



University of Pittsburgh



SPECS for Include Me from the Start



2-Year Program Evaluation Research Report
2010-2012

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September 20, 2012



The 2010-2012 program evaluation research results of IMFS are detailed in this report (2nd year and continuing of those teachers continuing from first year).

The IMFS Initiative focused on the provision of a structured model for consultation and mentoring to regular education teachers in inclusive classrooms in school districts across Pennsylvania and emphasized children (Kindergarten through 3rd grade) who are at risk of school failure or having developmental/learning disabilities (from mild to severe).

This report of the *Include Me from the Start* (IMFS) Initiative began in September of 2011 and continued into June of 2012. The following report represents final analyses and results of data collected within this time frame.

Consultant and Teacher Participants from Arc of Pennsylvania

Fifteen consultants participated in the second year of the initiative, eight of whom participated in the pilot year. Consultants ranged in age from 32 to 58 years, averaging 46 years of age. Gender distribution was 14 female and 1 male and education level can be found in Table 1. The mean years of experience were 17.6 years. Forty percent of the consultants had teaching experience and 73% were the parent of a child with a disability.

Table 1: Education level of Consultants participating in year 2

<i>Degree</i>	<i>Percentage</i>
Certificate	7%
Bachelors	33%
Masters	40%
Some Graduate	13%
Other	7%

Demographic information was collected on 59 teachers. Teachers had an average of 15 years of experience. Most of the teachers were female; one male provided demographic data. Nearly half of the teachers had a Master's degree; the distribution can be seen in the chart below. The majority of teachers (71%) had a degree in Elementary Education, 15% Special Education and 14%, Early Childhood. Fourteen percent of teachers reported having dual degrees.

Figure 1: Teacher Education

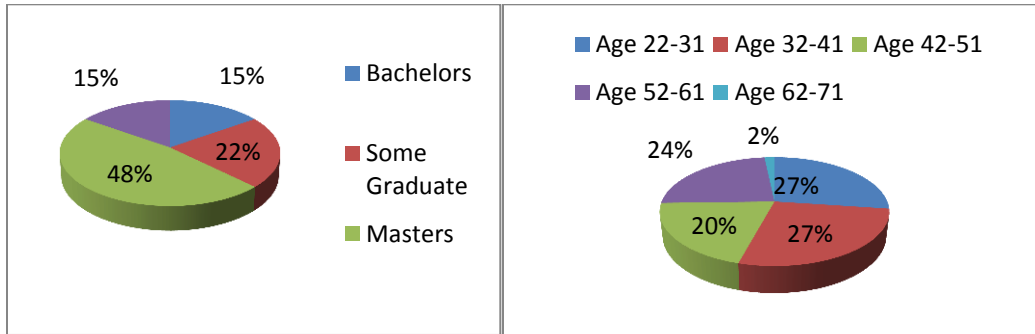
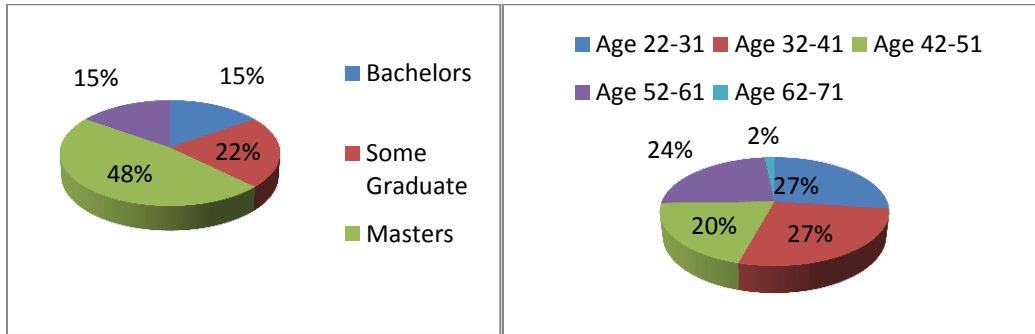


Figure 2: Reported Teacher Age



Student Participants

Demographic information was collected on 111 children, ranging in age from 5 years, 1 month to eight years, 4 months. The mean age of the children was 6 years, 4 months. The table and graphs below show the distribution of the sample in terms of gender, race/ethnicity, grade level and qualifying diagnoses.

Table 2: Gender distribution of student participants

	Frequency	Percent
female	29	26.1
Male	82	73.9

Figure 3: Distribution of race/ethnicity of student participants

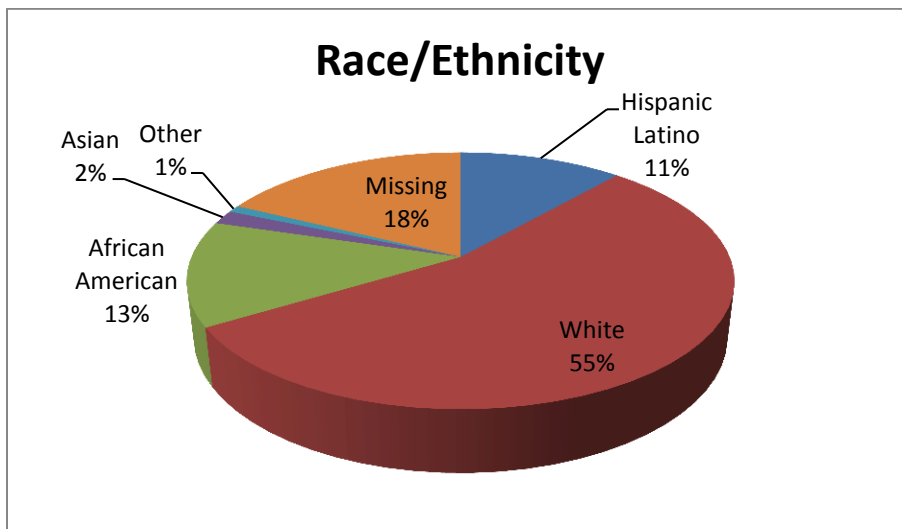


Figure 4: Distribution of grade placement of student participants

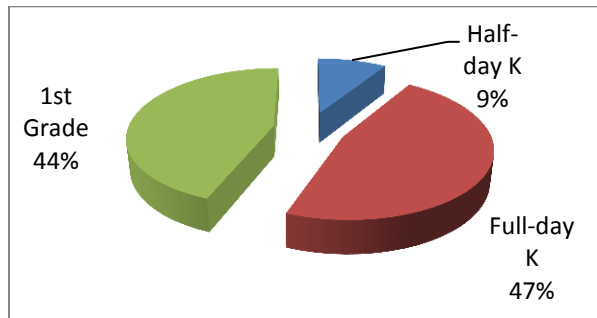
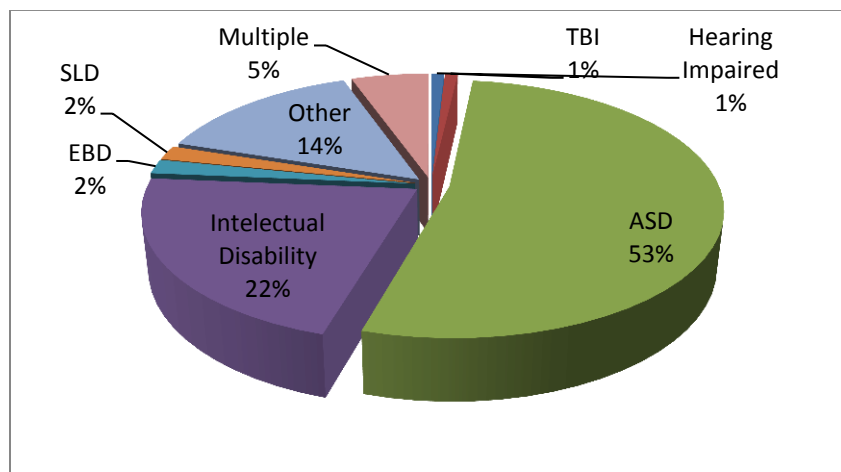


Figure 5: Distribution of the Disability Categories of some student participants



Of the children with Intellectual disability, 62.5% had Down Syndrome. Data indicated that 21% of the children had more than one qualifying disability listed but were not identified in the 'Multiple Disability' category. The 'Other Health Impairment' category included various specific disabilities; Noonan's Syndrome, Erb's Palsy, Selective Mutism, DiGeorge Syndrome, and ADHD. Eight children had no specific diagnosis listed. Of the children in the 'Multiple Disability' category, one child was deaf and had an orthopedic impairment, one child was deaf-blind and had an orthopedic impairment, and one child was blind and had cerebral palsy and four students were intellectually impaired as well. Two of the students in the 'Multiple Disabilities' category had no further specifics listed.

The largest majority of students received the services of Speech and Language therapists. The second most prescribed service was Learning Support for children with learning differences and at-risk status. More than half (52%) of the children received one type of support service.

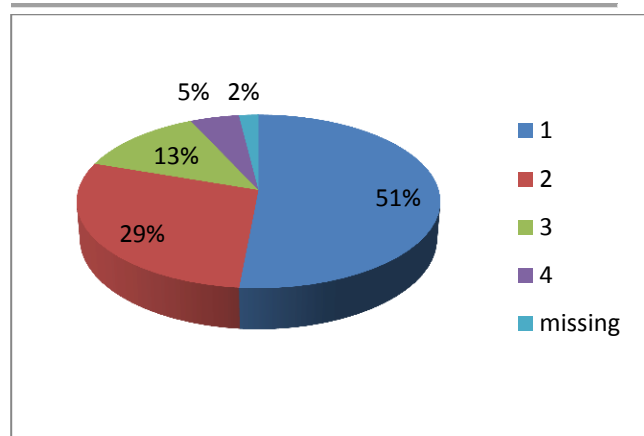
Table 3: Amount of Special Education student participants received

Amount Category	Number of Students
Itinerant Support	25
Supplemental Support	47
Full-time Support	18
missing	21

Table 4: Special education services

Type	Percentage
Autism	19%
Blind-VI	1%
Deaf-HI	1%
Emotional- Behavioral	3%
Learning	24%
Life Skills	15%
Physical	8%
Speech	29%

Figure 6: Number of support services received



Consultant Activities: Consultation Monitor Data

The tables below present the consultation monitor data collected in the study. The monitor is used to track consultant time and activities on the project. Data is displayed for teachers who received support in the second year. Monitors were completed by 13 of the 15 consultants. Two consultants were unable to complete the monitor due to school district complications and unforeseen circumstances. 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. The first chart represents all of the SAS categories combined and the subsequent charts are broken down into the four components.

Figure 7: Percent Allocation of Consultant Activities across Categories

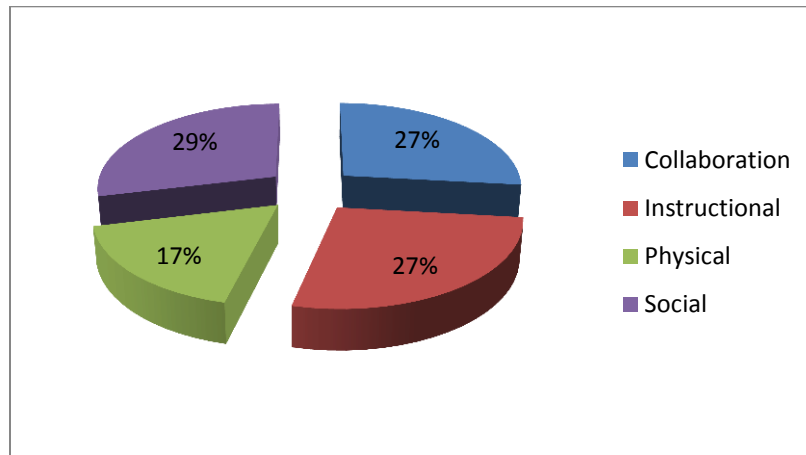


Figure 8: Percent Allocation of Consultant Activities across Collaboration Category

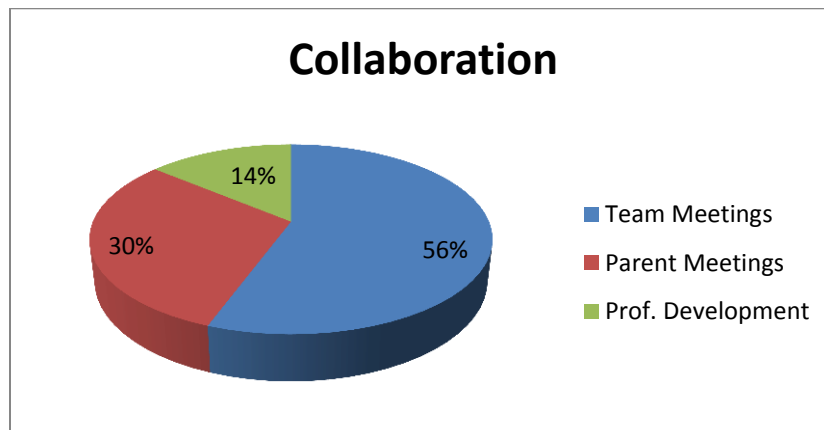


Figure 9: Percent Allocation of Consultant Activities across Instruction Category

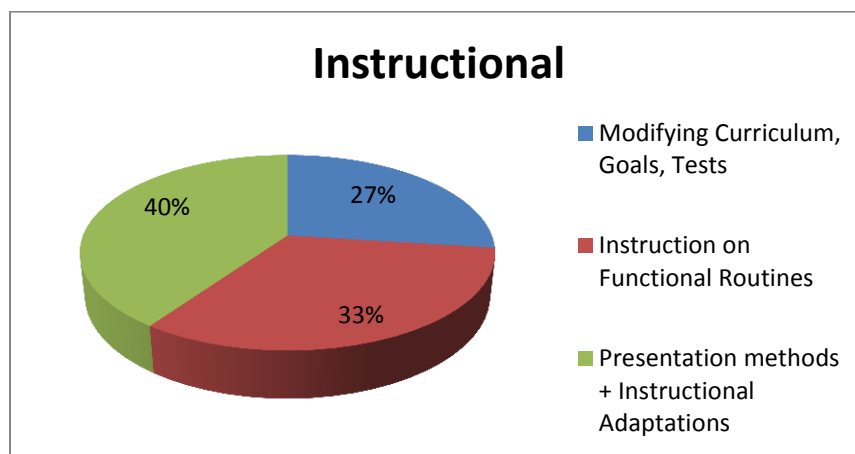


Figure 10: Percent Allocation of Consultant Activities across Physical Category

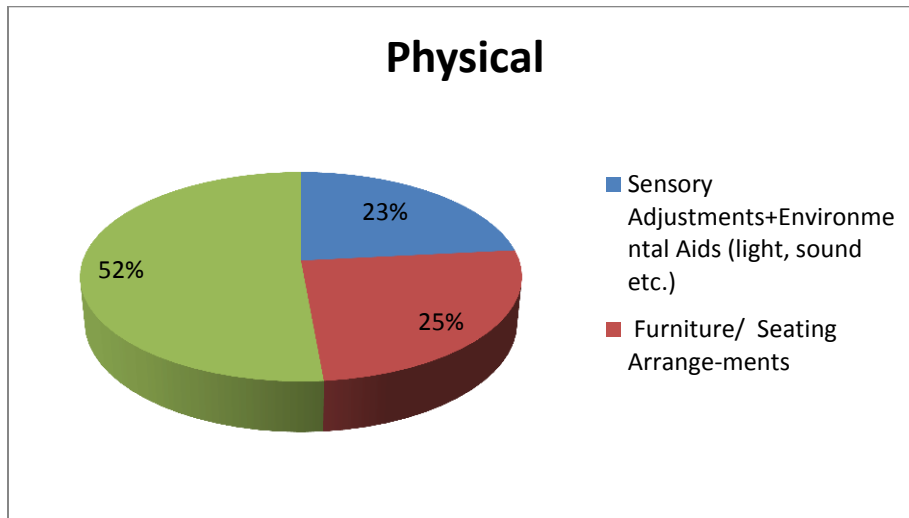
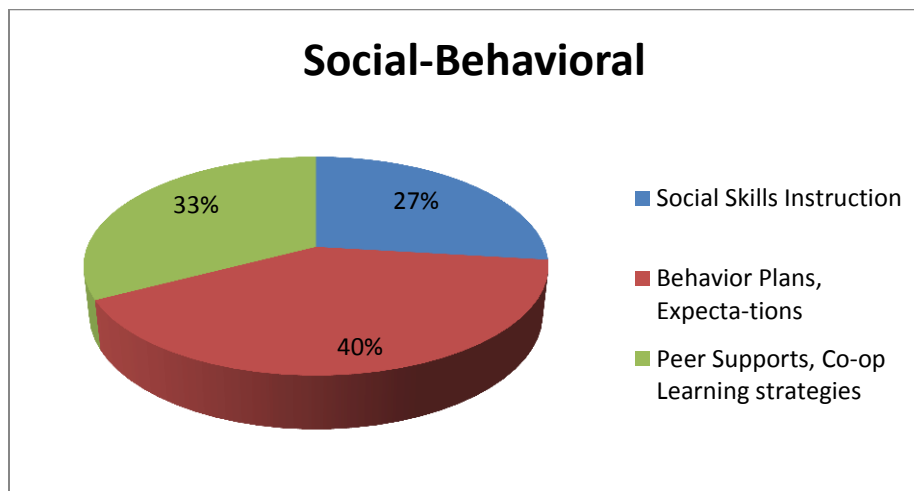


Figure 11: Percent Allocation of Consultant Activities across Social-Behavioral Category



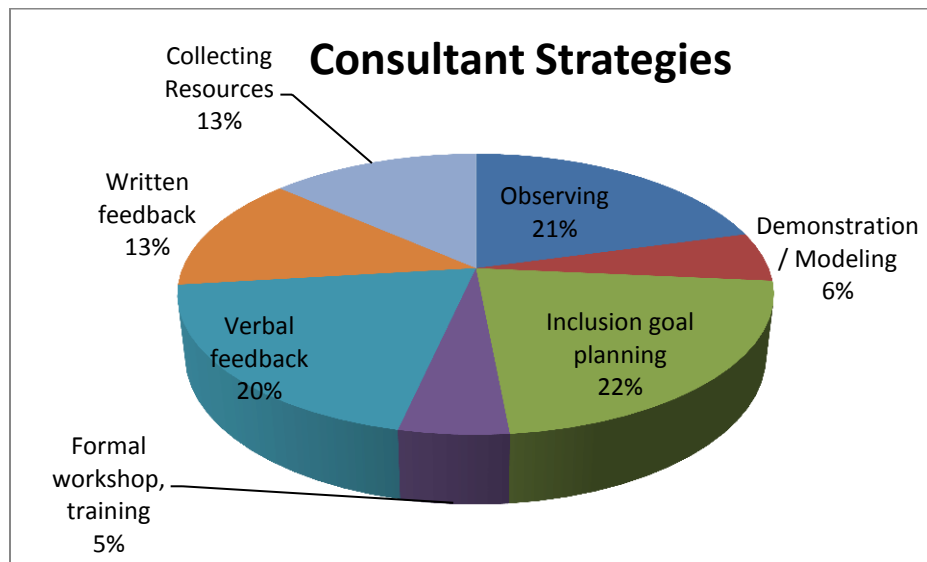
Results indicate that overall, *Include Me* staff consulted with regular education teachers most frequently on the topics of collaboration, instruction and social-behavioral issues and less often on physical supports in the classroom.. Specifically, the consultants put most of their effort into team meetings and working with teachers on how to adapt presentation and instructional methods in the classroom. Formal workshops accounted for only 5% and demonstration and modeling of skills 6% of consultant effort.

The data also revealed that inclusion goal planning and observing were the predominant strategies used by consultants when working with teachers. Collecting resources, including time spent locating or

preparing information for parents and teachers accounted for 13% of the consultant's effort. Modeling and demonstration of classroom practices and formal workshops were the activities utilized least, as illustrated in Figure 12.

Overall, our observations are that the following SaS categories when used by consultants and implemented by teachers provided the most benefit to children: Instructional Domain—Modifying curriculum and goals and tests; Physical: Implementing adaptive devices, and environmental arrangements; and Social: individual behavior plans.

Figure 12: Strategies or Activities used by Consultants over the Intervention Period.



The following table presents the intensity or amount of consultation teachers received over the course of the intervention (a nine month period). On average, teachers received approximately 37 hours of consultation each month. 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 calls, emails and written notes) were all utilized to a much lesser extent.

Table 5: Amount of Consultation Teachers Received over the School Year

	Face to Face	Phone	Email	Written notes	Amount of Time-Total
Total Ave Minutes	1614.11	165.40	253.18	253.16	2213.31
Total Ave Hours	26.36	2.76	4.14	4.22	36.89
Average Hours per child	2.93	0.31	0.46	0.47	4.10
Range (Average hours per month per child)	2.35-4.33	.12-.69	.21-.67	0-.89	1.03-5.97

Teacher and Parent Perception Surveys

Twenty-nine teachers completed both pretest and posttest surveys in the second year of the initiative. Mean scores decreased from pretest to posttest and lower scores represent more positive responses and attitudes toward inclusion.

Table 6: Mean scores on the Teacher Perception Survey from pretest to posttest (N=29)

	Pretest	Posttest
Mean	31.52	29.67
Std. Deviation	6.25	7.57

Teachers completed a Critical Incident Survey, providing their thoughts on the positive aspects of *Include Me from the Start* and their concerns about including children with disabilities in typical classrooms. Teachers most often wrote that 'Include Me' consultants provided support in terms of valuable information, including ways to modify lessons, adapt materials and locate resources. Teachers reported that consultants bridged the gap, increasing communication between home and school. They also appreciated that consultants observed and provided another set of eyes and perspective on individual child needs. The most frequently reported concern was that they, as teachers, they would not be able to meet the academic needs of all children in the classroom.

Thirty parents completed the Parent Perception Surveys at two time points. Mean scores on the parent surveys were lower than mean ratings on the teacher surveys, showing that parents had more

positive attitudes than teachers. The ratings also decreased on the parent survey as shown in the following table.

Table 7: Mean ratings on the Parent Perception Survey from pretest to posttest (N=30)

	Pretest	Posttest
Mean	27.328	25.62
Std. Deviation	1.5046	1.390

More specifically, items relating to parent knowledge about education law, child rights, available supports and ability to locate resources improved during the course of the intervention. Parents and caregivers also were asked to write their thoughts on *Include Me from the Start*. The most frequently reported benefit by parents was consultant support to the teacher in the form of knowledge about how to include their child in the classroom. Parents appreciated the objective, third party perspective of the consultant about their child in the classroom setting. With the same frequency, parents reported the positive impact consultants had in supporting them in the inclusion process. Parents most often report concerns regarding whether their child's needs will be met and if he/she will be accepted and understood by teachers and peers.

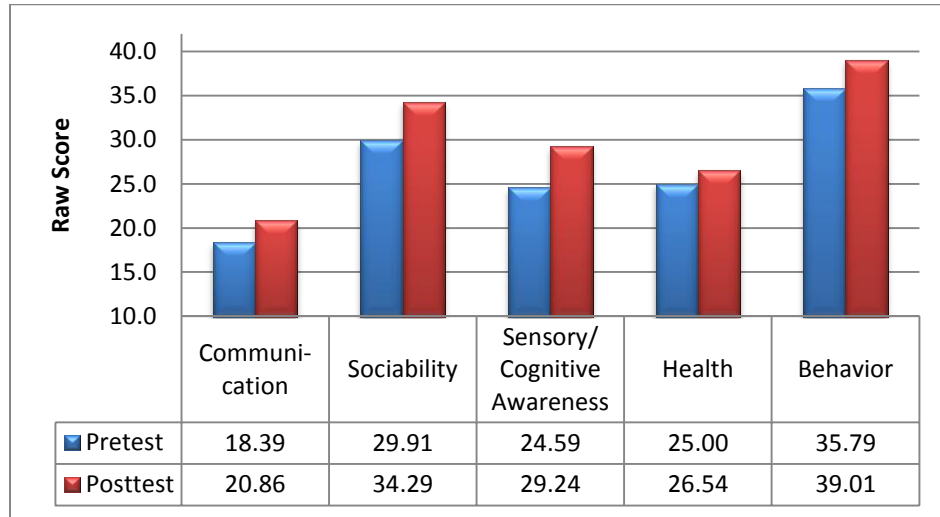
Assessment of Child Skills—Status and Progress

The mean time between assessments was approximately seven months during this second year of the inclusion initiative. The School Learning and Progress Scale (SLPS) was used to assess the children's status and gains in skills over the year. The SLPS is based on the Autism Treatment Evaluation Checklist (Rimland & Edelson, 1999) and was chosen because it is useful for measuring functional skill acquisition and is sensitive to incremental changes in skills.

Results of the analyses of the SLPS also show child improvement. The first three subscales use a 3-point Likert scale, the Health/Behavior subscale uses a 4-point scale. For the first analyses, the Health/Behavior subscale was divided the total Health/Behavior score can be derived from adding them together. Ratings were reverse scored for readability. (Typically, lower ratings on this scale represent more skill; higher ratings represent more deficit or needs). The largest gains from pretest to posttest were in

the area of Sociability and Sensory/Cognitive Awareness (which includes appropriate attention and responding). Scores increased an average of 4.5 points from the pretest to the posttest in these two subscales. (N =70)

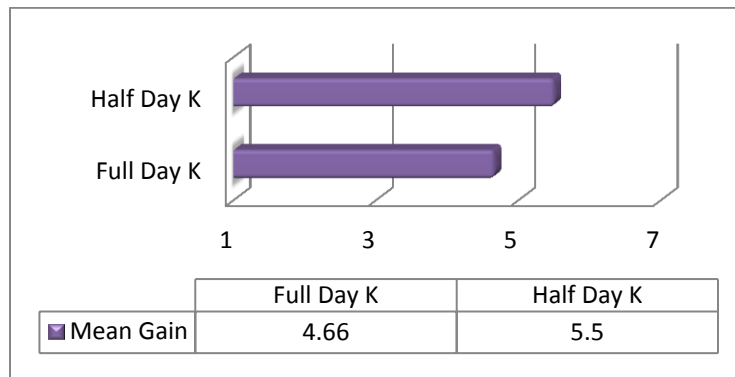
Figure 13: Mean gains on the School Learning & Progress Scale in year 2



*Significant differences on all subscales from pre to post-test ($p < .001$).

Students enrolled in Half-day Kindergarten made slightly more progress on the School Learning & Progress Scale total score than children in Full-day Kindergarten. Gain scores were computed by subtracting the Pretest from posttest scores for children in both grades. Mean gain scores differed by one point, most likely due to the larger range of scores for the Half-day children: -8 to 19 (half-day K) compared with -4 to 14 (full-day K).

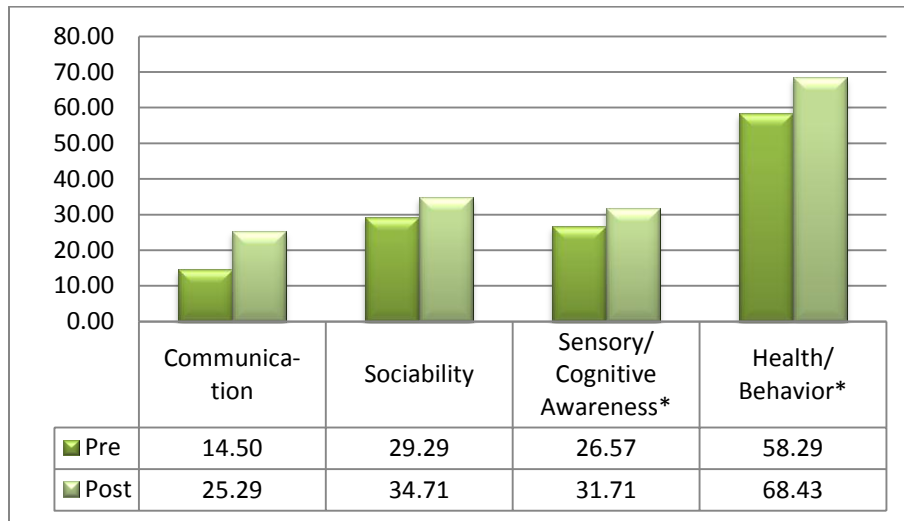
Figure 14.: Gains of Children in Half-day and Full-day Kindergarten classrooms



Children enrolled in both years

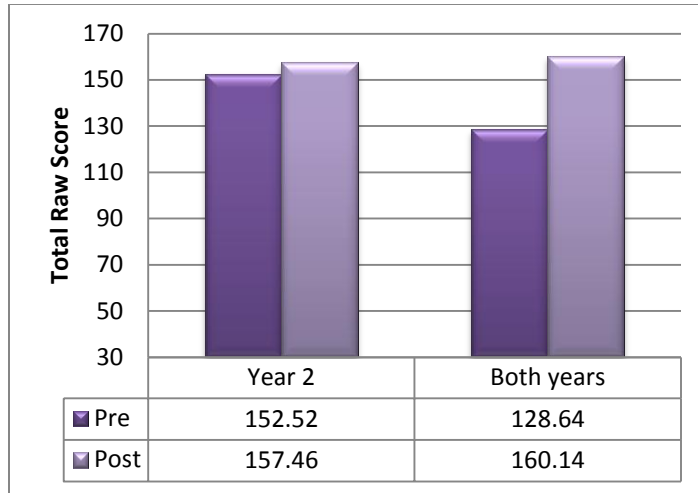
Seven students had pretests from the first year of the initiative and posttests at the final data collection point in May/June of the second year. Results revealed that children enrolled across both years gained skills across domains to a greater extent than 1 year participants as displayed in the graph to the right and on the following page. Mean gains for children across two years ranged from 4 to 10 points, compared to 1.5 to 4.5 points for children enrolled in the second year only. However, because there were so few subjects the significance level (p-value) was less. The Communication and Sociability subscales approached significance and the Sensory/Cognitive Awareness and Health/Behavior were significant ($p < .05$). The graph on the next page illustrates the results of the analyses. Figure 16 illustrates mean score for children enrolled in both years of the initiative, compared to children that participated in year 2 only.

Figure 15: Graph of Mean Scores at Pretest and Posttest for children enrolled both years



*Significant differences from pre to post-test ($p < .05$).

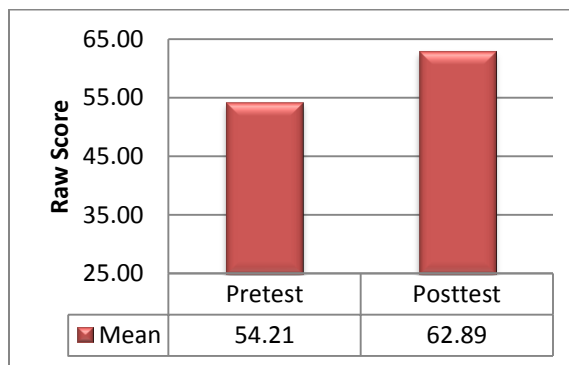
Figure 16: Graph comparing total scores for children participating in year 2 only and in both years of Include Me.



Vineland SEEC Interpersonal Subscale and School Learning & Progress Scale

In the second year of the initiative, the Interpersonal Subscale of the Vineland Social Emotional Early Childhood Scale (SEEC) was added to the evaluation and used to measure child progress in the area of relationships and social skills. A series of paired sample t-tests was conducted to examine the changes on Vineland Social Emotional Early Childhood Scale (SEEC) and School Learning & Progress Scale (SLPS). On the SEEC, higher ratings represent higher skill levels. Analyses revealed that children made significant gains on the Interpersonal Subscale (n=91), mean scores increased by 9 points.

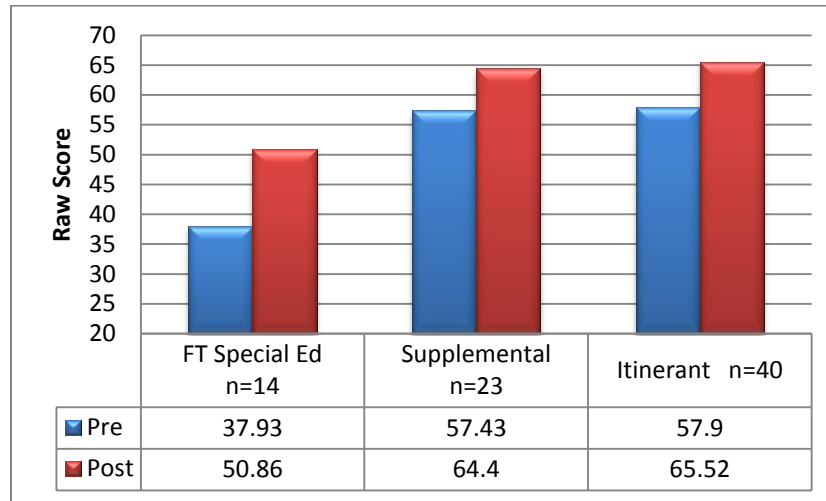
Figure 17: Vineland SEEC Interpersonal Subscale gains in year 2



*Significant differences on all subscales from pre to post-test (p<.001).

All children improved significantly on the Interpersonal Relationships subscale of the Vineland Social-Emotional Early Childhood Scale. Children in full time special education classrooms showed the most improvement but their scores were lower than children receiving supplemental and itinerant services at pretest.

Figure 18: Mean gains on the SEEC Interpersonal subscale by placement groups

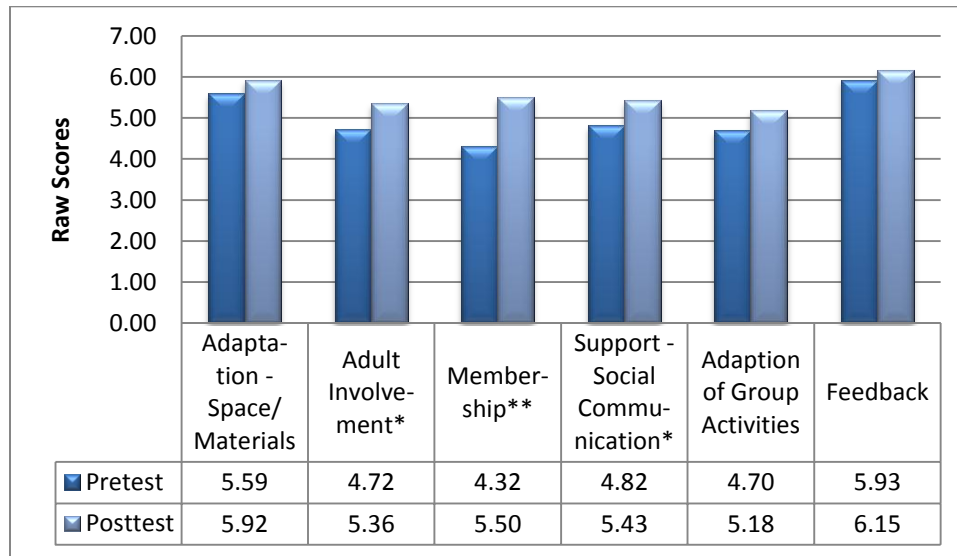


*Significant differences on all subscales from pre to post-test ($p < .001$).

Inclusive Classroom Profile: Classroom Quality and Teaching Practices

The results of the Inclusive Classroom Profile analyses showed that classroom quality improved over the course of the intervention. A total of 74 ICP forms were completed at both pre and posttest. However, consultants completed 40 of the “Feedback” subscales for both time points. Based on the consultants’ observations, classrooms improved on all subscales with three of those subscales reaching significance: Adult Involvement in Peer Interactions, Support for Social Communication and most notably, Membership.

Figure 19: Graph of the Mean Gains on the Inclusive Classroom Profile



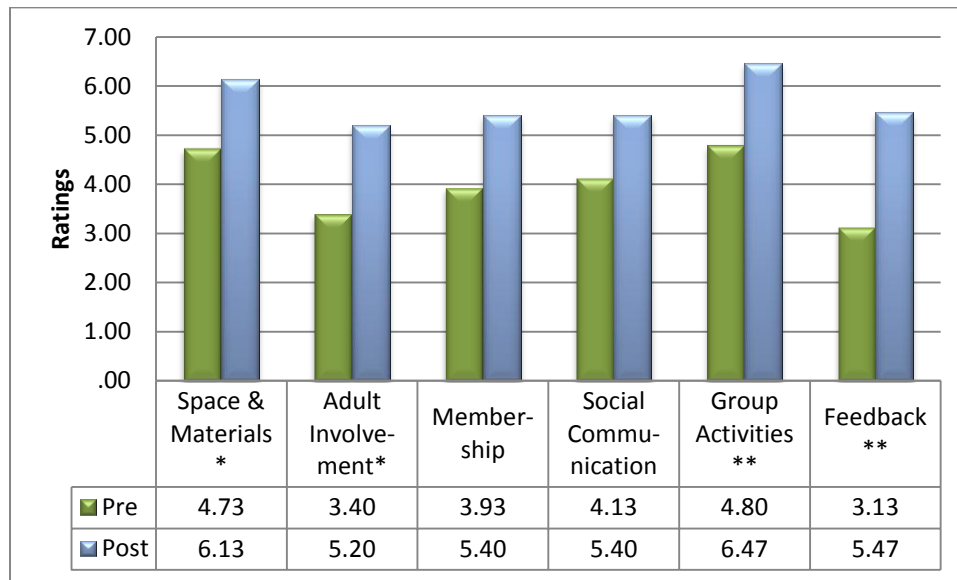
** Significant difference from pretest to posttest ($p < .001$)

*Significant difference from pretest to post ($p < .05$)

Independent ICP Ratings

Independent observations by members of the SPECS research team were completed concurrently with Consultant observations. This analysis has not changed from the preliminary report. Eighteen classrooms were randomly selected at the beginning of the year. Four SPECS team members completed the Inclusive Classroom Profile (ICP) at pretest and posttest in the randomly selected classrooms. One of the teachers was unable to be observed at pretest. At posttest, one SPECS' team member was given an insufficient time allotment to complete the ICP for two classrooms. A total of fifteen classrooms were observed at both time points. Inclusive classroom practice improved in all areas. Two subscales, 'Adaptations of Group Activities' and Feedback' reached significance.

Figure 20: Graph of Mean Scores on the SPECS team ICP ratings



* Significant difference from pre to post-test ($p < .01$)

** Significant difference from pretest to posttest ($p < .001$)

Quality related to child outcomes

Classrooms were placed into one of two groups based on ICP pre-test scores:

- Low Quality = 1.00 to 4.60; $n=39$
- High Quality = 4.80 to 7.00; $n=43$

As a group, after controlling for the pretest, children in the high quality classroom group demonstrated better post-test scores on the School Learning and Progress Scale than those in the low quality group. The Health and Behavior subscale approached statistical significance.

Table 8: Mean Scores on the School Learning and Progress Scale by Quality Group

	ICP Quality Group	
	Low Quality	High Quality
Communication	24.66	25.54
Sociability	33.98	35.27
Sensory/Cognitive Awareness	30.70	31.39
Health/Behavior	67.59	69.72
Total Score	155.76	161.22

*No significant difference from pretest and posttest ($p < .05$).

Consultation Monitor activities related to child outcomes

As previously reported, the Consultation Monitor was used to track consultant activities, including the four SaS categories (Collaboration, Instructional, Physical and Social) over the course of the intervention. A series of regression analyses were run to determine if consultant activity, recorded on the Monitor, was related to children's posttest assessments. More precisely, regression was utilized to discern whether the difference in child scores was predicted by consultation categories. The topic, 'Behavior Plans', under the Instructional SaS category accounted for the most variability in the School Learning and Progress Scale total score.

Summary

The results of the independent program evaluation demonstrate the impact of *Include Me from the Start*. The initiative facilitated the inclusion of children with profound disabilities in their neighborhood schools and supported parents in the process. Consultants helped districts and schools implement inclusion by collaborating with and supporting teachers. Inclusive practice improved and children progressed over the course of the intervention. Children that participated for both years of the initiative showed substantial improvement in scores.