# Mississippi Department of Education Mathematics Instructional Coaching Services

# 01 March, 2023

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#### Assets & Needs Assessment #3

#### May 2022

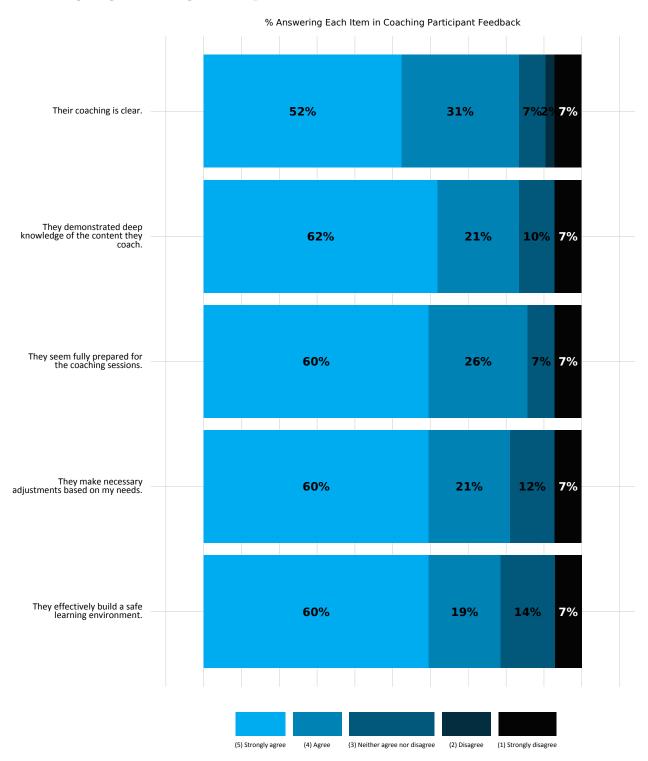
As part of the third Assets & Needs Assessment, Teaching Lab conducted a variety of data collection activities, including a teacher survey and classroom observations, a student survey and analysis of student work samples, and a family survey.

#### **Summary of Results**

- The majority of participating teachers gave positive feedback on the coaching experiences.
  - 100% of participants who responded to the End of Coaching Feedback Survey reported that they were satisfied with the overall quality of the coaching and the support they received, that the strategies were easy to implement, and that they had already applied or would apply what they have learned to their practice.
- Teachers improved their confidence in culturally responsive and sustaining education (CRSE) practices, especially
  teaching curriculum to students from historically marginalized groups, revising instructional material to include a
  better representation of cultural groups, and adapting instruction to meet the needs of their students.
- Teachers' instructional practices improved over their time in the coaching series, especially related to Core Actions 2 and 3.
- Students reported that their learning experiences improved over time for all constructs (experiencing CRSE, teacherstudent relationships, self-efficacy, happiness and sense of belonging, and being challenged).
- The most significant finding was the increase in teachers who assigned grade-level work (65% to 77%) and students' proficiency on these tasks: for the first round of student work samples, 31% of students demonstrated proficiency on grade-level tasks, which increased to 53% of students for the second round of samples.
- Although the response rate was low for the second administration of the family survey, results point to improvements
  in the family experience and their perception of student learning.

# 1 Section 1: Participant Feedback

#### 1.1 Ongoing Coaching Participant Feedback



n = 46

In summary, we see the following % agree or strongly agree with the above statements:

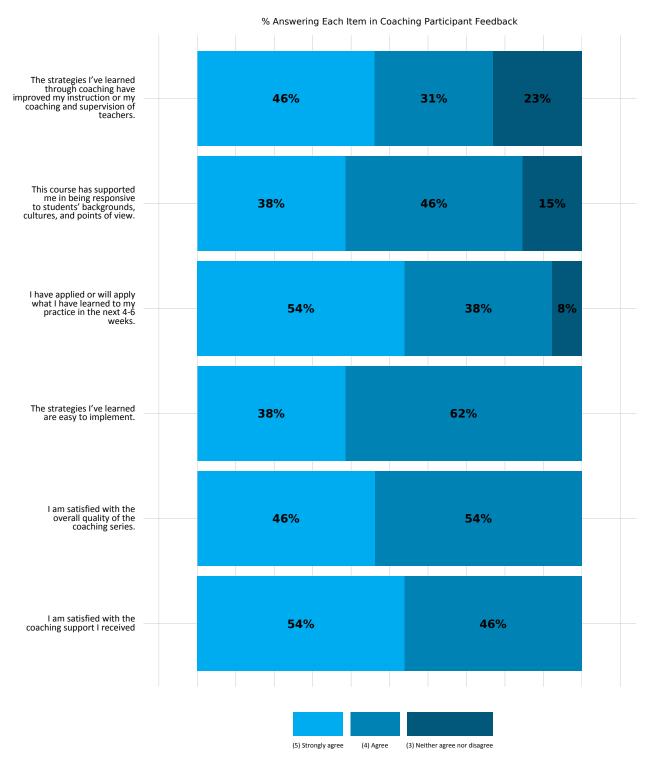
- 83% strongly agree or agree that they were fully prepared for the session.
- 86% strongly agree or agree that they responded to the group's needs.
- 81% strongly agree or agree that they effectively built a safe learning community.
- 79% strongly agree or agree that they demonstrated deep knowledge of the content they facilitated.
- 83% strongly agree or agree that their coaching was clear.

#### 1.1.1 Qualitative Feedback

The following qualitative feedback was given to the ongoing coaching feedback survey.

# Coaching Feedback Centers The nurturing teaching aspect that was introduced The support and feedback he gave was the most helpful The supportive feedback

# 1.2 End-of-Coaching Participant Feedback



n = 13

In summary, we see the following % agree or strongly agree with the above statements:

• 85% strongly agree or agree that the course has supported them in being responsive to students' backgrounds, cultures, and points of view.

- 77% strongly agree or agree that the strategies they've learned through coaching have improved their instruction or their coaching and supervision of teachers.
- 92% strongly agree or agree that they have applied or will apply what they have learned to their practice in the next
   4-6 weeks.
- 100% strongly agree or agree that the strategies they've learned are easy to implement.
- 100% strongly agree or agree that they were satisfied with the overall quality of the coaching series.
- . 100% strongly agree or agree that they were satisfied with the coaching support they received.

#### 1.2.1 Qualitative Feedback

The following qualitative feedback was given to the end of coaching feedback survey.

#### 1.2.1.1 What went well? 222222

#### What went well?

All of the teaching methods she supplied me with during my coaching time was amazing. She taught me several methods I can use for upcoming students.

Being able to see the concept to be utilized in action.

I have been provided clear **feedback** which has helped me to plan my lessons better.

Ms. Boone has provided adequate **feedback** to assist me with further developing my **students**.

Specific **feedback** and ways to improve that can be immediately put into **action**.

We have been able to work together to aid the students.

We work together. Coach offers different strategies for students to use.

Implementing suggestions for state test review.

Everything

My coach shared practical strategies to improve small group instruction.

#### What could have been better?

As of now everything was perfect if anything could **change**I would wish it was more **time** for one on one with certain **students**.

Currently we have not been able to focus on specific teaching techniques due to us being in test prep season. It also has often felt like any decision I have made for my students is not trusted and is questioned and not always to me.

More sessions would provide a better opportunity for learning and implementing strategies.

More time with the coach.

Nothing. My sessions have been amazing.

Scheduling meeting times

I think she does a great.

Everything has gone well except severe weather condition

I really cannot think of anything!

Everything is excellent so far.

#### 1.2.1.3 Additional Feedback 222222

#### Additional Feedback

**Excellent** people skills and professional

He is excellent! I'm a first year teacher and he has been awesome with developing engaging activities!

Ms. Richardson (Mercadel) is very encouraging and supportive. She is able to recognize areas of improvement and offer recommendations immediately. She follows up to see if the recommendations made were implemented and whether they are successful. She is willing to jump in and help in whatever way she is needed. My students LOVE her also! I can tell by her words and actions that she has a deep concern for the success of my students. She is not afraid to speak up about things that she sees that need improvement from a classroom, school, and district perspective. I cannot say enough how valuable this experience has been for me. I was able to immediately use what she recommended for me and implement it in my classroom and see immediate results for the better!

Flexibility in scheduling

We didn't have a session.

Provide examples, articles of teaching strategies

Very great skills.! Learned a lot from my coach.

She has a wonderful personality.

He made it comfortable when he was around. It did not seemed as if I was being pressured but I felt like he sincerely was here to help.

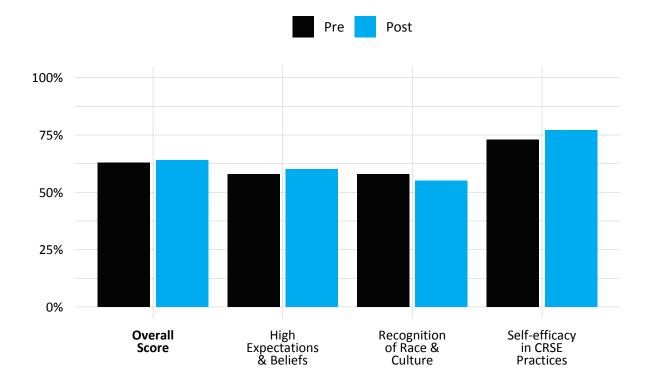
#### 2 Section 2: Mindsets

#### 2.1 Equitable Mindsets Summary

Teachers responded to seven items about mindsets, including three items related to recognizing race and culture and four items related to holding high expectations for all students on a 5-point Likert scale. Composite measures were created for each construct by reverse coding some items and then averaging responses across items. In this way, higher scores correspond to holding equitable mindsets.

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Score	63%	64%
Recognition of Race & Culture	58%	55%
High Expectations & Beliefs	58%	60%
Self-efficacy in CRSE Practices	73%	77%
<sup>1</sup> n = 69 <sup>2</sup> n = 40		

# **Overall Shifts in Mindsets**



# 2.2 Recognizing Race and Culture Items

	Question	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Score		58%	55%
	I am color blind when it comes to my teaching I don't think of my students in terms of their race or ethnicity	41%	42%
	The gap in the achievement among students of different races is about poverty not race	56%	47%
	I think about my own background and experiences and how those affect my instruction	76%	76%
<sup>1</sup> 69 <sup>2</sup> 40			

# 2.3 High Expectations items

	Question	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Score		58%	60%
	I try to keep in mind the limits of my students ability and give them assignments that I know they can do so that they do not become discouraged	50%	51%
	Before students are asked to engage in complex learning tasks they need to have a solid grasp of basic skills	32%	38%
	It is not fair to ask students who are struggling with english to take on challenging academic assignments	61%	60%
	Teachers should provide all students the opportunity to work with grade level texts and tasks	87%	89%
<sup>1</sup> 69 <sup>2</sup> 40			

Teachers also responded to six items about self-confidence in their ability to engage in culturally responsive and sustaining education (CRSE) practices on a scale from 0 (not at all confident) to 10 (extremely confident). Responses were averaged across items. Higher scores correspond to higher self confidence.

# $\hbox{\bf 2.4 Culturally Responsive and Sustaining Education Self-Efficacy Summary and } \\ Items$

	Question	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Score		73%	77%
	Adapt instruction to meet the needs of my students	76%	80%
	Identify ways that the school culture e g values norms and practices is different from my students home culture	73%	75%
	Use my students prior knowledge to help them make sense of new information	82%	82%
	Revise instructional material to include a better representation of cultural groups	71%	76%
	Teach the curriculum to students with unfinished learning	70%	72%
	Teach the curriculum to students who are from historically marginalized groups	67%	74%
<sup>1</sup> 69 <sup>2</sup> 40			

# 3 Section 3: Content and Pedagogical Content Knowledge

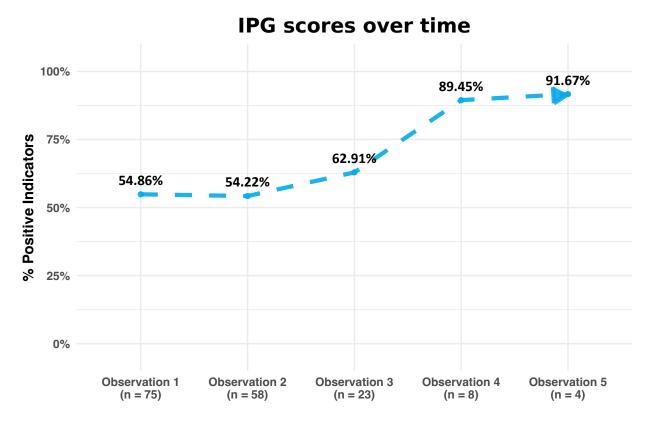
Teachers answered eight questions related to content and pedagogical content knowledge, including strategies for students with unfinished learning and equitable instruction. The score below is the overall percent correct (note: some questions had multiple correct answers and were worth more than one point).

	Question	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Score		73%	77%
	Adapt instruction to meet the needs of my students	76%	80%
	Identify ways that the school culture e g values norms and practices is different from my students home culture	73%	75%
	Use my students prior knowledge to help them make sense of new information	82%	82%
	Revise instructional material to include a better representation of cultural groups	71%	76%
	Teach the curriculum to students with unfinished learning	70%	72%
	Teach the curriculum to students who are from historically marginalized groups	67%	74%
<sup>1</sup> 69 <sup>2</sup> 40			

# 4 Section 4: Instructional Practices

Teaching Lab staff observed teachers using the IPG rubric. Ratings of 3 and 4 on 4-point Likert scales and Yes on a Yes/No items were considered positive.

#### 4.1 IPG Ratings



Note: n sizes are average of the n sizes for Core Action 1, 2, 3, which can vary slightly.

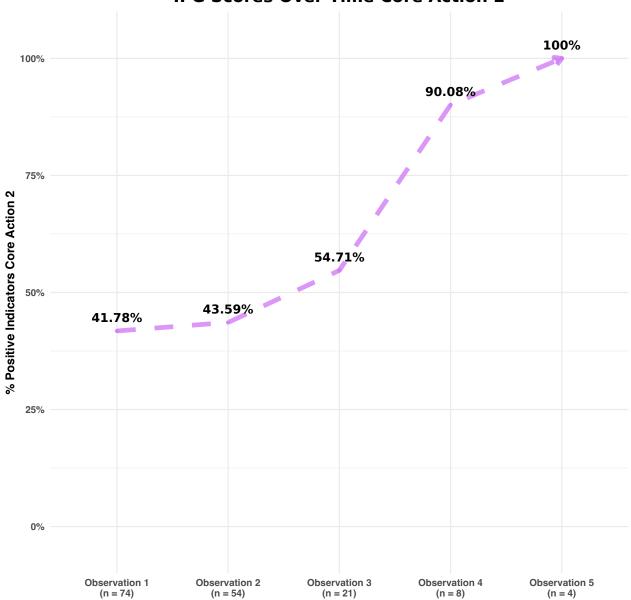
#### 4.2 Core Action 1

# **IPG** scores over time Core Action 1

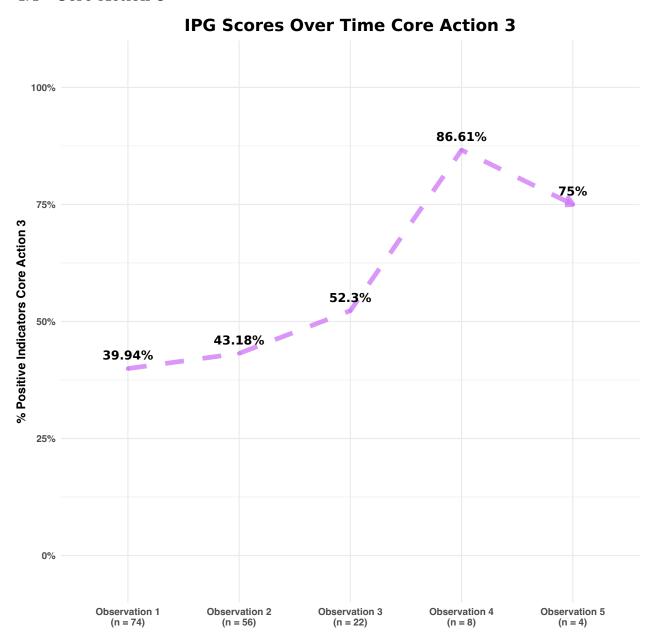


#### 4.3 Core Action 2





#### 4.4 Core Action 3

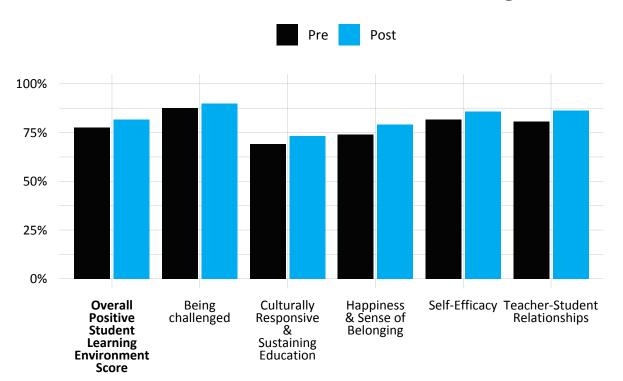


# 5 Section 5: Student Learning Experiences

Teachers administered a student survey to at least one of their groups. Using 5-point Likert-type scales, students responded to eight items related to their teachers' engagement in CRSE practices, three items related to teacher-student relationships, five items about self-efficacy, six items about happiness and sense of belonging, and five items about being challenged. Responses were averaged across items. Higher scores correspond to more positive experiences.

	Pre <sup>1</sup>	Post <sup>2</sup>
<b>Overall Positive Student Learning Environment Score</b>	78%	82%
Culturally Responsive & Sustaining Education	69%	73%
Teacher-Student Relationships	81%	86%
Self-Efficacy	82%	86%
Happiness & Sense of Belonging	74%	79%
Being challenged	88%	90%
<sup>1</sup> n = 1031		
<sup>2</sup> n = 304		

# **Overall Shifts in Student Learning**



# 5.1 Culturally Responsive & Sustaining Education

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Culturally Responsive & Sustaining Education Score	69%	73%
My teacher wants students from different cultures to respect one another.	86%	89%
My teacher uses what I already know to help me understand new ideas.	82%	85%
My teacher uses examples from my culture when teaching.	65%	69%
My teacher asks about ways that students' cultures may be different from others.	56%	61%
My teacher helps students learn about other students and their cultures.	58%	60%
My teacher asks about students' home life.	52%	58%
My teacher treats all students like they are important members of the classroom.	85%	91%
<sup>1</sup> n = 1031 <sup>2</sup> n = 304		

# 5.2 Teacher-Student Relationships

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Teacher-Family Relationships Score	78%	88%
Please indicate your level of agreement with the following statements My child is comfortable talking to their teacher.	74%	91%
Please indicate your level of agreement with the following statements My child can get the help they need to complete their schoolwork.	82%	93%
Please indicate your level of agreement with the following statements My child's teacher regularly shares detailed feedback on my child's work.	74%	80%
Please indicate your level of agreement with the following statements The work my child is being asked to do is helping them learn new things.	80%	88%
<sup>1</sup> n = 107 <sup>2</sup> n = 16		

# 5.3 Self-Efficacy

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Self-Efficacy Score	82%	86%
I can do almost all the work in this class if I don't give up.	85%	87%
Even when work is hard, I know I can learn it.	85%	88%
I'm certain I can master the skills taught in this class.	83%	88%
When doing work for this class, I focus on learning, not the time work takes.	78%	83%
I have been able to figure out the most difficult work in this class.	77%	82%
<sup>1</sup> n = 1031 <sup>2</sup> n = 304		

# 5.4 Happiness & Sense of Belonging

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Happiness & Sense of Belonging Score	74%	79%
This class is a happy place for me to be.	78%	83%
In this class, I feel like I belong.	78%	83%
Being in this class makes me feel sad or angry.	46%	48%
The things we have done in class this year are interesting.	82%	86%
Because of this teacher, I am learning to love this subject.	80%	87%
I enjoy this subject this year.	79%	88%
<sup>1</sup> n = 1031 <sup>2</sup> n = 304		

# 5.5 Being Challenged

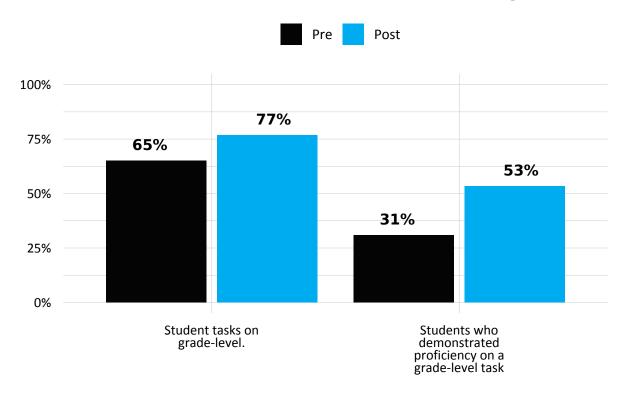
	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Being Challenged Score	88%	90%
My teacher makes sure that I try to do my best.	90%	91%
In this class, we learn a lot almost every day.	87%	88%
In this class, we learn to correct our mistakes.	87%	91%
In this class, my teacher accepts nothing less than our full effort.	86%	88%
My teacher wants us to use our thinking skills, not just memorize things.	88%	91%
<sup>1</sup> n = 1031 <sup>2</sup> n = 304		

# 6 Section 6: Student Math Proficiency

Teachers collected student work samples of a task that involved explaining mathematical thinking or reasoning from all students in at least one of their groups. Teaching Lab coaches first determined whether the task was on grade-level and whether it met the criteria of explaining mathematical thinking or reasoning. If so, then the work samples were scored using a 2-point rubric. Students who scored 2 on the rubric were considered to demonstrate proficiency on the grade-level task.

	Pre	n	Post	n
Student tasks on grade-level.	65%	160	77%	199
Students who demonstrated proficiency on a grade-level task	31%	52	53%	60

# **Overall Shifts in Student Learning**



# 7 Section 7: Family Experiences & Perceptions

Schools and teachers assisted in sending home a voluntary survey to their students' families. Using Likert-type scales, caregivers responded to seven items related to teacher-family relationships and support, five items related to teacher-student relationships, and two items related to their child's learning. Responses were averaged across items. Higher scores correspond to more positive family perceptions and experiences.

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Positive Family Experiences & Perceptions %	75%	87%
Teacher-Family Relationships and Support	72%	85%
Teacher-Student Relationships	78%	88%
<sup>1</sup> n = 107		
<sup>2</sup> n = 16		

# 7.1 Teacher-Family Relationships and Support

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Teacher-Family Relationships Score	72%	85%
I feel comfortable reaching out to my child's teacher if I have questions or concerns	73%	83%
I am satisfied with how often my child's teacher engages with me.	81%	92%
My child's teacher communicates with me or other family members about my child's educational progress.	71%	86%
My child's teacher structures parent-teacher conferences so that the meeting is not intimidating for me or other family members attending.	70%	88%
My child's teacher establishes positive home-school relationships.	71%	81%
My child's teacher communicates with me or family members of my child in positive ways, not just when there is a problem.	73%	84%
My child is excited to go to class.	68%	79%
<sup>1</sup> n = 107 <sup>2</sup> n = 16		

<sup>24</sup> 

# 7.2 Teacher-Students Relationships and Support

	Pre <sup>1</sup>	Post <sup>2</sup>
Overall Teacher-Family Relationships Score	78%	88%
Please indicate your level of agreement with the following statements My child is comfortable talking to their teacher.	74%	91%
Please indicate your level of agreement with the following statements My child can get the help they need to complete their schoolwork.	82%	93%
Please indicate your level of agreement with the following statements My child's teacher regularly shares detailed feedback on my child's work.	74%	80%
Please indicate your level of agreement with the following statements The work my child is being asked to do is helping them learn new things.	80%	88%
<sup>1</sup> n = 107 <sup>2</sup> n = 16		

<sup>25</sup> 

- 7.3 Caregiver Perceptions of Student Learning
- 7.3.1 How many assignments does your child complete?

	Pre <sup>1</sup>	Post <sup>2</sup>
All of their assignments	49%	73%
Most of their assignments	34%	20%
Some of their assignments	8%	
Few of their assignments	5%	7%
I'm not sure	4%	
<sup>1</sup> n = 77		
<sup>2</sup> n = 15		

7.3.2 Which best matches your belief about your child's experience so far this year?

	Pre <sup>1</sup>	Post <sup>2</sup>
My child has learned a lot this year.	53%	80%
My child has learned some this year.	40%	13%
My child has learned a little this year.	5%	7%
My child has learned nothing this year.	1%	
<sup>1</sup> n = 77		
<sup>2</sup> n = 15		