



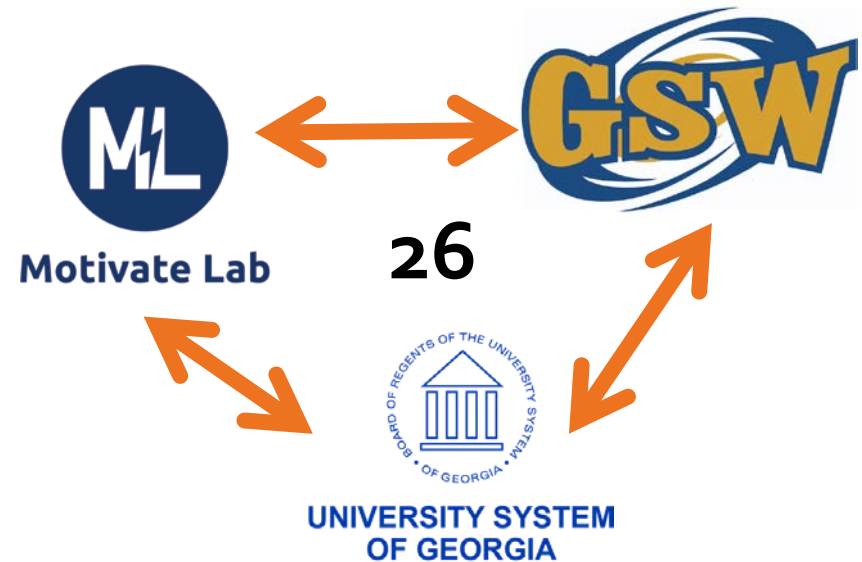
Motivate Lab

Infusing a System with Productive Learning Mindsets

Chris Hulleman and Yoi Tibbetts



To improve peoples' lives through rigorous motivation research



Partnership Goals

1. Understand

2. Foster

“Solutionitis”

- Doing something—anything—to and for students

Long-term mentoring

“Gamification” of course material

Real-time data systems

Financial incentives

Navigating the college campus

Accountability

Counseling

Help choosing major

Improved orientation

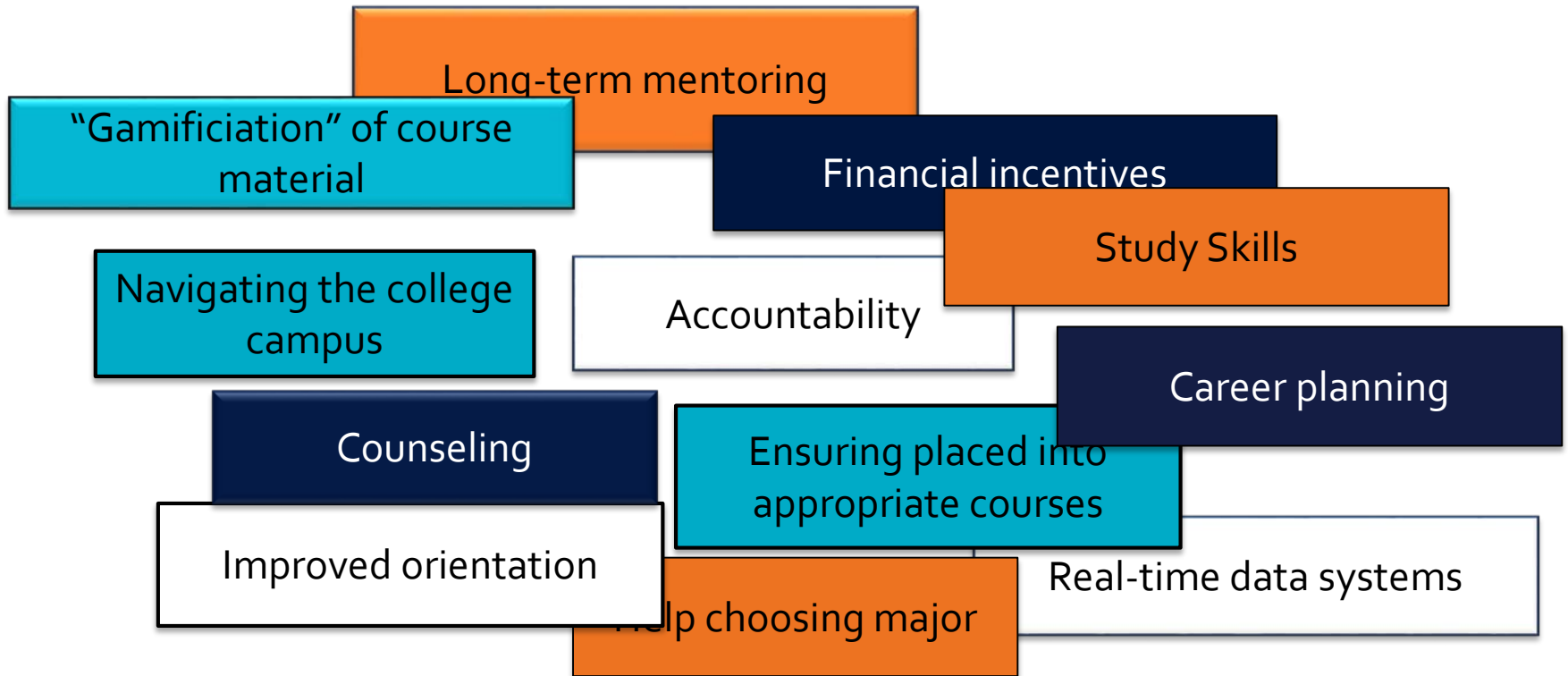
Career planning

Study Skills

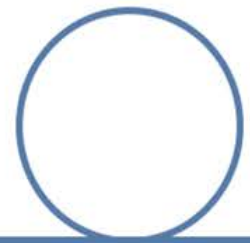
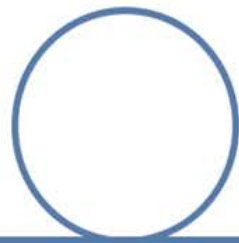
Ensuring placed into appropriate courses

“Solutionitis”

- Challenge: lack of *consistent* efforts and messages



Motivate Lab Design Process



EMPATHIZE & LEARN

SYNTHESIZE & PLAN

PROTOTYPE & TEST

ADOPT & INFUSE

Plan for today's session

Intro:

Part 1:

Part 2:

Wrap Up:

And... please ask questions along the way

1)

What is your role at GSW? (e.g., Psychology Professor)

2)

What are 1 or 2 motivational challenges that you routinely face with your students?

3)

What are 1 or 2 strategies that you've tried to better motivate your students?

4)

Do you use a particular theory of motivation to help address your challenges or plan your strategies? If yes, can you provide the name for it?

**Can we share
some of your
motivational
challenges?**

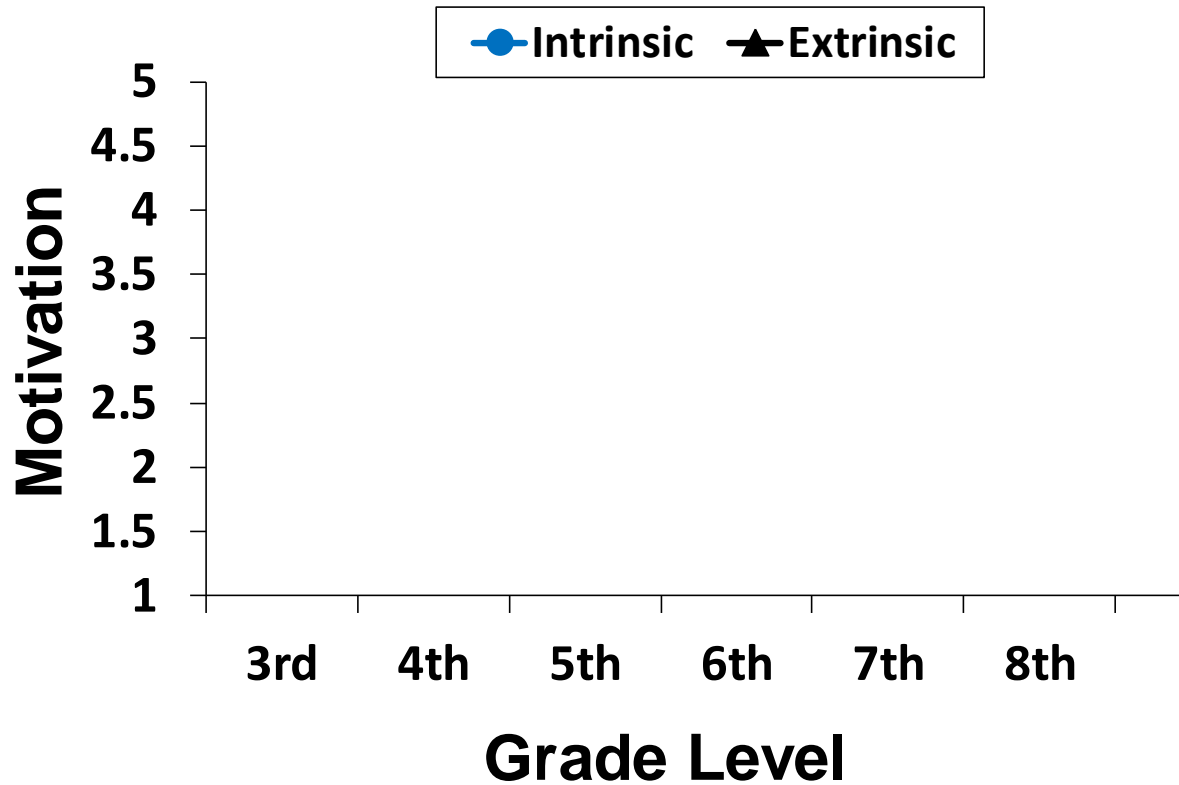


What are your motivation challenges?

- Getting students to turn things in
- Getting students to be passionate in the field
- Understanding what it takes to be successful
- Entitlement – not willing to work for it
- Stop stigma behind using university resources
- Not asking for help until it's too late
- Acknowledging the struggles they face – need their honesty
- Overcoming their lack of confidence

Alarming Data... Revisited

(Lepper, Henderlong, & Iyengar, 2005)



Then... what happens when we get students in college?

Student email:

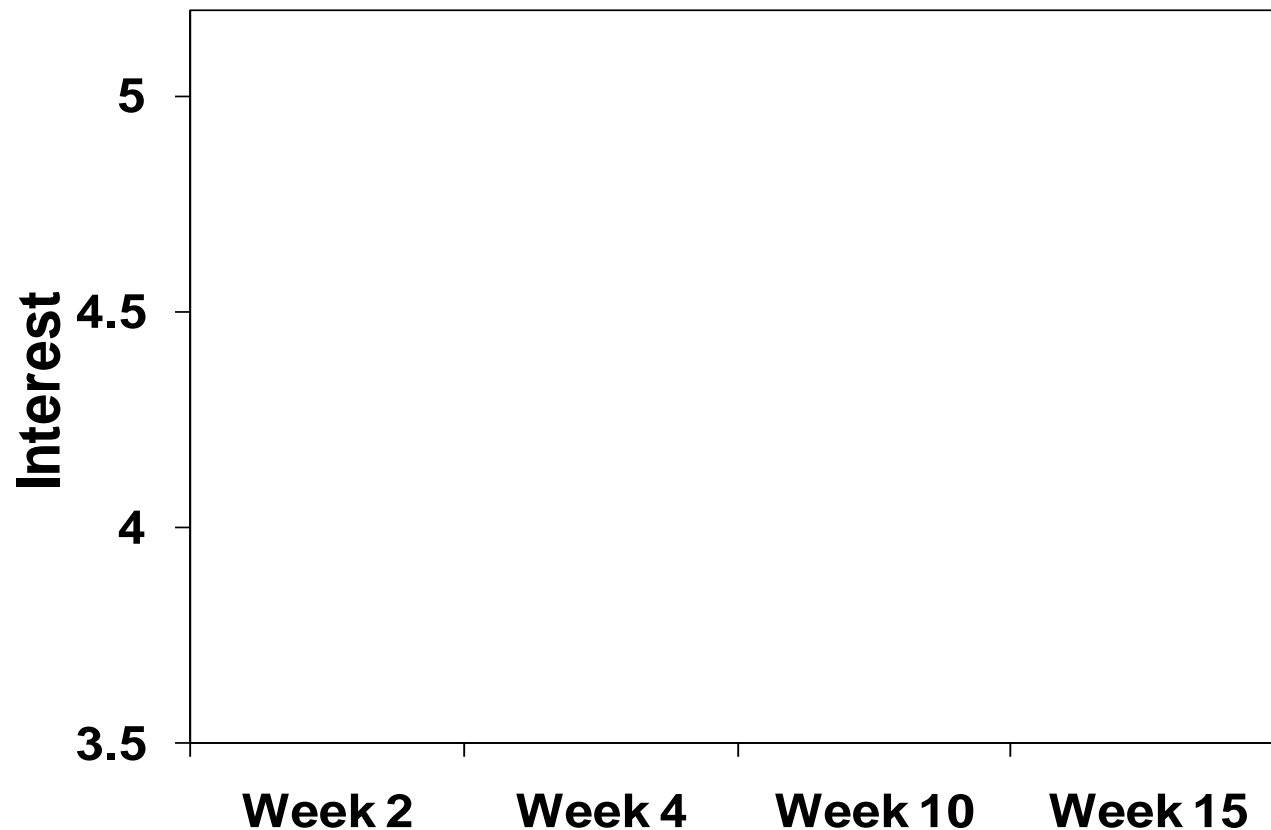
"Hey Prof, i didnt come 2 class last week. did i miss anything imp? any of it gonna b on the test? also, is lab runnin the whole time 2day, or we gettin out early?"

www.ratemyprofessors.com:

- "Definitely take this class.! I never went to class or bought the book, and I got a B."
- "The easiest teacher! Always lets class out early and cancels class on Fridays a lot. TAKE HIM!"

And More Alarming Data that We've Collected in College Classrooms

(Hulleman, Godes, Hendricks, & Harackiewicz, 2010)



And to help us appreciate our students' perspective...

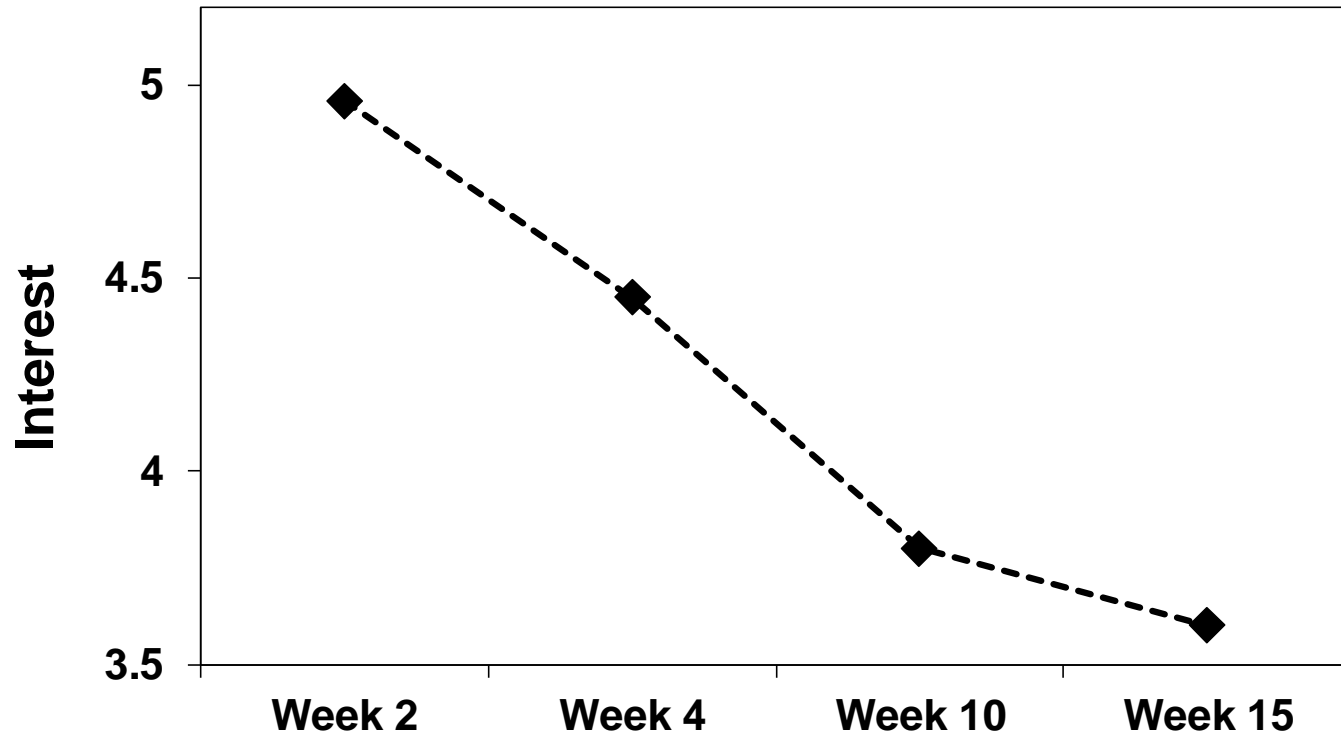
From a College Faculty List-serve:

"I can empathize with unmotivated students when I consider faculty meetings. I dutifully attend these meetings, but they often seem to continue on quite well without me; Perhaps your faculty meetings are run differently?"

On the rare occasions when I miss one, I'll ask my colleagues "Did I miss anything important?"... they invariably roll their eyes and say no!"

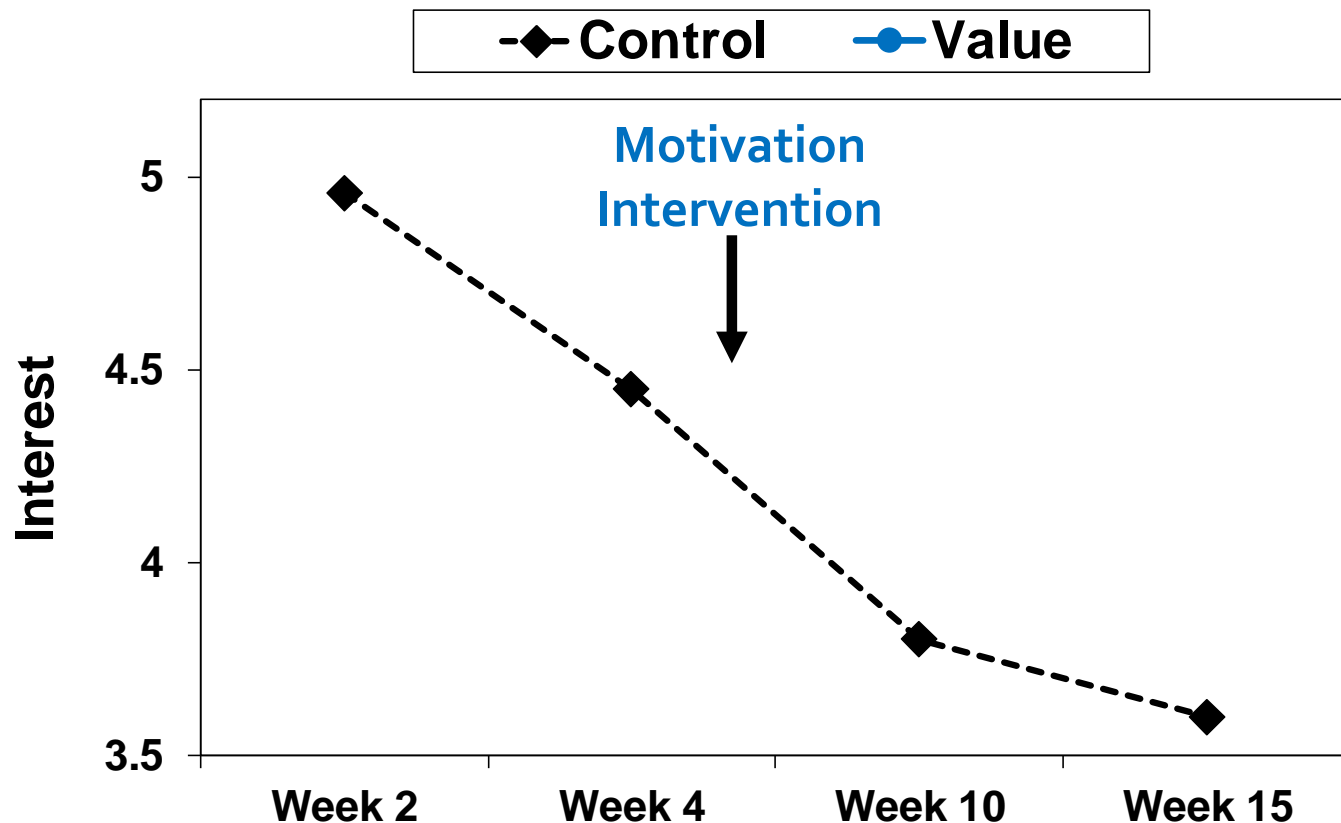
So, a hopeful story through motivational planning

(Hulleman, Godes, Hendricks, & Harackiewicz, 2010)



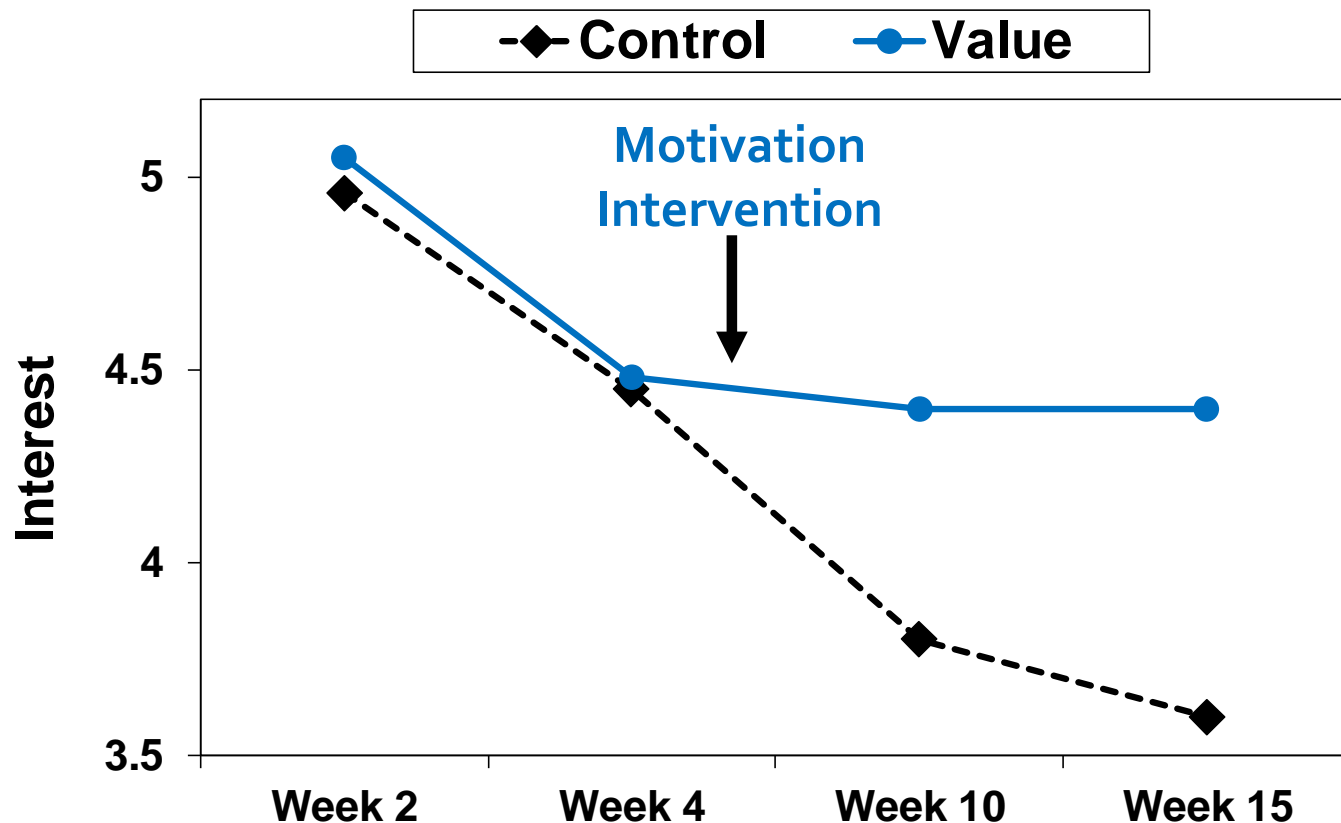
So, a hopeful story through motivational planning

(Hulleman, Godes, Hendricks, & Harackiewicz, 2010)



So, a hopeful story through motivational planning

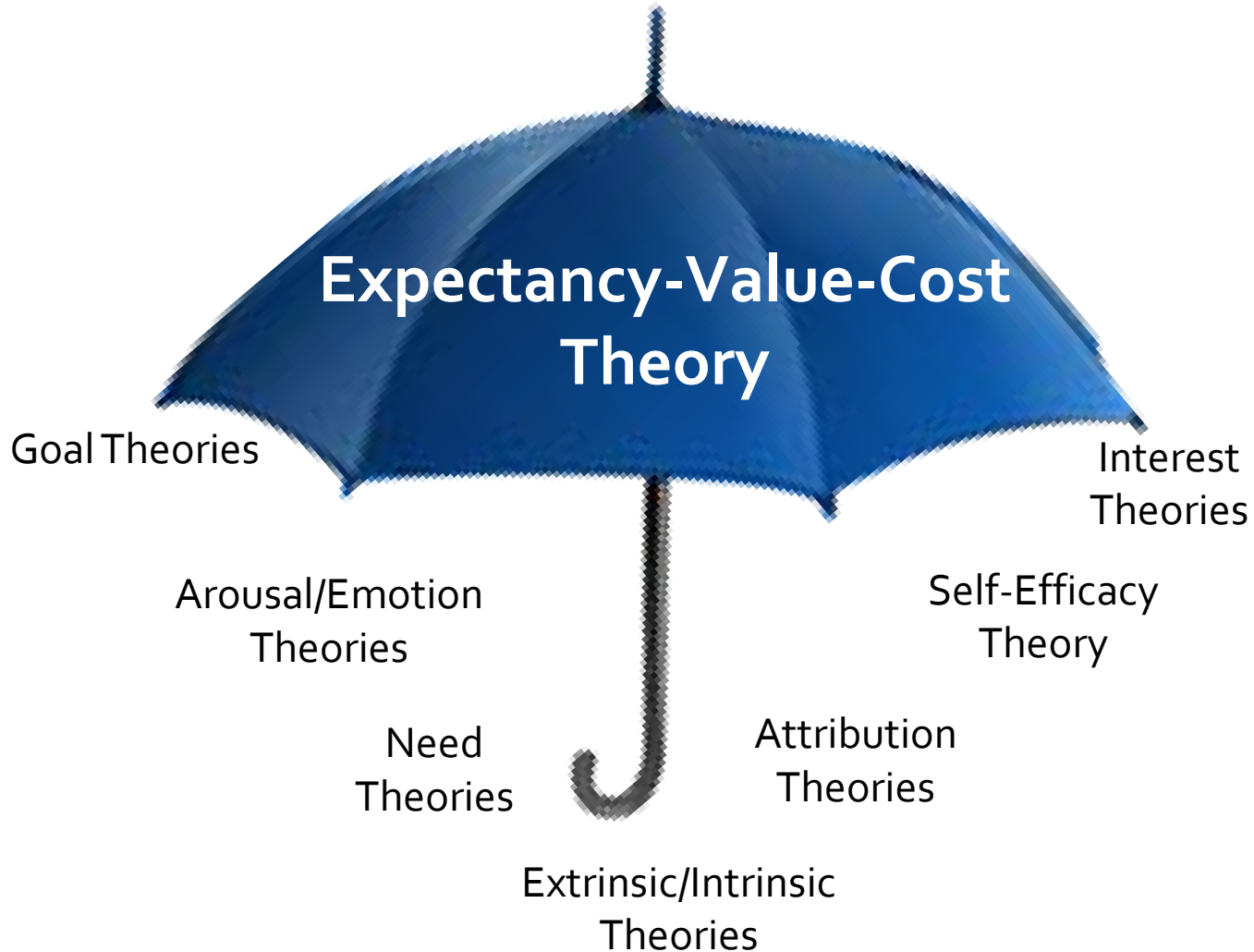
(Hulleman, Godes, Hendricks, & Harackiewicz, 2010)



Does anyone have a
motivation theory
that guides your
practice now?



Although many theories exist...



The Expectancy-Value Framework

(Eccles et al., 1983)

$$M = E * V - C$$

M = Motivation

E = Expectancy (Can I do the task?)

V = Value (Do I want to do the task?)

C = Cost (Do I have barriers preventing me from doing the task?)

Expectancy

Can I do the task?



Grades
Test Scores

Value

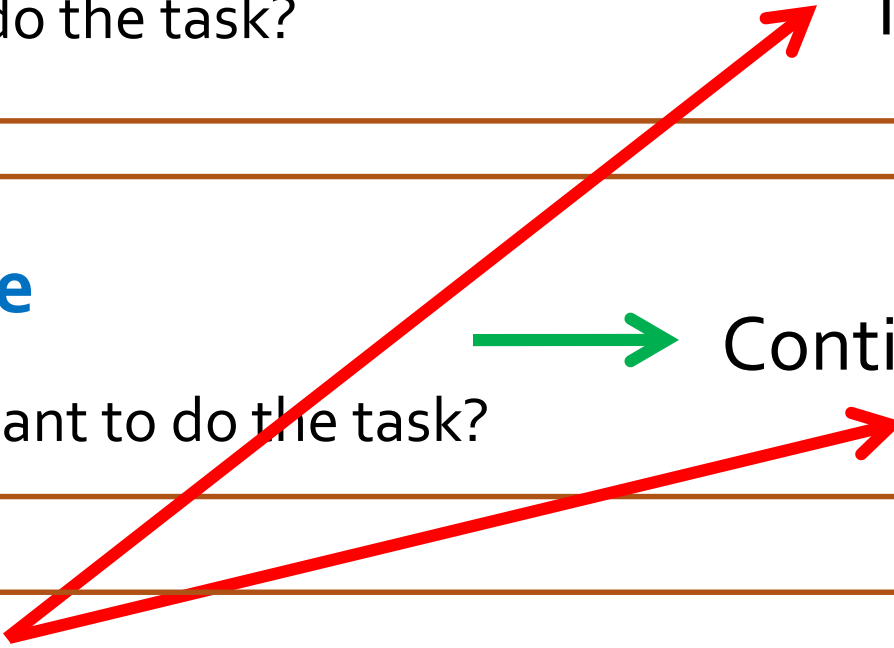
Do I want to do the task?



Interest
Continued Persistence
Major

Cost

Do I have additional barriers that reduce my time, energy, and resources to do the task?





Let's pause for an application break

Using EVC language, can you now identify your challenges being a(n):

Expectancy problem?

(students don't think they **CAN** do it)

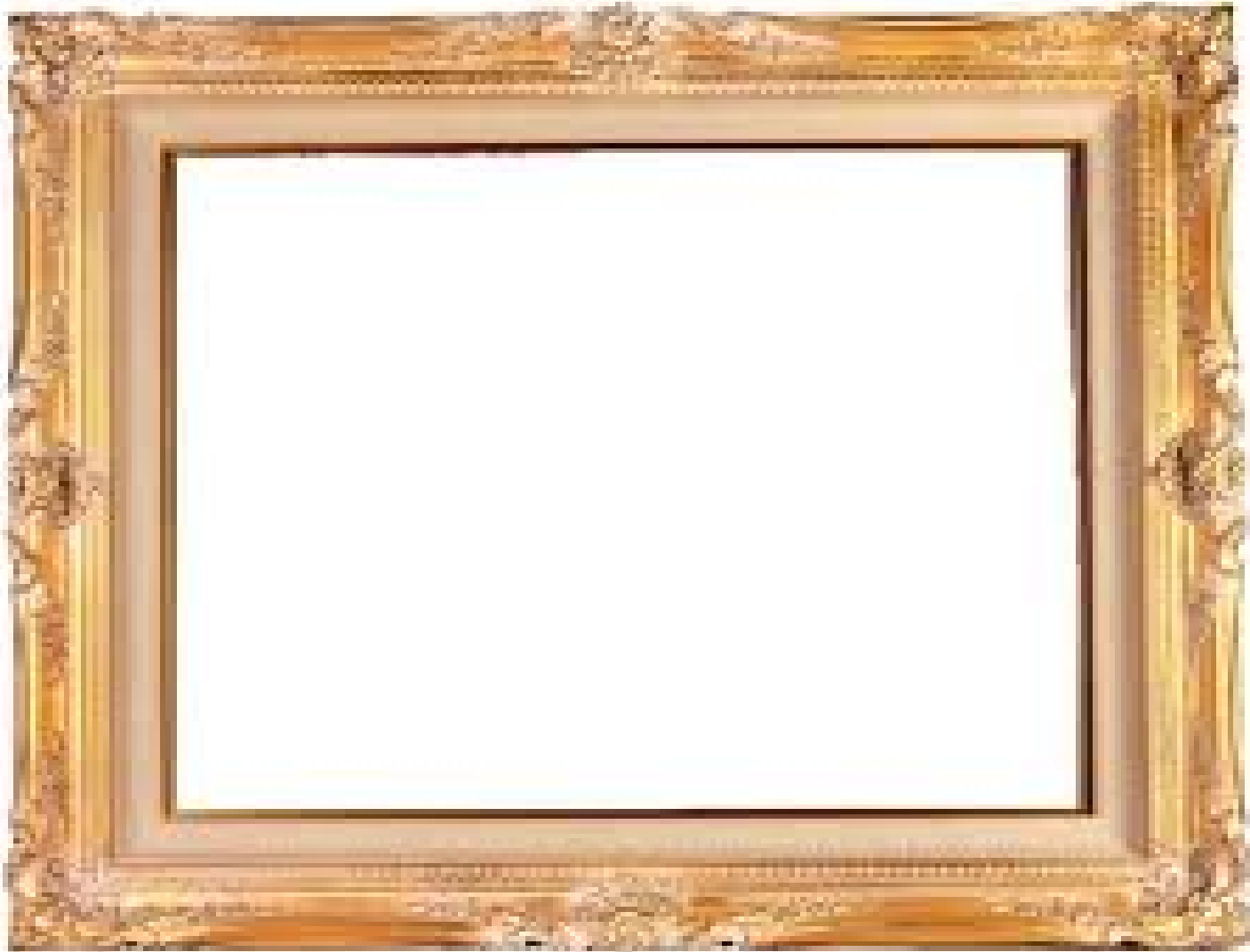
Value problem?

(students don't **WANT** to do it)

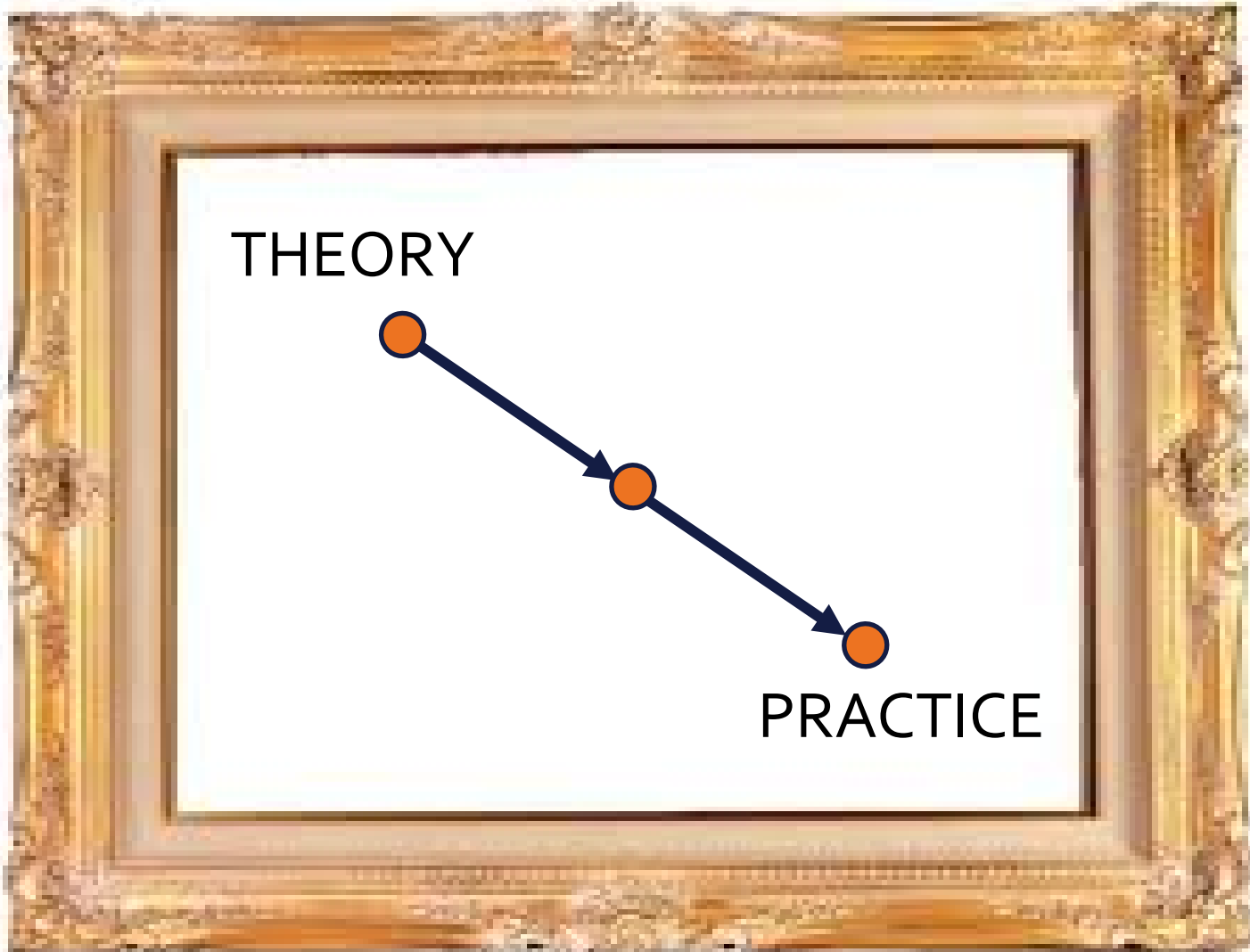
Cost problem?

(students have additional **BARRIERS** preventing them from having time, energy, and resources to do it)

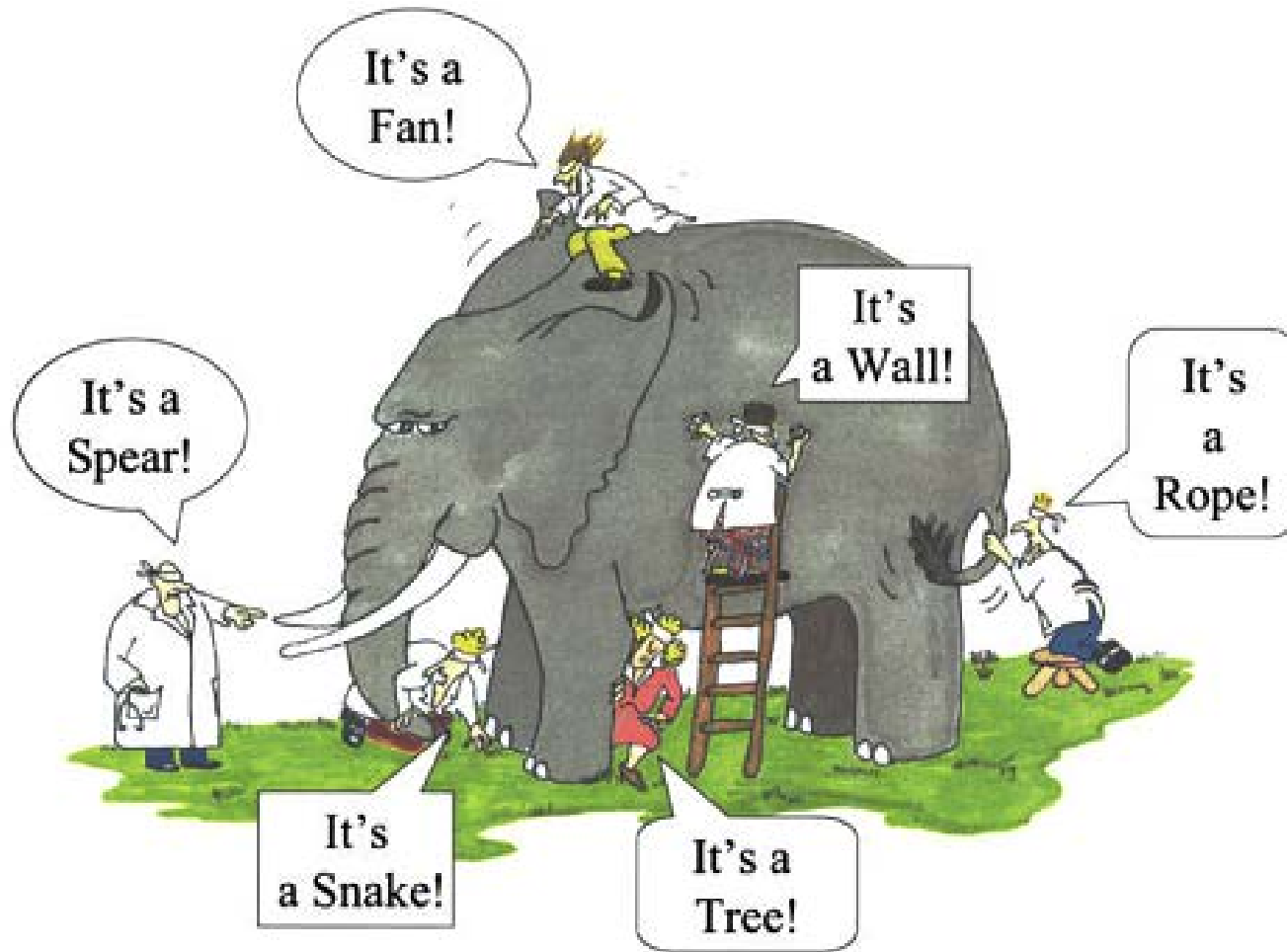
But, is knowledge of motivation theory
(and a formula like $M = E + V - C$) enough?



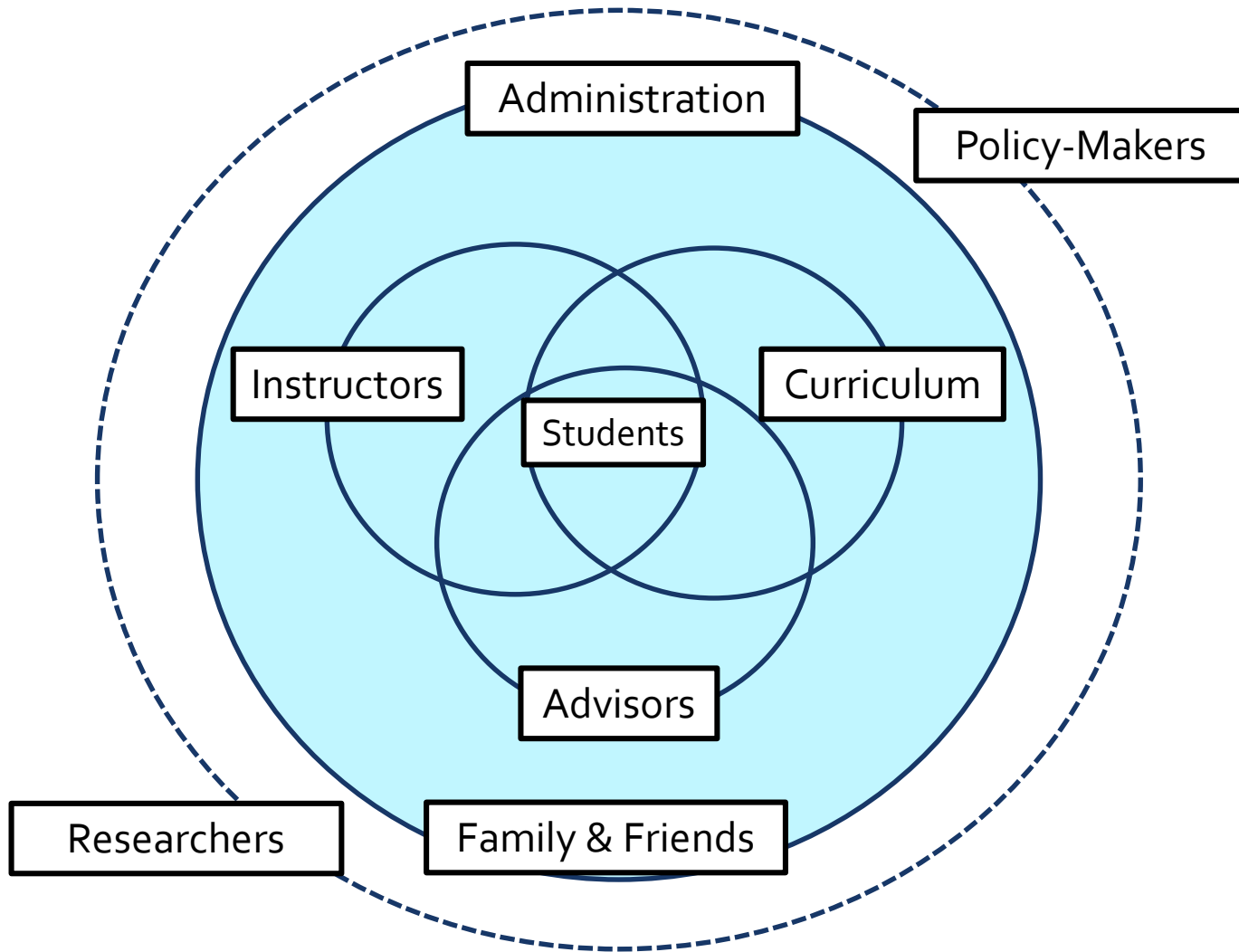
But, is knowledge of motivation theory
(and a formula like $M=E+V-C$) enough?



What if we don't see the whole system?



Harnessing the Power of System-Wide Change



Mindsets



Motivation

Growth



Expectancy

Purpose



Value

Social



Cost

Part 1:
**Levers of Change: Mindset
Interventions**

Mindset GPS

Purpose & Value

Growth Mindset

Do I have what it takes?

What's the point of this?

Social Belonging

Do I belong here?



PHOTO: SHUTTERSTOCK

Growth Mindset

Purpose & Value

Growth Mindset

Do I have
what it
takes?

Why should
I learn this?

Social Belonging

Do I belong
here?

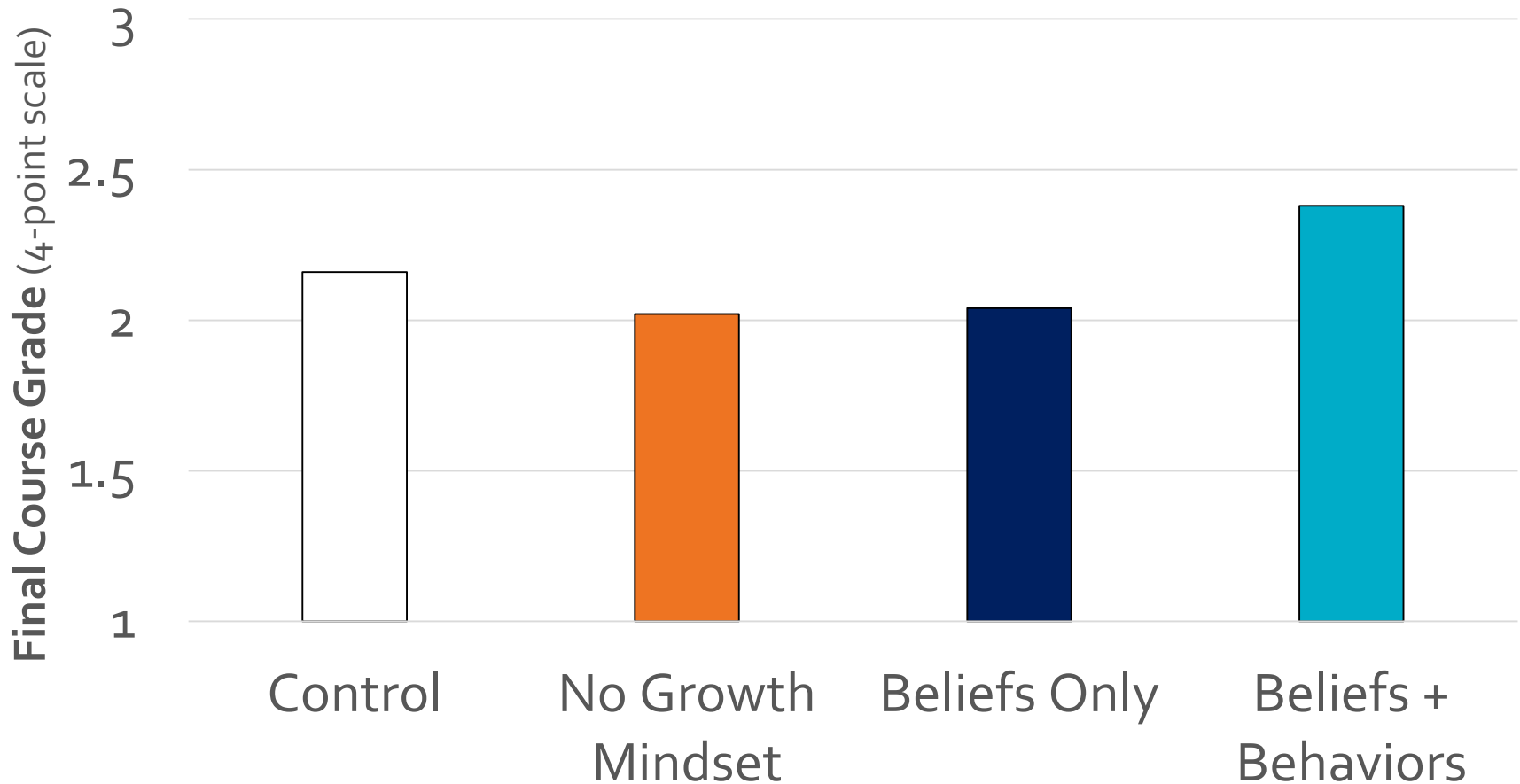
- **Students feel they can be successful if they try**
 - Intelligence is malleable
 - Challenges are an opportunity to grow
 - Obstacles can be overcome by using good strategies

Growth Mindset Intervention

1. Learn about growth mindset, often through neuroplasticity.
2. Write a one-paragraph essay that describes growth mindset to another student (control: just summarize).
 - Explain that your intelligence can grow
 - Talk about behaviors to grow your intelligence

"Just because you do not understand something does not mean you are dumb. it just means you need a little extra help in the subject. Some ways you can get help and learn the material is to get a tutor. if you do not have access to tutoring you can always go to your professor and ask for help or ask a friend."

Intervention Effects Vary by Essay Responses



Purpose and Value

Purpose & Value

Growth Mindset

Do I have
what it
takes?

Why should
I learn this?

Social Belonging

Do I belong
here?

- **The learning context has value to students**
 - Students find their learning or school to be relevant, purposeful, interesting, or important
 - There are many ways to infuse value into students' learning environments

Purpose and Value:

Belief that schoolwork is valuable because it's personally relevant

Students can value school for different reasons

Utility:

This is useful and relevant for my:

- *Daily life*
- *Future education*
- *Career*
- *Interests and hobbies*

Personal:

This will help me get the job I want in the future.

Identity:

This is who I am. It's important to me to be good at this.

Prosocial:

This allows me to do something that makes a difference in the world.

Interest:

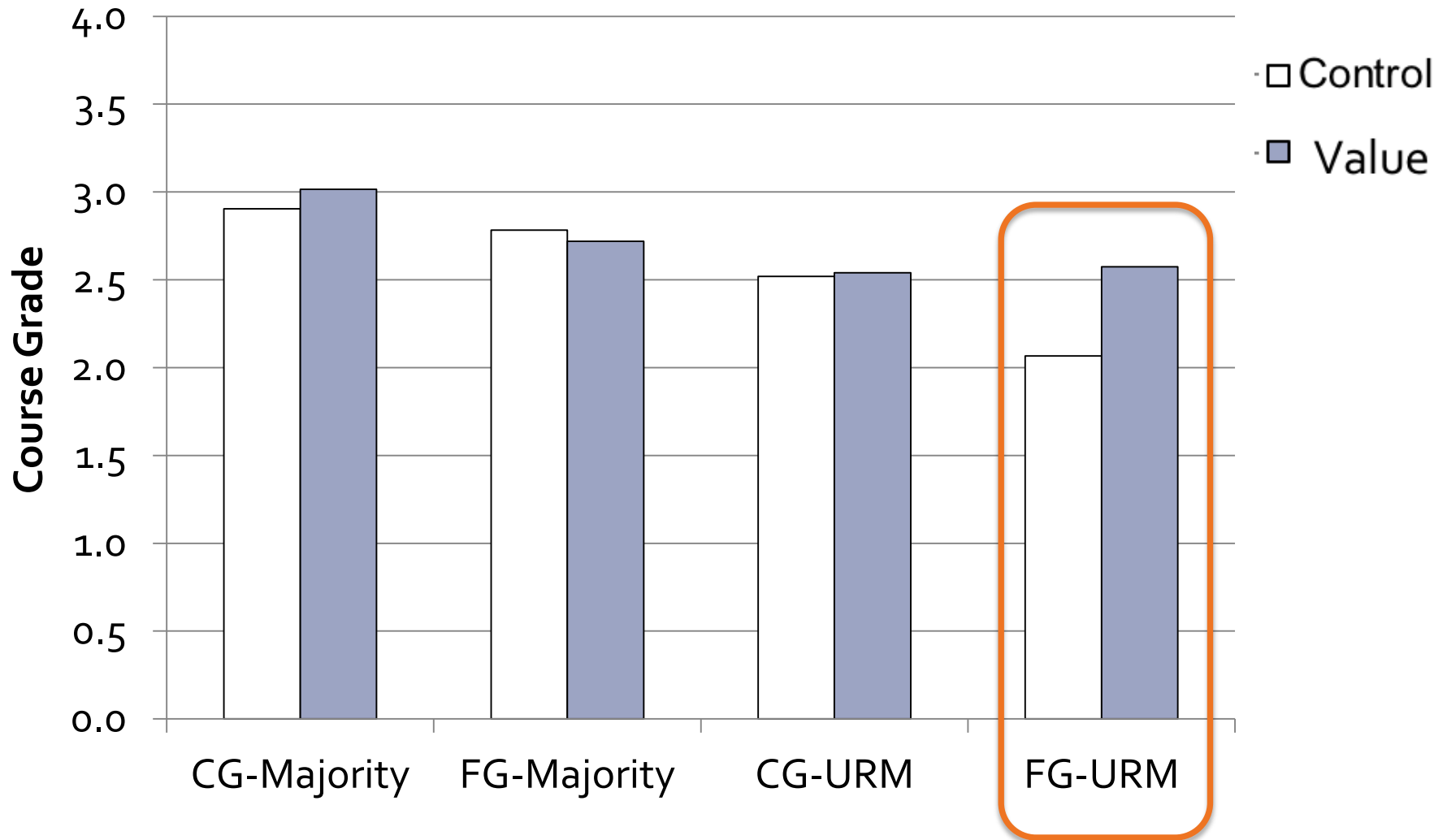
This is fun! I just like doing this.

Utility Value Intervention

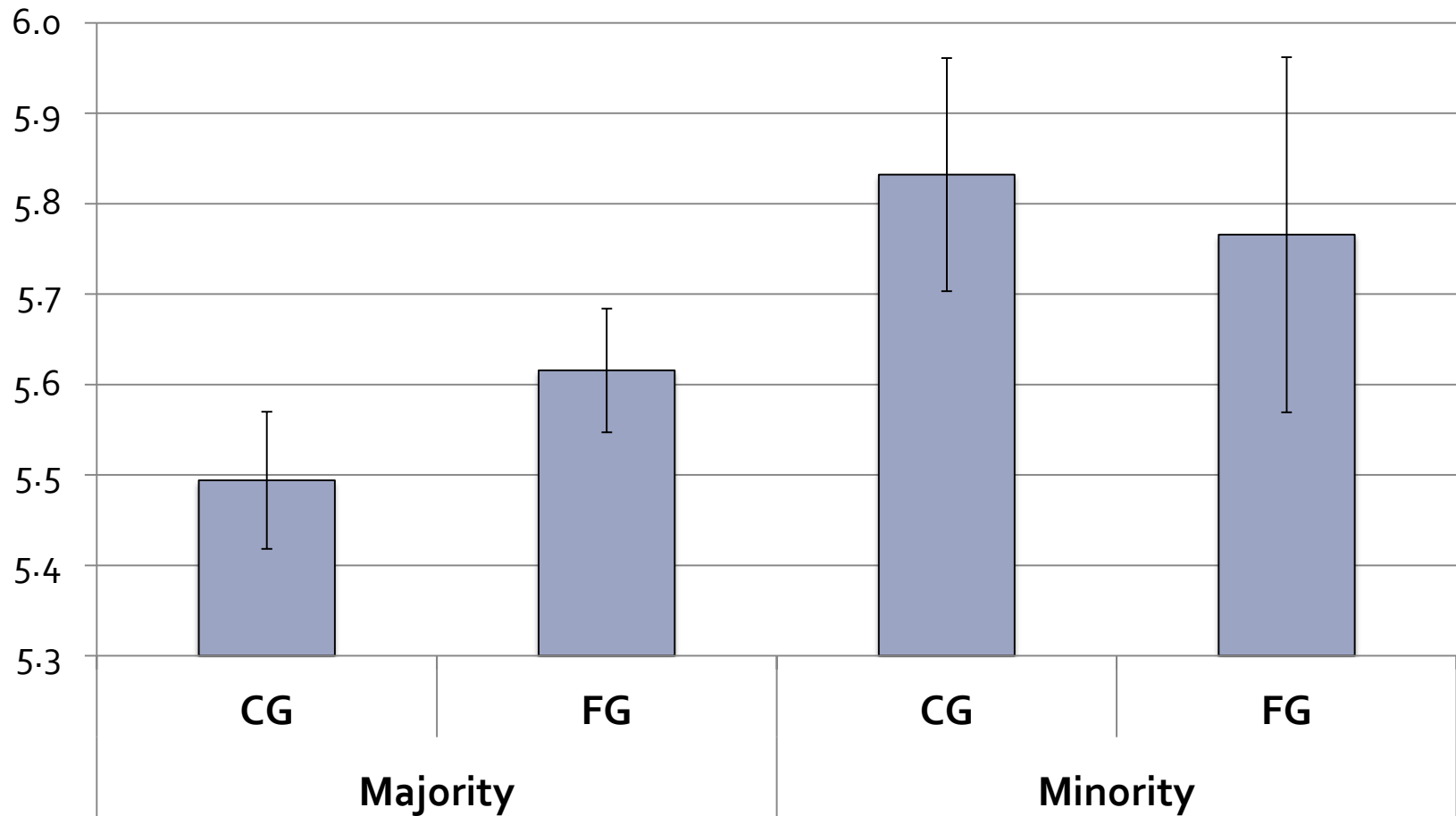
1. Select a topic that is currently being covered in class.
2. Write a one-paragraph essay that applies the topic to your life or a letter to someone you know (control: just summarize).
3. Repeat 3-5x over course of semester.

Graphing is an important part of life.... For an example, my grandmother and aunt work at a retirement home and they need to decide dosages per day, meals, and etc. Graphing out all the data they have will [help them] come out with a resolution.

College Biology ($N = 1040$)



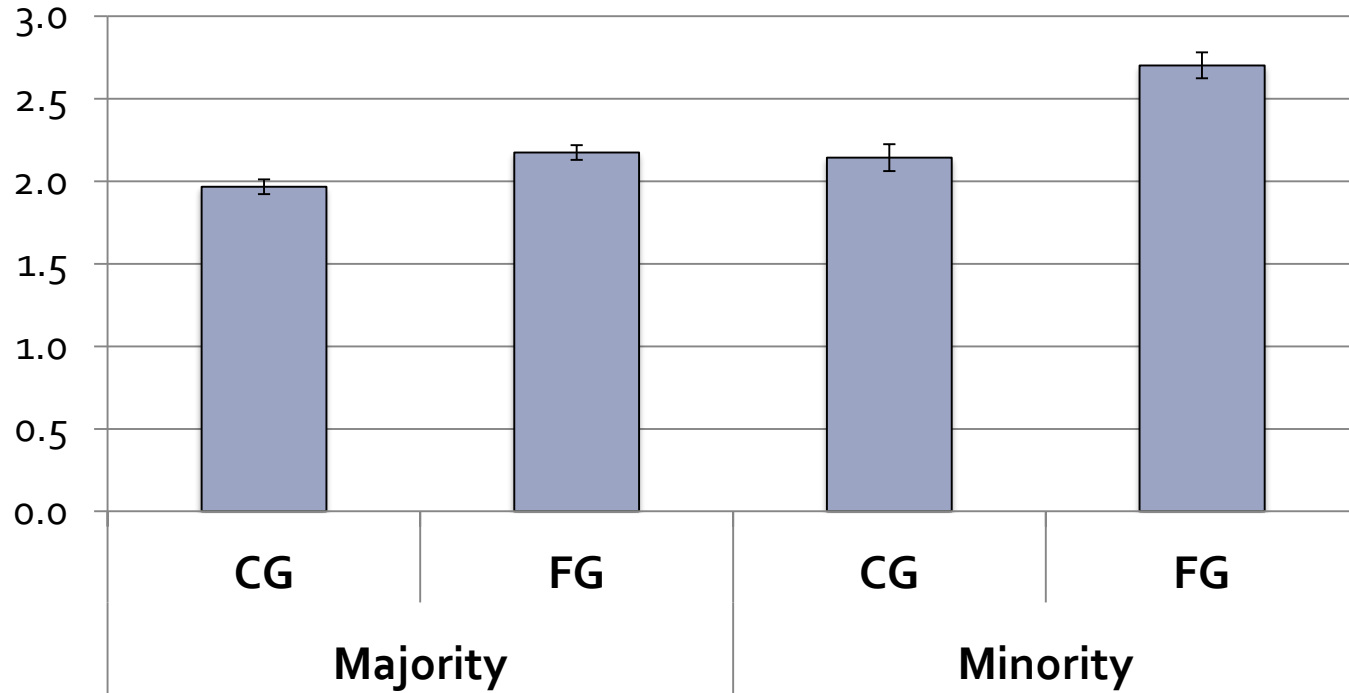
Desire to Contribute to Society



"I want to study biology because I want to make a contribution to society"

Reasons for Completing a College Degree

Helping Motives



- Help my family out after I'm done with college
- Give back to my community
- Provide a better life for my own children

FG-URM students used more...

- Social Processing Words
 - E.g., Friends, help, encourage, society
- Family Words
 - E.g., Mom, sister son

Phrases consistent with their motivations for attending college

Social Belonging

Purpose & Value

Growth Mindset

Do I have
what it
takes?

Why should
I learn this?

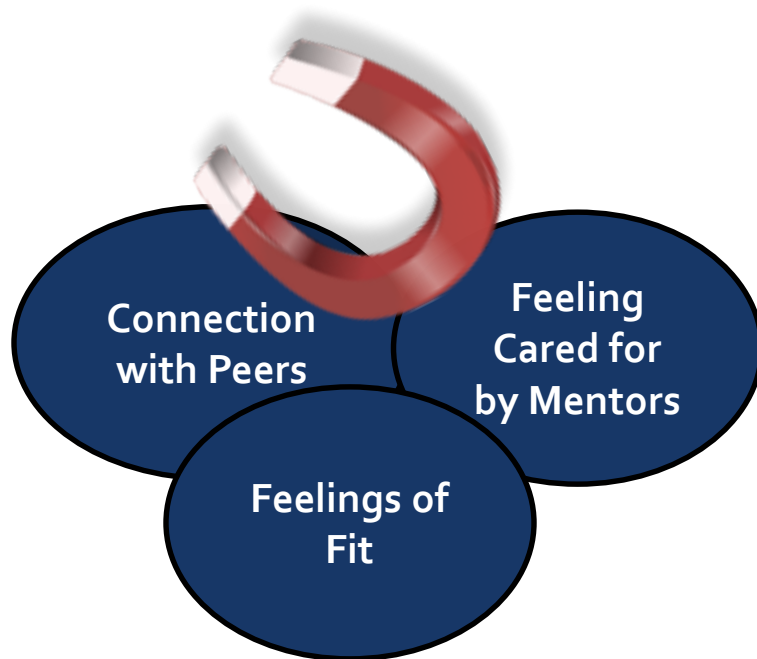
Social Belonging

Do I belong
here?

- **Students feel they belong in the context**
 - Connected with peers
 - Known and cared for by teachers and mentors
 - Fit in academically and socially
 - Free from doubts and worries about belonging

One Important Takeaway

Feelings of Belonging Belonging Uncertainty



Belonging messages we send students

MY HERO

7 edits

Dear Mr. Warner Prouty,

My hero is Dr. Martin Luther King JR. My hero has courage to do what he has to and when he has to do it. He is a testimony to others, and when he was tested he over came it. He went through trials after trials and he did not hold a grudge.

① had the

② had

define hero

use past tense for someone no longer living

First Dr. Martin Luther King JR has courage. He did not have to speak for "his people" but he did it because he cares. King led some civil rights movements in his time. Dr. King also gave a speech in front of 200, 000 of his supporters. — where?

③ had or was courageous

give more detail

give me detail - use the article

Second Dr. Martin Luther King is a testimony to me and others. He is a testimony to me because he did everything he could do to fight for the freedom for him, his family, and others. Now when I look at the simplest things and complain I think of what Dr. King would do.

what do you mean by testimony?

⑦ turn away

Finally Dr. King is my hero because when he was tested he did not complain instead he over came the worst. Dr. King had many good reasons to quit what he was doing and curse everyone, but he didn't. In the worst of times Dr. King kept his chin up. When King's home was bombed all he said was "We must learn to meet hate with love" Dr. King was a great man and he helped change our world as we know it.

freedom to fight from what say more about the

good - use this earlier w/ courage maybe

say more about the change

In conclusion Dr. Martin Luther King JR is my hero because he had courage. He is a testimony to me and to others. Also he over came his troubles when he was tested.

"I have a dream that little black boys and little black girls will be able to join hands with little white boys and little white girls and walk together as sisters and brothers."

use this in the essay.

"Wise feedback:"

I'm giving you these comments because I have high standards and I know that you can meet them.



lo what he has to and
d he over came it. He

② had

define hero

o speak for "his
ements in his time. Dr.
where?

give more detail

. He is a testimony to
im, his family, and
what Dr. King would

what do you mean by testimony?

⑦ turn away
not complain instead

freedom to fight from what

he over came the worst. Dr. King had many good reasons to quit what he was doing and curse everyone, but he didn't. In the worst of times Dr. King kept his chin up. When King's home was bombed all he said was "We must learn to meet hate with love" Dr. King was a great man and he helped change our world as we know it.

good - use this earlier w/ courage maybe

say more about the change

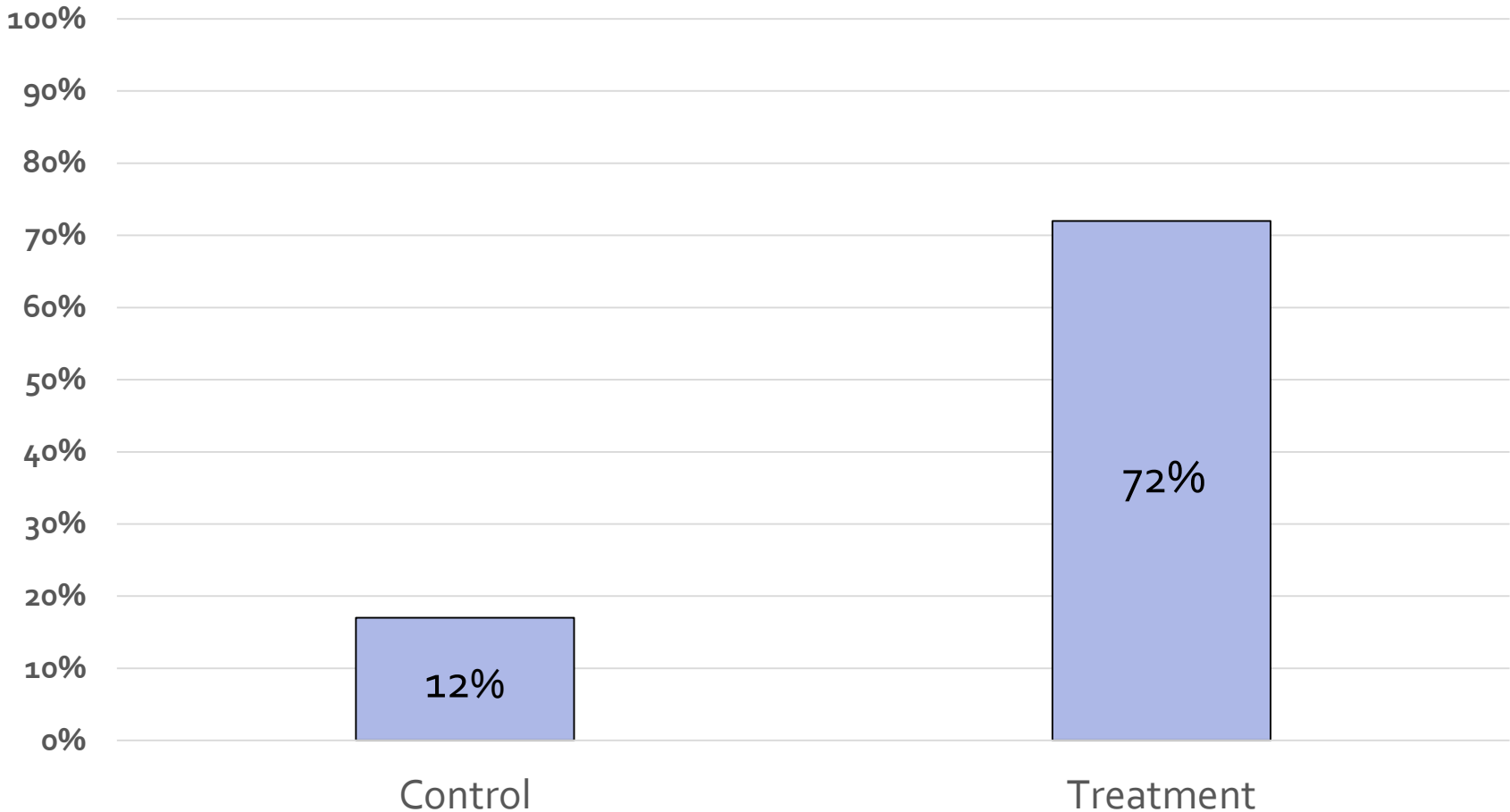
say more about the

In conclusion Dr. Martian Luther King JR is my hero because he had courage. He is a testimony to me and to others. Also he over came his troubles when he was tested.

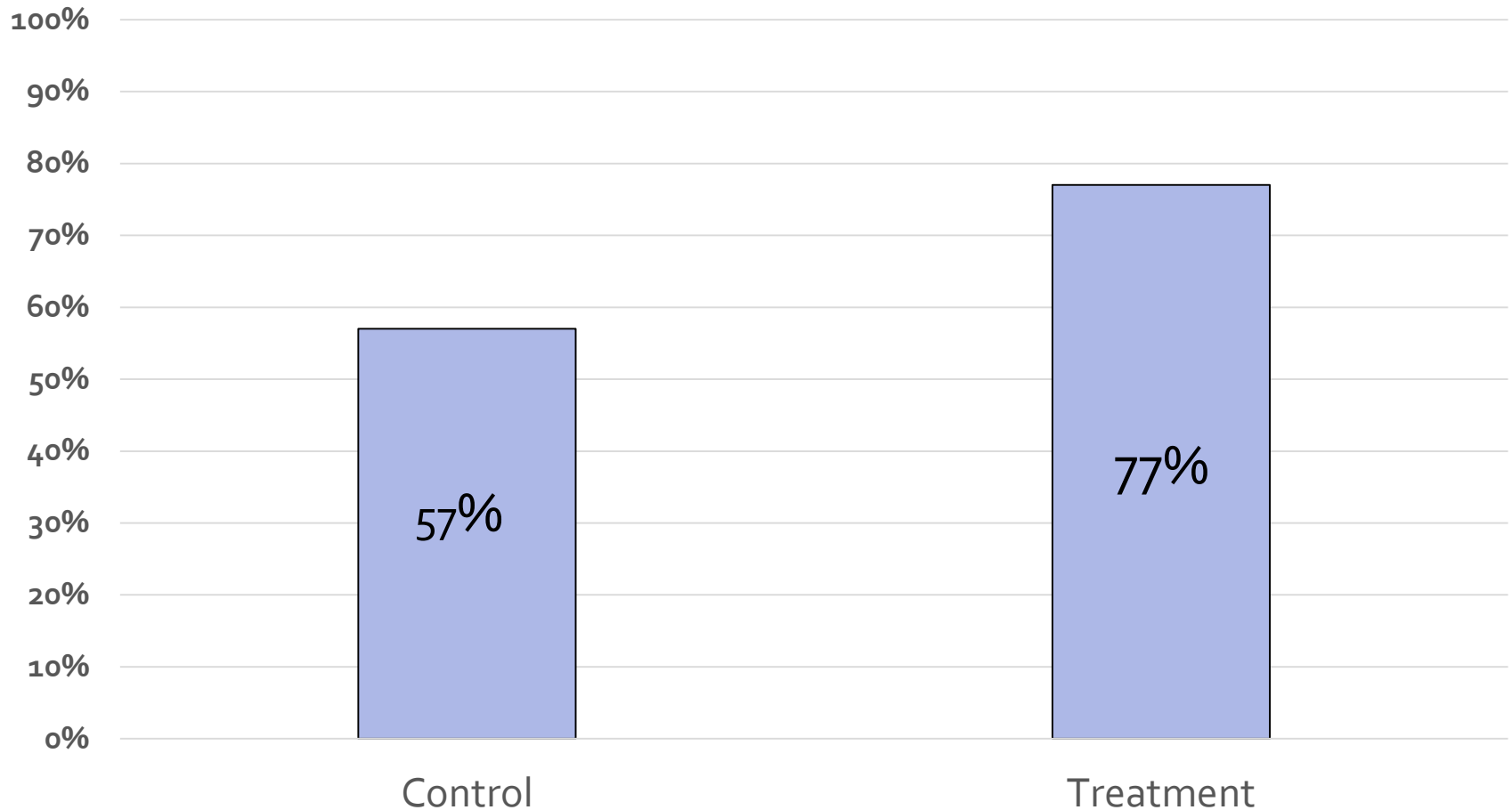
"I have a dream that little black boys and little black girls will be able to join hands with little white boys and little white girls and walk together as sisters and brothers."

use this in the essay.

Percentage of African American Students who Resubmitted their Essay (7th Grade)



Percentage of Classes Passed (high school)



30 Second Reflection

- What mindset intervention do you think would be most powerful for the students you work with at GSW? Why?

Growth



Expectancy

Purpose



Value

Social



Cost

Part 2: Seeing Your Motivation System

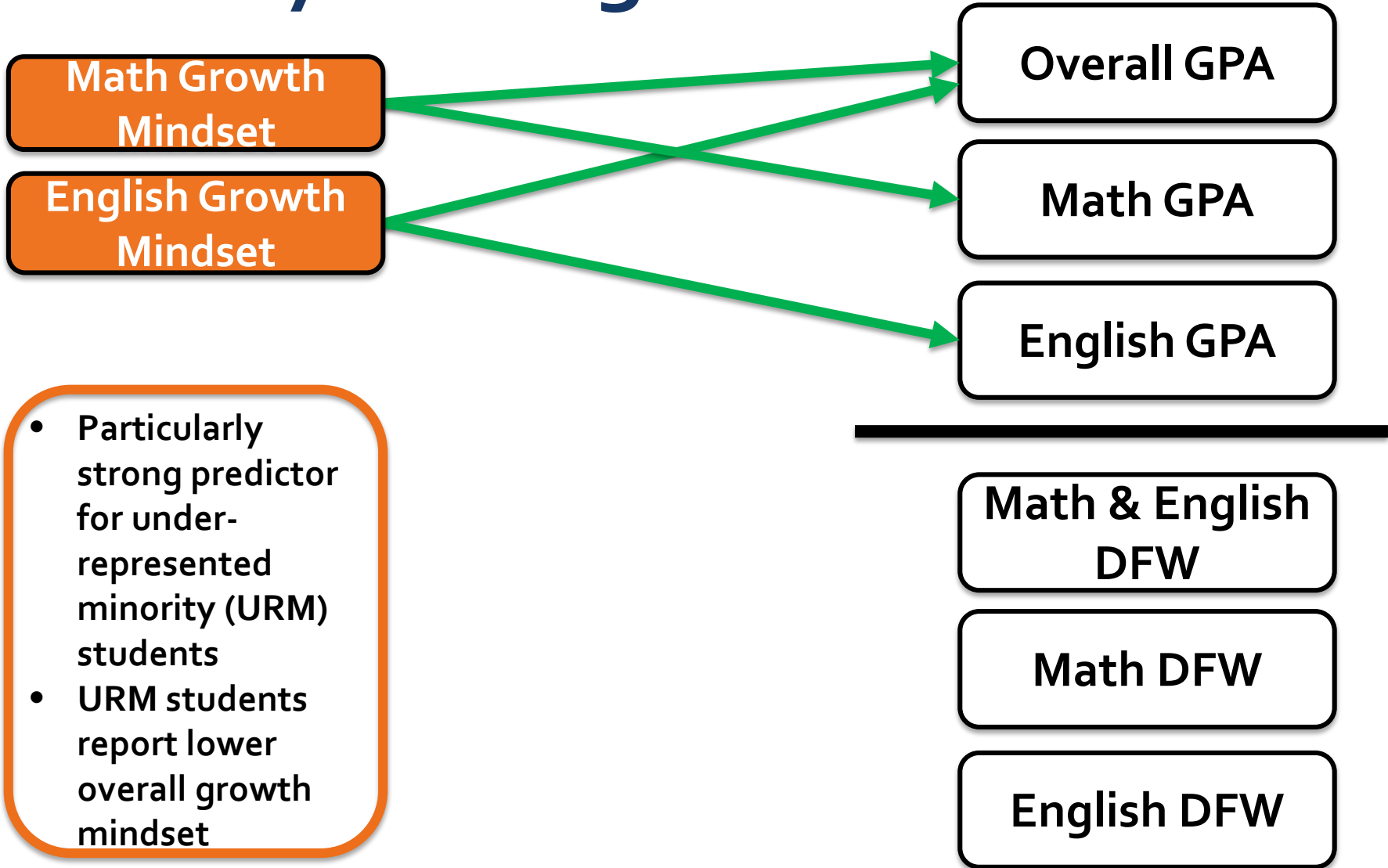


4,479
Mindset Survey
responses



112
Mindset Survey
responses

Survey Findings: Growth Mindset



Survey Findings: Value

Growth
Mindset

Math Value

English Value

Overall GPA

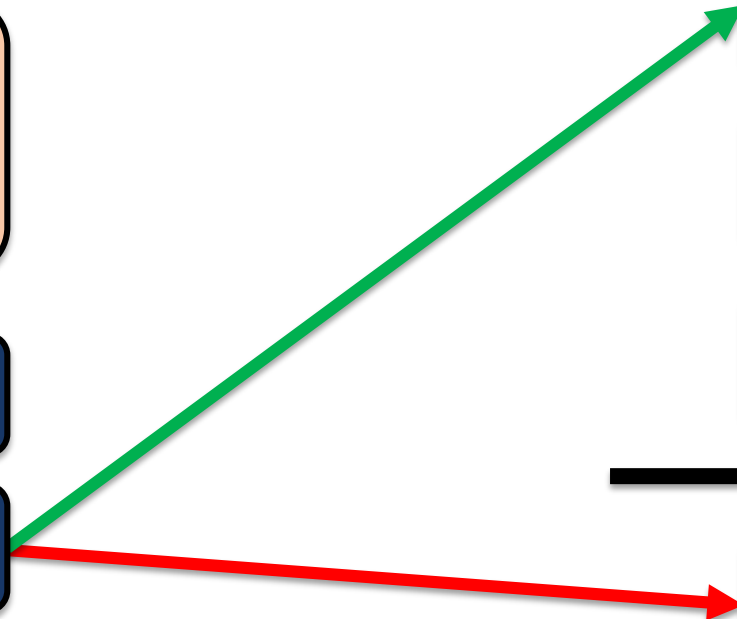
Math GPA

English GPA

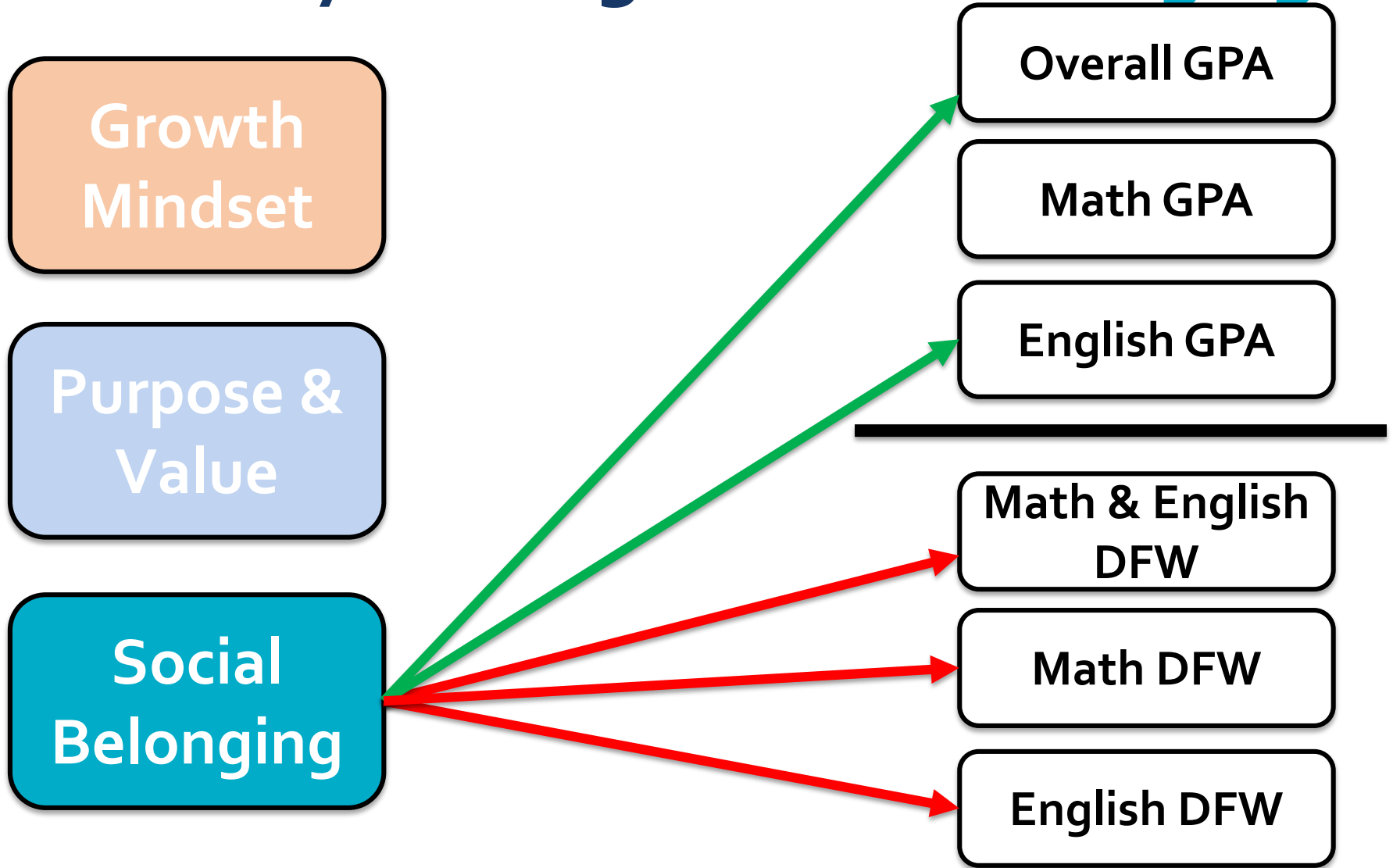
Math & English
DFW

Math DFW

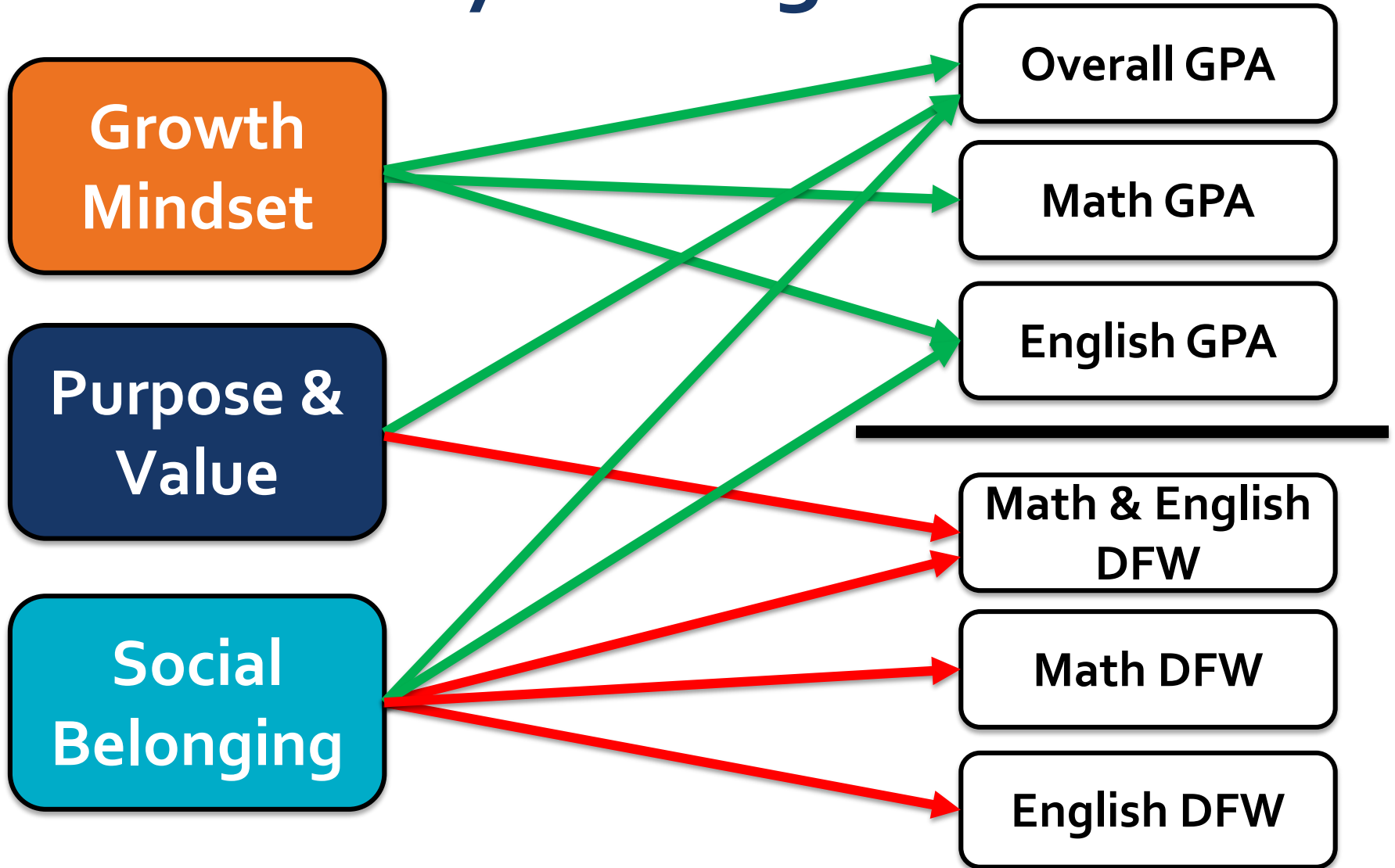
English DFW



Survey Findings: Social Belonging



Survey Findings: Overall



33%

2/3

92%

What are people saying?

Student Perspective

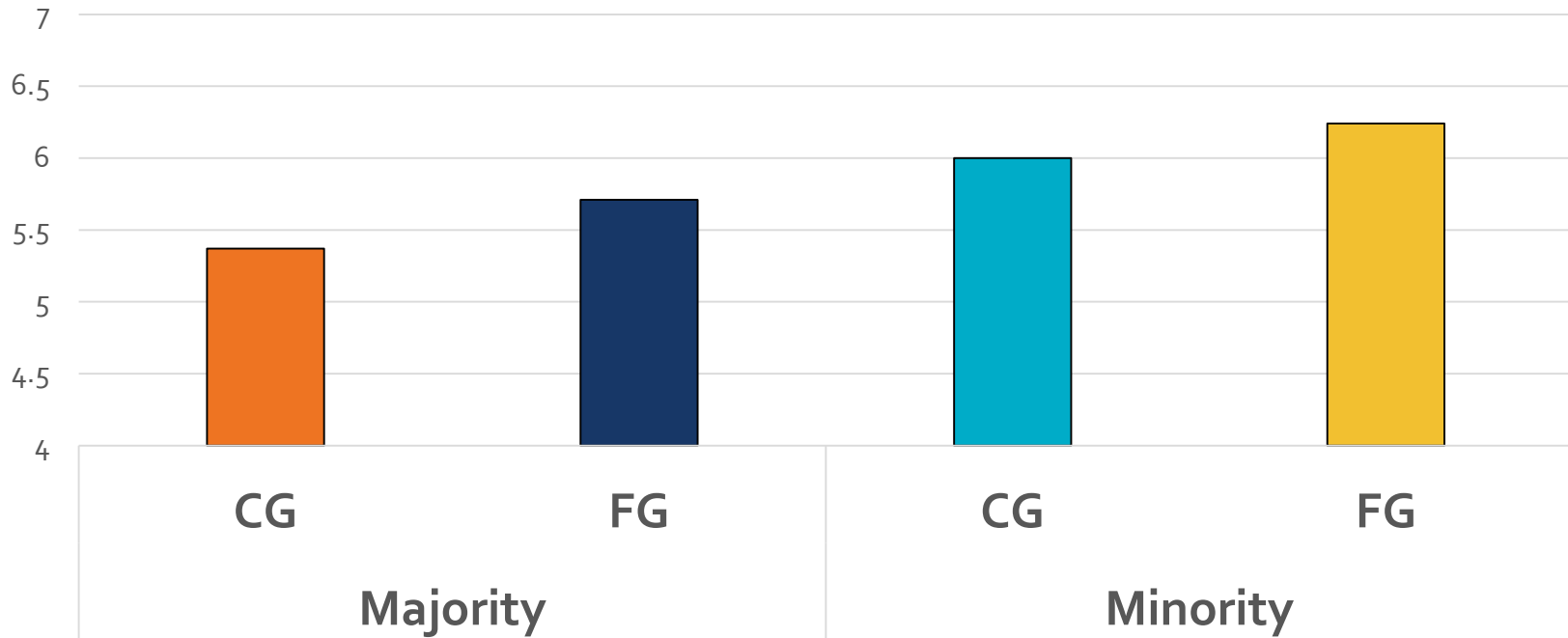
“Unnecessary classes and assignments. It’s hard to get motivated for a class not related to your major, or assignments that do not benefit you.”

Faculty Perspective

“They see value in anything that they’re going to orient themselves towards a career. They have a lot of trouble doing that with core courses”

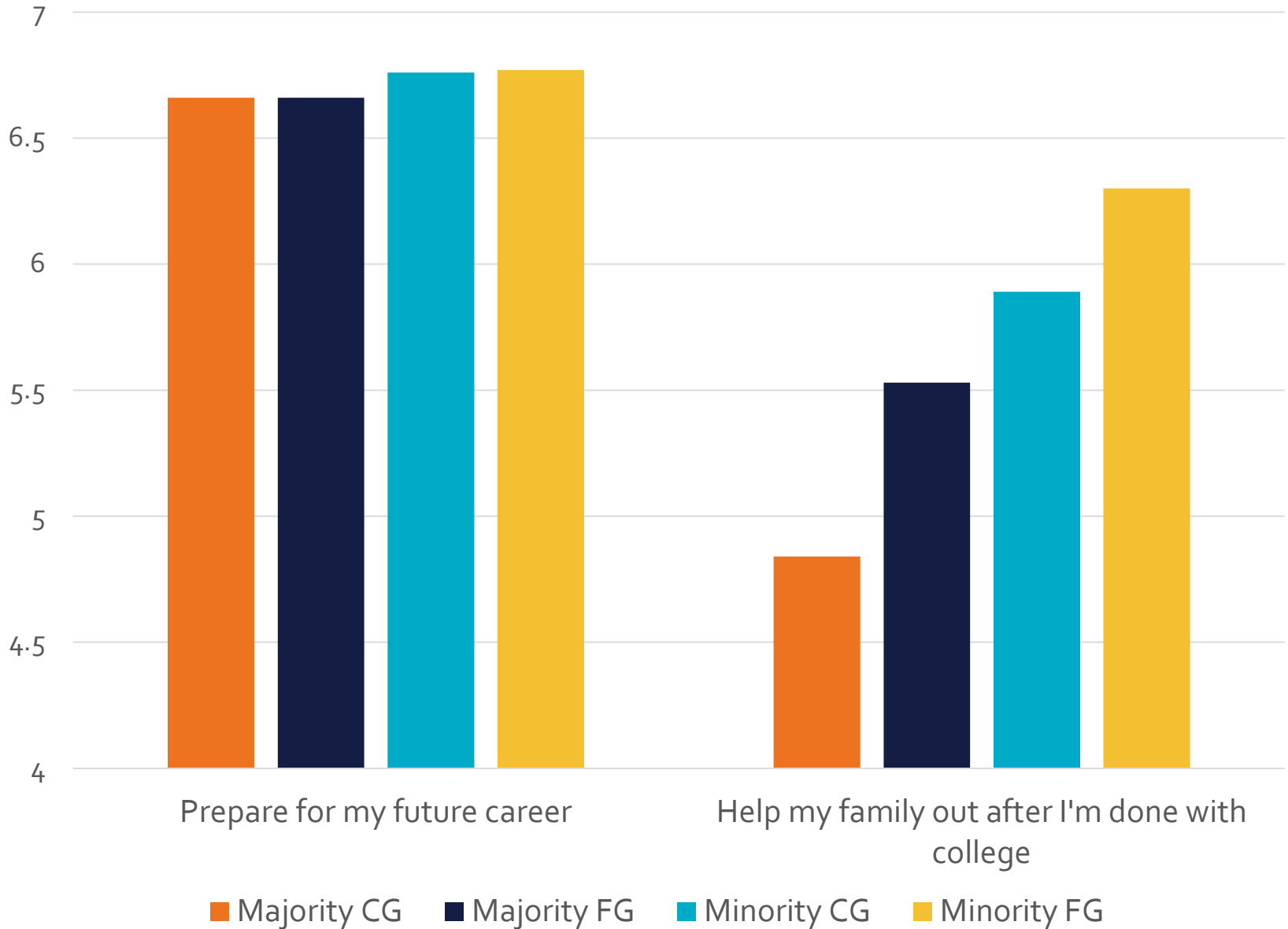
USG Students: Reasons for Completing a College Degree

Helping Motives



- Help my family out after I'm done with college
- Give back to my community
- Provide a better life for my own children

Motives for Attending College



Infusing Mindset-Supportive Practices Throughout the Academic Community

STATEWIDE

INSTITUTIONAL

CURRICULAR & PROGRAM

INSTRUCTIONAL & COMMUNITY SUPPORT

STUDENT

Wrap Up: 3 Key Take-Aways

#1) Can you start motivational planning?

$$M = E + V - C$$



$$M = E + V - C$$

Another example is my syllabus for Psyc212: Research Design and Data Analysis I

Lecture Topic and Reading Schedule and Due Dates: The following is a tentative lecture and reading schedule. Any changes will be announced in lecture.

Week	Date	Lecture Topic	Reading: From Jackson text
1	8/25 8/27	Course Overview and Rationale for Psyc212 and 213 Introduction to Psychological Research and Thinking Like a Scientist **Pass out HW#1	Preface Ch. 1
2	9/1	Introduction to Psychological Research and Thinking Like a Scientist	Outside reading

INSTRUCTOR'S COPY w/ MOTIVATIONAL PLANNING

Lecture Topic and Reading Schedule and Due Dates: The following reading schedule. Any changes will be announced in lecture.

Week	Date	Lecture Topic
1	8/25	Course Overview and Rationale for Psyc212 and 213 EVC - Learn students names before class (V) - Activity: PSYC 212 Information Survey (E, V, C) - Case Study: Replicate Context Experiment (E, V)
	8/27	Introduction to Psychological Research and Thinking Scientist EVC - Case Study: Reading an article from the Univ. of Wisconsin's college newspaper and debating whether the claim that <u>U.W.</u> is #2 is valid? (E, V) **Pass out HW#1



$$M = E + V - C$$

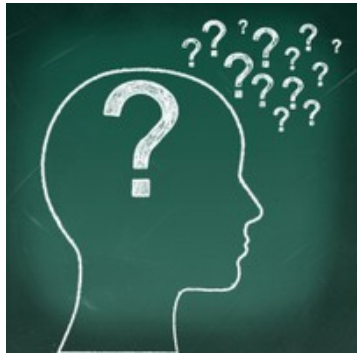
#2) Can you send **consistent** EVC messages throughout your course?

E.g.,

- Syllabus
- 1st day of class
- General approach to teaching each day of class (lecture vs. team-based learning)
- Specific content/activities for each day
- Type and amount of assignments
- Type and amount of readings
- Evaluation and grading practices
- Communication with students (in and out of class)
- Office Hours/Additional Support services
- Teaching particular student populations (e.g., 1st Generation, Freshman vs. Seniors, Minority Students)
- Last day of class (and how class ends)

#3) Can **you assess student mindsets?**

To help PLAN interventions



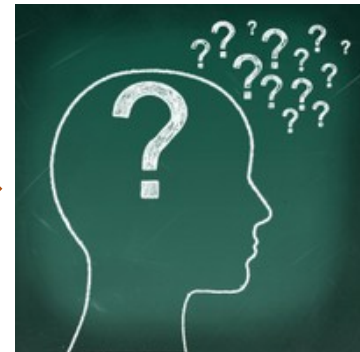
G?
P?
S?



If students' mindsets are _____, I should consider _____ as a new intervention?

To help EVALUATE interventions

This semester, I decided to adopt _____ as a new intervention, should I keep using it?



G?
P?
S?



#1) Can you start **motivational planning?**

#2) Can you send **consistent EVC
messages throughout your courses
and campus?**

#3) Can you **assess student mindset GPS?**

Thank you!

Questions?



motivatelab.org

Contact us:

chris.hulleman@virginia.edu

YoiTibbetts@Virginia.edu



Motivate Lab

Examples of Mindset-Supportive Practices:

<https://motivatelab.org/mindset-summit-2018>

Infusing Mindset-Supportive Practices Throughout the Academic Community

STATEWIDE

- Coordinate inter-institutional Learning Mindset Summit
- Incorporate mindset-supportive practices into Momentum Year initiatives

INSTITUTIONAL

- Facilitate a self-assessment of mindset-supportive practices on campus
- Support faculty and staff implementation of mindset-supportive practices
- Establish institutional requirement for focus areas to identify mindset-supportive practices

CURRICULAR & PROGRAM

- Provide resources for course and program design that emphasize learning mindsets
- Rethink program and curricular design with an eye towards mindset-supportive practices (e.g., advising, orientation, critical courses)

INSTRUCTIONAL & COMMUNITY SUPPORT

- Develop mindset-supportive modules, activities, and protocols and offer training and professional development for use of these practices
- Create learning mindset networked improvement communities

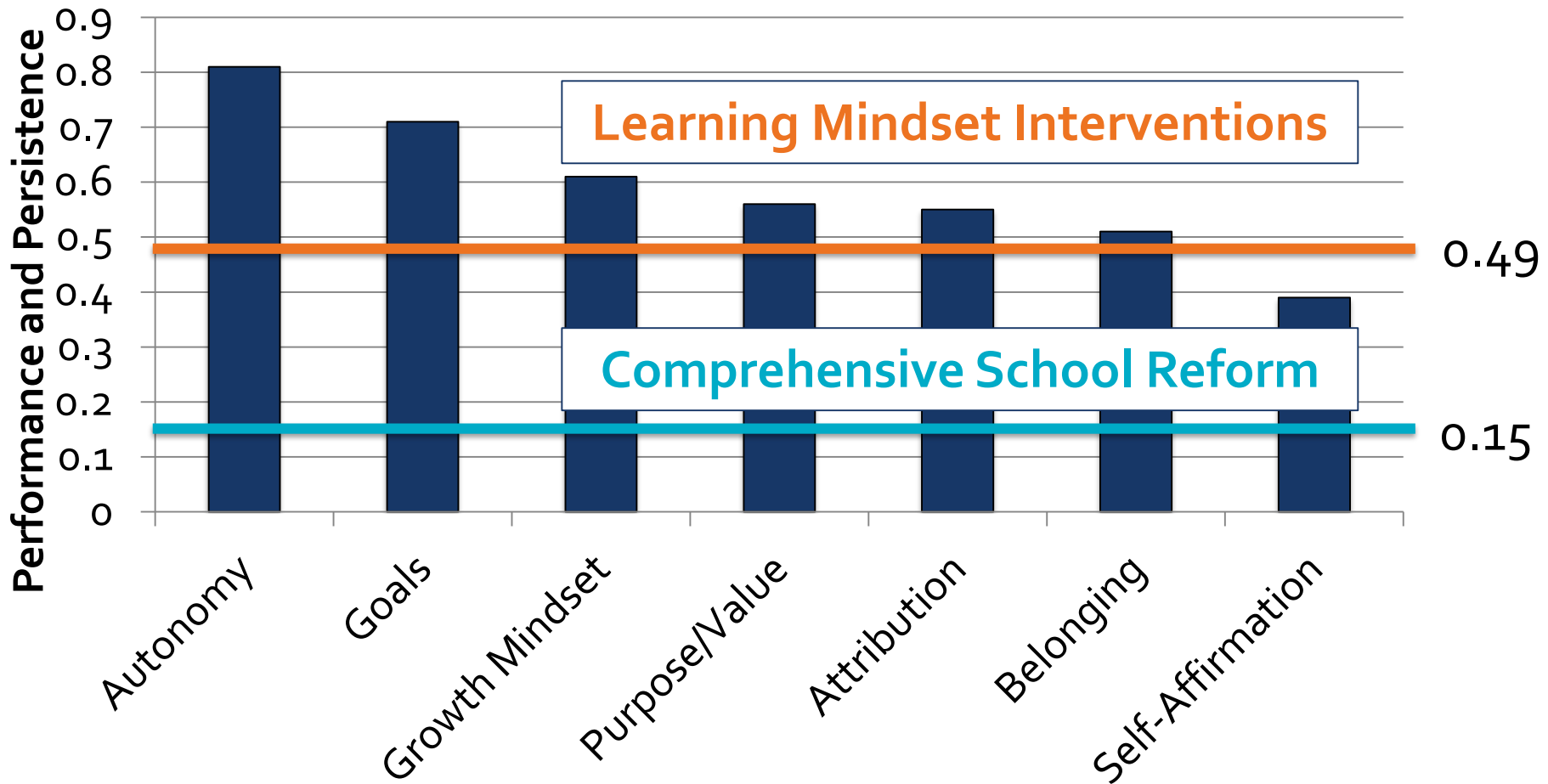
STUDENT

- Customize existing, research-based learning mindset interventions (e.g., growth mindset, value) to best match the learning context and students)
- Develop and test new interventions to meet specific student needs (e.g., cost perception)

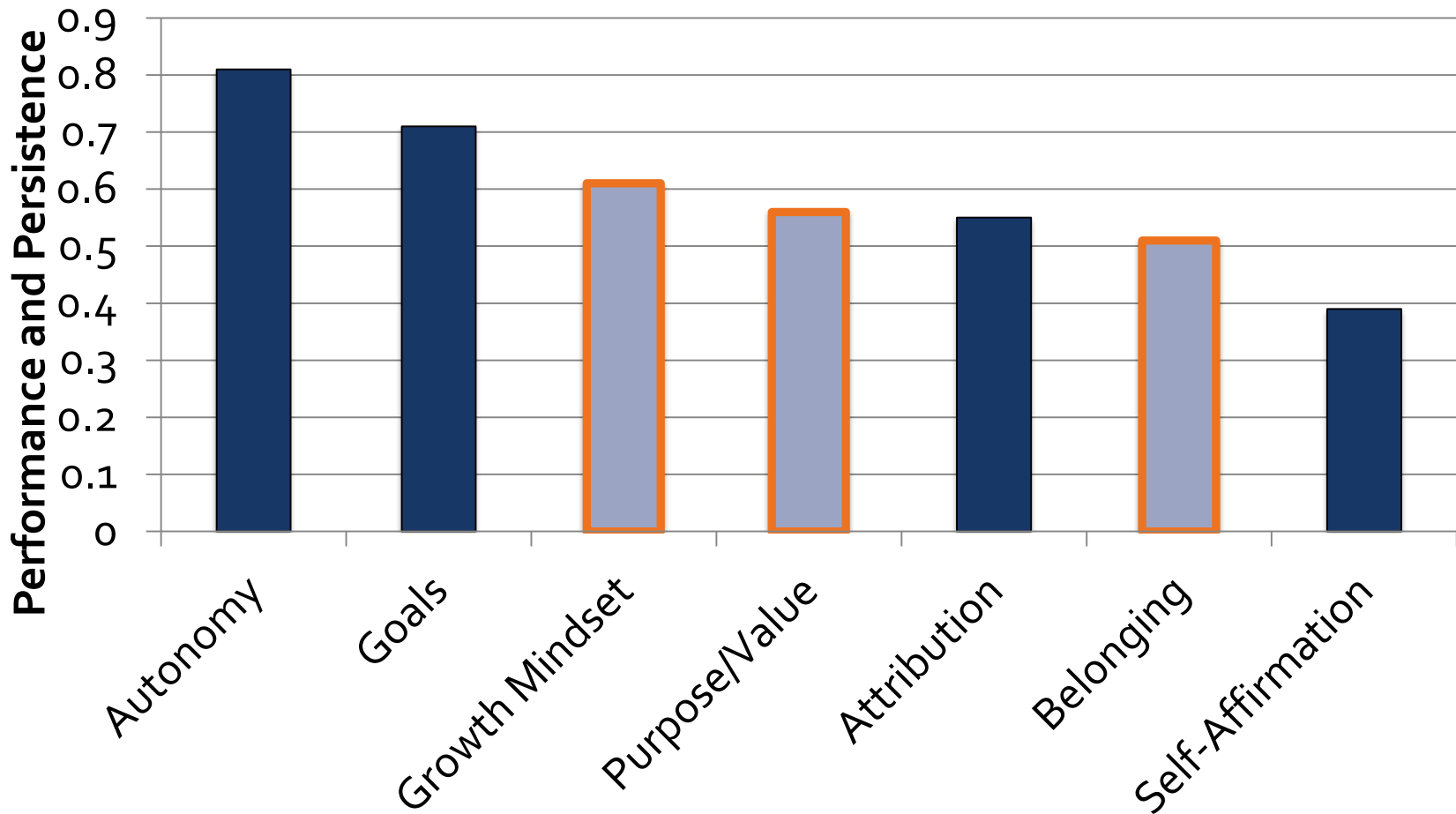
Three Practical Tips

1. Use language that promotes relational trust and academic support
 - See “**Wise framing for feedback**” activity
 - Remember to emphasize *high standards* and *assurance*
2. Scaffold/Enable students to identify course value for themselves
 - Multiple Strategies
 - See “**build connections**” activity
3. Choose activities, assessments, and pedagogical practices that offer opportunities for social connection
 - See “**Group roles and norms**” activity

Targeting Learning Mindsets Boosts Performance and Persistence



Targeting Learning Mindsets Boosts Performance and Persistence



But Remember...

- Learning mindset interventions can be powerful, but they aren't magic



Learning Mindset Interventions can be Powerful Because...

- They serve as a catalyst for larger change
- They can be infused within existing initiatives
- Positive effects of interventions are amplified through classroom, school, and system-level changes



College Biology Course Example

“A couple of months ago you broke my heart when you told me you would be attending Nebraska instead of Wisconsin.”

“The question I asked myself was this, based on the foods our schools are known for, which school students could survive longer only consuming those foods?”

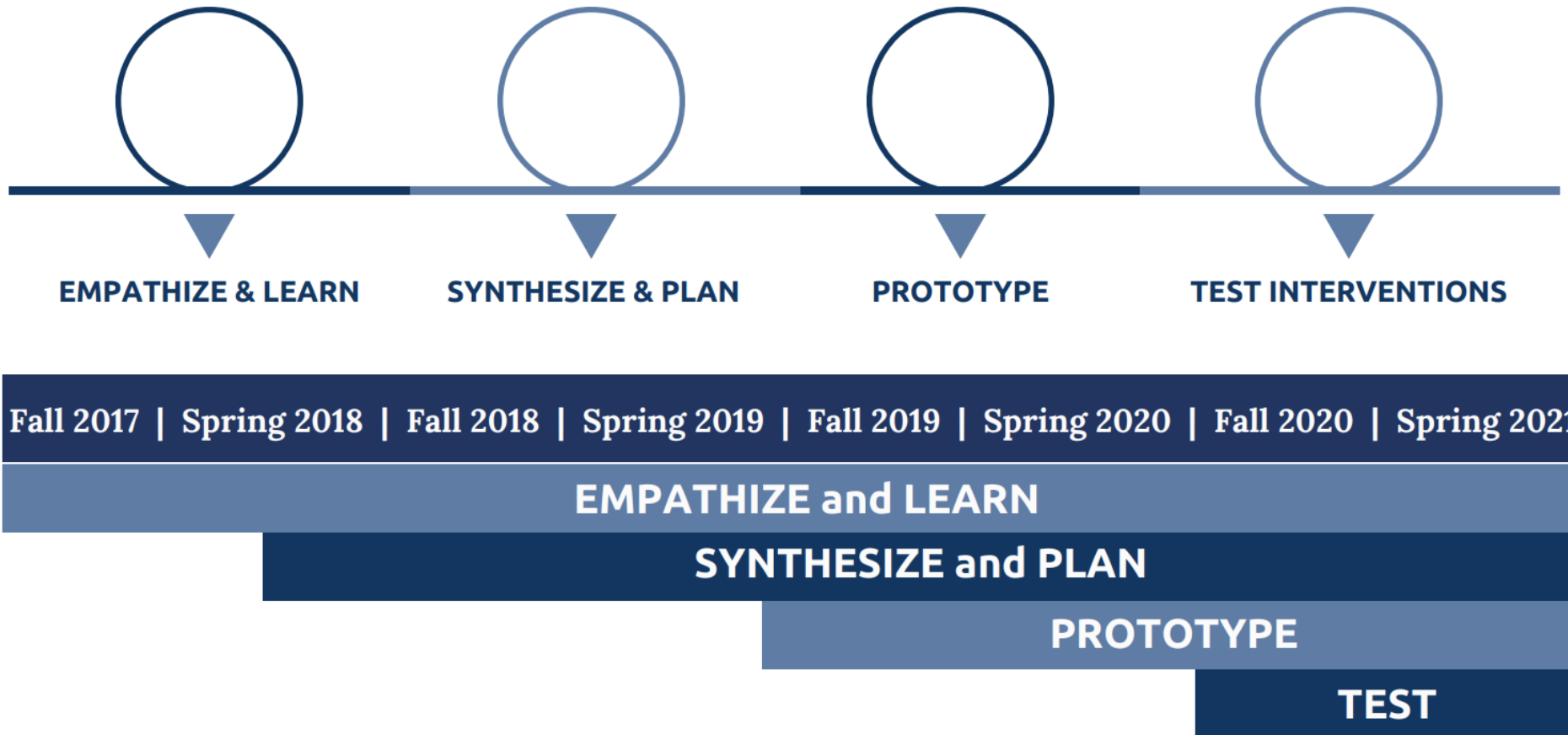
“Overall, corn is extremely lacking in fat, protein, calcium, and vitamin A. For example, corn only provides 4.1g (8%DV) of protein per serving, 6% of the daily value of vitamin A...”

“Cheddar cheese, a Wisconsin staple, on the other hand provides those who consume it with 32.9 g of protein (66% DV), 1170 mg of threonine....essentially, cheese provides eight times more amino acids and protein.”

“In conclusion, Wisconsin Badgers would have fewer issues related to protein, calcium, and vitamin A deficiency compared to the Nebraska Huskers.”

Although cheddar cheese is known for being high in fat, Wisconsin is cold in the winter so we need that fat anyways. I think this proves my point that you made a poor choice when deciding to go to Nebraska.”

Current Draft/Preliminary Timeline



What Have We Done?

WHAT WE DID

ADVISING ACADEMY

OCTOBER 2017

Participated in panel on successfully transitioning to college and worked with advisors to think through best advising practices

STUDENT SURVEY

FALL 2017

Surveyed first year students at all USG schools about their learning mindsets, future goals, and reasons for attending college. These data are being connected to academic records and analyses are ongoing

MOMENTUM SUMMIT

FEBRUARY 2018

Consulted with representatives from USG institutions about how to incorporate learning mindsets into Momentum Year planning

STRONG START TO FINISH GRANT

JANUARY 2018

Participated in the construction of a collaboration with multiple institutions (e.g., Complete College America, Gardner Institute) to cultivate productive academic mindsets and increase degree attainment

WHAT WE'RE DOING

SITE VISITS

APRIL 2018

Meeting formally and informally with students, faculty, staff, and key personnel at several schools in the USG system to understand the school climate and student experience

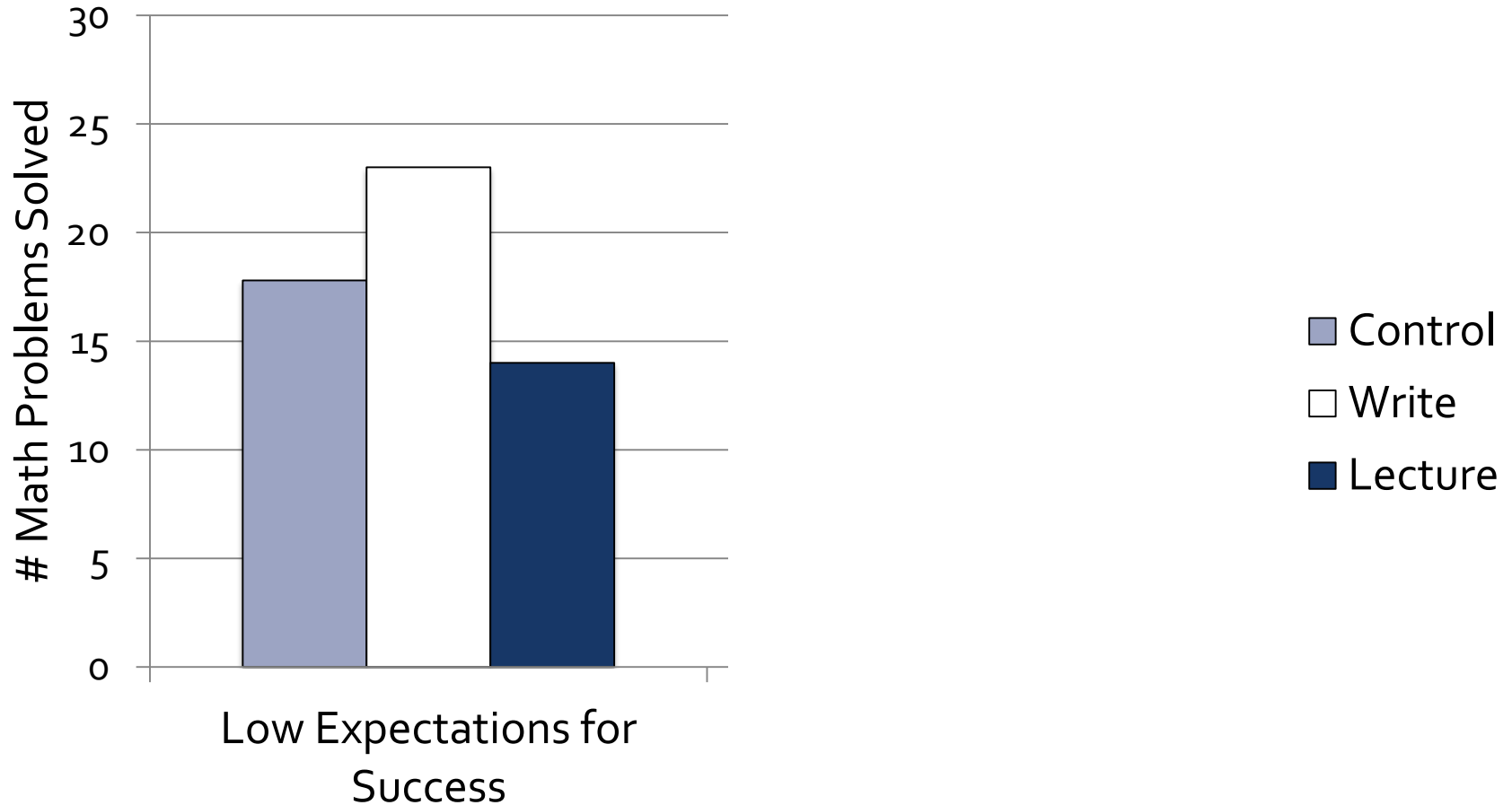
Conducting classroom observations to gain insight into students' educational experience

MINDSET SUMMIT

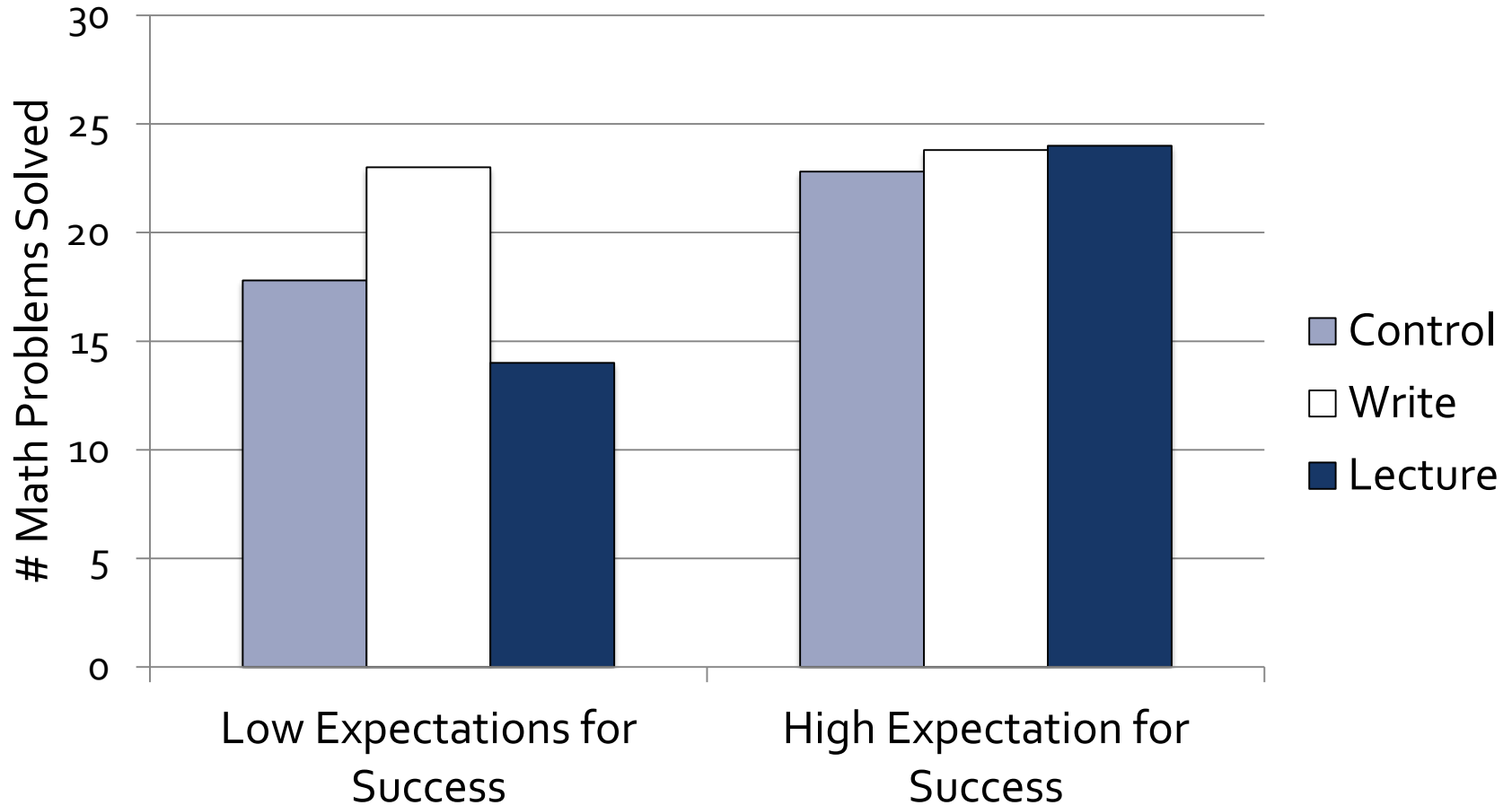
MAY 2018

Leading a meeting about how to infuse mindset supportive practices into all levels of the USG system

Respecting Students' Perspective



Respecting Students' Perspective



(Mindset) Interventions are most effective when they are...

- Targeted
- Tailored
- Tracked

(Mindset) Interventions are most effective when they are...

- Targeted...to the source
- Tailored
- Tracked

(Mindset) Interventions are most effective when they are...

- Targeted...to the source
- Tailored...to your context
- Tracked

(Mindset) Interventions are most effective when they are...

- **Targeted**...to the source
- **Tailored**...to your context
- **Tracked**...measured over time and in relation to desired outcomes

