

Nuts and Bolts

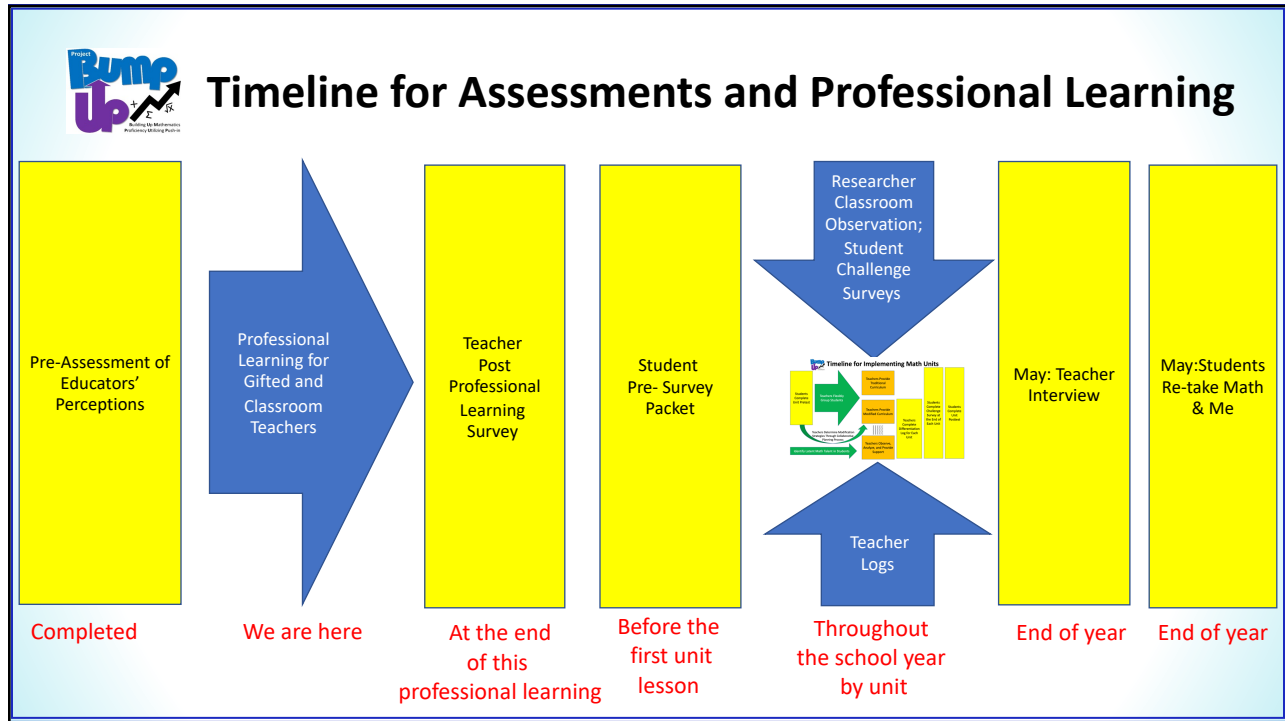
Project BUMP UP

1

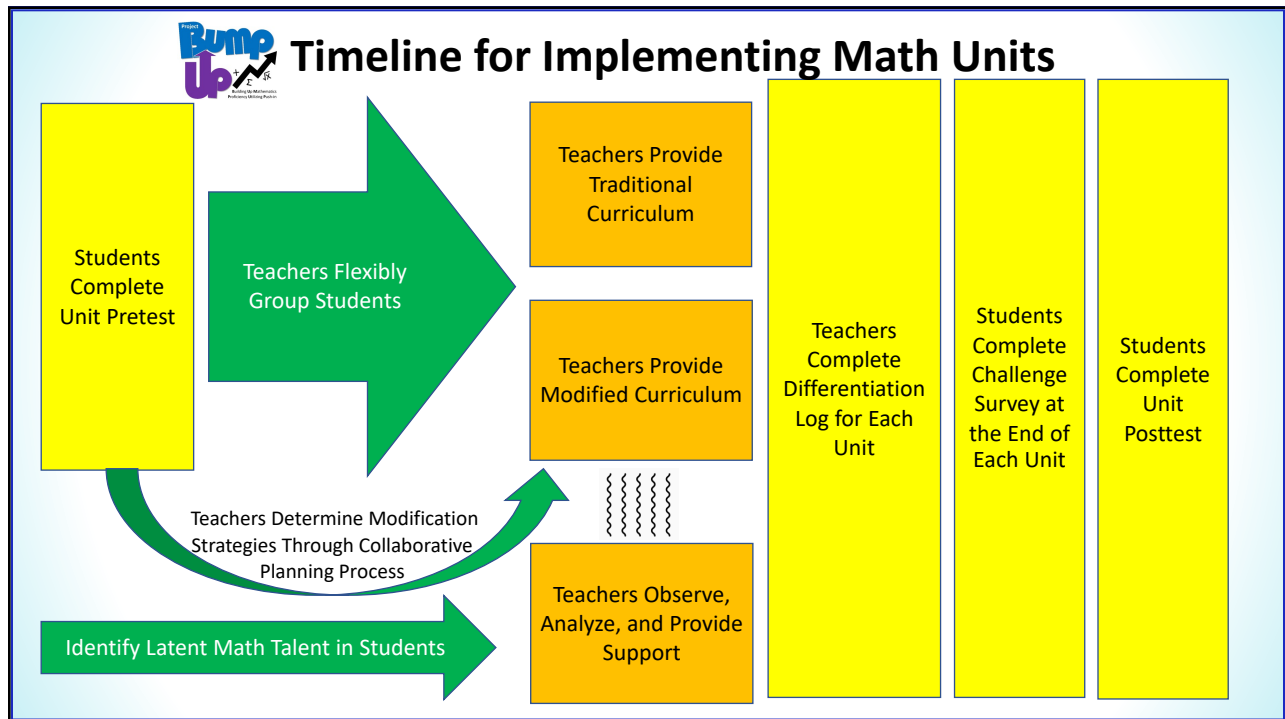
Goals:

- Inform PBU team of non-participating students
- Protocols for participating/non-participating students
- Student surveys
- PBU data

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Teacher Components



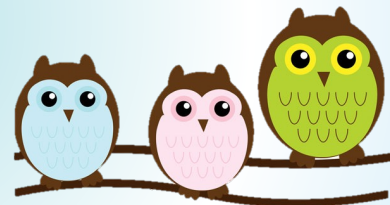
- Beginning of year
 - Parent/Guardian BUMP UP information & opt-out form
- By Unit
 - Pre-assess
 - Co-plan by unit
 - Co-teach
 - Post-assess
 - Upload pre- and post-unit scores
 - Teacher post-unit survey (some units)
 - Teacher differentiation log (all units)
- Five Units
 - Points of Promise lesson (5 units)
 - Teacher Survey
- End of year
 - Teacher interview

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Student Components

- Beginning of year
 - Math and Me survey
- By Topic/Unit
 - Pre-topic/unit assessment
 - Points of Promise lesson (5 units)
 - Participate in flexible group differentiated math
 - Student perception of math challenge survey
 - Post-unit assessment
- End of year
 - Math and Me survey



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Distribute PBU parent/guardian information

- Send home
- Inform the PBU team of non-participating students
- Email bumpup@uconn.edu
 - Use only the student's identification number (no names)
- Students/parents/guardians may opt out any time

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Project BUMP UP	Participating Students	Non-Participating Students
Participation	All participate except for those whose parents/guardians opt out.	Notify bumpup@uconn.edu by student ID number of those who opt out. NO NAMES
Online Surveys	Take surveys	Do not take surveys
Pre- and Post-Assessments	Take assessments; Teacher reports scores by student ID numbers. NO NAMES	Take assessments as part of regular classroom instruction; Teacher does NOT report scores to BUMP UP.
Points of Promise Lessons	All participate	All participate as part of regular classroom instruction.
Flexible Differentiation Groups	All participate who show need. Teacher reports participation by student ID numbers	All participate who show need. Teacher does NOT report participation to BUMP UP.

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Student Surveys Online Links

- Math and Me – After 8/30/24 but before the first BUMP UP Unit
- Student Perception of Math Challenge Survey – After each unit
 - Teach the Student Survey Lesson prior to the first survey

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Math and Me Survey

Twice:

- After sending permissions and receiving any opt-outs
- Before implementing co-teaching
- End of the school year

Project BUMP UP Math & Me Survey

Classroom BUMP UP Number
Ingrese su número de CLASE de Proyecto BUMP UP

Next, enter your student identification number.
Luego, entra tu número

Please circle **ONE** response for each question. Remember that there are no "right" or "wrong" answers. These are about how you feel about math.
Traza un círculo alrededor de UNA respuesta para cada pregunta. Recuerde que no hay respuestas "correctas" o "incorrectas". Las preguntas se tratan de cómo te sientes acerca de las matemáticas.

	Neither Agree Nor Disagree				
	Strongly Disagree (En total desacuerdo)	Disagree (No estoy de acuerdo)	No estoy de acuerdo ni en desacuerdo	Agree (De acuerdo)	Strongly Agree (Muy de acuerdo)
1. I am really good at math. <i>(Soy muy bueno en matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I love math. <i>(Año las matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I understand math. <i>(Entiendo matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Math is boring. <i>(Las matemáticas son aburridas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I can solve difficult math problems. <i>(Puedo resolver problemas matemáticos difíciles.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I enjoy doing math puzzles. <i>(Me gusta hacer acertijos matemáticos.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Math is very hard for me. <i>(Las matemáticas son muy difíciles para mí.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I do math problems on my own "just for fun." <i>(Resuelvo problemas de matemáticas "solo por diversión".)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Math is confusing to me. <i>(Las matemáticas me confunden.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Math is fun. <i>(Las matemáticas son divertidas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I look forward to learning new math. <i>(Tengo ganas de aprender nuevas matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Math comes easily to me. <i>(Las matemáticas son fáciles para mí.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I hate math. <i>(Odo Matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I enjoy playing math games. <i>(Me gusta jugar juegos de matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I can tell if my answers in math make sense. <i>(Puedo sentir si mis respuestas en matemáticas tienen sentido.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I enjoy studying math. <i>(Me gusta estudiar matemáticas.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Doing math is easy for me. <i>(Hacer matemáticas es fácil para mí.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Solving math problems is fun. <i>(Resolver problemas de matemáticas es divertido.)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

THANK YOU
for responding!

- The Project BUMP UP Team

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Student Perception of Math Challenge Survey Lesson

- Audience:** All participating students
- Purpose:** To acquaint students with the survey. This is best done when students are taking the survey for the first time so teachers may demonstrate the process and have students complete their first survey.
- Time:** 15 minutes
- Format:** Whole class discussion and demonstration
- Equipment:** Projector and link to survey
- Objectives:** By the end of this lesson, students will
 - Understand the purpose of the Project BUMP UP survey.
 - Understand how to rate concepts of challenge, new math concepts, interest, and engagement.
 - Be able to successfully complete the survey.
 - Know how to get help if they have any difficulty.
- Pre-assessment:**
 - Ask students what they know about rating things or completing surveys. Call on students for responses. Student answers may range from rating items or videos online to knowing about surveys their parents have answered.
 - Ask students what they know about why we rate things or take surveys. Call on students for responses.
- Introduction and Overview**
 - Based on the pre-assessment, **tell students** about survey items you have recently rated either on paper or online (restaurants, online shopping, etc.) Describe why you did and what was important or helpful about doing so (e.g., rating a restaurant gave the owners helpful feedback about the food, answering survey questions about a new app let the developers know how the app worked).
 - Share that you are **working with education researchers** about teaching math and researchers are interested in students' experiences in math.
 - Share the **objectives** in student language. *"Today, we are going to learn about a quick math survey that you will take each unit. It is a way you can let the researchers know your opinion of your math experiences. By the end of this lesson, you will"*

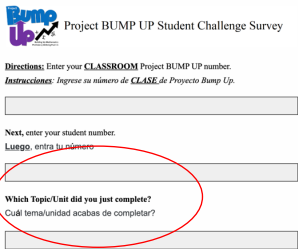
Student Perception of Math Challenge Survey Lesson

Teach the lesson prior to the first student challenge survey

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Student Perception of Math Challenge Survey

- Teach the lesson prior to the first BUMP UP unit survey
- Have students take the survey as indicated on the Gr. 4&5 BUMP UP Calendar (linked on BUMP UP site and in binder).
- <https://s.uconn.edu/student-challengesurvey>



Project Bump Up Student Challenge Survey


Directions: Enter your CLASSROOM Project Bump Up number.
Instrucciones: Ingrese su número de CLASE de Proyecto Bump Up.

Next, enter your student number.
Luego, entra tu número.

Which Topic/Unit did you just complete?
Cuál tema/unidad acabas de completar?

Directions: Rate the following four characteristics of this week's math class.
Instrucciones: Califique las siguientes cuatro características de la clase de matemáticas de esta semana.

CHALLENGE: Move the slider on the number line below to rate how challenging math class was for you this week.
DESAFÍO: Mueva el control deslizante en la línea numérica para calificar el nivel de desafío de la clase de matemáticas para ti esta semana.



NEW MATH CONCEPTS: Select a rating star below to tell us how much you learned during math class this week.
NUEVOS CONCEPTOS MATEMÁTICOS: Seleccione una estrella de calificación para decirnos cuánto aprendiste durante la clase de matemáticas hoy.

1 star = Nothing was new to me. (1 estrella = Nada era nuevo para mí.)
10 stars = Everything was new to me. (10 estrellas = Todo era nuevo para mí.)

☆☆☆☆☆☆☆☆☆☆

INTEREST: Select a rating star below to tell us how interesting you thought math class was this week.
INTERÉS: Seleccione una estrella de calificación para decirnos qué interesante fue la clase de matemáticas esta semana.

1 star = Not at all interesting (1 estrella = Ni un poco interesante)
10 stars = Extremely interesting (10 estrellas = Extremadamente interesante)

☆☆☆☆☆☆☆☆☆☆


ENGAGEMENT: Select a rating star below to tell us how engaged you were during math class this week.
COMPROMISO: Seleccione una estrella de calificación para decirnos qué dedicado estuviste durante la clase de matemáticas hoy.

1 star = Not at all engaged (1 estrella = Ni un poco dedicado)
10 stars = Extremely engaged (10 estrellas = Extremadamente dedicado)

☆☆☆☆☆☆☆☆☆☆

THANK YOU
for responding!

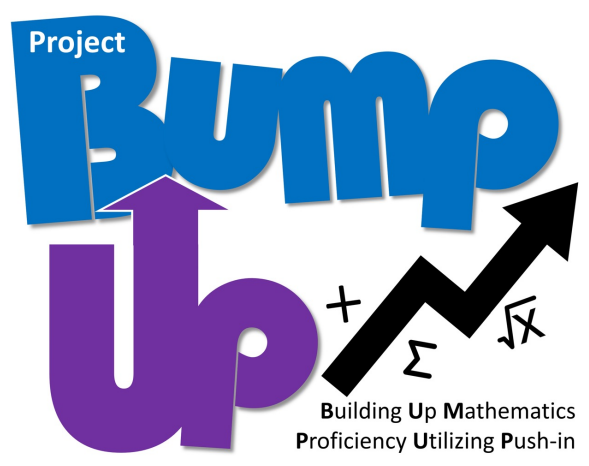
- The Project Bump Up Team




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Learning Something New Matters


*Del Siegle, Susan Dulong Langley, D. Betsy McCoach,
Ashley Carpenter, Kenneth J. Wright, Kelly Kearney, &
Sarah D. Newton*



**Building Up Mathematics
Proficiency Utilizing Push-in**



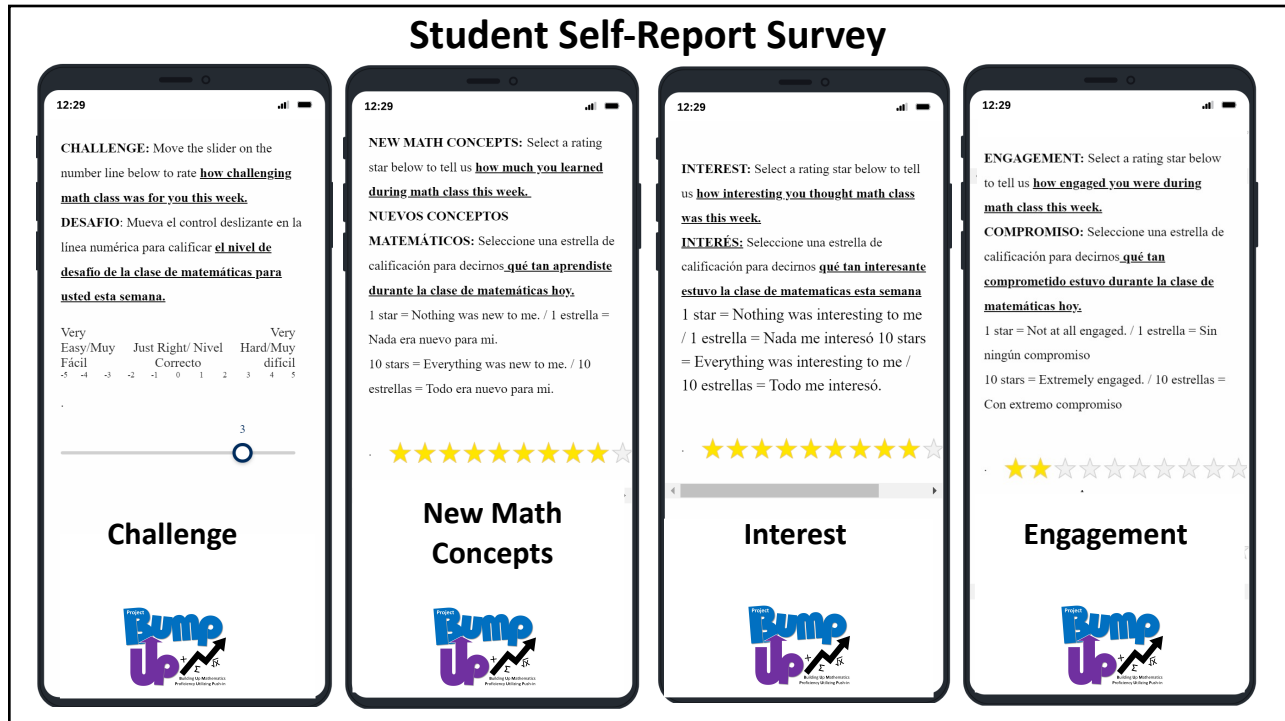
UNIVERSITY OF CONNECTICUT
RENZULLI CENTER FOR CREATIVITY, GIFTED
EDUCATION, AND TALENT DEVELOPMENT



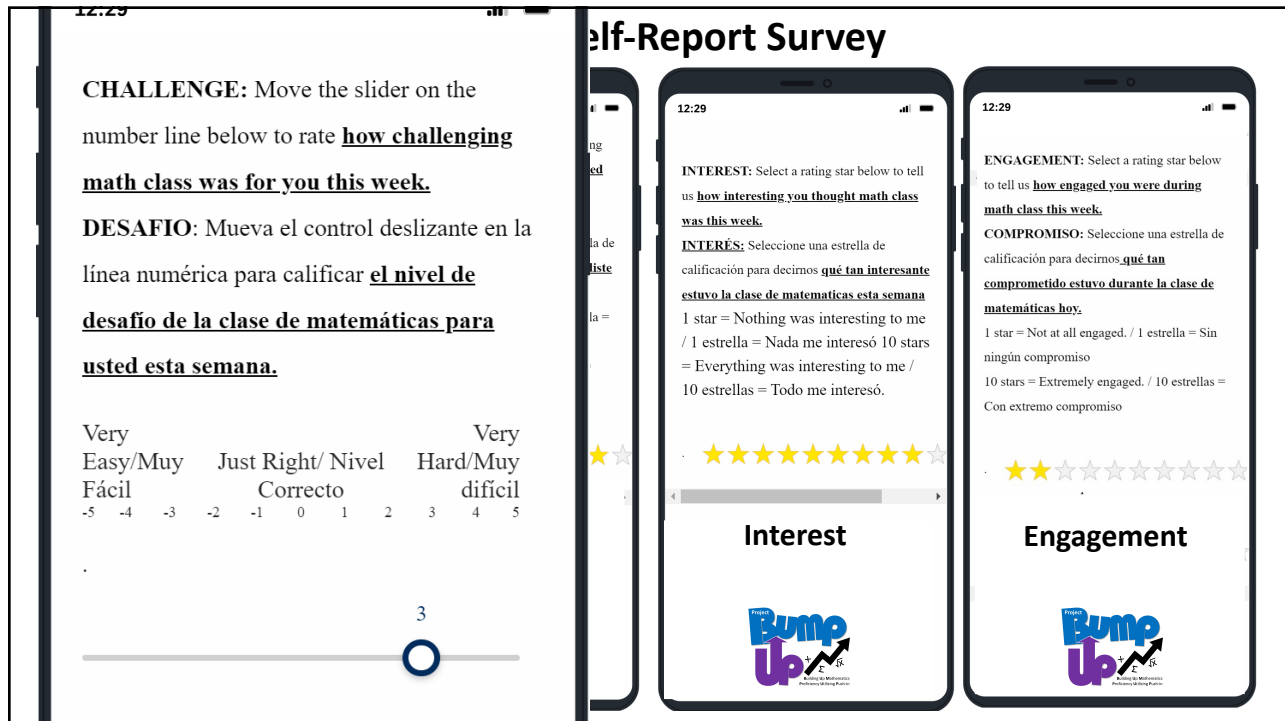
WILLIAM & MARY
CHARTERED 1693

FUNDED BY JACOB K. JAVITS GIFTED AND TALENTED STUDENTS
EDUCATION PROGRAM, U.S. DEPARTMENT OF EDUCATION
PR/AWARD # S206A190028

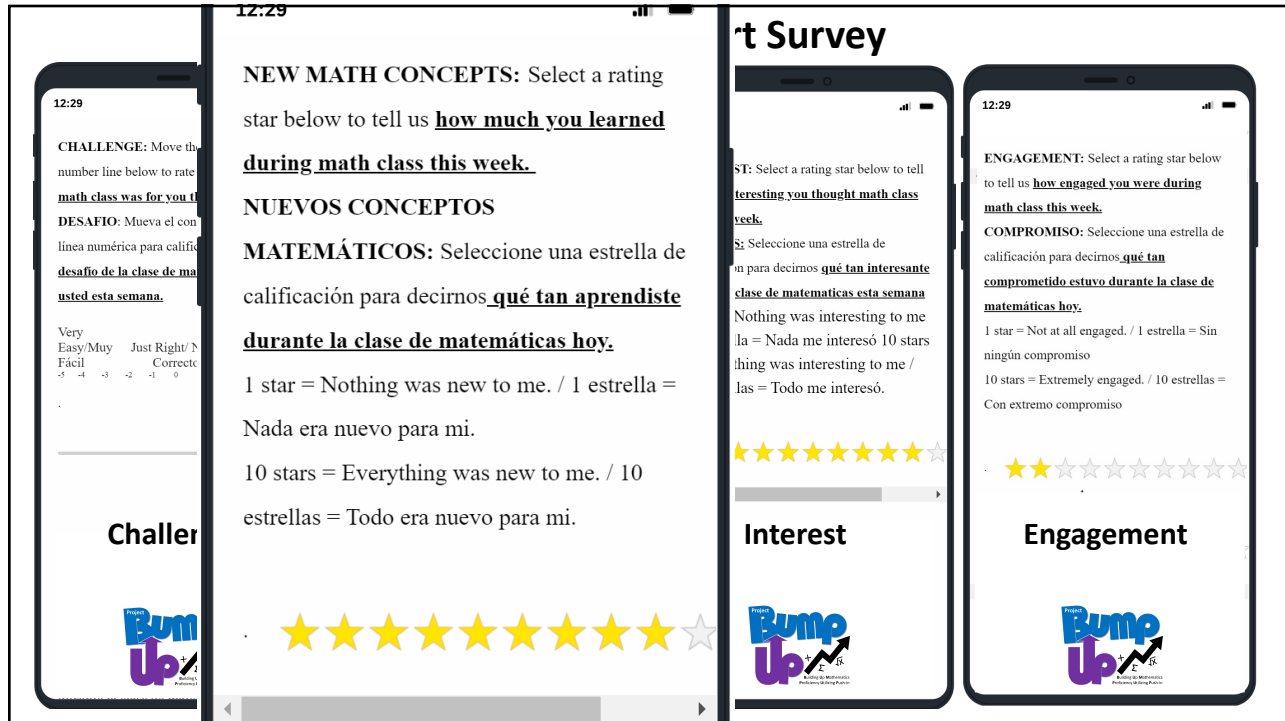
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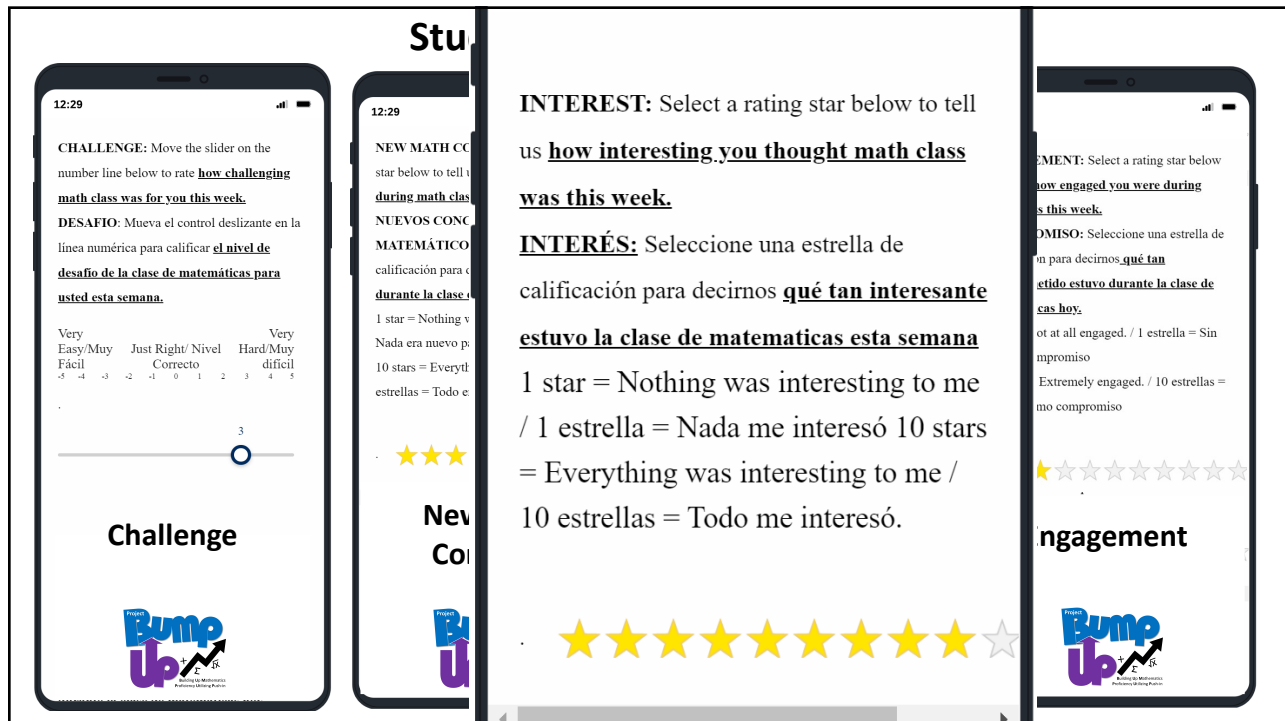
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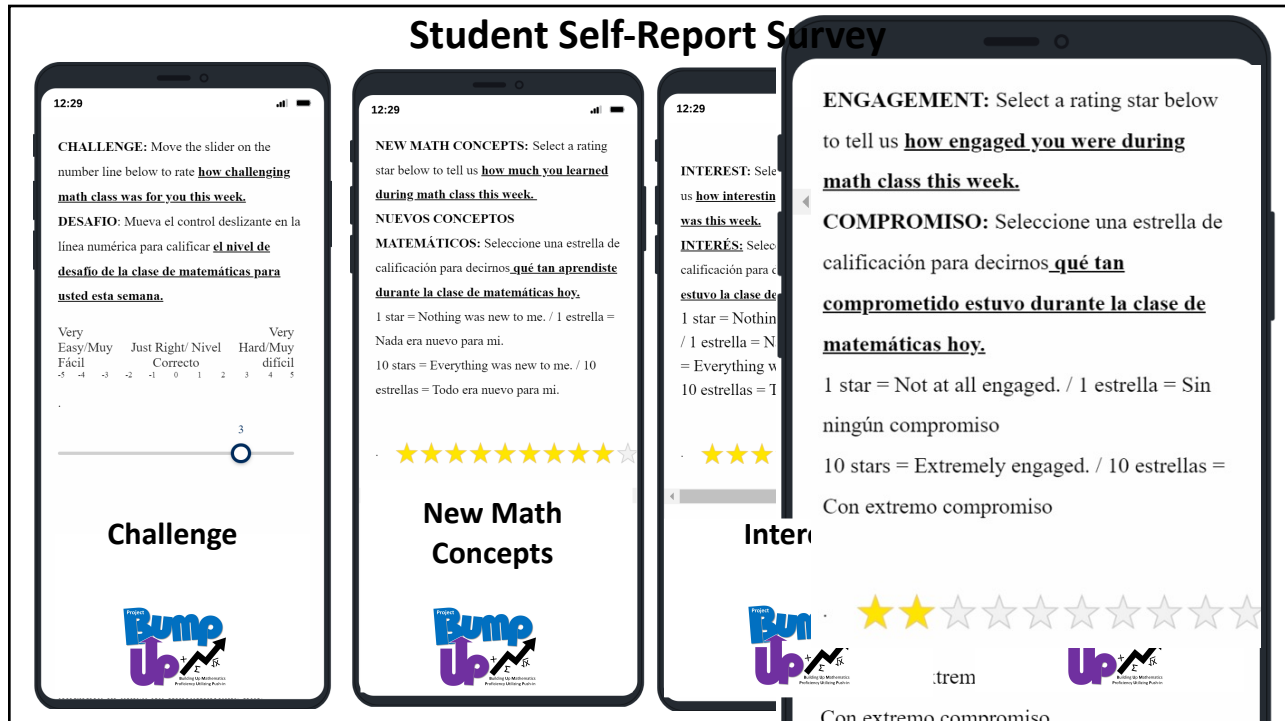
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Descriptive Statistics N=248

Construct	M (SD)
Challenge	-0.316 (2.765)
New Math Concepts	5.717 (2.809)
Interest	6.386 (2.856)
Engagement	7.016 (2.464)

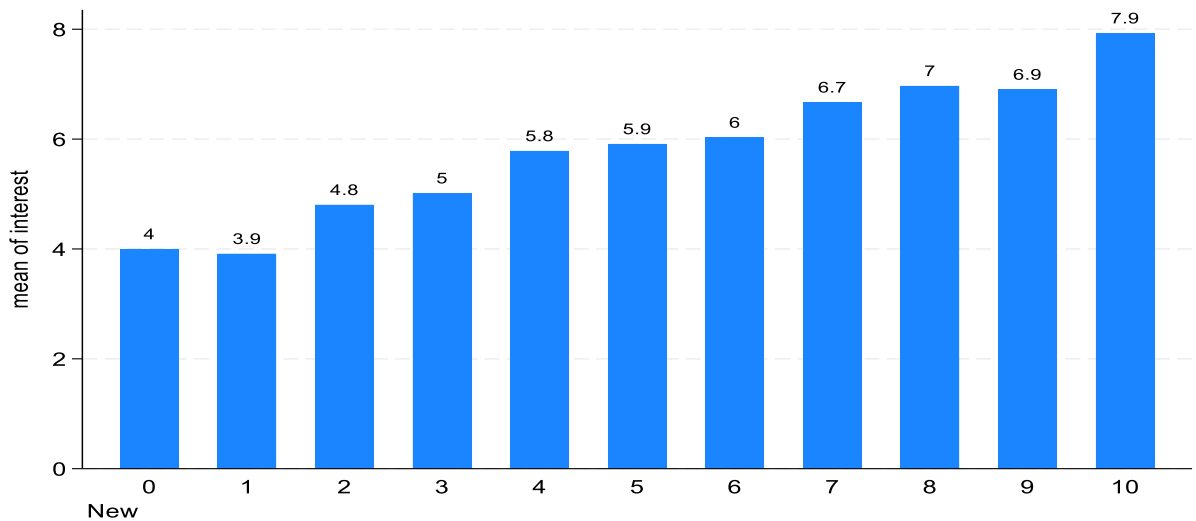
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Correlations

	New	Challenge	Interest	Engage
New Math Concepts	1.00			
Challenge	0.23	1.00		
Interest	0.46	-0.06	1.00	
Engagement	0.29	-0.18	0.50	1.00

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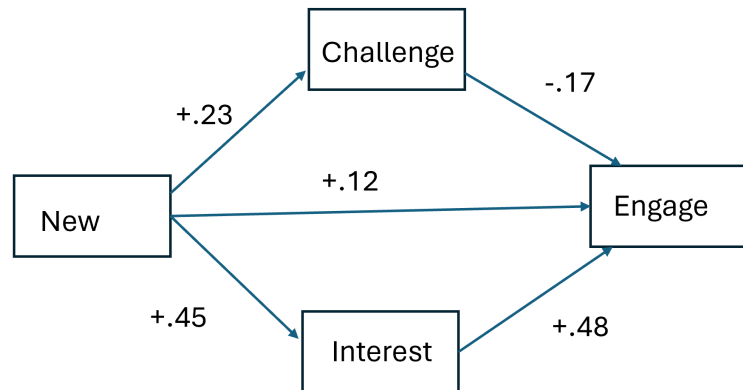
Interest as a Function of the “New” Rating



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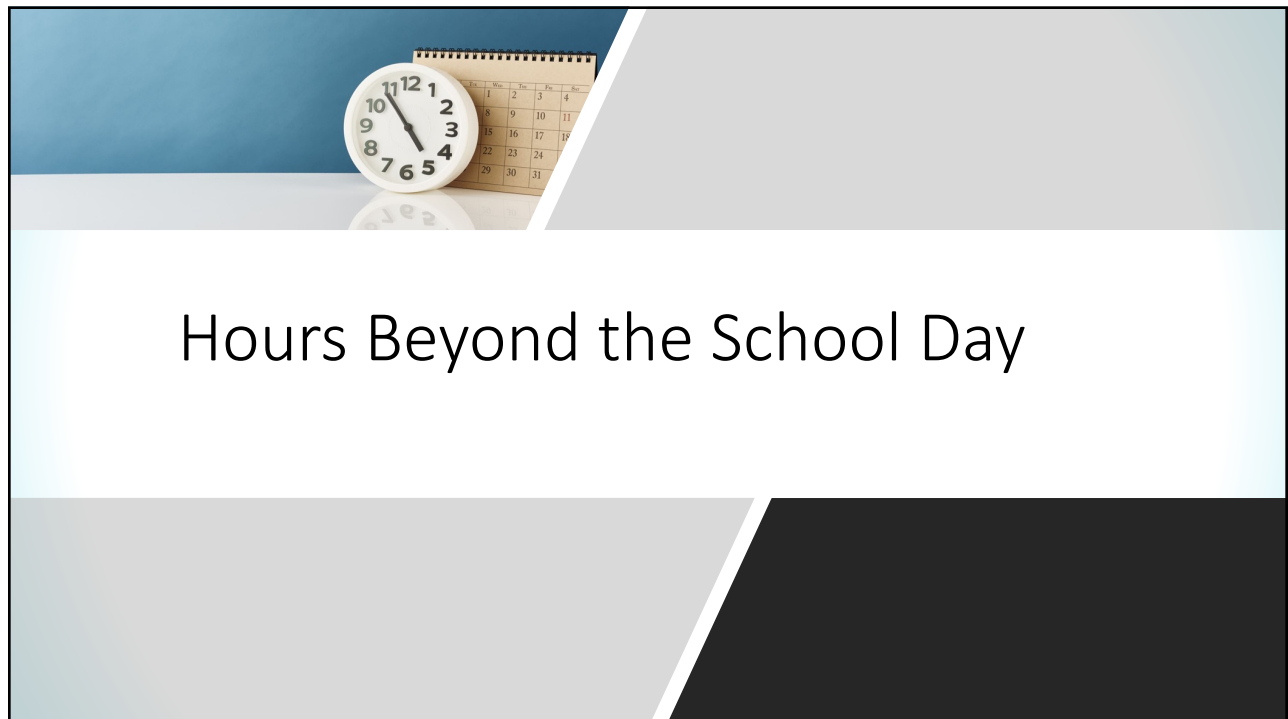
Mediation Model

($R^2=.30$)

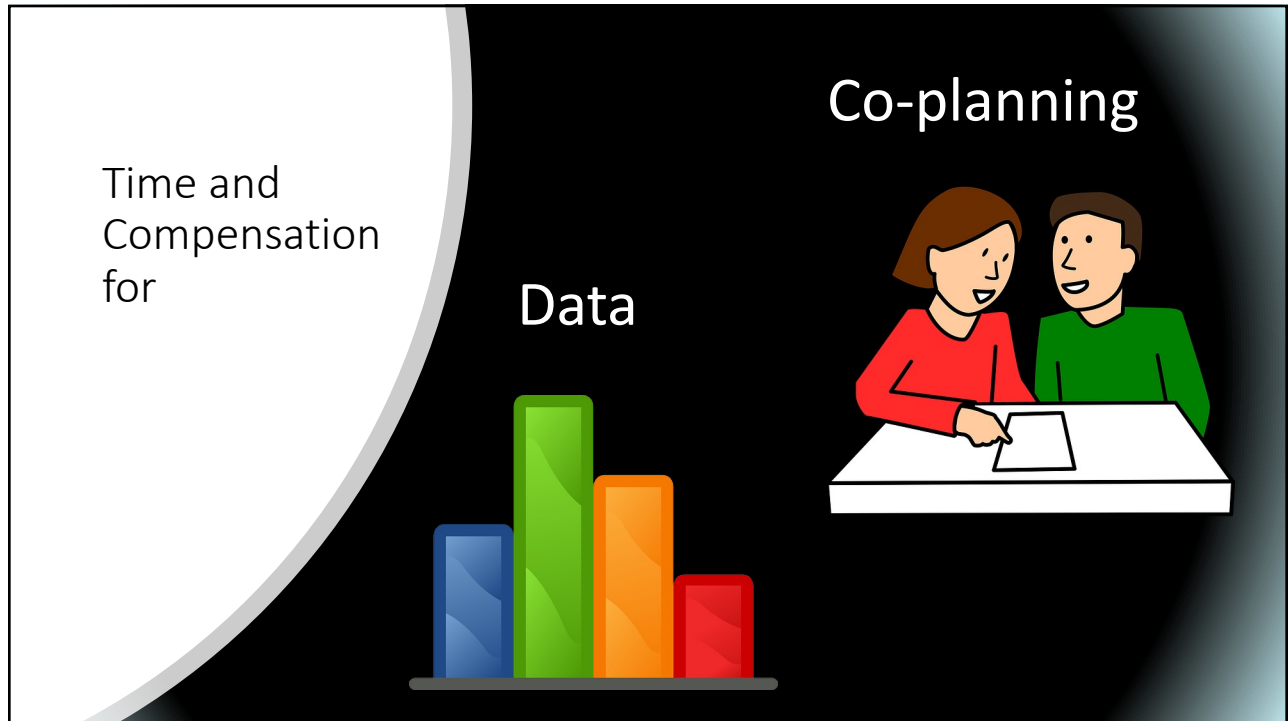


	Standardized Regression Coefficient	<i>p</i> -value
Direct Effect: New → Engage	.12	.048
Indirect Effect: New → Engage	.18	<.001
Total Effect: New → Engage	.30	<.001

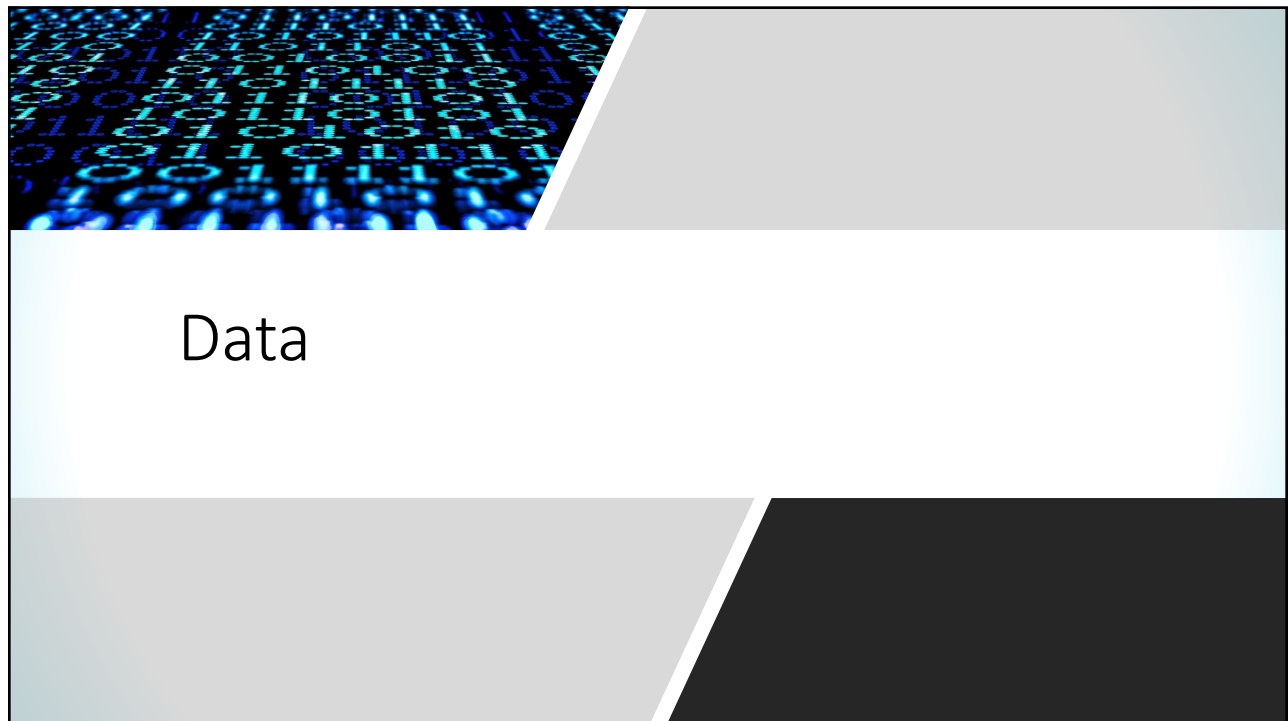
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 Curriculum Guide Differentiation Log

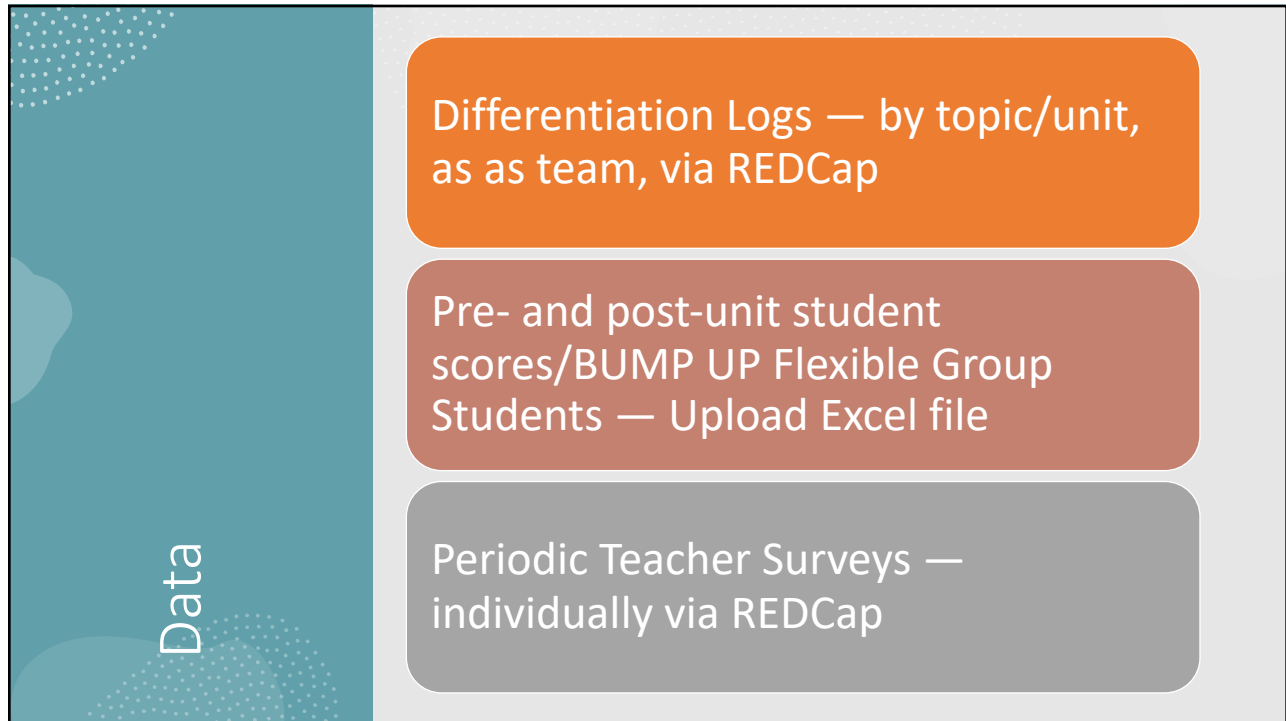
Differentiation for BUMP UP Students		
Content From a Supplemental Source	Differentiation of the Standard	Alternative Standard
Topic _____ Source _____ DOK Level 3 ____ or 4 ____? Brief description of differentiated math activity:	<input type="checkbox"/> Math differentiation option from the textbook for this lesson. Page ____ Activity Number(s) _____ Brief description of differentiated math activity: DOK Level 3 ____ or 4 ____? and/or <input type="checkbox"/> DOK Differentiated math to: Level 3 __ and/or Level 4 __ Brief description of differentiated math activity:	Grade ____ Standard _____ DOK Level 3 ____ or 4 ____? Brief description of differentiated math activity:
Other Information or Additional Comments		

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 Curriculum Guide Differentiation Log

Topic/Unit: _____ Dates: _____ Standards (Please list): _____ _____ _____	Check all that apply: How did you create instructional groups for this topic/unit? <input type="checkbox"/> Topic/Unit pre-assessment <input type="checkbox"/> Points of Promise lesson and checklist (if applicable) <input type="checkbox"/> District-identified gifted students <input type="checkbox"/> Same grouping as last unit <input type="checkbox"/> By interest <input type="checkbox"/> We did not group for this unit. <input type="checkbox"/> Other (Briefly describe)	How many: <ul style="list-style-type: none"> • Total students in the math class ____? • Number of Students in the BUMP UP Group: <ul style="list-style-type: none"> ○ Identified gifted students in the BUMP UP group ____? ○ Not-identified as gifted students in the BUMP UP group ____? Differentiation during this unit: We modified/differentiated ____% of this topic/unit's math content for BUMP UP math students.																					
Differentiation and Instruction: Check all that apply.		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%; text-align: center;">Days When Both Co-Teachers Were in the Classroom</th> <th style="width: 25%; text-align: center;">Days When the Co-Teacher Was Not in the Room</th> </tr> </thead> <tbody> <tr> <td>All students did the same tasks or received the same instruction (no differentiation).</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>BUMP UP students completed advanced content/tasks assignments individually.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>BUMP UP students completed advanced content/tasks/assignments in pairs or small groups.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>The classroom teacher delivered differentiated instruction to the BUMP UP group.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>The gifted co-teacher delivered differentiated instruction to the BUMP UP group.</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">NA</td> </tr> <tr> <td>Other:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Days When Both Co-Teachers Were in the Classroom	Days When the Co-Teacher Was Not in the Room	All students did the same tasks or received the same instruction (no differentiation).	<input type="checkbox"/>	<input type="checkbox"/>	BUMP UP students completed advanced content/tasks assignments individually.	<input type="checkbox"/>	<input type="checkbox"/>	BUMP UP students completed advanced content/tasks/assignments in pairs or small groups.	<input type="checkbox"/>	<input type="checkbox"/>	The classroom teacher delivered differentiated instruction to the BUMP UP group.	<input type="checkbox"/>	<input type="checkbox"/>	The gifted co-teacher delivered differentiated instruction to the BUMP UP group.	<input type="checkbox"/>	NA	Other:	<input type="checkbox"/>	<input type="checkbox"/>
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Other:	<input type="checkbox"/>	<input type="checkbox"/>																					
How did you co-teach during this unit? Check all that apply:																							
<table style="width: 100%; text-align: center;"> <tr> <td style="width: 16.6%;"><input type="checkbox"/> Tier (Parallel teaching)</td> <td style="width: 16.6%;"><input type="checkbox"/> Safari (Alternative teaching)</td> <td style="width: 16.6%;"><input type="checkbox"/> Stretch (One teach, one assist)</td> <td style="width: 16.6%;"><input type="checkbox"/> Carousel (Station teaching)</td> <td style="width: 16.6%;"><input type="checkbox"/> Tango (Teaming)</td> <td style="width: 16.6%;"><input type="checkbox"/> Scout (One teach, one observe)</td> </tr> </table> Other:			<input type="checkbox"/> Tier (Parallel teaching)	<input type="checkbox"/> Safari (Alternative teaching)	<input type="checkbox"/> Stretch (One teach, one assist)	<input type="checkbox"/> Carousel (Station teaching)	<input type="checkbox"/> Tango (Teaming)	<input type="checkbox"/> Scout (One teach, one observe)															
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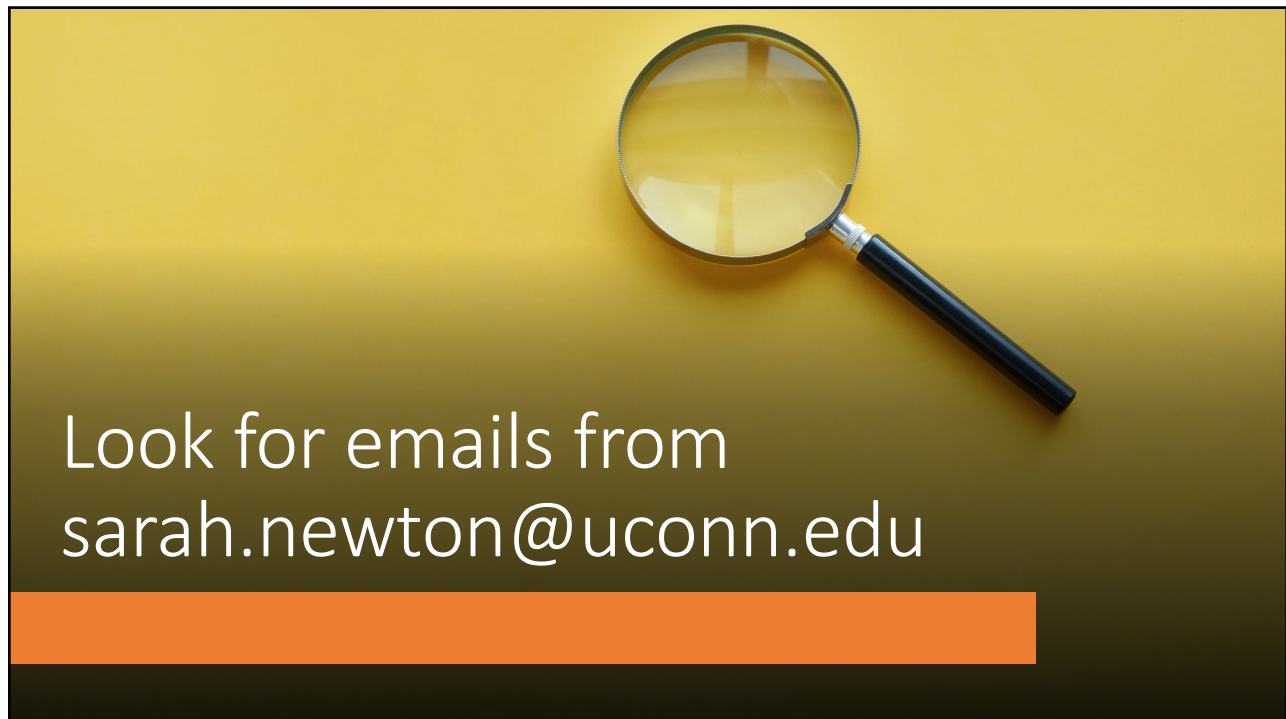


The slide features a teal background on the left with the word "Data" written vertically. On the right, three rounded rectangular boxes list data collection methods: an orange box for "Differentiation Logs", a reddish-brown box for "Pre- and post-unit student scores", and a grey box for "Periodic Teacher Surveys".

Data

- Differentiation Logs — by topic/unit, as as team, via REDCap
- Pre- and post-unit student scores/BUMP UP Flexible Group Students — Upload Excel file
- Periodic Teacher Surveys — individually via REDCap

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The slide has a yellow-to-black gradient background. A magnifying glass is positioned in the upper right. The text "Look for emails from sarah.newton@uconn.edu" is centered in the lower half. An orange bar is at the bottom.

Look for emails from
sarah.newton@uconn.edu

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Project BUMP UP Team Visits

- 1-2 Project BUMP UP team members
- 2-4 times per year
- 60 minutes
- Observing, not evaluating

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Next Steps

Classroom teachers

- distribute parent notification
- inform us via bumpup@uconn.edu of non-participating students by their student ID numbers (no names)
- Administer Math and Me to participating students

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By Unit

Before	During	After
<ul style="list-style-type: none"> • Differentiation Log to co-plan • Pre-assessment • Points of Promise lesson to spot advanced math behaviors (periodically) • Refine co-plans and flexibly group students 	<ul style="list-style-type: none"> • Co-teach • Continue to spot talent; adjust groups/instruction 	<ul style="list-style-type: none"> • Student Survey • Pre/Post scores by student ID #'s; indicate Bump Up students (Y/N) • Individual Teacher Survey (5x/year) • Enter Differentiation Log information



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Shipped to Your School

- Lesson materials
 - All student worksheets
 - Student mathematical thinking poster
 - Materials for lessons including pencils, student work dividers, manipulatives (e.g., counters, pattern blocks)...

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Resources and Support

- District Google Drive
- Project BUMP UP Teacher Resources
 - https://projectbumpup.education.uconn.edu/professional_development/
 - Password: 2daybumpup
- Email: bumpup@uconn.edu

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thank you!

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