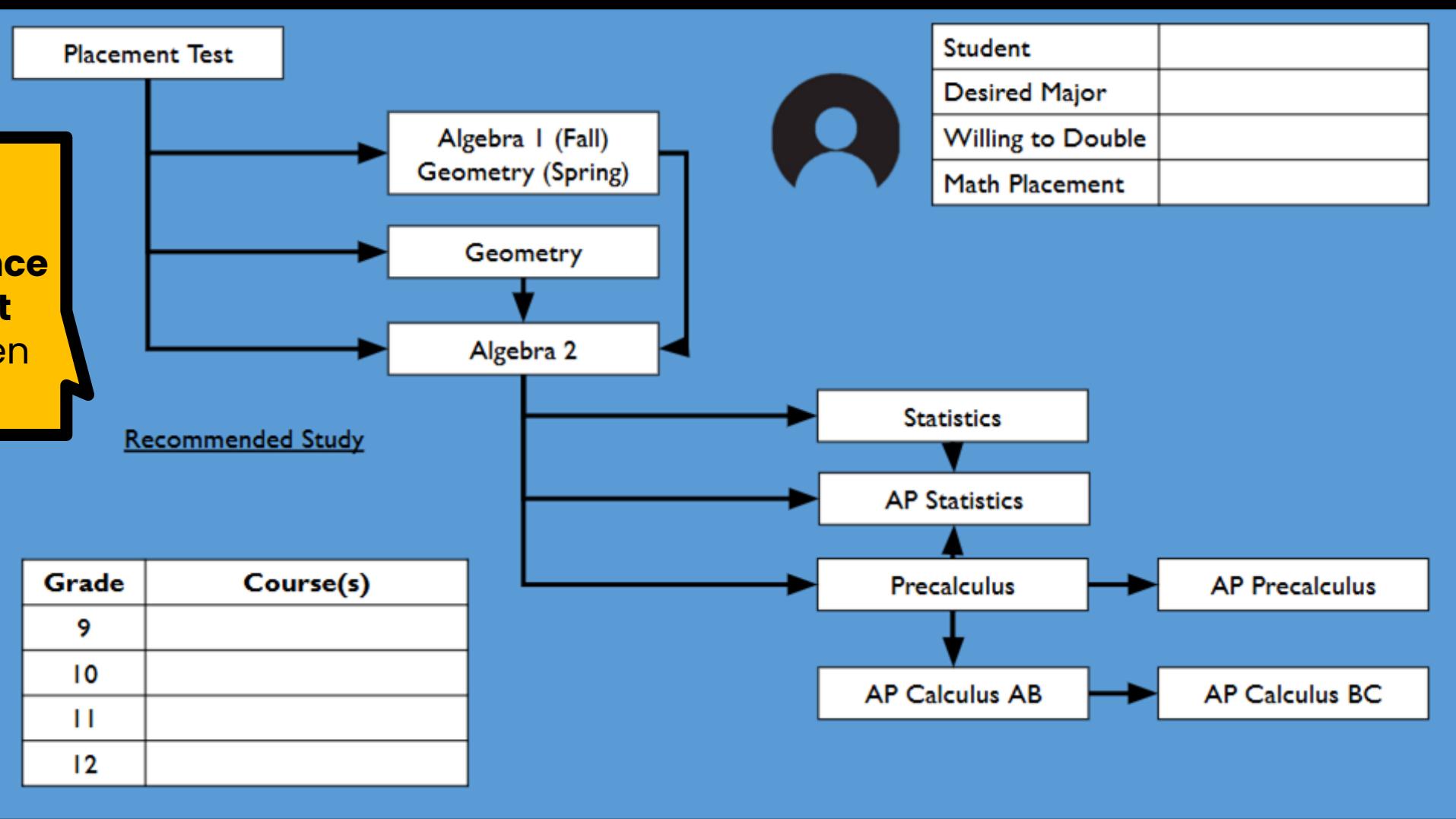


**Pause here to reflect.
Resume when you are ready.**



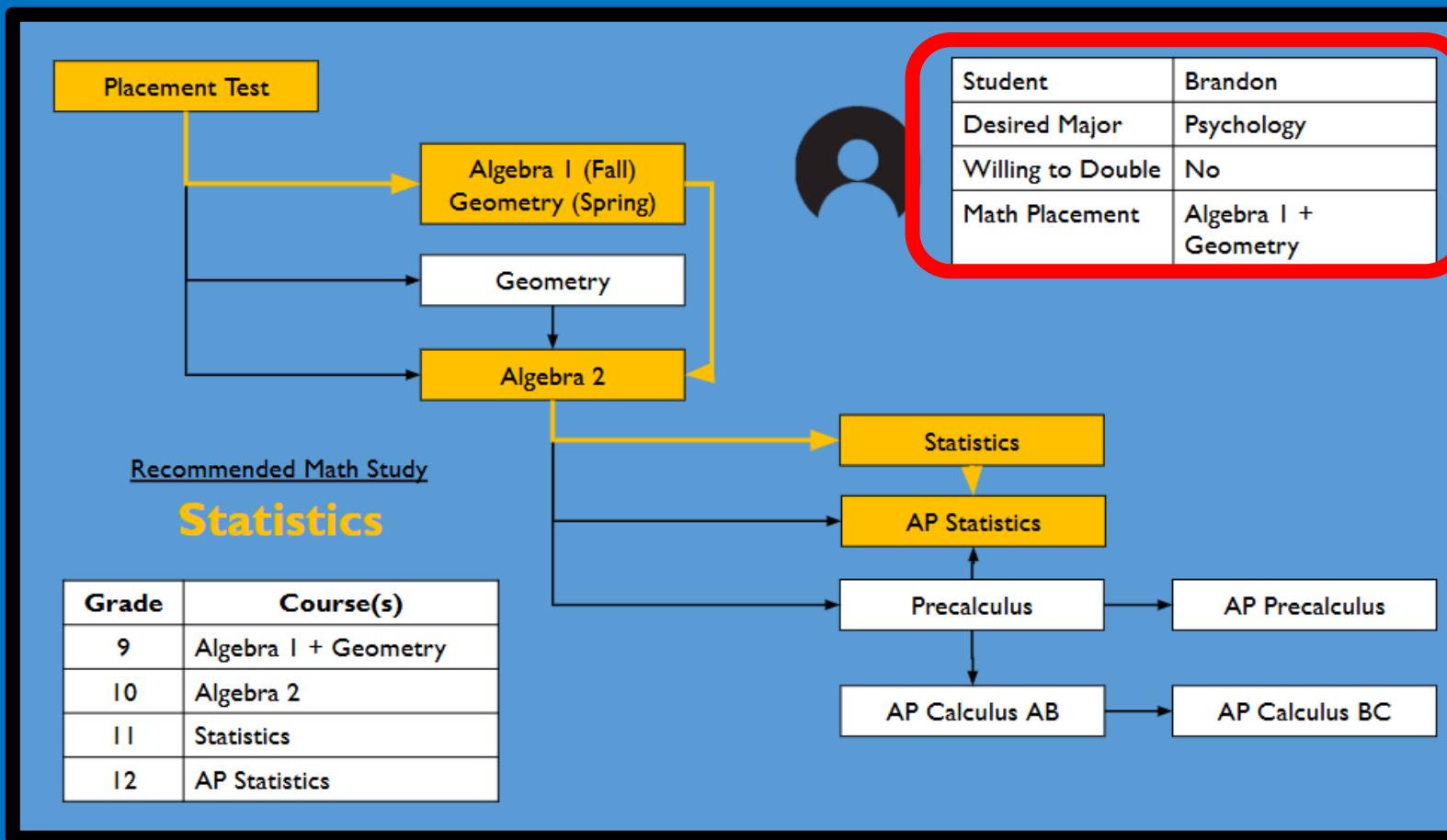
Example of Student-Facing Course Progression Map

Example from
**Engineering & Science
University Magnet
School** in New Haven





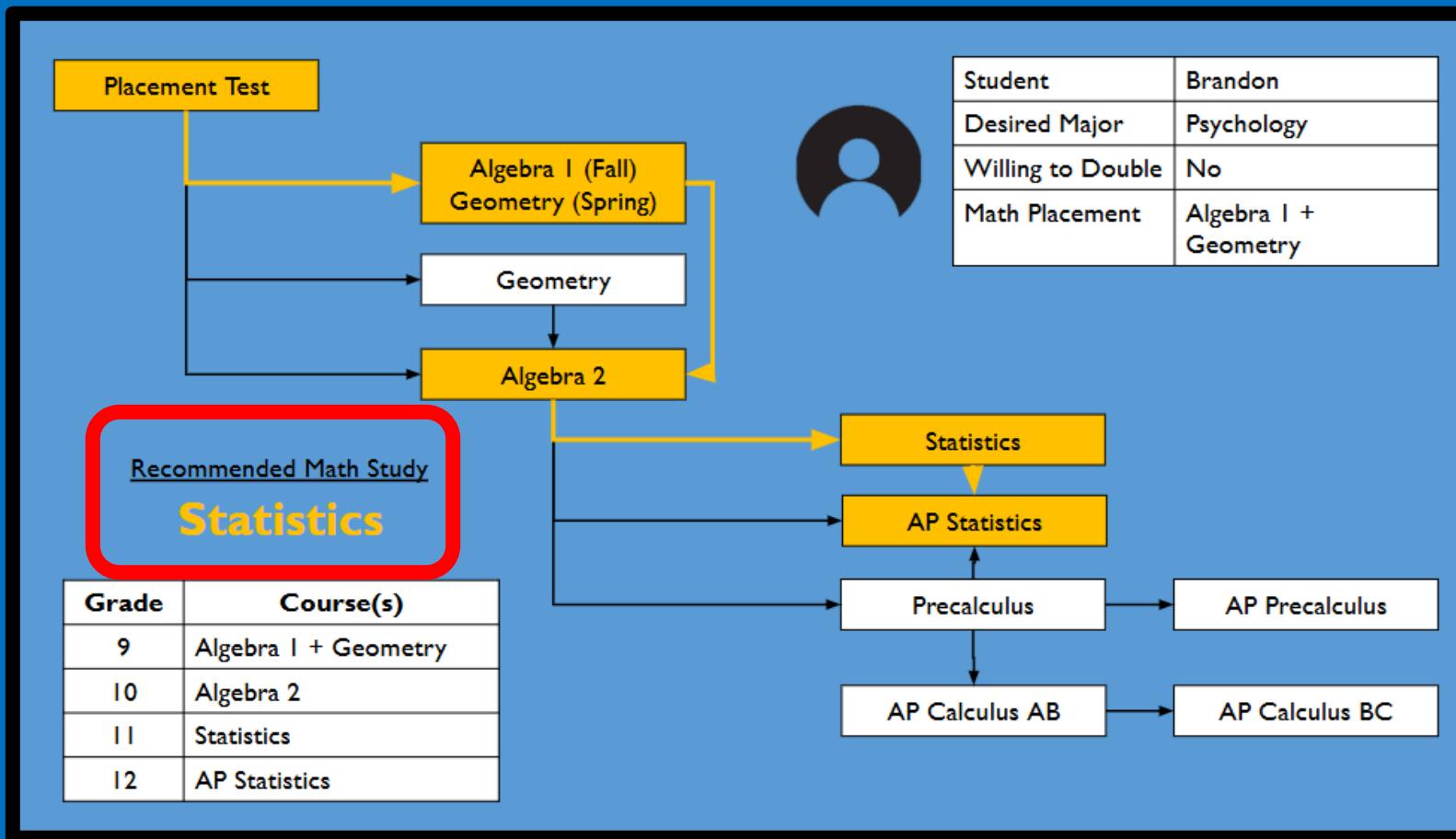
Example of Student-Facing Course Progression Map



- 1 Major/Career Trajectory Consideration
- 2 Recommended Course of Study
- 3 Clear Course Progression



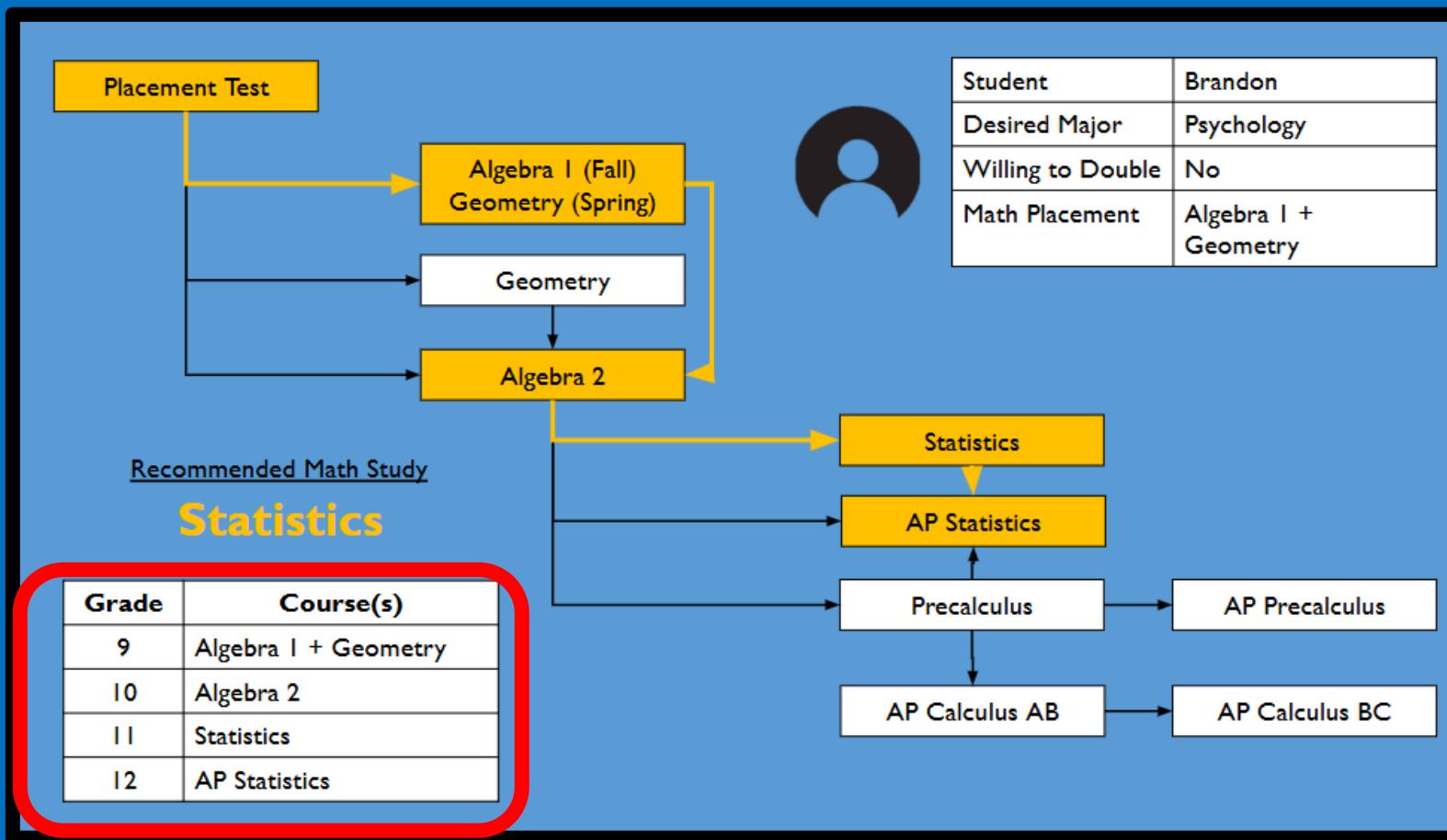
Example of Student-Facing Course Progression Map



- 1 Major/Career Trajectory Consideration
- 2 Recommended Course of Study
- 3 Clear Course Progression



Example of Student-Facing Course Progression Map



- 1** Major/Career Trajectory Consideration
- 2** Recommended Course of Study
- 3** Clear Course Progression



Reflection: Course Progression Maps

Are the school counseling materials:

- Tailored to different stakeholders?
- Easy for them to navigate?
- Presented in a way that they can easily understand?
- Show how careers/majors are related to the school course offerings?





Reflection: Course Progression Maps

Are the school counseling materials:

- Tailored to different stakeholders?
- Easy for each group to navigate?
- Presented in a way that they can easily understand?
- Show how careers/majors are related to the school course offerings?



Pause here to reflect.
Resume when you are ready.





Reflect: What Can You Do **NOW** to...

1

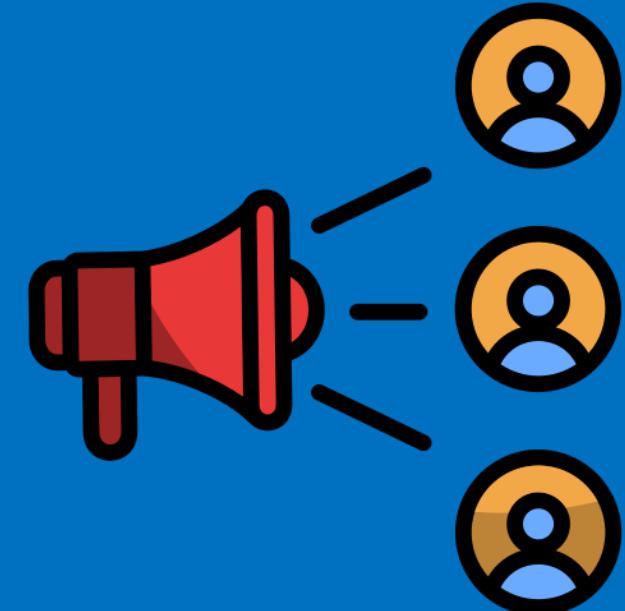
Improve advisory materials?

2

Disseminate information?

3

Empower students and faculty?





Reflect: What Can You Do **NOW** to...

1

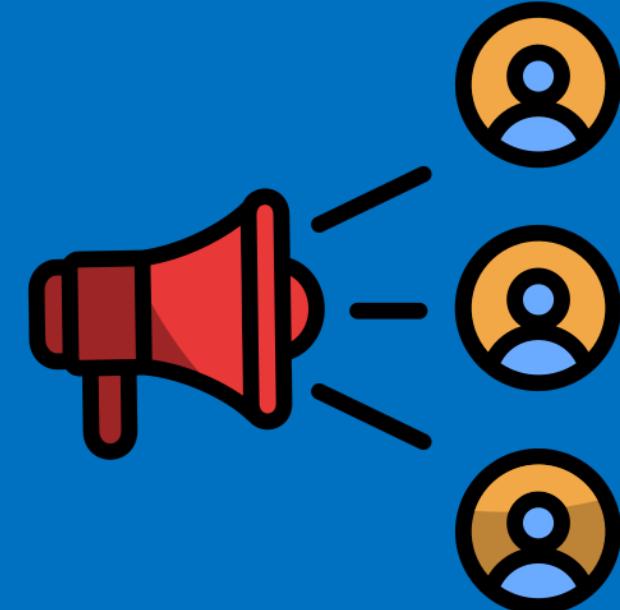
Improve advisory materials?

2

Disseminate information?

3

Empower students and faculty?





Reflect: What Can You Do **NOW** to...

1

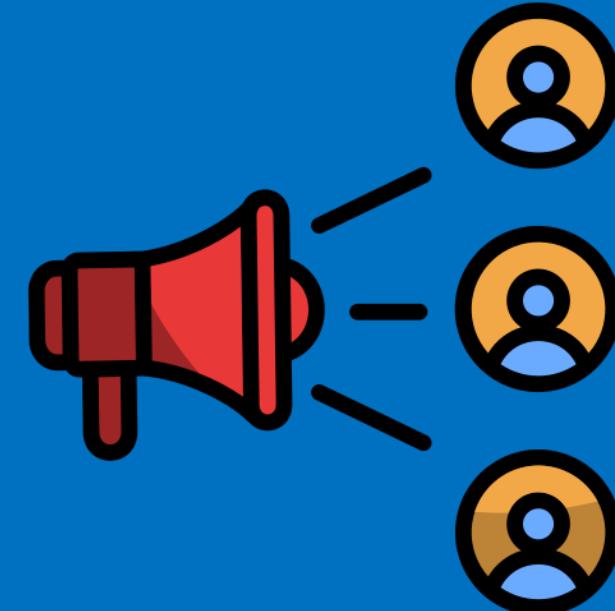
Improve advisory materials?

2

Disseminate information?

3

Empower students and faculty?





Reflect: What Can You Do **NOW** to...

1

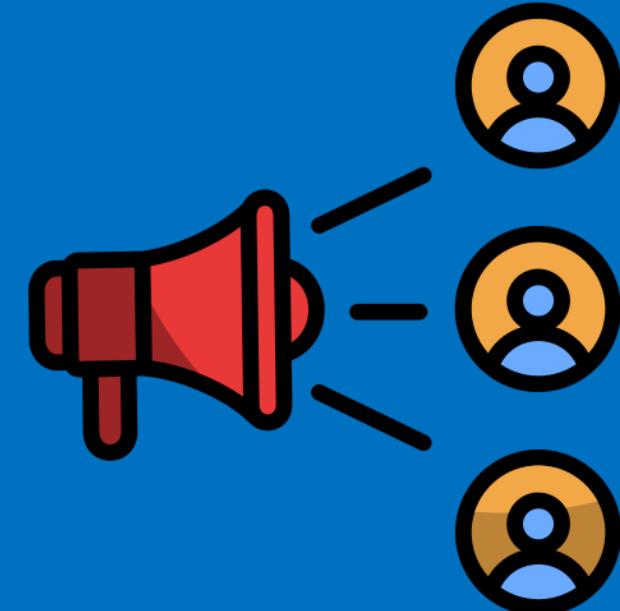
Improve advisory materials?

2

Disseminate information?

3

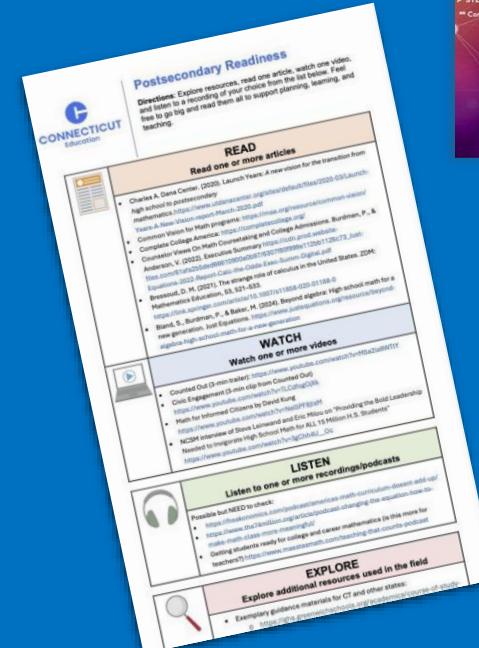
Empower students and faculty?



More Resources

Postsecondary Readiness Fast Facts

Postsecondary Readiness PD Playlist



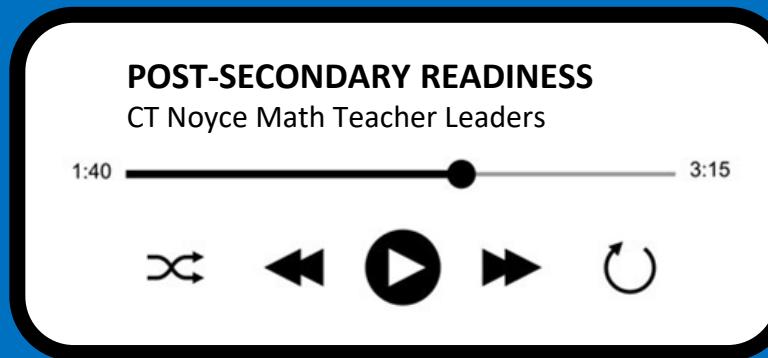
Transition to Higher Education
Which math courses in high school prepare our students for their college courses?

	Non-STEM Minimum Math Requirements	Algebra 2	Statistics	Calculus
School of Business				
Accounting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Business Information Systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Finance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marketing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Humanities				
Communication	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Education	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
History	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
World Languages	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anthropology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Sciences				
Anthropology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Criminology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Journalism	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Philosophy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Political Science	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Work	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sociology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Women & Gender Studies	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





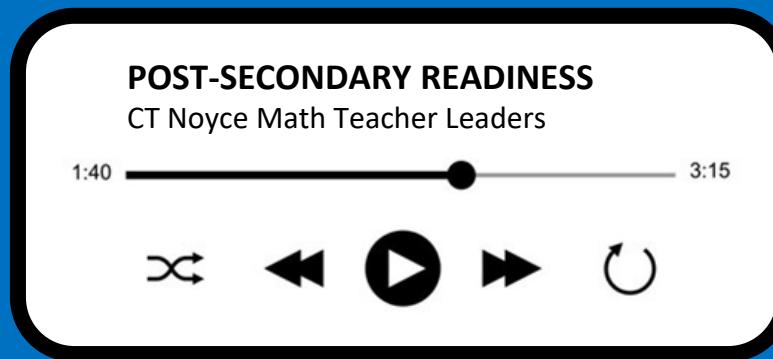
More Resources: Playlist



- 1 Read
- 2 Watch
- 3 Listen
- 4 Explore
- 5 Reflect



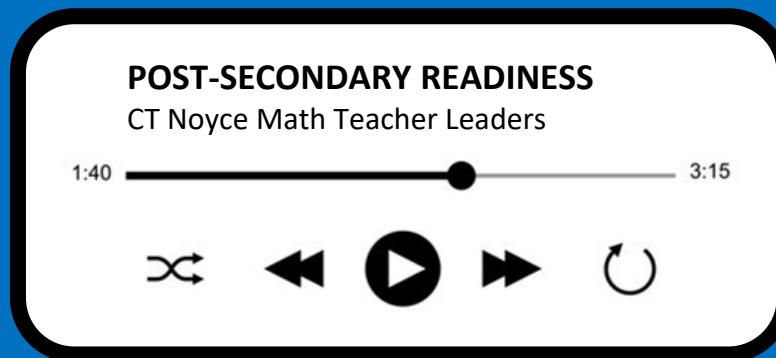
More Resources: Playlist



- 1 **Read**
- 2 **Watch**
- 3 **Listen**
- 4 **Explore**
- 5 **Reflect**



More Resources: Playlist



- 1 Read
- 2 Watch
- 3 Listen
- 4 Explore
- 5 Reflect



More Resources: Playlist

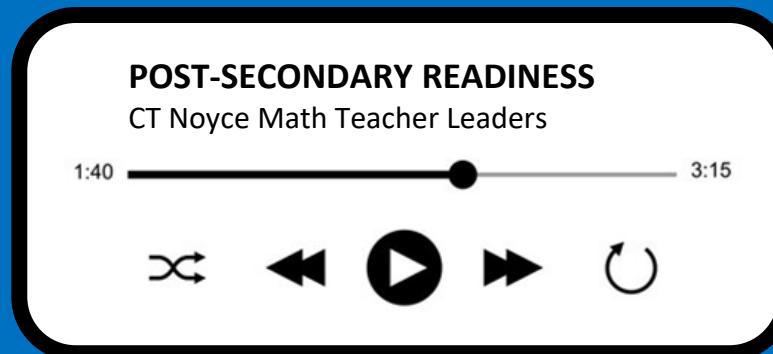
POST-SECONDARY READINESS
CT Noyce Math Teacher Leaders

1:40 3:15

- 1 Read
- 2 Watch
- 3 Listen
- 4 Explore
- 5 Reflect



More Resources: Playlist



- 1 Read
- 2 Watch
- 3 Listen
- 4 Explore
- 5 Reflect



More Resources: Playlist

POST-SECONDARY READINESS
CT Noyce Math Teacher Leaders

1:40 3:15

- 1 Read
- 2 Watch
- 3 Listen
- 4 Explore
- 5 Reflect

From Foundations to Futures

A PD Series on Readiness, Access, and Alignment

NEXT

Joint Position Statement

Launch Year's

Post-Secondary Readiness

Pathways

Common Content

Middle School Acceleration

K-8 Grade level