



Dana Center
Mathematics
PATHWAYS

Effective Messaging for Mathematics Pathways



The University of Texas at Austin
Charles A. Dana Center www.dcmathpathways.org



Purpose
Support institutional leaders to plan effective messaging about mathematics pathways.

Audience
Individuals and teams who are leading math pathways work, which may include faculty, administrators, student services staff, and institutional researchers.

Facilitated by
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Charles A. Dana Center

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Using this webinar

This webinar is designed to convey information and support discussion, reflection, and action.

View this webinar individually or use it with a group to structure discussion and planning. Periodically, there will be prompts for activities, including:

- Discussion/reflection
- Practice
- Plan for action



For each webinar, pause at these points as long as you wish.


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Outcomes

Participants will:

- Understand the value of careful and strategic messaging.
- Understand basic effective practice in messaging.
- Examine specific critical messaging challenges common to mathematics pathways.
- Identify messaging challenges unique or particularly sensitive to their institutions.
- Plan strategies to prepare champions.

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Messaging Basics

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Messaging basics

Messaging refers to the way in which you communicate ideas.

Goals of positive messaging include:

- Avoiding misconceptions and “triggers”
- Clarifying meaning and intentions
- Demonstrating openness and integrity

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Plan ahead for positive messaging

Anticipate negative misinterpretations and reactions.

- Utilize strategic, planned, positive messaging.
- Be prepared to respond to comments and questions.
- If you are not prepared for a question, be honest and follow up if possible.

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Strategic, positive messaging

Establish a relationship with audience based on respect.

- Start with finding common ground → students.
- Presume good intentions.
- Acknowledge and honor legitimate concerns.
- Do not minimize challenges and complexity.
- Be honest and speak from your own experience.

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Activity: Discussion/reflection

Take a few minutes to discuss with your colleagues or reflect individually 

Think of a time when have you have observed either very successful or unsuccessful attempts to communicate about a difficult topic. How did messaging (the way in which information was communicated) help or hinder the communications?

When you are finished, proceed to the next section.

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Challenges in Messaging About Math Pathways

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How good messaging can go wrong

Challenge 1: Student achievement data

It is vital to raise awareness about student achievement data over time.

The danger: Data showing poor success rates can be demoralizing for faculty and staff.

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Tips for messaging about difficult data

Critique the *data* not the *people*.

- Honor the hard work and deep commitment to students.
- Emphasize that the evidence for math pathways points to problems with the *structures* in which we work, not to problems with the *people* in the system.
- Point out that faculty often only see how students do in our own courses. Data demonstrates student success over time.

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How good messaging can go wrong

Challenge 2: Focus on student success
 Student success must be the driver for our work.

The danger: Solely focusing on student success data leads to the misinterpretation that we are trying to make it “easier” for students to “get through” mathematics.

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Tips for messaging about student success

Describe success holistically.

- When talking about student outcomes, include discussion about goals for mathematical learning.
- Avoid statements such as “We need to get more students through math.” Instead, use statements such as “We want more students to be successful in learning mathematics that will be relevant and useful to them.”

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How good messaging can go wrong

Challenge 3: Mathematics content
 We need to demonstrate that non-algebraic pathways better serve the career and life goals of many students.

The danger: Math pathways are perceived as “anti-algebra.”

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Tips for messaging about algebra

Acknowledge algebra's central role in mathematics.

- Algebraic reasoning and skills are foundational to all pathways. The question is not *if* students should learn algebra, but *which* algebraic concepts should students learn to best prepare them for their future.
- Distinguish between "algebra" and specific courses such as Intermediate or College Algebra. Avoid negative descriptions of algebraically intensive courses.
- Terms that may be useful: *non-algebraically intensive* and *algebraically intensive*.

How good messaging can go wrong

Challenge 4: Rigor of pathways.

We make the case that many students will be more successful in non-algebraically intensive mathematics courses.

The danger: Pathways such as statistics and quantitative reasoning are perceived as less rigorous.


Tips for messaging about rigor and standards

Focus on mathematical needs, not perceptions of students' abilities.

- Emphasize the goal for student learning: All students should learn mathematics content that is challenging, rigorous, and meaningful to their lives.
- In describing different pathways, use terms such as "appropriate" and "relevant." Avoid referring to any pathway in terms of difficulty such as "easier" or "more challenging."
- Reiterate that the selection of a pathway should be based on a student's goals, not on level of preparation or perceived "ability."

Activity: Practice

Practice how you would respond briefly to the following questions or statements.



- *I've been teaching math for 15 years, and I know my students are successful.*
- *Isn't it true that you are just "dumbing down" mathematics?*
- *Everyone needs algebra.*
- *Some students just can't learn algebra so they should take Quantitative Reasoning.*

When you are finished, proceed to the next section.

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Other challenges

Some challenges are unique to the local context.


Certain topics or issues may be sensitive within an institution or department due to:

- Past history.
- Relationships between individuals and departments.
- Perceptions about authority and power.

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Activity: Discussion/reflection

Take a few minutes to discuss with your colleagues or reflect individually:



What potential messaging challenges exist at your institution?
How might you address those challenges?

When you are finished, proceed to the next section.

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Preparing Champions for Communications Activities



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Role of champions

Champions advocate for and help others understand mathematics pathways.

Your champions should provide clear, consistent information about the pathways.

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Resources for champions

Support champions by providing resources and helping them refine their message.

- Talking points
- PowerPoint slide deck
- One-page information brief
- Practice answering difficult questions
- Prepare an elevator speech

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Elevator speech

An elevator speech is an excellent strategy to practice effective messaging.


An elevator speech...

- Is brief (two minutes).
- Contains some common points and is also individualized.
- Is prepared and rehearsed.
- Can be modified for different audiences and situations.

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Activity: Plan for action

Create a plan for promoting effective messaging. Plan for how you will:



- Share information about effective messaging with people in roles that require communications about math pathways.
- Create resources that you will develop to support your champions.
- Help your champions practice effective messaging and communications. Consider scheduling a time to practice elevator speeches and responding to difficult questions.

When you are finished, proceed to the next section.

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Resources available

The Dana Center Mathematics Pathways Resource site, www.dcmathpathways.com:

- **Learn About:** Essential ideas and resources targeted for essential stakeholders
- **Take Action:** Action steps and resources for institutional and classroom implementation
- **Resources:**
 - *The Case for Math Pathways*
 - Videos of student and faculty sharing their experiences

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Contact information

- General information about the Dana Center
www.utdanacenter.org
- Dana Center Mathematics Pathways Resource Site
www.dcmathpathways.org
- To receive monthly updates about the DCMP, contact us at
dcmathpathways@austin.utexas.edu

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About the Dana Center

The Charles A. Dana Center at The University of Texas at Austin works with our nation's education systems to ensure that every student leaves school prepared for success in postsecondary education and the contemporary workplace.

Our work, based on research and two decades of experience, focuses on K-16 mathematics and science education with an emphasis on strategies for improving student engagement, motivation, persistence, and achievement.

We develop innovative curricula, tools, protocols, and instructional supports and deliver powerful instructional and leadership development.

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