# SPECS for Include Me (IM):

Program Evaluation of an Innovative Teacher Inclusion Mentoring Initiative in Pennsylvania Schools



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Program Evaluation Research Report [2017-2018]



### **EXECUTIVE SUMMARY**

### SPECS for IM: Lessons Learned "Take Home Points" (2017-2018)

### IM Mentoring Model:

- Twenty-five consultants provided mentoring to regular education teachers in the SaS categories, in the areas of Collaboration, Instructional, Physical, Social-Behavioral, and Medical.
- Most frequent consultation/mentoring among IM consultants and teachers were in the areas of Instructional and Social-Behavioral, with the most time spent on social skills instruction, creating behavior plans, and utilizing peer supports in the classroom.
- Consultants predominantly used the strategies of verbal feedback and observing, providing an average of 36 hours of consultation to each teacher throughout the school year.
- A continuing trend shows that teacher inclusion practices are related to students' functional skills: at post-test, teachers whose inclusion practices were rated high were more likely to have students who demonstrated higher functioning skills.

## Teacher and Parent Benefits:

- Teachers' instructional strategies related to inclusion significantly improved over the course of the school year. Largest gains were seen in instruction, social relationships, and self-determination.
- Independent observation showed that all of the classrooms exceeded the national average comparisons in the areas of emotional support and instructional support and scores in the average to high average range on a measure of classroom quality.
- Pre and post-test surveys showed that parents and teachers improved in their perceptions of inclusion practices over the course of the school year.
- In a survey of key stakeholders, (parents, teachers, and district administrators), **parents** felt most strongly about the benefits of IM consultation.

## **Child Benefits:**

- Improvement was seen for all students across all functional domains, with the largest gains in Social-Emotional skills, Self-Regulation, and Academics.
- Students diagnosed with autism showed significant **improvement in Social-Emotional Skills and Self-Regulation.**
- Teachers rated the overall academic competence for the majority of students in the middle 40 percent compared to their typical peers.

#### **DETAILED ANALYSIS OF IM OUTCOMES**

#### **Consultation Activities**

#### **Consultant Demographics**

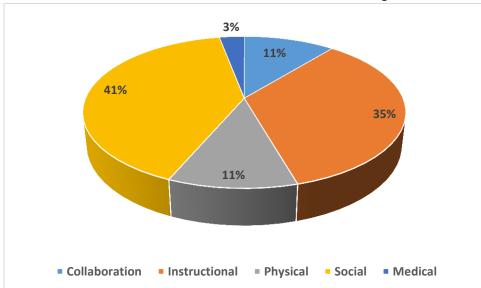
Twenty-five consultants/mentors participated in the Include Me program during the 2017-2018 school year. Gender distribution was 22 females and 3 males and their education level is presented in Exhibit 1. The mean years of experience in disabilities education advocacy was 12 years. Fifty-six percent of the consultants had teaching experience and 32% reported having a child with a disability.

Degree	Percentage
Associates	4.00%
Bachelors	48.00%
Some Graduate	16.00%
Masters and Masters +	32.00%

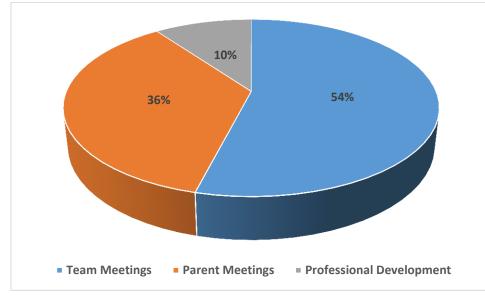
Exhibit 1. Educational level of consultants participating in 2017-2018 school year

#### **Consultation Monitor Data**

The consultation monitor is used to document the scope, intensity, and content of IM consultation and inclusion mentoring with public school teachers and staff. The percentage of effort was calculated by dividing the frequency count of each specific category, topic, or strategy/activity, by the total number implemented over the course of the year. Consultation topics are aligned with the SaS categories. The exhibits below present the consultation monitor data collected during the 2017-2018 school year.

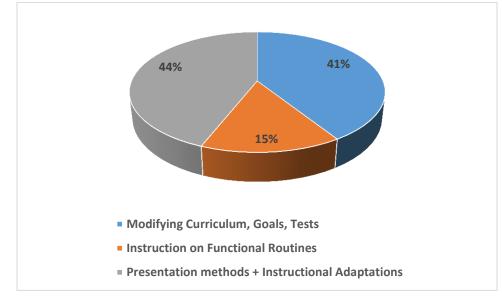


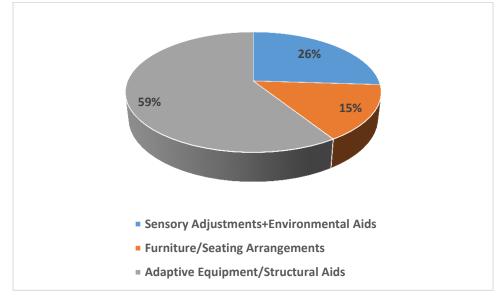
Insert Exhibit 2. Allocation of Consultant Activities across Categories here



Insert Exhibit 3. Percent Allocation of Consultant Activities across Collaboration Category here

Insert Exhibit 4. Percent Allocation of Consultant Activities across Instructional Category here

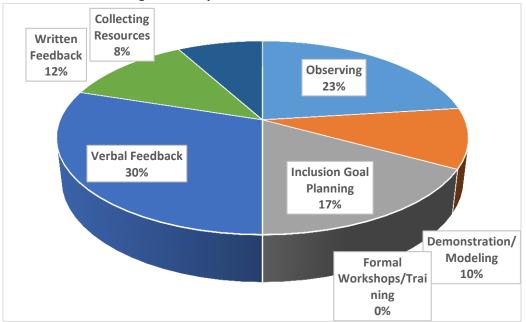




Insert Exhibit 5. Percent Allocation of Consultant Activities across Physical Category here

Insert Exhibit 6. Percent Allocation of Consultant Activities across Social Behavioral Category here





Insert Exhibit 7. Strategies used by Consultants over the 2017-2018 School Year here

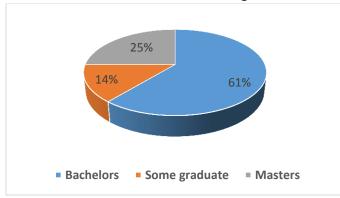
The data reveal that providing verbal feedback and observing were the predominant strategies used by consultants when supporting and mentoring teachers. Demonstration and modeling, and inclusion goal planning each accounted for roughly 27% of the consultants' efforts. Collecting resources, providing written feedback, and attending formal workshops were activities utilized least, as illustrated in the exhibit *above*. On average, each teacher received approximately 4.03 hours of consultation each month, and a total average of 36.23 hours for the entire school year. Most of the time was spent in direct contact or face-to-face time between the consultants and teachers and related personnel. In comparison, the other forms of contact (phone, text, email, or written notes) were all utilized to a much lesser extent.

Overall, results indicate that Include Me consultants mentored regular education teachers most frequently on the topics of instructional and social-behavioral issues and less often on physical supports, medical issues, and attending team meetings. Specifically, the Arc consultants put most of their efforts into working with teachers around social skills instruction, creating behavior plans, and utilizing peer supports in the classroom.

### **Teacher Inclusion Practices**

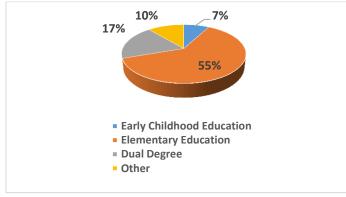
## **Teacher Demographics**

Demographic information was collected for 99 teachers. Over half (62%) of the teachers were between the ages of 22 and 41 years-old. The majority (95%) of teachers identified as White, while 4% reported African American. One teacher reported race as Asian. Teachers had an average of 12 years of experience. Twenty-five percent of the teachers had a Master's Degree and over half hold a degree in Elementary Education (55%).



## Insert Exhibit 8. Teacher Education: Degree here

### Insert Exhibit 9. Teacher Education: Major here



## Classroom Effective Practices Inventory (CEPI): Improvements in Teacher Practices

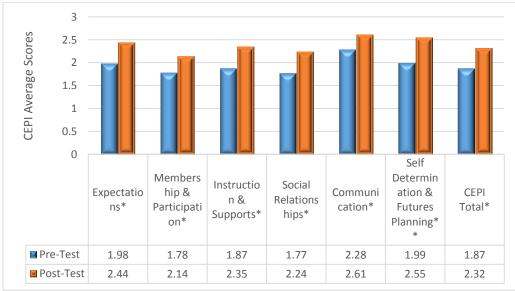
The CEPI is an authentic observational assessment collected by the consultants to determine the extent to which the regular education teachers are engaging in instructional strategies that are aligned with best practices in inclusion. The CEPI consists of a total of 6 domain-areas which are scored on a Likert scale ranging from 0 (not yet met); 1 (partially met); 2 (usually met); and 3 (fully met). These domains are briefly summarized the table below (Exhibit 10):

CEPI Domain	Description
Expectations	Observed teacher behavior ('People First' language used; teacher speaks directly to
	student; teacher uses age-appropriate vocabulary)
Membership &	Characteristics of the classroom environment in terms of accessibility;
Participation	accommodations; inclusive delivery of services
Instruction &	Types of instructional supports utilized; individualized instruction; data-based
Supports	decision making
Social Relationships	Support of social interactions such as interaction with peers; building social support
	networks; strengths-based approach
Communication	Facilitation of communication (student access to different modes of
	communication; teacher facilitates social communication; respectful
	communication is used)
Self Determination	Student participation in goal planning (participates in own IEP meeting; graduation
& Futures Planning	plan; graduation participating

### Exhibit 10. CEPI Domains and Descriptions

The results of the CEPI analyses showed that teachers' instructional strategies related to inclusion significantly improved over the course of the 2017-2018 school year. A total of 90 CEPI forms were collected at both pre and post-test. Based on the consultants' observations, teachers improved across all domains with both statistically and educationally significant gains.

Largest gains were observed in instruction, social relationships, and self-determination. It is also worth noting that at post-test, practices associated with all CEPI domains, received an average rating of above 2.0, indicating that there is much evidence of these specific practices observed in the classroom.



Insert Exhibit 11. Mean Gains on the Classroom Effective Practices Inventory here

### Classroom Assessment Scoring System

The CLASS is an observation instrument designed to assess classroom quality in preschool through 12<sup>th</sup> grade. The CLASS is comprised of three dimensions, which are based entirely on interactions between the teachers and students in the classroom. The purpose of utilizing the CLASS for the IM evaluation is to provide evidence for the validity of the teacher consultation and mentoring model. The CLASS observations are non-biased since they are independent and conducted by trained SPECS staff and SPECS interns without detailed knowledge of the IM initiative. In this report, the CLASS data collected in the Spring 2017 is compared to the national averages reported in the technical appendices of the CLASS.

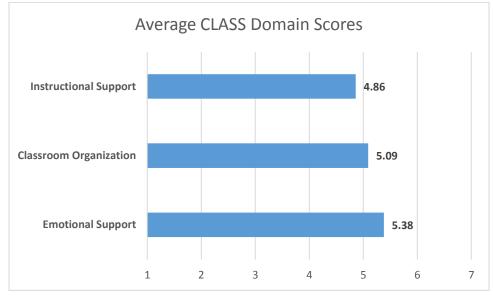
The CLASS is organized into three domains and assesses a total of 10 dimensions of teacher-child interactions in the classroom. The CLASS dimensions are rated on a 7-point Likert scale ranging from 1 (low) to 7 (high).

The table below provides an overview of the CLASS tool and includes the national mean scores from the CLASS technical manuals (Pianta, Hamre, & Mintz, 2012; Pianta, LaParo, & Hamre, 2008).

DOMAIN	Description	National Mean (SD)			
		К	1 <sup>st</sup> -5 <sup>th</sup>	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -12th
Emotional Support	Assesses the degree to which teachers establish and promote a positive climate in their classroom through their everyday interactions.	5.00 (0.79)	5.02 (0.89)	4.73 (0.53)	4.68 (0.63)
Classroom Organization	Assesses classroom routines and procedures related to the organization and management of children's behavior, time, and attention in the classroom.	4.65 (0.79)	4.78 (0.89)	5.43 (0.52)	4.86 (0.68)
Instructional Support	Assesses the ways in which teachers implement the curriculum to effectively promote cognitive and language development.	1.98 (0.69)	4.30 (1.02)	3.51 (0.54)	3.54 (0.66)

Exhibit 12. Overview of CLASS Domains and National Means

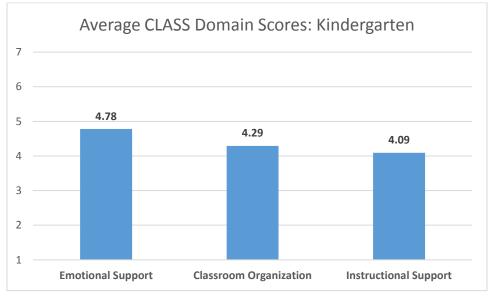
The CLASS was administered and scored by seven independent observers who were trained on the tool. The observers were graduate students completing their practicum or internship requirements at the University of Pittsburgh, Office of Child Development and received training on the tool as part of their coursework. The observations were completed in 20 classrooms across eleven districts (randomly selected within geographic region) in Pennsylvania, in April and May 2018. Exhibit 13 displays the average CLASS domain scores across the 20 classrooms.

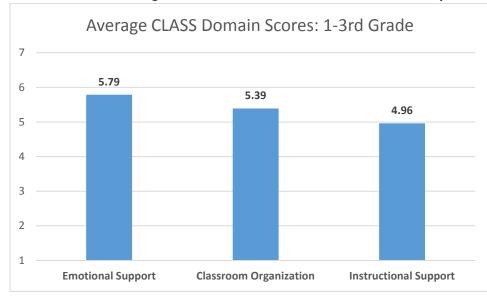


Insert Exhibit 13. Average CLASS Domain Scores across IM Classrooms here

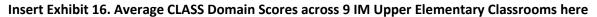
Exhibits 14 through 17 display the average CLASS domain scores by grade. Across all domains, classrooms were rated in the average to high average range, and exceeded the national average comparisons in emotional support and instructional support domains.

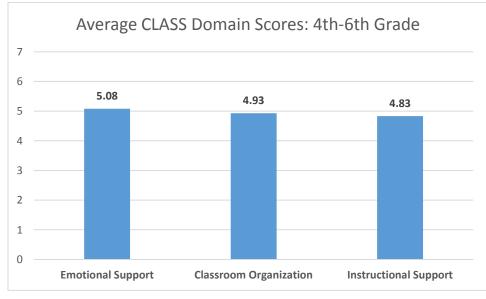
Insert Exhibit 14. Average CLASS Domain Scores across 2 IM Kindergarten Classrooms here

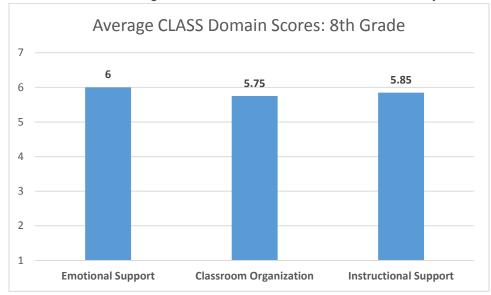




Insert Exhibit 15. Average CLASS Domain Scores across 8 IM Elementary Classrooms here





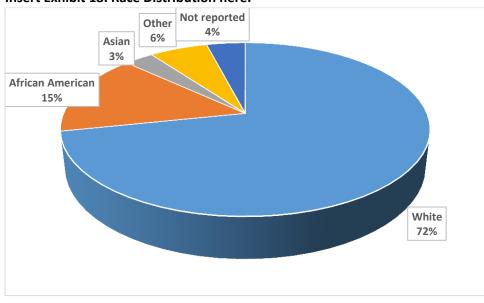


Insert Exhibit 17. Average CLASS Domain Scores across 1 IM Secondary Classroom here

## Student Learning and Functional Outcomes

### Student Demographics

Demographic information was collected on 157 students during the 2017-2018 school year. The graphs and tables below show the distribution in terms of race/ethnicity, grade, and qualifying diagnoses.



Insert Exhibit 18. Ra	e Distribution here.
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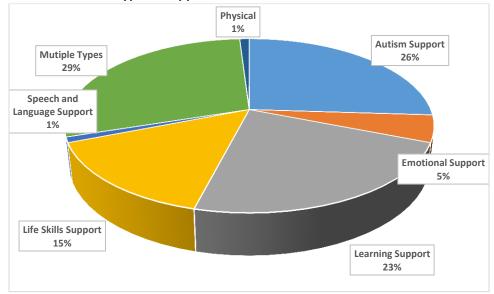
Exhibit 19.	Grade Distribution
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Grade	Number	Percent
Half Day Kindergarten	2	1%
Full Day Kindergarten	22	14%
First Grade	21	13%
Second Grade	21	13%
Third Grade	19	12%
Fourth Grade	21	13%
Fifth Grade	18	12%
Sixth Grade	15	10%
Seventh Grade	3	2%
Eighth Grade	7	5%
Ninth Grade	4	3%
Tenth Grade	2	1%
Eleventh Grade	2	1%
Twelfth Grade	0	0%

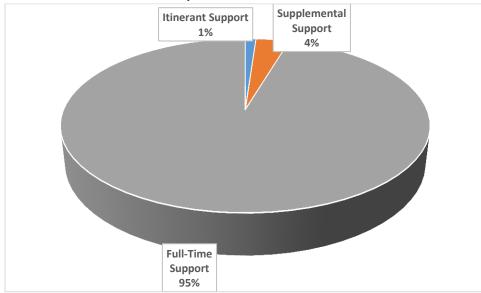
Exhibit 20. Dis	tribution of (	Qualifying	Disability
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Qualifying Disability	Percent
Autism	45%
Multiple Disabilities	12%
Intellectual Disabilities	21%
Other Health Impairment	10%
Speech or Language Impairment	2%
Specific Learning Disability	3%
Emotional Disturbance	7%

Insert Exhibit 21. Type of Support Services here



Insert Exhibit 22. Amount of Special Education Services here



The majority of students participating were in elementary school, with the largest percentage of students attending full day kindergarten. The largest majority of students' qualifying diagnosis to receive services was autism, while over a quarter of the students received multiple types of support. Most support received by students was characterized by supplemental, which equates to roughly 20-80% of special education support during the school day.

## Functional Outcomes Classification of Assets for Learners (FOCAL)

The Functional Outcomes Classification of Assets for Learners (FOCAL) is a measure based on the US Department of Education, Office of Special Education (OSEP) framework for mandated documentation and reporting of status and progress data of young children at entry and exit from early intervention programs. Additional items were added to the post-test FOCAL to measure performance and growth in learning; the items rely upon the informed observation and judgment of both parents and teachers. The FOCAL instrument measures expected functional competencies for children/students as a result of improved teaching practices from Pre-K to High School due to individualized IMFS mentoring. The instrument assesses and profiles 6 functional assets of the students:

- 1. **Social-Emotional:** i.e., the degree to which students shows functional progress in acquiring positive social-emotional and engagement skills;
- 2. *Knowledge:* i.e., extent to which students show functional progress relating to using knowledge and skills;
- 3. *Effective Actions:* i.e., the functional progress in taking appropriate action to meet own needs;
- 4. *Self-Regulation*: i.e., demonstrating skills in self-regulatory behaviors as relating to classroom learning;
- 5. *Academics:* i.e., the extent to which students demonstrate functional capacity in acquiring and using academic skills;
- 6. *Technology:* i.e., demonstrating skills in acquiring and applying computer-assisted technology for classroom learning.

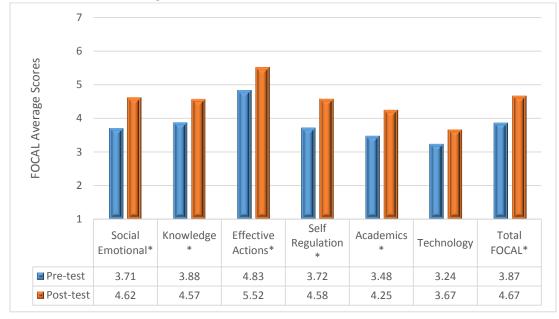
The FOCAL is based on a 7-point Likert-type scale. However, the two scales do differ in the interpretation of the scoring. That is, while the FOCAL Progress items asks about whether the child has or has not made observable progress (according the qualitative judgment of both teacher and parent) the FOCAL scale asks and assesses the extent to which the student demonstrates and performs specifics skills and behaviors. The 7 point Likert-type scale gradients and values for both scales are provided in Exhibit below.

Rating	FOCAL (Age-appropriate skills + functioning)	FOCAL Progress (Acquiring and showing improved performance)	Rating
1	Not Yet	No Observable Progress	1
2	(rarely)	(very little progress)	2
3	Emerging	Made Observable Progress	3
4	(sometimes but not consistent)	(closer to same-age peers)	4
5	Somewhat	Reached Level of Same-Age Peers	5
6	(generally age appropriate)	(mostly at or slightly above same-age	6
		peers)	

### Exhibit 23. FOCAL Gradients and Values

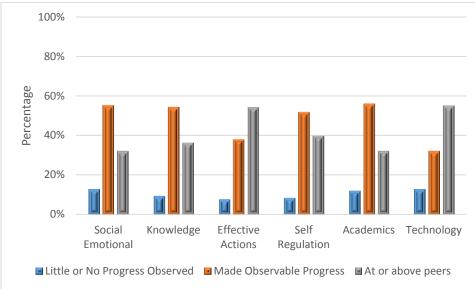
7	Completely	Maintained Level of Same-Age Peers	7	
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**Results of the analysis of the FOCAL changes in student learning and social-behavioral competencies show significant student improvement over the course of the intervention.** A total of 118 FOCAL forms were collected at both pre and post-test. Improvement was observed across all FOCAL domains, with the largest gains seen in social-emotional, self-regulation, and academics. The Exhibit below displays the FOCAL mean scores from pre to post-test.



Insert Exhibit 24. Mean gains on the Functional Outcomes Classification of Assets for Learners here

Examination of the post-test scores indicate that students' functional skills across domains are sometimes, but not consistently evident. Looking across post-test domain scores, students were rated as most consistently being able to take appropriate action to meet their own needs (i.e., demonstrating independence in self-help skills). A separate analysis of students diagnosed with autism indicates significant improvements across all domains with the largest gains observed in social-emotional skills and self-regulation.



Insert Exhibit 25. Extent of Progress Made Across FOCAL Domains here

Examination of the FOCAL Progress Scale Scores collected in the Spring reveal that over half of the students made the most progress in attaining positive social-emotional skills and social engagement, acquiring and using knowledge and skills, self-regulation skills related to classroom learning, and acquiring and using academic skills for classroom learning. The least amount of progress was observed in the Effective Actions Domain, but it is important to note that over 50% of students were rated as demonstrating skills commensurate with their peers.

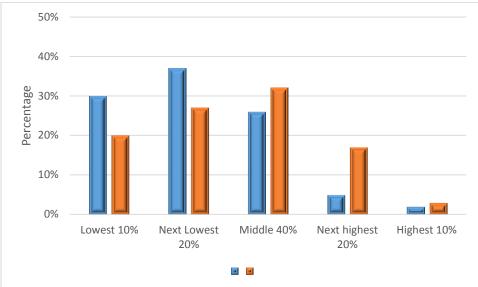
## Academic Competence Scale (ACS)

In addition to the FOCAL, the Academic Competence Scale (ACS; of the Social Skills Improvement System; Gresham & Elliot, 2008) was used to assess students' academic performance and progress. The adapted scale included 7 items that assess the level of academic competence for students from Kindergarten through Grade 12 and profiles the students' performance in terms of their percentile rank as compared to same-aged peers. The scale is rated from a score of 1 = lowest 10% performance; 2 = next lowest 20%; 3= middle or 40% rank; 4= next highest 20%; and 5 = highest 10%.

Teachers were asked to compare their students to their peers across the following items:

- Overall academic performance
- Reading
- Math
- Overall motivation
- Intellectual Functioning

Exhibit X shows the frequency percentage of students moving from a lower rating category to a higher rating category at post-test (i.e., Lowest 10%, Lowest 20%, Middle 40%, etc.).



Insert Exhibit 26. Students changing ACS Rating Categories here

Examination of the graph above shows that at the end of the school year, more students were rated in the middle 40 percent by teachers, compared to their typical peer's overall academic performance. This trend was observed across all other academic competencies: reading, math, motivation, and intellectual functioning. Examination of individual rating changes indicates that a higher percentage of students increased by at least one categorical rating (i.e., moved from next lowest 20% to middle 40%), compared to the percentage of students who decreased by at least one rating. Across all competencies, the majority of students did not change categorical ratings from pre to post-test, and were rated by their teachers as performing in the middle 40% compared to typical peers.

### **Teacher and Parent Perceptions of Inclusion**

## **Teacher Perceptions**

Thirteen teachers completed a pre-test survey, and seventeen teachers completed a post-test survey. Of those, only 3 teachers completed both pre-test and post-test surveys in the 2017-2018 school year. Lower scores represent more positive responses and attitudes toward inclusion. Average scores decreased slightly from Fall to Spring, reflecting an increase in positive perceptions around inclusion. The two exhibits below show the average survey scores across the year, and the items with the highest frequency of strong ratings by teachers at post-test: a) most strongly in agreement with the statement, and b) most strongly disagreeing with the statement.

### Exhibit 27. Mean scores on the Teacher Perceptions Survey

	Mean (SD)
Pre-Test	31.49 (5.26)
Post-Test	28.88 (5.74)

### Exhibit 28. Frequency of Strong Ratings on the Teacher Perceptions Survey Post-test

Item	Most Often Rated Positive (Strongly Agree)	Frequency
3	All students are enriched by participation in a classroom by peers with disabilities.	70%
10	I feel I have a positive attitude toward having children with disabilities in the classroom.	65%
12	When necessary, I work effectively with the challenging behavior of children using positive strategies.	55%
	Most Often Rated Negative (Strongly Disagree)	
6	Most school staff understand the capabilities of children with disabilities.	10%

## **Parent Perceptions**

Sixteen parents completed a pre-test survey, and 17 parents completed a post-test survey. Of those, only 4 parents completed both pre-test and post-test surveys in the 2017-2018 school year. Lower scores represent more positive responses and attitudes toward inclusion. Average scores decreased slightly from Fall to Spring, reflecting an increase in positive perceptions around inclusion. The two exhibits below show the average survey scores across the year, and the items with the highest frequency of strong ratings by teachers at post-test: a) most strongly in agreement with the statement, and b) most strongly disagreeing with the statement.

### Exhibit 29. Mean scores on the Parent Perceptions Survey

	Mean (SD)
Pre-Test	34.14 (8.42)
Post-Test	31.93 (8.15)

Item	Most Often Rated Positive (Strongly Agree)	Frequency
15	I am knowledgeable about the range of supports that are available to children with disabilities.	73%
	Most Often Rated Negative (Strongly Disagree)	
5	A regular education classroom provides more meaningful and functional opportunities for my child to learn than does a special education classroom.	27%

Exhibit 30. Frequency of Strong Ratings on the Parent Perceptions Survey Post-test

Survey results indicate that teachers strongly agree that all students in the classroom benefit from inclusion practices while parents strongly agreed that they were knowledgeable about the range of support available to their children. Parents disagreed that a regular education classroom provides a more meaningful experience for children compared to a special education classroom while teachers strongly disagreed that school staff understand the capabilities of children with disabilities. **Both teachers and parents showed improved attitudes about inclusion from pre to post-test.** 

## Social Validity

We administered the *Include Me* Partner's Survey to evaluate stakeholder's perceptions of the potential "spread of effect" or extended influence/impact of IM in the entire school or perhaps community. Specifically, we wanted to explore the perceived benefits from the IM consultants supporting and mentoring teachers, students, and parents. The survey contained 12 questions, where partners selected answers on a scale from "Strongly Agree" to "Strongly Disagree". Concluding the survey, we asked partners to identify both positive and negative critical incidents they observed during the year.

Seventy-two partners across seven school districts received the survey, of which we received a 46% response rate, representing all of the school districts. Survey results were collected in the spring of 2018.

The following exhibit compares average score on the survey by teachers, parents, and district administrators. Lower averages indicate more positive responses, such as "Strongly Agree" or "Agree." As displayed on the graph, parents felt most strongly about the perceived benefits of IM, compared to teachers and district administrators.

## Insert Exhibit 31. Average Survey Scores per Partner Type here

The following exhibit illustrates strong ratings from partners' survey responses, both positive and negative.

Item	Most Often Rated Positive (Strongly Agree or Agree)	Frequency	
05	I believe IM had a positive impact on the students' perceptions and attitudes	85%	
	towards inclusion in the district.		
01	IM has improved the classroom environments in our district by encouraging	82%	
	more individualized accommodations to meet specific needs and to foster		
	student engagement and participation for students with disabilities.		
Item	Most Often Rated Negatively (Disagree or Strongly Disagree)	Frequency	
09	Building principals share the inclusion philosophy by promoting school-wide	19%	

Exhibit 32. Frequency of Strong Ratings on the Include Me Partner's Survey

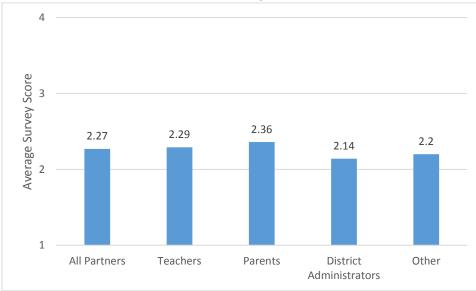
	changes in instruction and physical and social arrangements for students.	
10	Home-school relationships are closer and more responsive for IM students.	17%

Notable responses were also found in the critical incident portion of the survey. Some positive events or changes observed and noted on the surveys included: all students being included in school-wide assemblies and activities; inclusion-focused art projects; hosting awareness days for different disabilities; increased social acceptance of students with disabilities; utilization of iPad communication program. Negative events or instances observed and noted on partner surveys included: technology issues related to lack of training and yearly transitions; resistance by teachers to implement recommended strategies.

## Exploratory Analysis of Functional Interrelationship Between Teacher Inclusion Practices and Student Outcomes

Exploratory analyses suggest that teacher inclusion practices are related to students' post-test FOCAL scores. That is, teachers whose inclusion practices were rated high at post-test by consultants were more likely to have students who demonstrated higher functional skills at post-test.

Exhibit X displays student progress by teachers' inclusion practices. Significant differences were found at post-test between the two inclusion groups across all FOCAL domains, with the exception of Technology. That is, there is a continuing trend showing that students of teachers who were rated as usually demonstrating effective inclusion practices had higher FOCAL scores at post-test, compared to students of teachers who were rated as partially demonstrating effective inclusion practices.



#### Insert Exhibit 33. Post-test FOCAL scores by Inclusion Practices here