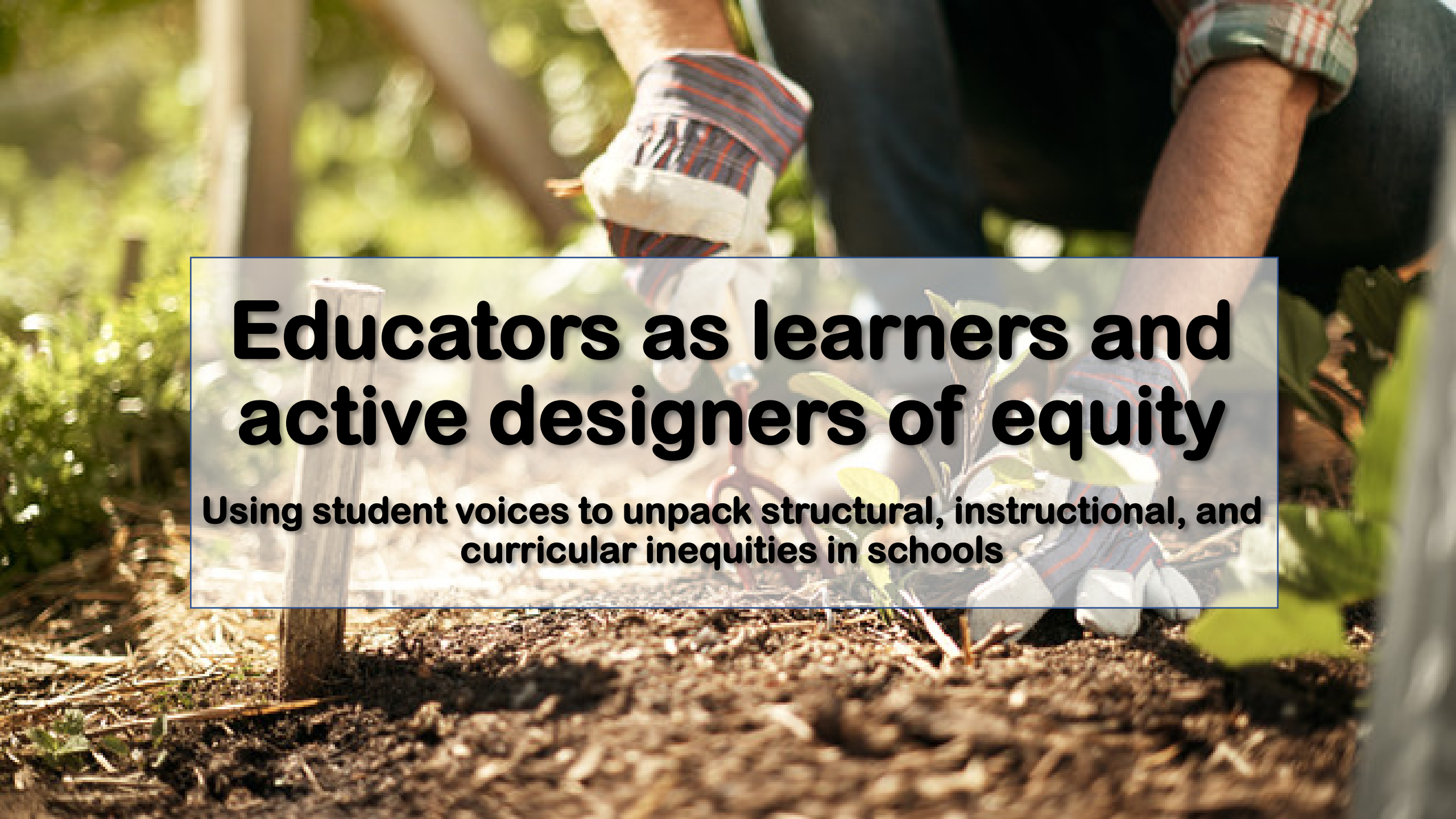

Educators as learners and active designers of equity

Using student voices to unpack structural, instructional, and curricular inequities in schools

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Goals for Today's Session

Reflect	Reflect on what constitutes a "good" school, focusing on educator outcomes rather than student outcomes.
Learn	Learn about structural, instructional, and curricular barriers that diverse students face via student empathy interviews.
Listen	Listen to how educators have actively designed for equity through an equity-focused continuous improvement process.

Acknowledgements

This project is funded by a grant from the National Science Foundation to the University of North Carolina Greensboro (NSF Award # 1837344).

A definition of educational equity

Unlearning how we define a “good” school

2020 Rankings

Thomas Jefferson High School for Science and Technology

Alexandria, VA | **Fairfax County Public Schools**

#1 in National Rankings

Thomas Jefferson High School for Science and Technology is ranked first within Virginia. Students have the opportunity to take Advanced Placement® coursework and exams. The AP® participation... **READ MORE »**

GRADUATION RATE
100%

COLLEGE READINESS
100

ENROLLMENT 9-12
1,786

Academic Magnet High School

North Charleston, SC | **Charleston County School District**

#2 in National Rankings

Academic Magnet High School is ranked first within South Carolina. Students have the opportunity to take Advanced Placement® coursework and exams. The AP® participation rate at Academic... **READ MORE »**

GRADUATION RATE
100%

COLLEGE READINESS
100

ENROLLMENT 9-12
664

Merrol Hyde Magnet School

Hendersonville, TN | **Sumner County**

#3 in National Rankings

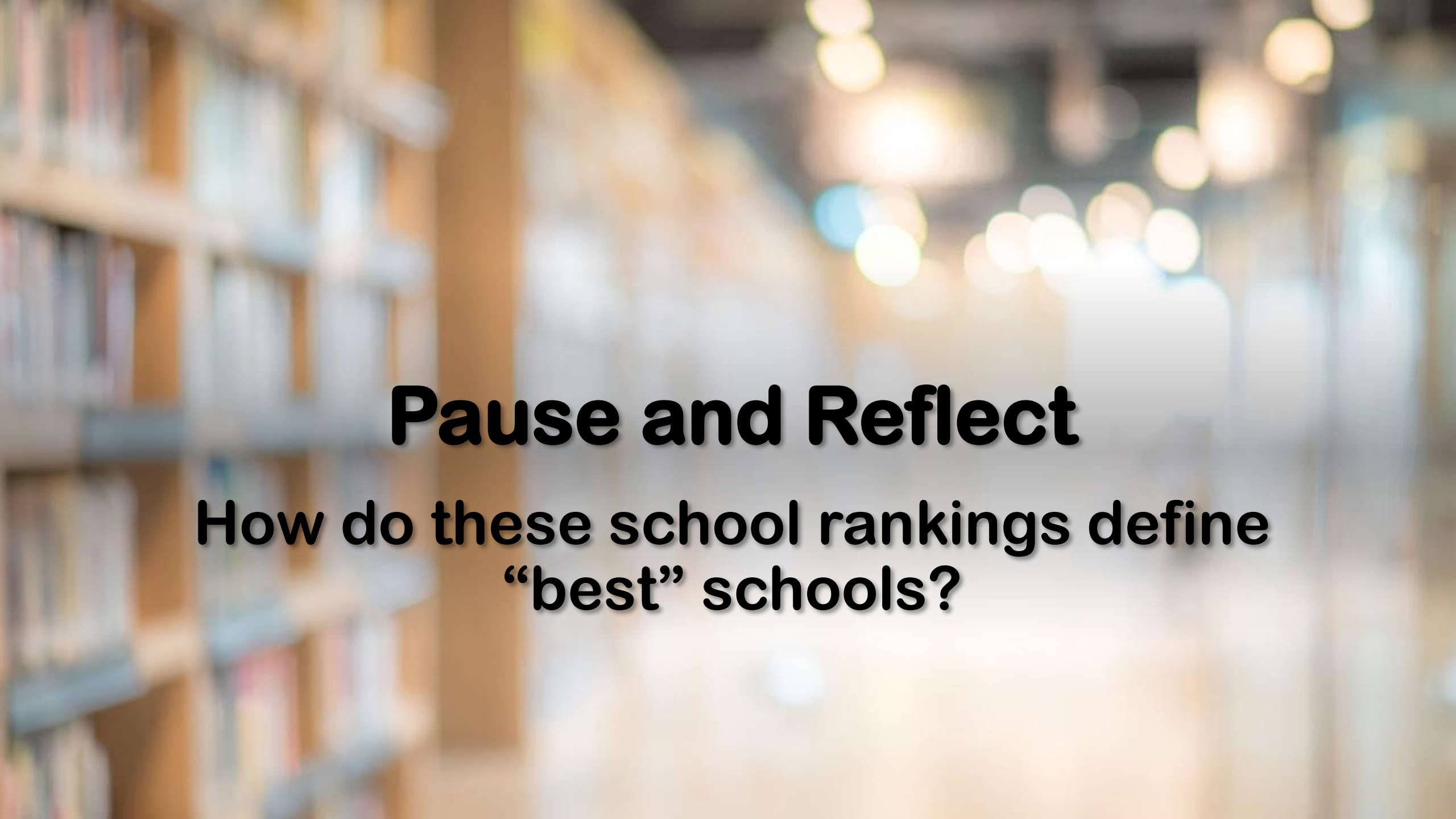
Merrol Hyde Magnet School is ranked first within Tennessee. Students have the opportunity to take Advanced Placement® coursework and exams. The AP® participation rate at Merrol Hyde Magnet... **READ MORE »**

GRADUATION RATE
100%

COLLEGE READINESS
100

ENROLLMENT 9-12
225

Source: https://www.usnews.com/education/best-high-schools/national-rankings



Pause and Reflect

How do these school rankings define “best” schools?

Rankings of “best” high schools based on:

- **College Readiness 30%**
  - The proportions of 12th graders who took and passed at least one AP or IB exam. Passing is worth three times more than just taking.
- **Math and Reading Proficiency 20%**
  - Aggregated scores on state assessments that students may be required to pass for graduation.
- **Math and Reading Performance 20%**
  - How aggregated scores on state assessments compare to U.S. News's expectations given the proportions of students who are black, Hispanic, and from low-income households.
- **Underserved Student Performance 10%**
  - Scores on state assessments aggregated just among students who are black, Hispanic, and from low-income households. These scores are compared to what is typical in the state for non-underserved students, with parity or higher being the goal.
- **College Curriculum Breadth 10%**
  - The proportions of 12th graders who took and passed AP and IB exams in multiple areas. More exams are valued more than fewer exams up to a maximum of four. Passing an exam is worth three times more than taking.
- **Graduation Rate 10%**
  - The proportion of entering 9th graders who graduated four academic years later.

Source: https://www.usnews.com/education/best-high-schools/articles/how-us-news-calculated-the-rankings

How diverse students define “best” schools

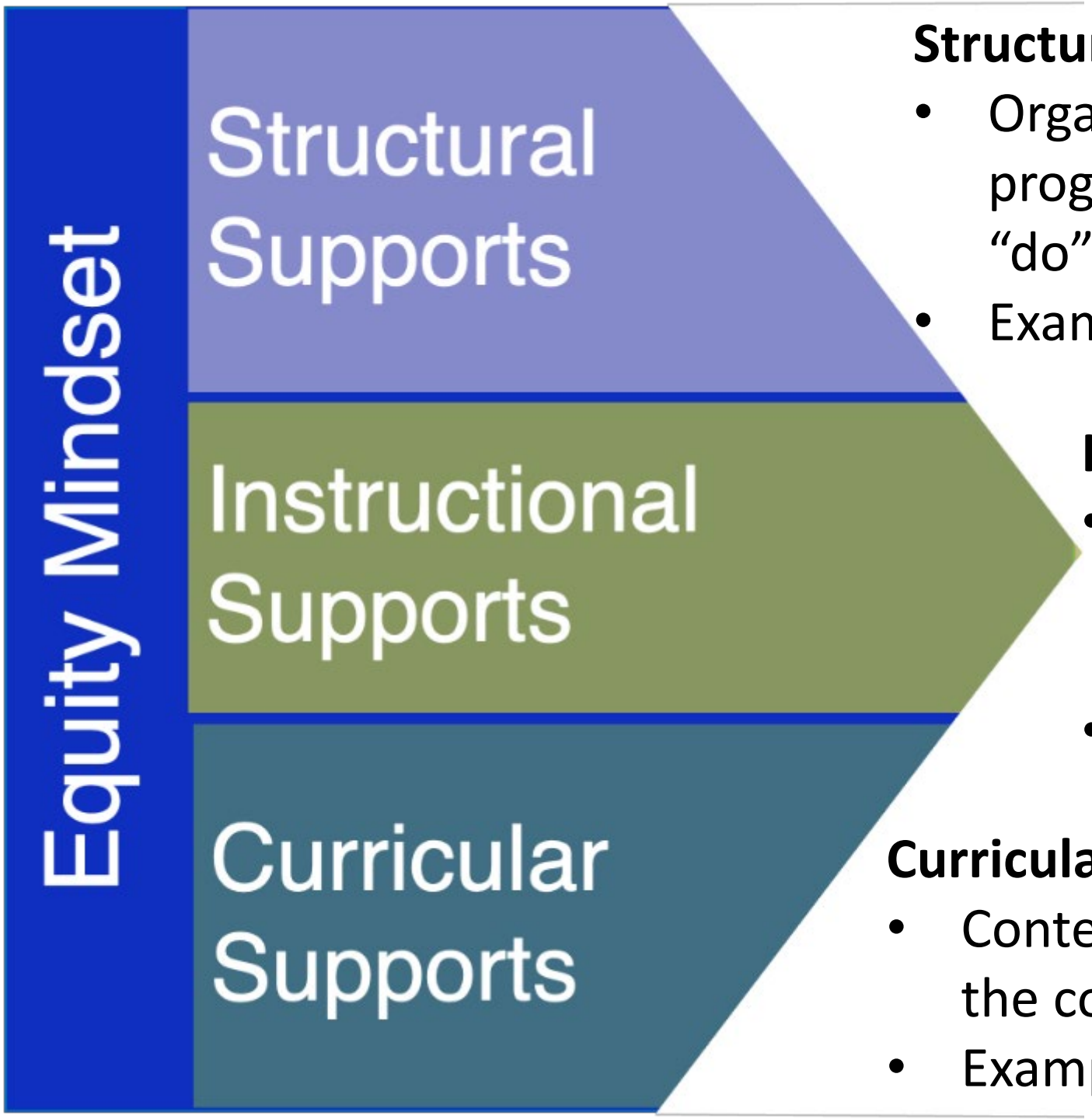
- The teacher wants everybody to pass. She’s like, “Here, come here. Let’s go over it together. Tell me what you need help with.”
- You can see it in her voice. You can tell she wants all of us to pass her class.
- They make an effort to build a relationship, they talk to you. They work with you.

Educational equity:
It’s about the grown-ups in the system

An equitable educational system is one in which educators support <u>every</u> student to actualize their full potential.

Educators as learners and active designers of equity

Structural, instructional, and curricular barriers to support



Structural aspects of schooling

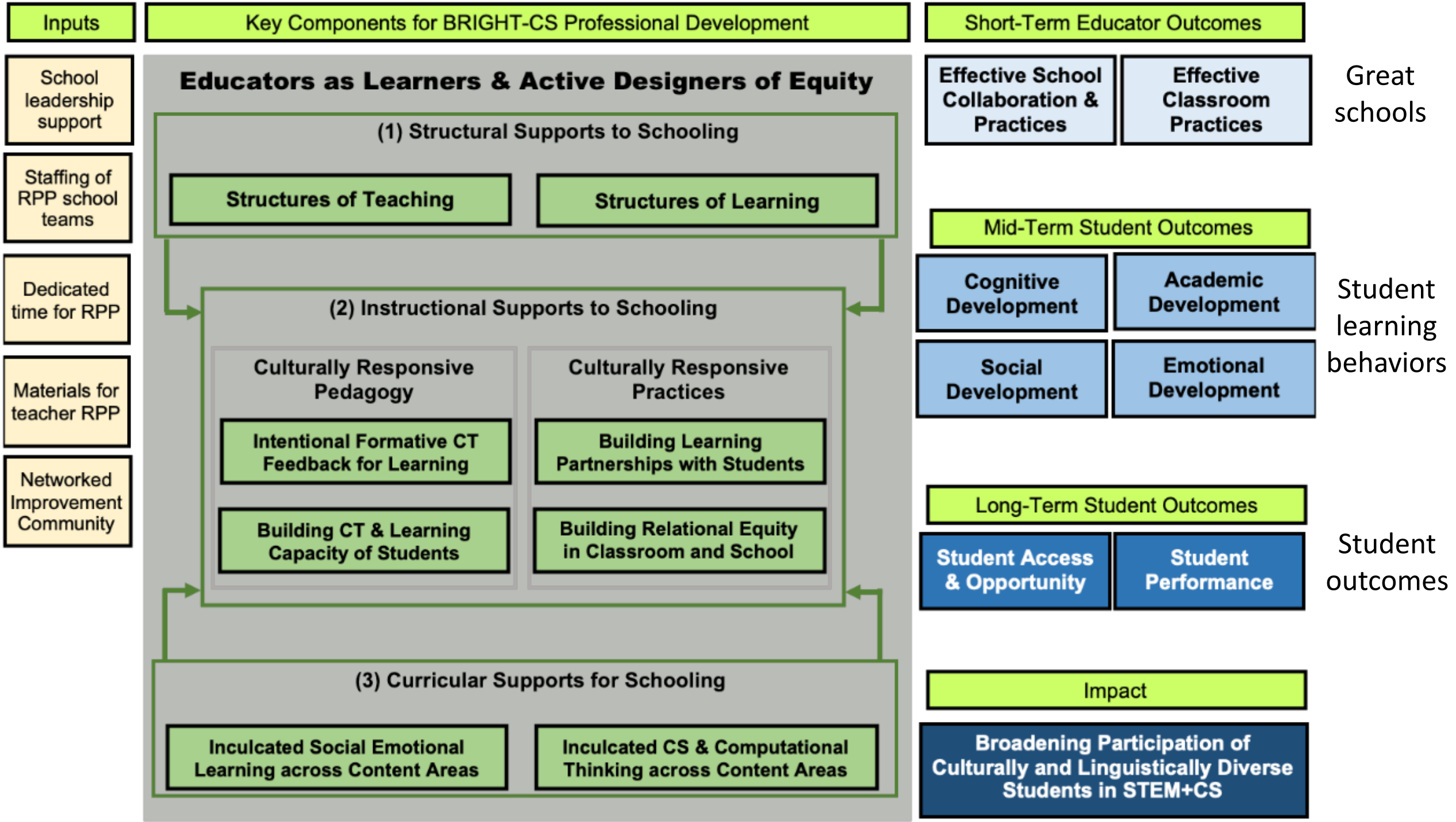
- Organizing mechanisms such as policies, programs, and procedures on how we "do" school
- Example: Grading policies

Instructional aspects of schooling

- Educator intent + actions for equity to support students through the learning pit
- Example: Formative assessments

Curricular aspects of schooling

- Content and activities that fully engage the content
- Example: Lesson plans


Inputs
Key Components for BRIGHT-CS Professional Development
Short-Term Educator Outcomes
School leadership support
Staffing of RPP school teams
Dedicated time for RPP
Materials for teacher RPP
Networked Improvement Community
Educators as Learners & Active Designers of Equity
(1) Structural Supports to Schooling
Structures of Teaching
Structures of Learning
(2) Instructional Supports to Schooling
Culturally Responsive Pedagogy
Intentional Formative CT Feedback for Learning
Building CT & Learning Capacity of Students
Culturally Responsive Practices
Building Learning Partnerships with Students
Building Relational Equity in Classroom and School
(3) Curricular Supports for Schooling
Inculcated Social Emotional Learning across Content Areas
Inculcated CS & Computational Thinking across Content Areas
Effective School Collaboration & Practices
Effective Classroom Practices
Great schools
Mid-Term Student Outcomes
Cognitive Development
Academic Development
Social Development
Emotional Development
Student learning behaviors
Long-Term Student Outcomes
Student Access & Opportunity
Student Performance
Student outcomes
Impact
Broadening Participation of Culturally and Linguistically Diverse Students in STEM+CS

LIBERATORY DESIGN

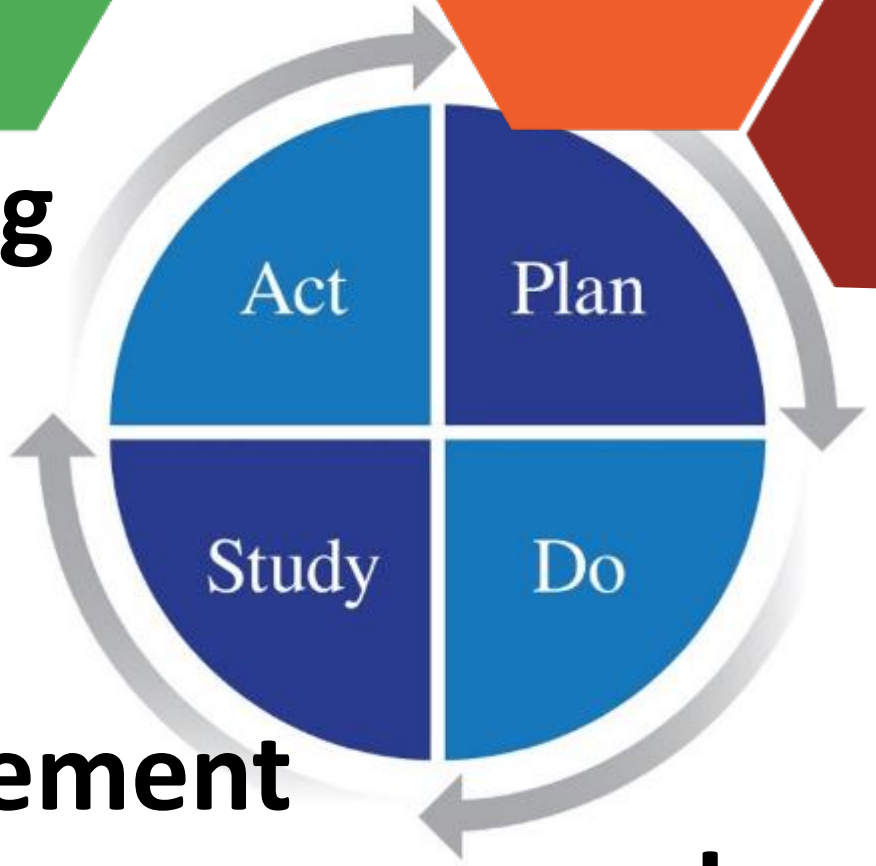
Design Thinking

+

Equity

+

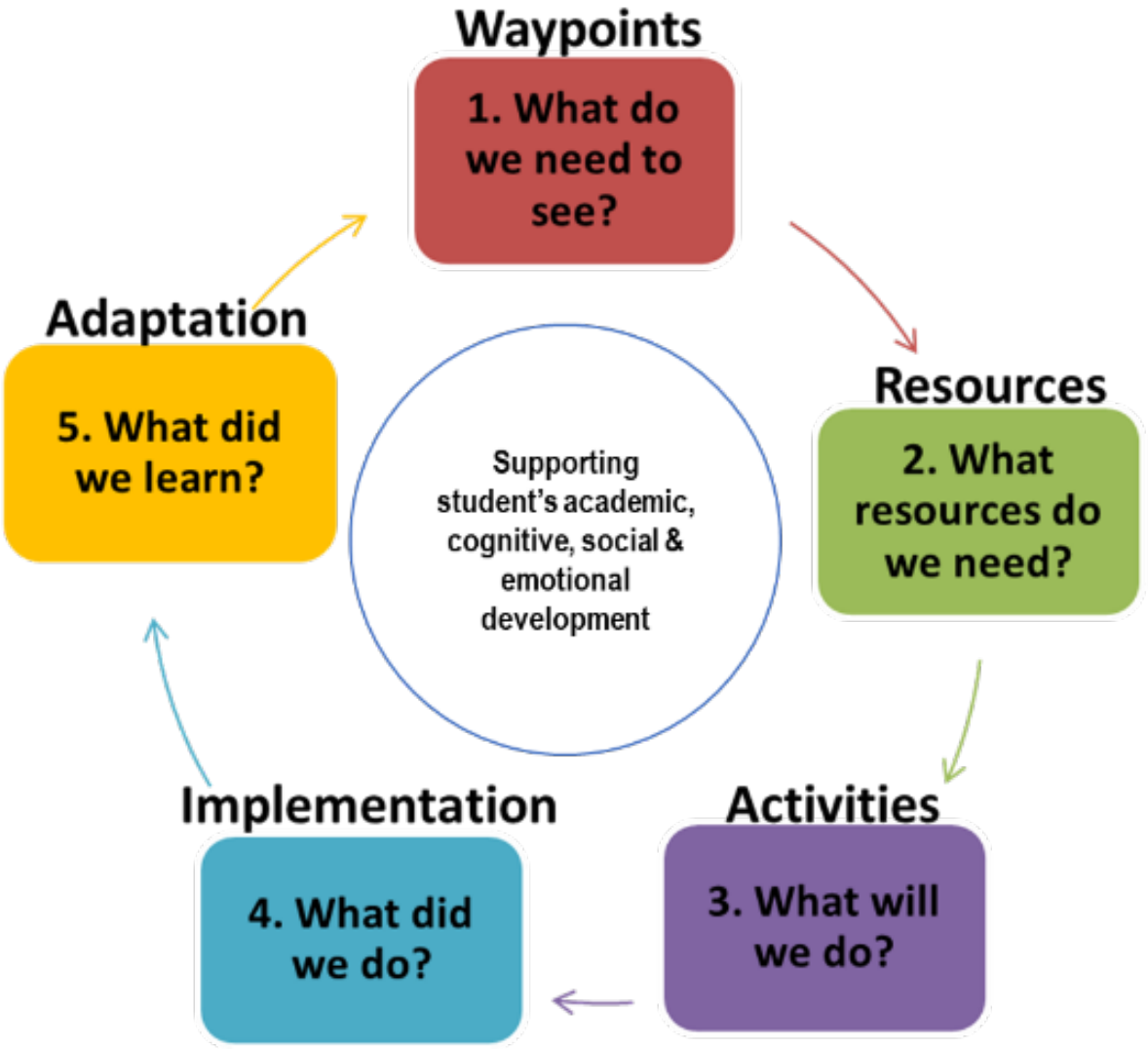
Continuous Improvement



Adaptive Implementation

Adaptive Implementation: Dig out barriers, plant supports

- **Identify a problem of practice**
  - Recognize a barrier
  - Based on empathy interviews and student voice
- **What do we need to see?**
  - Focus on classroom or short-term school outcomes
- **What resources do we need?**
- **What will we do?**
  - Dig out the barrier, create a support.
  - Think small wins. Collect data.
- **What did we do?**
  - Analyze data– What happened? Adapted?
- **What did we learn?**
  - I used to think __, now I know __.

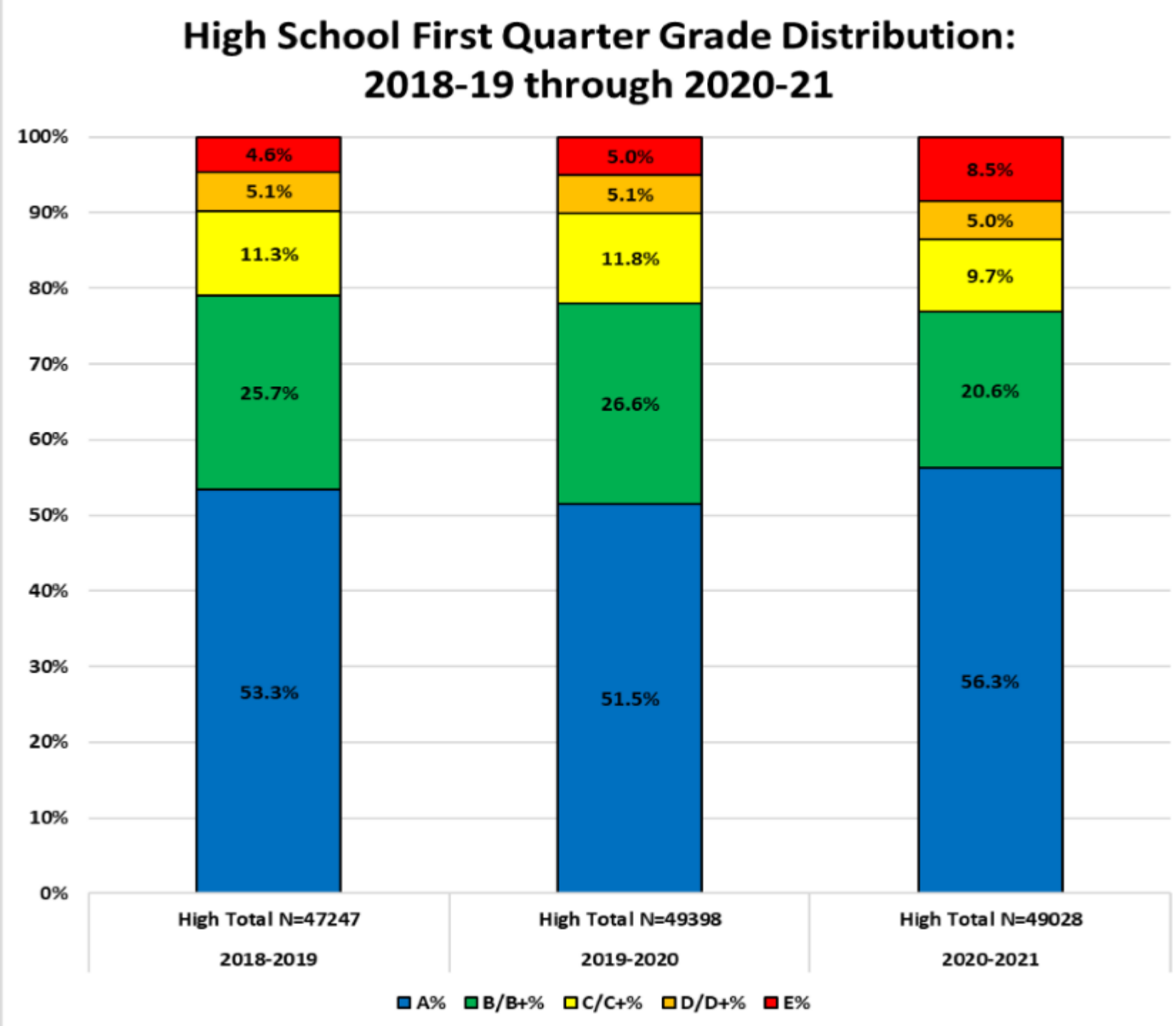


Source: Yamaguchi et al. (2017). Adaptive Implementation: Navigating the School Improvement Landscape. Lanham, MD: Rowman & Littlefield.

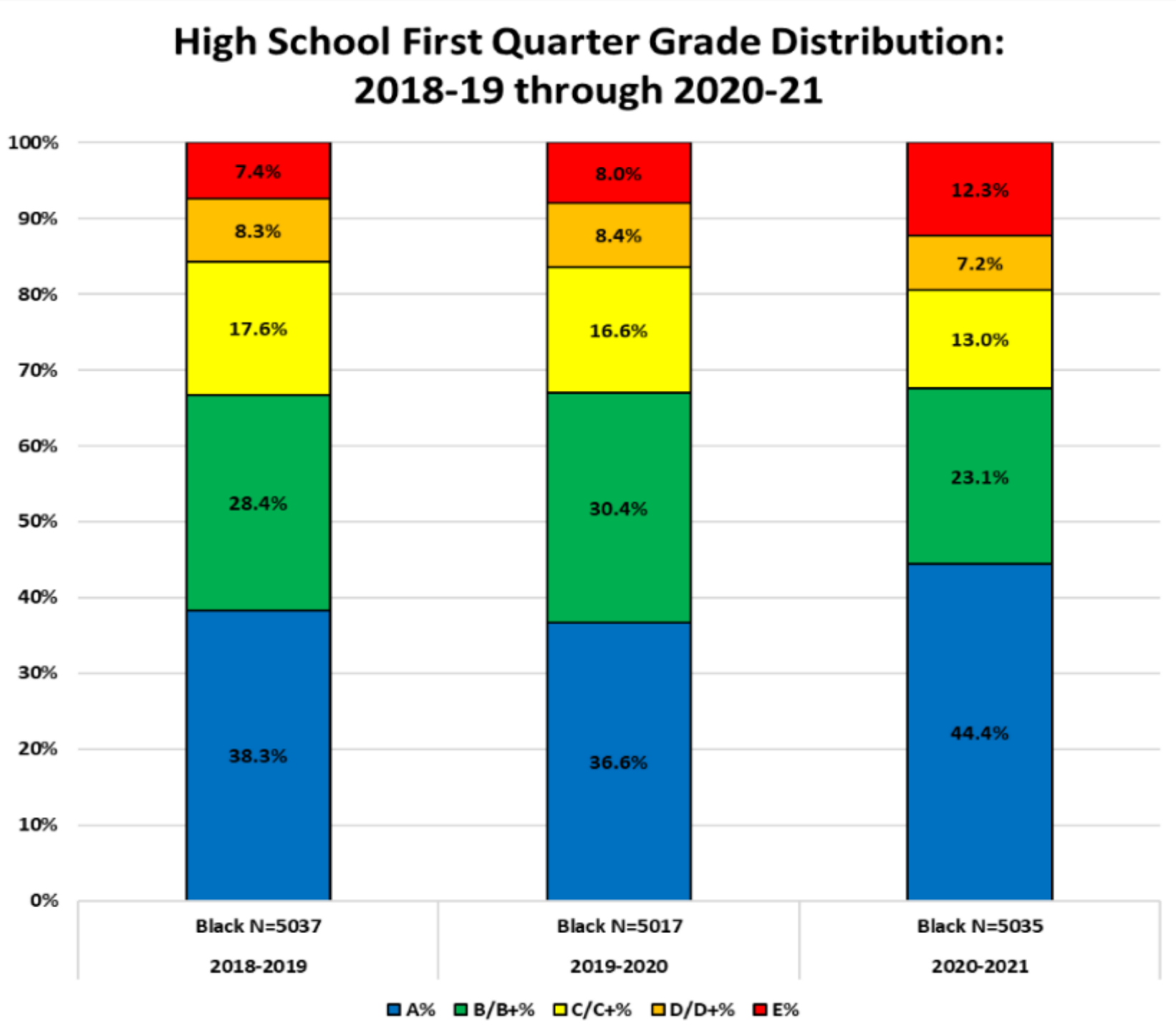
Identifying barriers through student empathy interveiws

Problems of practice

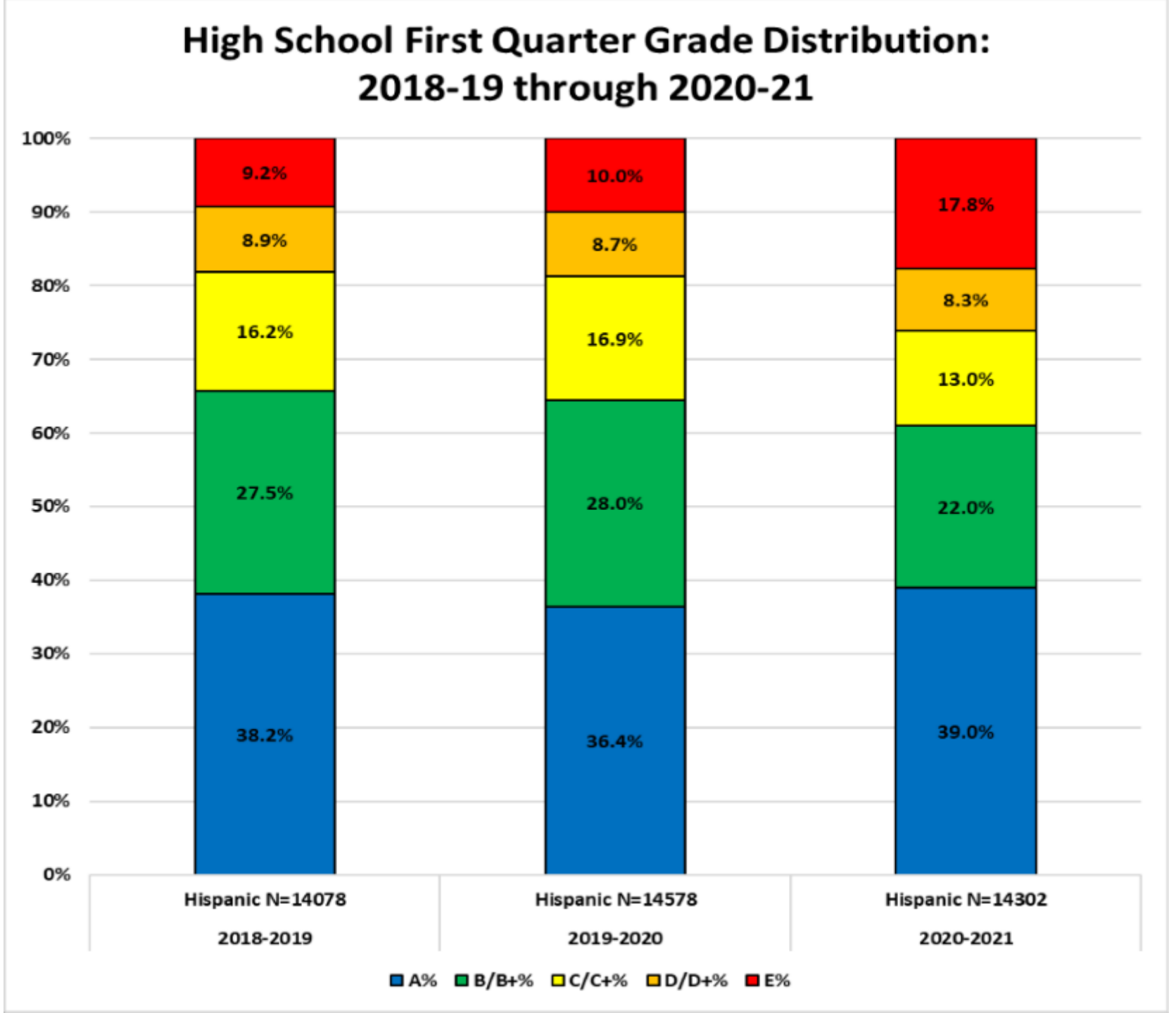
District-wide high school student's first quarter grade distribution

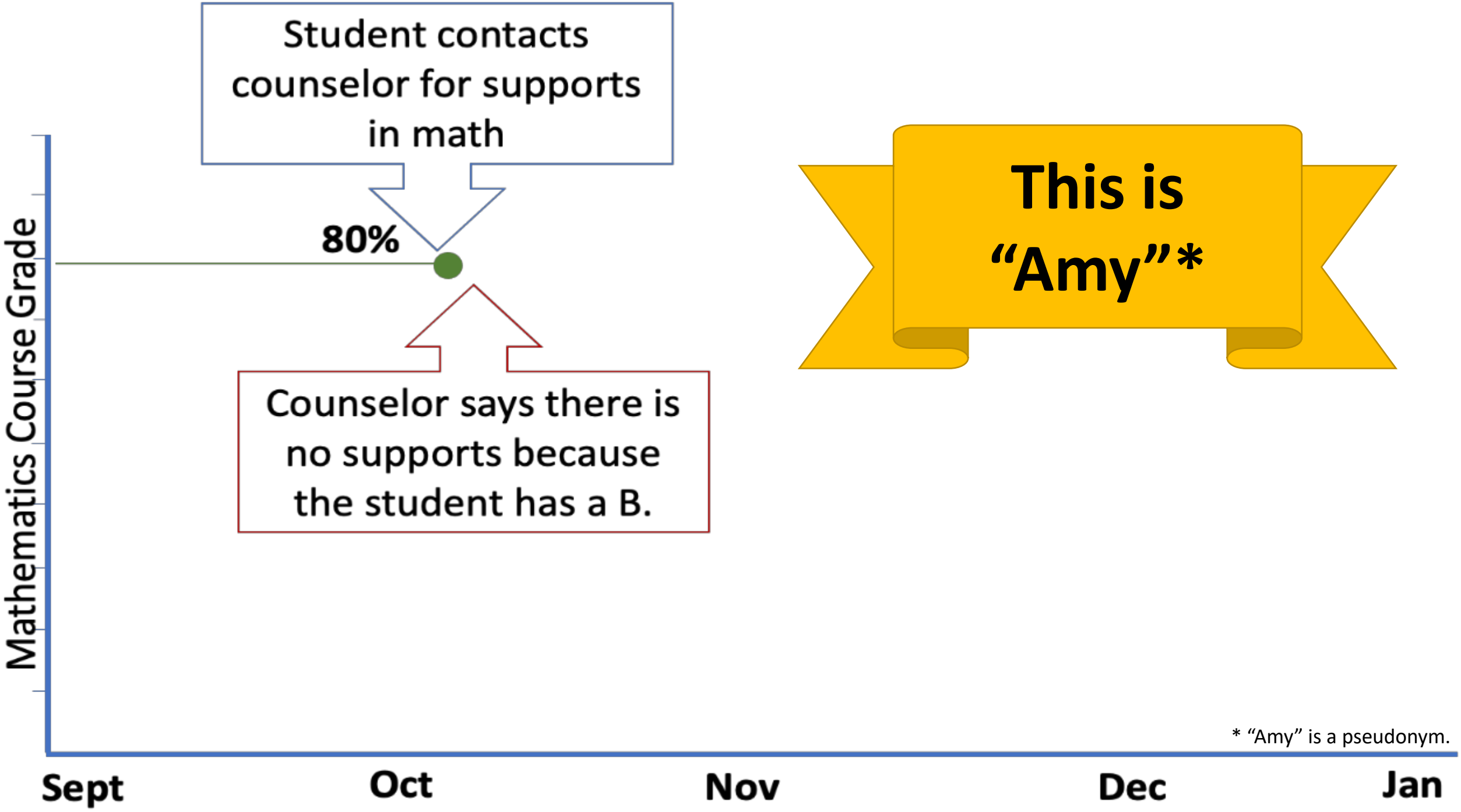


District-wide **Black** high school student's first quarter grade distribution

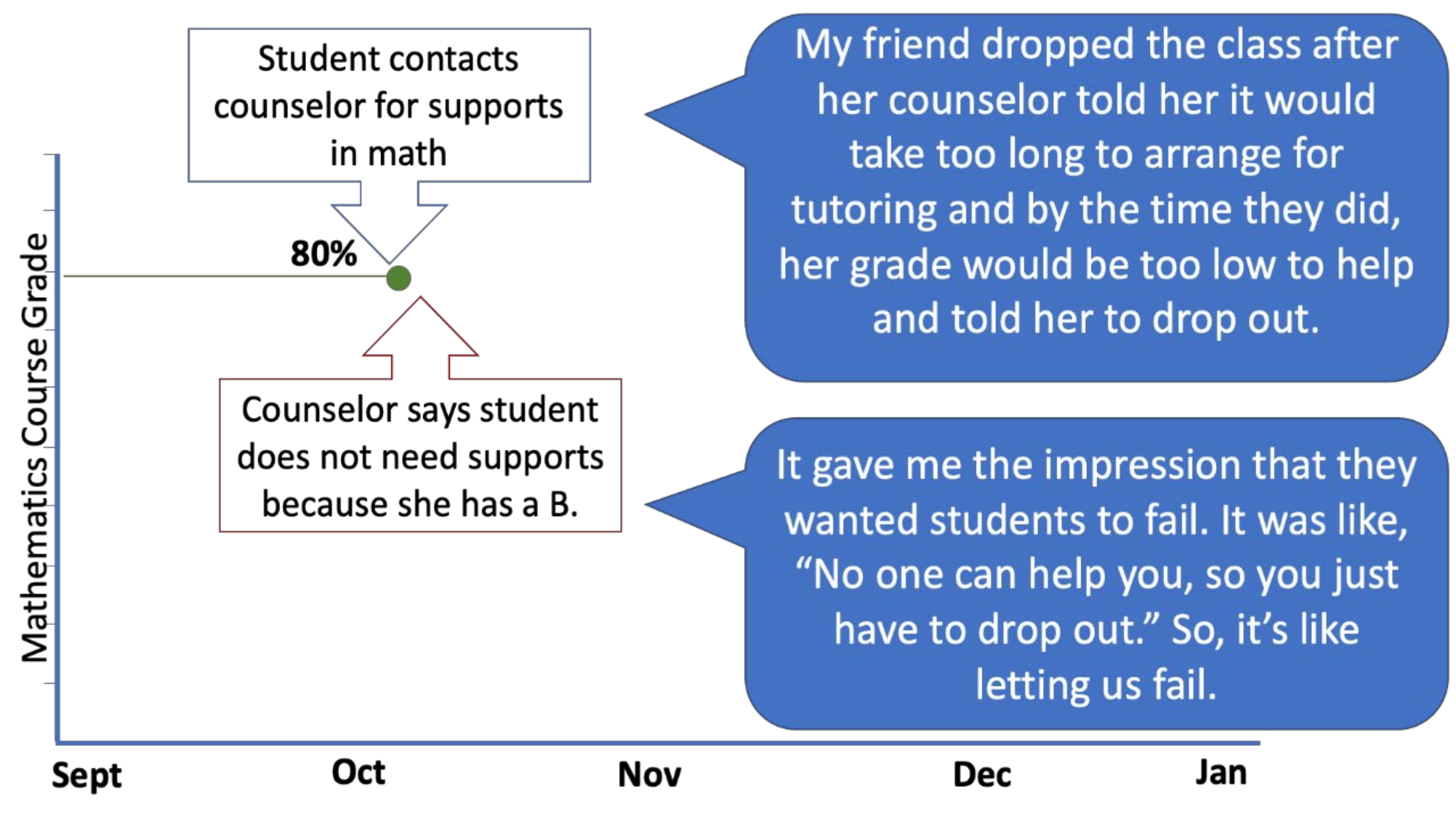


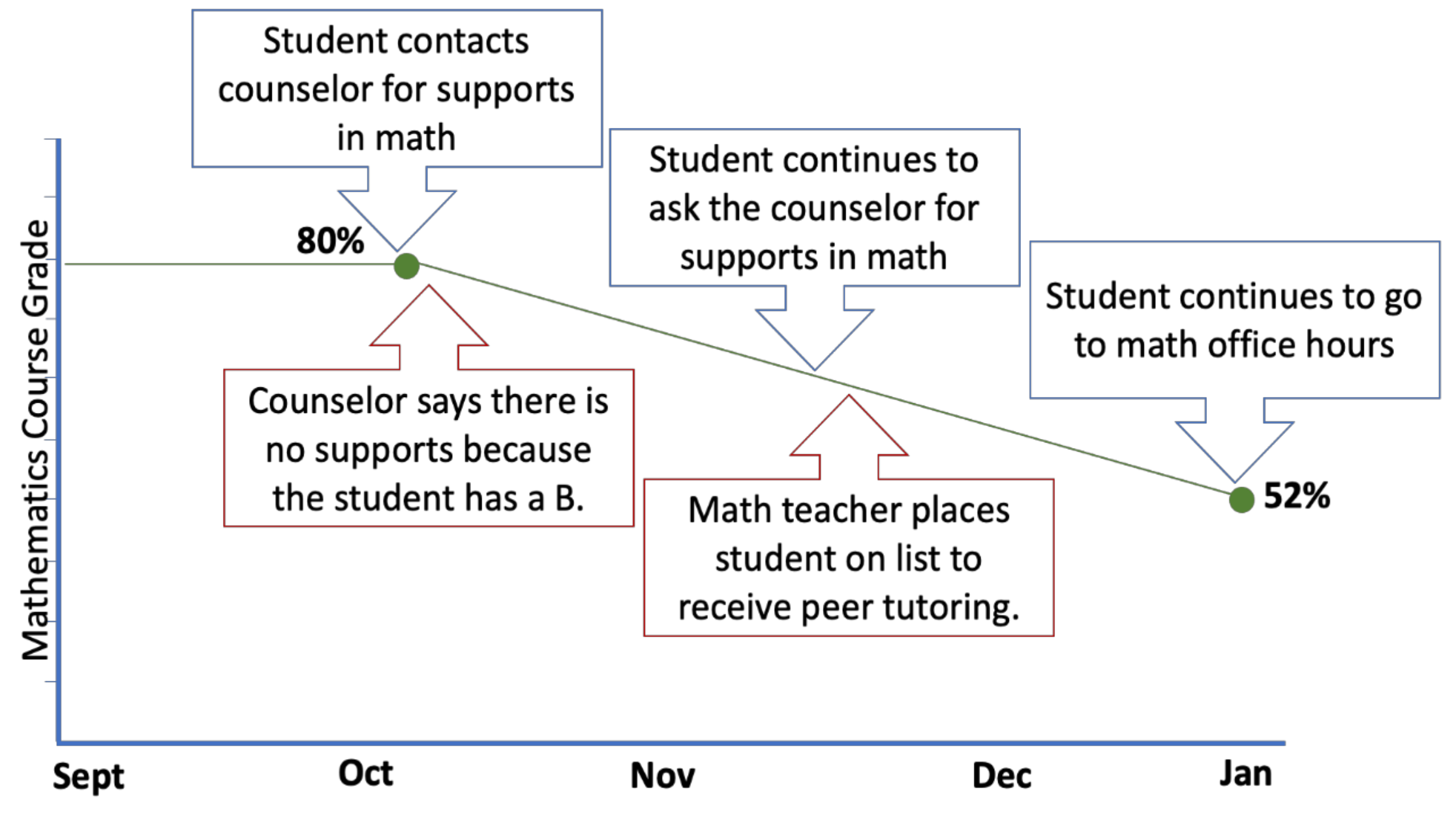
District-wide **Hispanic** high school student's first quarter grade distribution

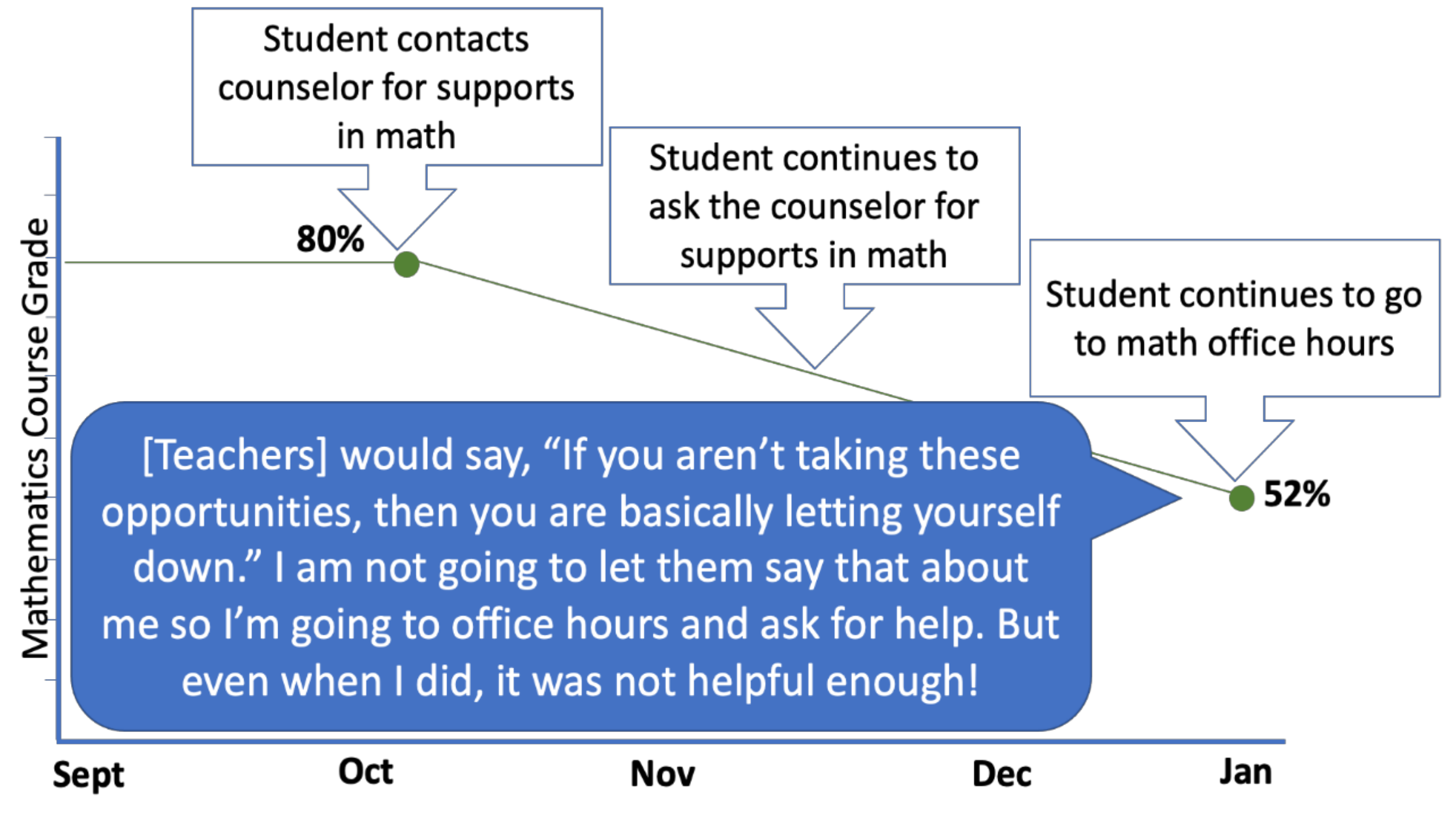


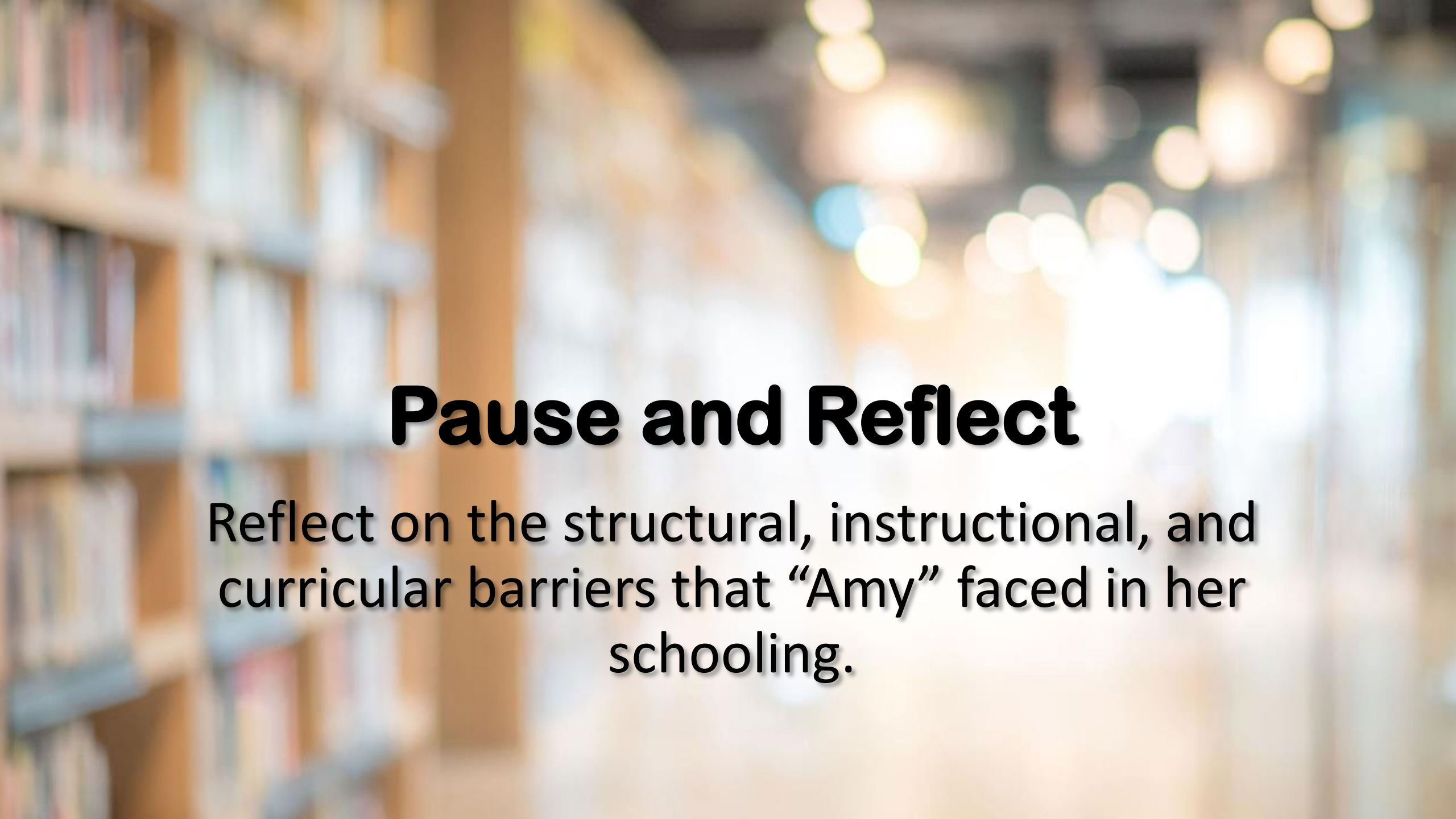


* "Amy" is a pseudonym.


Student contacts counselor for supports in math
80%
Counselor says student does not need supports because she has a B.
My friend dropped the class after her counselor told her it would take too long to arrange for tutoring and by the time they did, her grade would be too low to help and told her to drop out.
It gave me the impression that they wanted students to fail. It was like, "No one can help you, so you just have to drop out." So, it's like letting us fail.
Mathematics Course Grade
Sept
Oct
Nov
Dec
Jan


Student contacts counselor for supports in math
Student continues to ask the counselor for supports in math
Student continues to go to math office hours
80%
52%
Counselor says there is no supports because the student has a B.
Math teacher places student on list to receive peer tutoring.
Mathematics Course Grade
Sept
Oct
Nov
Dec
Jan


Student contacts counselor for supports in math
Student continues to ask the counselor for supports in math
Student continues to go to math office hours
80%
52%
Mathematics Course Grade
[Teachers] would say, “If you aren’t taking these opportunities, then you are basically letting yourself down.” I am not going to let them say that about me so I’m going to office hours and ask for help. But even when I did, it was not helpful enough!
Sept
Oct
Nov
Dec
Jan



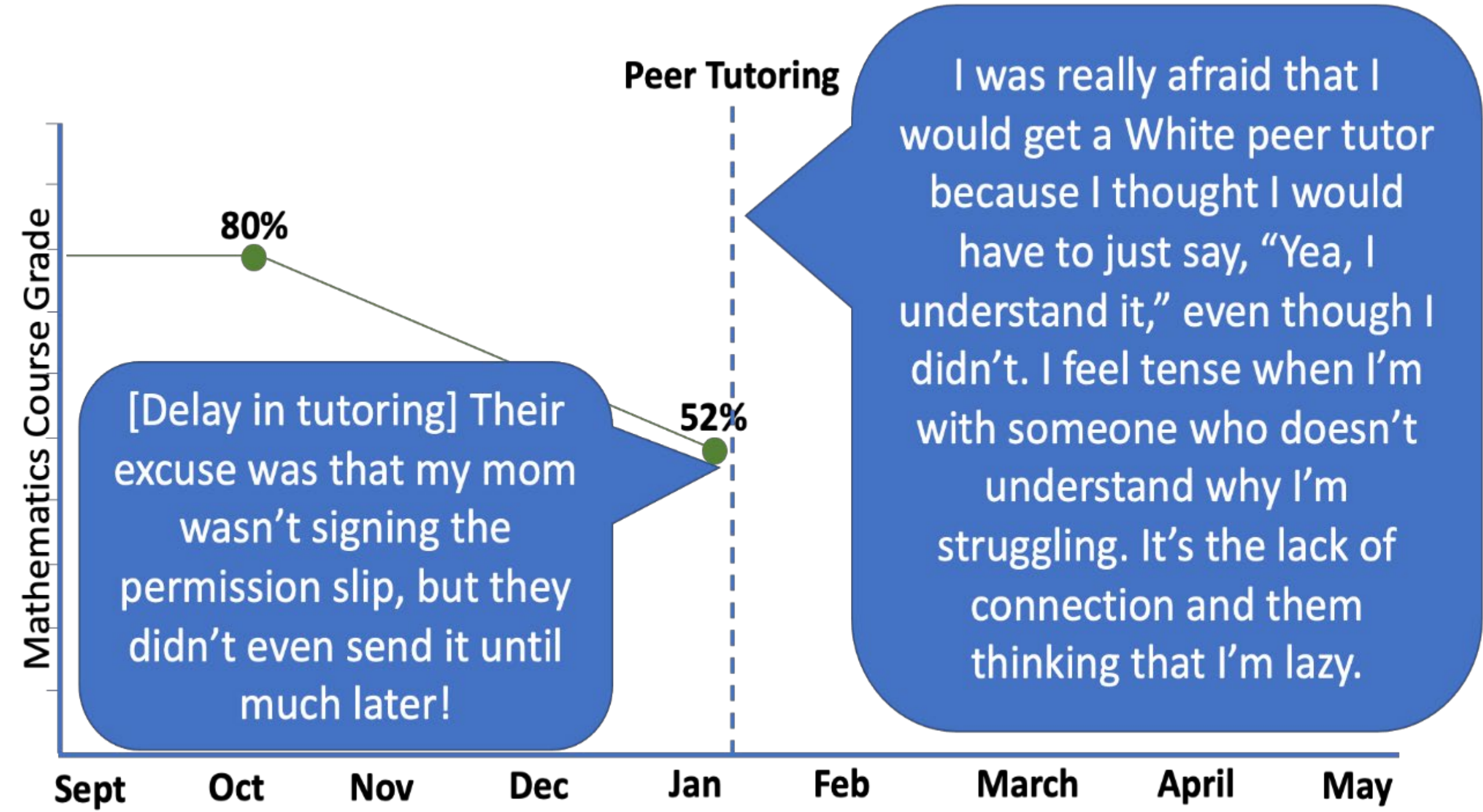
Pause and Reflect

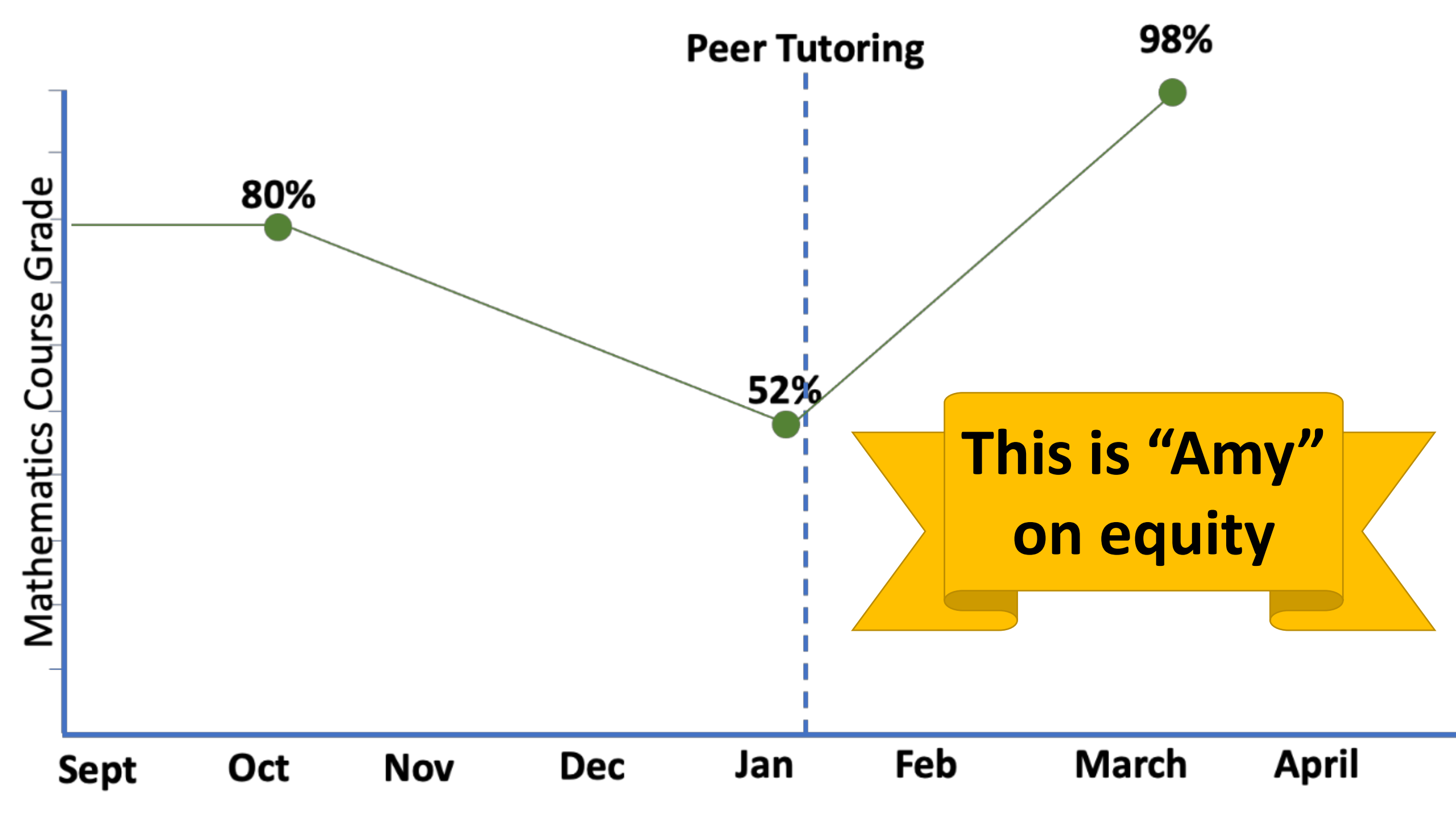
Reflect on the structural, instructional, and curricular barriers that “Amy” faced in her schooling.

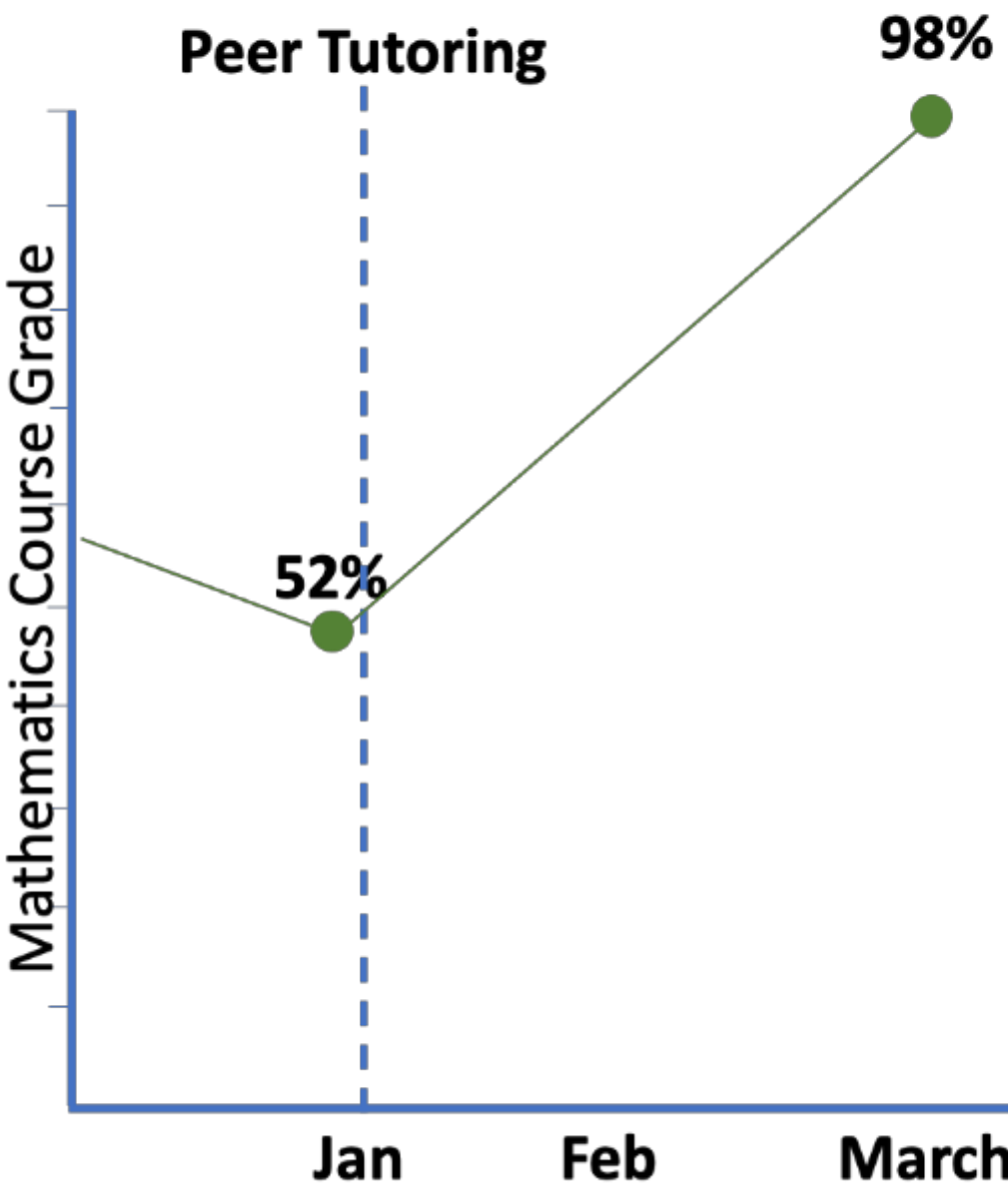
Educator Panel Discussion

Digging out barriers and planting supports

This is “Amy”. This is “Amy” on equity.


Peer Tutoring
Mathematics Course Grade
80%
52%
[Delay in tutoring] Their excuse was that my mom wasn't signing the permission slip, but they didn't even send it until much later!
I was really afraid that I would get a White peer tutor because I thought I would have to just say, "Yea, I understand it," even though I didn't. I feel tense when I'm with someone who doesn't understand why I'm struggling. It's the lack of connection and them thinking that I'm lazy.
Sept
Oct
Nov
Dec
Jan
Feb
March
April
May


Peer Tutoring
98%
80%
52%
Mathematics Course Grade
This is “Amy” on equity
Sept
Oct
Nov
Dec
Jan
Feb
March
April



Designed for equity

(1) Structural barrier to supports

- Student did not have textbook or formula guide.

☆ Hand-delivered to residence within a week.

(2) Curricular barrier to supports

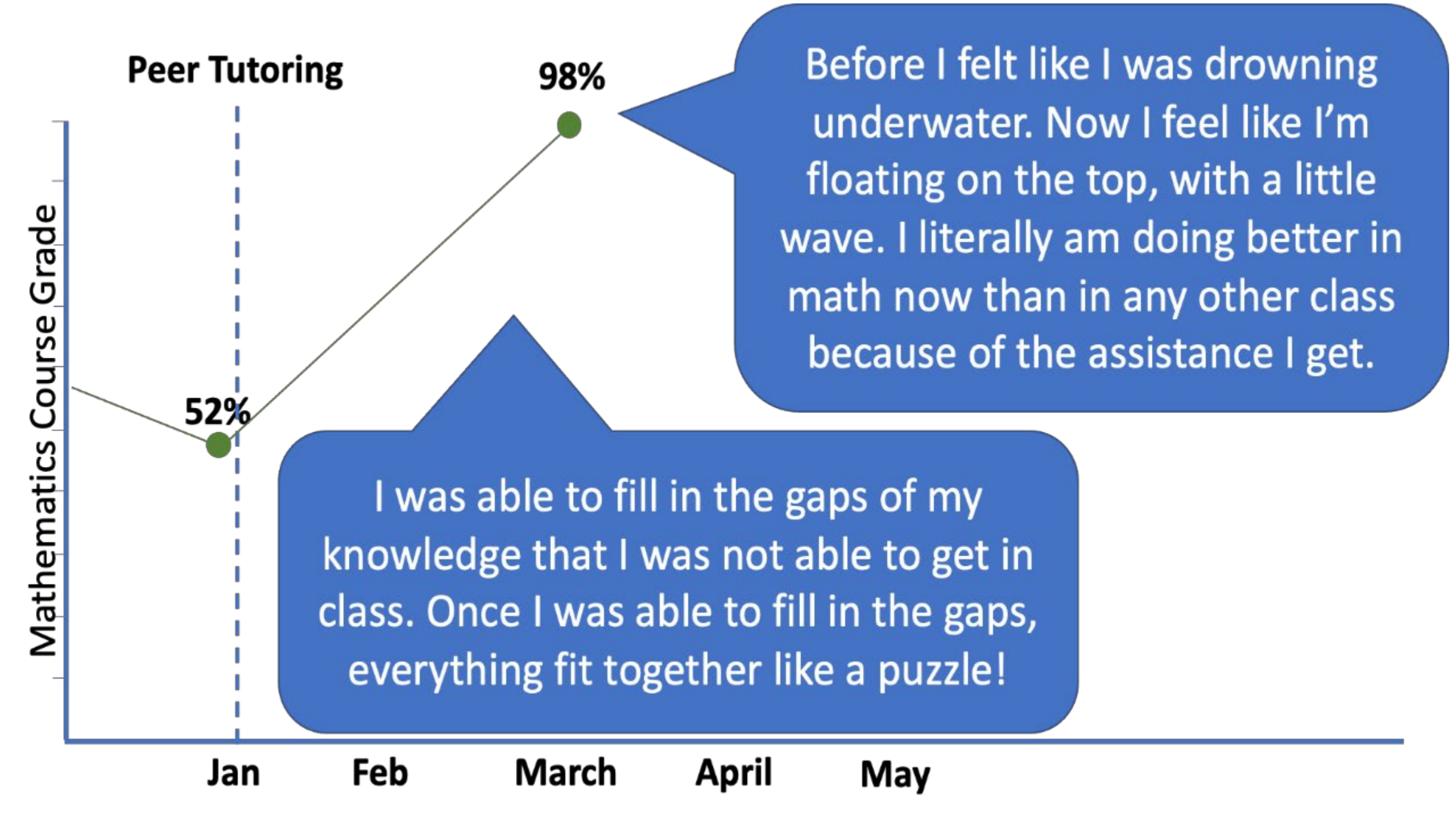
- Student could not engage in curriculum (worksheets) without formula guide.

☆ Adapted worksheets to deconstruct equation into chunks and mini-steps.

(3) Instructional barrier to supports

- Student kept going to office hours for help.

☆ Provided immediate feedback and explicit instruction on meta-cognitive strategies. Used Zoom Whiteboard for shared notes.


Peer Tutoring
98%
Before I felt like I was drowning underwater. Now I feel like I'm floating on the top, with a little wave. I literally am doing better in math now than in any other class because of the assistance I get.
52%
I was able to fill in the gaps of my knowledge that I was not able to get in class. Once I was able to fill in the gaps, everything fit together like a puzzle!
Mathematics Course Grade
Jan
Feb
March
April
May

Educator Panel Showcase

Wrap up

Key take-aways

Educational equity is about the grown-ups in the system.

Turn numbers into students: Use student empathy interviews to better identify and understand barriers.

Just dig it out: Plant structural, instructional, and curricular supports for equity.

Come to our office hours!

Thank You!

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Access the evaluation link in the session's description in the Summit web platform.

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