The Role of Principal Leadership in the Inclusive School Practices Initiative

ISP Study Year II

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Executive Summary

The goal of the Clark County School District (CCSD) Inclusive School Practices (ISP) initiative is to support schools in creating an inclusive, student-centered culture designed to close the achievement gap and create positive learning environments. School personnel received professional development regarding the implementation of inclusive practices in the classroom. The CCSD Student Support Services Division (SSSD) sponsored this research program. The CCSD Research Department designed the study, developed protocols, collected and analyzed the data.

This study focused on the influence of site leadership on the Inclusive School Practices initiative. Specifically, the goal was to identify principals' knowledge and attitude towards inclusive classroom practices and what support they provided within their schools. Observers went into ISP schools to document how leadership affected the implementation of inclusive classroom practices.

Design

All CCSD elementary and middle school principals who participated in the ISP initiative received a survey asking about inclusive classroom practices at their school. The content of the survey covered principal participation in ISP professional development, perceptions of teacher preparation for inclusive classroom practices, related student outcomes, and support provided in terms of budgeting, student and teacher scheduling, and school culture. Seventy-five percent of survey recipients responded. Of those, 40 schools (30 elementary and 10 middle schools) were selected for classroom observations. Observations documented specific collaborative teaching models, student activities, and inclusive strategies. The influence of each element on student achievement also was evaluated.

PRINCIPLE FINDINGS

Principal ISP Professional Development

- Most (79.4%) principals have attended the ISP administrative workshop.
- Seventy percent reported attending an ISP workshop with the teachers.
- More than half (54.6%) have held ISP workshops at their schools.

- The number of ISP workshops principals attended was associated with higher positive perceptions of student outcomes and negative perceptions of resource or "pullout" approaches.
- The mean number of workshops attended by principals was 2.7. Those principals who completed at least three workshops were more confident in their schools' implementation of inclusive classroom practices.
- Principals who completed four or more ISP workshops sought out external funding to support inclusive classroom practices at their school.

Teacher ISP Professional Development

- Overall, principal perceptions tended to be negative towards teacher preparation in inclusive classroom practices. Most principals (44% to 58%) believed teachers needed additional professional development.
- Only 18% of principals strongly or very strongly agreed their teachers were adequately prepared. Strong positive perceptions were associated with:
    - Greater participation in peer tutoring
    - School budgets that supported inclusive classroom practices
    - Teachers more likely to volunteer as collaborative teachers
    - More collaborative classrooms within the school
    - Positive perceptions about students making gains in academic achievement

Classroom Observations

- Middle schools had more collaborative classrooms than elementary schools. Title I schools had fewer collaborative classrooms than non-Title I schools.
- Less than half (48.5%) of the classrooms had two teachers present at the time scheduled as a collaborative classroom.
- Principals with less positive perceptions about ISP supporting student achievement had more classrooms where one adult taught and one adult observed the students.
- Teachers who used tiered activities to differentiate instruction had more class discussions and writing activities.

- Of specific collaborative teaching models, co-teaching decreased after participating in the ISP initiative for 2 years. The model One Adult Teaching and One Adult Observing decreased after 4 years of participation in the ISP initiative.
    - Whole class instruction decreases between two and four years of participation in the ISP initiative, while independent student work increased during that same period.
    - Principal perceptions about student outcomes predicted classroom use of graphic and advanced organizer. Perceptions that are more positive correlated with higher use of graphic and advanced organizers.
- The length of a principal's tenure at a school was positively associated with increased use in tiered student activities and students working independently. Tenure was associated with decreases in multi-modal instruction. The principal's tenure at that school correlated positively with school CRT Reading, Mathematics, and Science scores.

Student Achievement

- Title I elementary schools who participated in the ISP initiative had higher CRT Reading scores than other Title I schools.
- ISP middle schools who were not Title I had higher CRT Reading, Mathematics, and Science scores than all Title I schools and non-Title I schools not participating in the ISP initiative.

These findings support the ISP initiative suggesting principal knowledge and experience with the ISP initiative reinforces principal's perceptions, support, classroom practices, and student achievement. These results also suggest a number of opportunities for supporting these principals exist. Principals would benefit from more support in professional development for themselves and their teachers.

The Role of Principal Leadership in the Inclusive School Practices Initiative

ISP Study Year II

Educators once believed that children with disabilities, specifically students with Individualized Education Plans (IEPs), may best learn separately from other children in what was known as pullout instruction or "resource rooms"(Gresham, 1982, as cited in Cole & Meyer, 1991). Current research suggests placing students in resource rooms may be detrimental to student achievement (Jenkins, 2005). For example, Savage (2006) and Weisch (2006) found that students in pullout instructional programs declined in reading and spelling skills.

Inclusive classroom practices, as an alternative to pullout instruction, are specific strategies for teaching students of diverse learning rates and knowledge in one classroom (United Nations Educational, Scientific and Cultural Organization [UNESCO], 1994, p. 11). Inclusive classroom practices include, but are not limited to collaborative teaching models, differentiated texts, work and instruction, and student-centered scheduling. Several studies associate the use of inclusive classroom practices with improvement in social skills (Vaughn & Klingner, 1998) and better academic achievement (Calhoun & Fuchs, 2003; Kemp & Carter, 2006; McGregregor & Vogelsberg, 2000). Results include gains in reading achievement (Bear & Proctor, 1990; Walsh & Snyder, 1993; Wilson & Michaels, 2006), mathematics (Calhoun & Fuchs, 2003; Fryxell, 1995), science (Lundeen & Lundeen, 1993), and social studies (Patriarca & Lamb, 1994).

Principal leadership is a recognized element in the successful implementation of inclusive classroom practices (Cruzeiro & Morgan, 2006). Source of this necessarily leadership

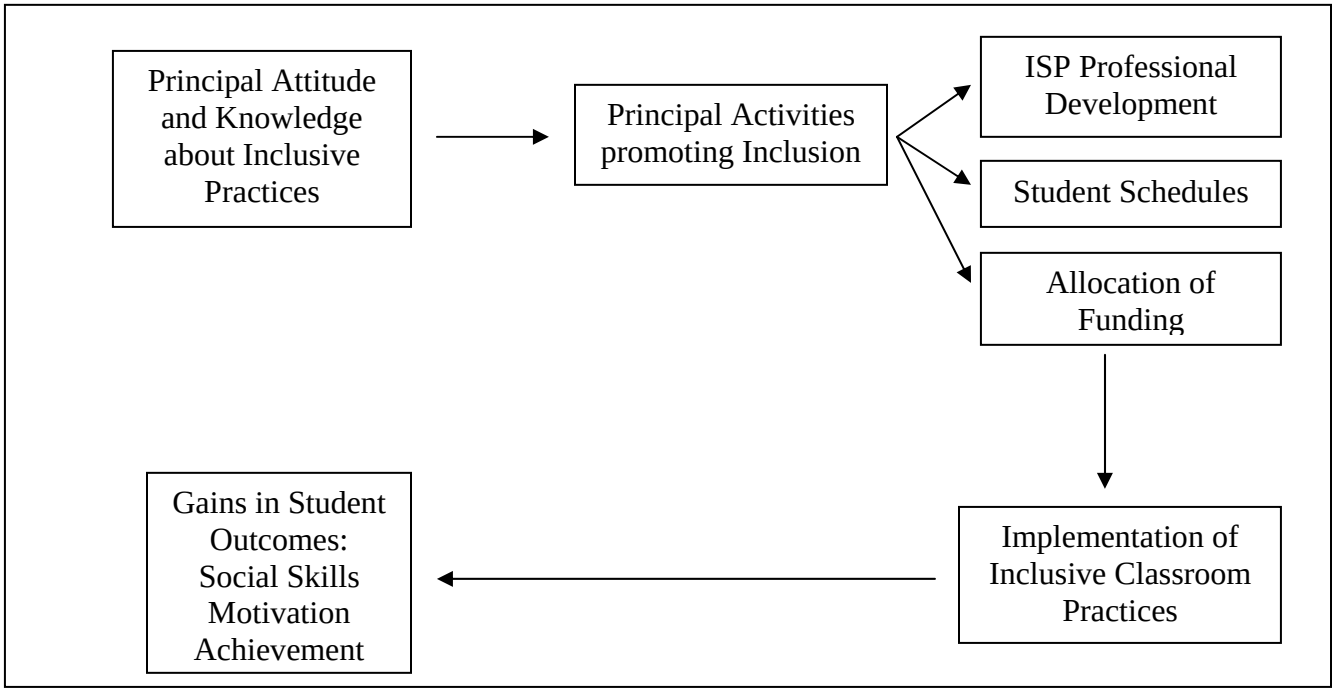
comes from the power structure within the school or district (Leo & Barton, 2006) and through the principal's vision for the school (Cruzeiro & Morgan, 2006; Parker & Day, 1997). Inclusive principals establish policies and structures that support inclusive practices (Guzman, 1997; Horrocks, White & Roberts, 2008; Lieber, Hanson, Beckman, Odom, Sandall, Schwartz, Horn & Wolery, 2000). Structures such as the provision of professional development, as well as financial and emotional support lead to strong inclusive classroom practices (Idol, 2006; Minke, Bear, Deemer & Griffin, 2006; Sindelar, Shearer, Yendol-Hoppey & Liebert, 2006).

It was the goal of this project to identify principals' knowledge and support in an inclusive practices program. First, principals completed a survey about their attitude, knowledge, and activities regarding inclusion. The purpose of the survey was to outline the continuum of beliefs and activities for principals who participate in an inclusive practices school.

Following the administration of the survey, observers visited those schools participating in the CCSD ISP initiative. The purpose of the observations was to identify how principals' beliefs trickle down into classroom instruction. While teachers and other school staff have a direct influence on inclusion in the classroom, we expected that principals have a mediating influence—either positive or negative—on inclusive practices. A secondary goal was to identify how student engagement interacts with inclusive practices. The current study was a necessary step to assist educators in understanding how to best facilitate the implementation of inclusive practices, the success of professional development in changing classroom practices and teacher attitudes, and how practice and attitude influence student outcomes.

Research Framework and Methods

The ISP Research Advisory Committee developed the conceptual framework that guided this study. The Committee drew on prevailing views on educational leadership, as well as existing research on inclusive classroom practices, including the CCSD ISP Year I study. Figure 1 illustrates the framework describing the Committee's theory of inclusive leadership. Principal knowledge and attitude about inclusive school practices guide the support and promotion of the Inclusive Schools Practices initiative. Specific activities include professional development regarding inclusive classroom practices, guiding student schedules to support students who would benefit from inclusion and seeking and allocating funding that supported inclusive practices. All of these lead to teacher buy-in and implementation of inclusive classroom practices. In turn, successful implementation of inclusive practices in the classroom should improve student outcomes: gains in social skills, self-esteem, motivation, and academic achievement.



There were three stages to this study. The first was the collection of principal knowledge and attitude towards inclusion through an on-line survey. The second was tracking inclusive practices through classroom observations. The final was to examine student achievement using CRT scale scores. Other student outcomes were assessed previously in the ISP Year I study.

Sample

All 130 K – 8 principals who participate in the CCSD ISP initiative received a link to the Principal Survey via e-mail. Seventy responding principals were from elementary schools and 27 were from middle schools. Of those who responded, principals worked in CCSD an average 17.5 years. The average (mean) number of years as principal was 5.5 with 3.5 years at their current school.

Forty principals who responded to the survey were selected for classroom observations at their schools. Ten schools were middle schools, and the remaining 30 were elementary (K – 5) schools. Stratified sampling occurred to insure representation across the six district regions, years of involvement in the ISP initiative, and ethnic makeup of the district. Twenty schools (50%) received Title I funding.

Data Sources

Principal Survey. Principals were surveyed in the fall of 2008. Principals received notification of the survey through the district email. This email contained a link that led to a web-based (Zoomerang) survey. The respondents met the criteria for being representative of the ISP schools. Appendix A contains the survey items.

Classroom Observations. An observer checklist is a modified from a CCSD Learning Walk. A Learning Walk is a five-to-ten minute classroom visit that focuses on instructional strategies and classroom organization (Marsh, Kerr, Ikemoto, Darilek, Suttorp, Zimmer & Barney, 2005). One Learning Walk is not intended to be stand-alone events or evaluations, but a collection of Learning Walks provides a comprehensive observation of the school. Appendix A contains the observation checklist.

Consultants for the district developed the original CCSD Learning Walk. This instrument was selected because it aligned with district initiatives and with previous inclusive classroom practices research. Some modifications were required to increase the focus on inclusive classroom practices. Topics covered quality and level of student engagement, specific collaborative strategies employed by the teachers, and differentiated instructional strategies.

Student Academic Achievement. Student assessment data, the Nevada Criterion Referenced Test (CRT), was collected at the end of the school year for Grades 3 – 8. The CRT focused on three content areas: reading, mathematics and science. These assessments were used to determine school and district Annual Yearly Progress as dictated by the No Child Left Behind Act of 2002. CRT scores were reported as standardized scale scores with a minimum score of 100 and a maximum of 500.

Results

Context

CCSD is the fifth largest school district in the United States comprising of a mixture of urban, suburban and rural schools. A diverse population is served with 42.5% receiving free or reduced cost lunch. The race and ethnic division is 39.9% Hispanic, 0.8% American

Indian/Alaskan Native, 9.3% Asian/Pacific Islander, 14.3%, Black, 13.9%, and 36.1% White. Gender is divided 51.5% male and 48.5% female. Students with IEPs account for 10.3%. Students identified as Limited English Proficiency (LEP) represent 19.6% of the student population. Table 1 presents the district and ISP school demographics.

Table 1. CCSD 2008 demographics compared to ISP school demographics

	CCSD		ISP	
	Elementary	Middle	Elementary	Middle
Number of students	151,495	78,140	72,917	46,177
Number of schools	217	82	98	34
Number of Title I schools	65	11	35	5
Percent of students with IEPs	12.6	14.8	10.5	10.04
Number of schools not meeting AYP	108	40	62	19

In 2004, CCSD implemented an Inclusive School Practices (ISP) program designed to support schools in creating an inclusive, student-centered culture. The ISP initiative offered professional development for implementing instructional strategies such as differentiated instruction in classrooms and collaborative teaching models, on-site technical assistance, and additional funds to support contributing activities. The Student Support Services Division (SSSD) sponsored the ISP initiative. Professional practices designated by the ISP initiative were designed to increase academic achievement and create a positive environment for all CCSD students. The stated goals of the Inclusive School Program were: (1) close the achievement gap, (2) treat people with dignity and respect, and (3) create positive learning environments.

Despite the initial interest and participation of 120 schools, in 2006 CCSD personnel recognized that vast improvements were necessary in the promotion of inclusive school practices in the majority of CCSD schools. In an effort to address the needs of the transitive administrative and teacher populations and create sustainable change at schools, a revised professional development model was developed for implementation during the 2007-2008

school year. This model offered a differentiated approach to participating schools, targeting the professional development needs of individual teachers. The effectiveness of specific inclusive classroom strategies had yet to be evaluated systematically. Thus, the purpose of the present evaluation was to outline the challenges and successes in implementation of inclusive classroom practices and determine whether positive student outcomes could be detected in classrooms that are more inclusive.

Principal Survey

Ninety-seven principals responded, providing a response rate of 75%. Seventy (72%) responding principals represented elementary schools, while the remaining 27 (28%) represented middle schools. All principals reported serving students with learning disabilities. Students with developmentally delays, emotional challenges, speech impairments, health impairments, and autism were highly represented in these schools. Six principals did not indicate which students were served in their schools. The specific diagnoses are in Table 2.

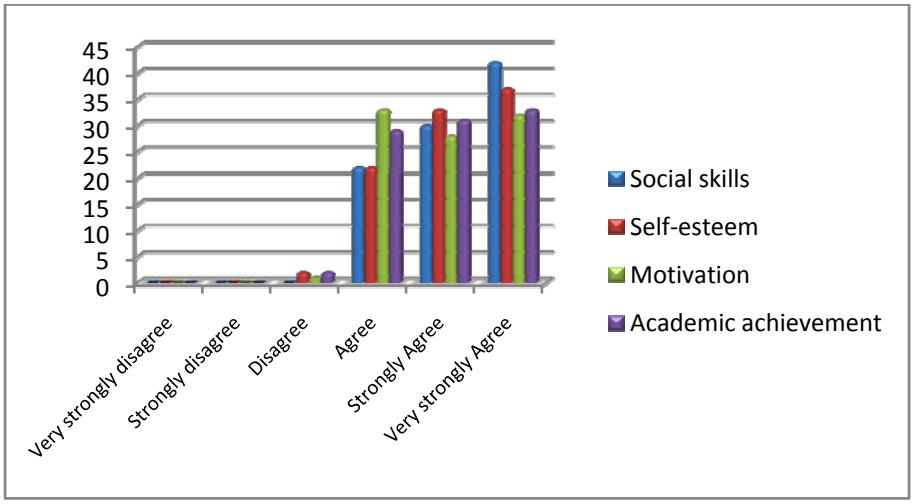
Table 2. Percentage of specific disabilities serviced as represented by principal report.

Diagnosis	Percentage reported	Frequency Reported
Learning Disabled	100.0%	91
Developmentally Disabled	60.8	59
Emotionally Disabled	58.8	57
Autism	68.0	66
Mental Retardation	46.4	45
Speech Impaired	54.6	53
Vision Impaired	26.8	26
Hearing Impaired	30.9	30
Deaf or Blind	13.4	13
Health Impaired	61.9	60
Orthopedic supported	24.7	24
Traumatic Brain Injury	11.3	11
Multiple Impairments	39.2	38

Overall, principals were positive about student outcomes related to inclusion (Figure 1). Support was greatest for increased social skills and self-esteem. Principals were less supportive

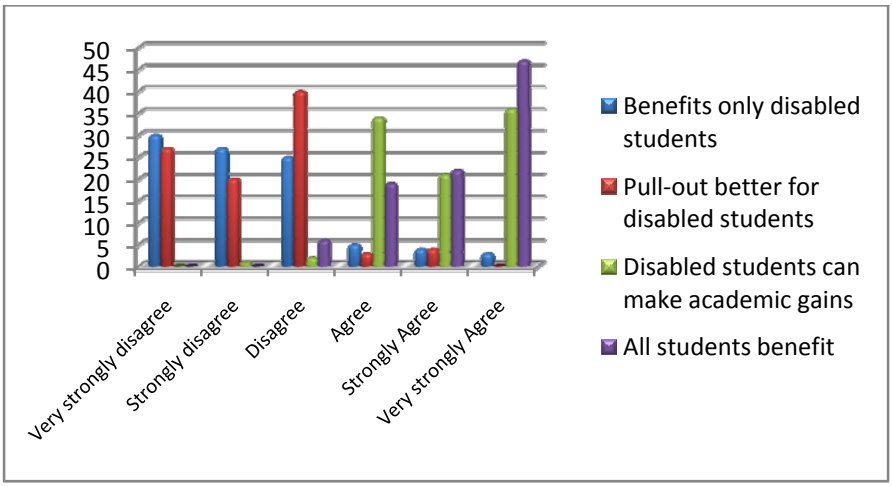
of student motivation and academic achievement, although fewer than three percent disagreed with those two items.

Figure 1. Principal perceptions about the effect of ISP on student outcomes.



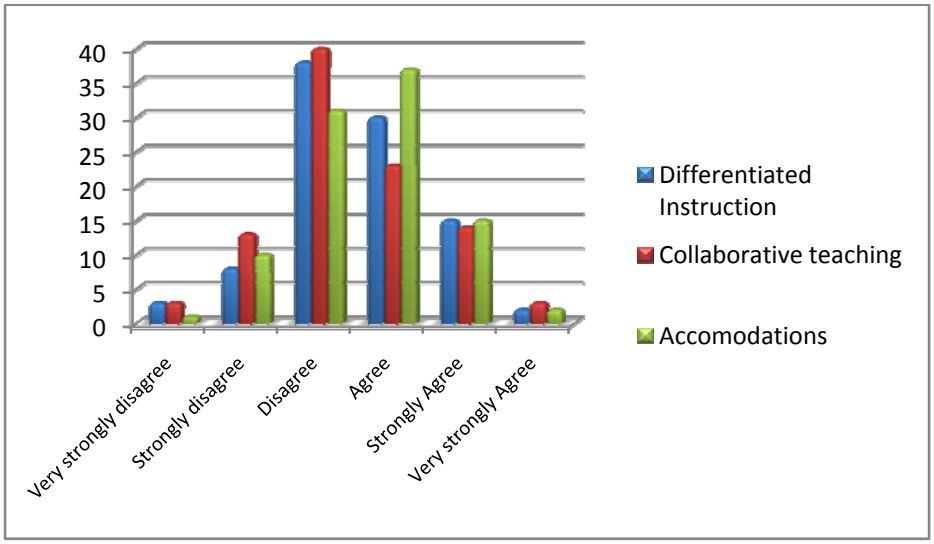
When asked about the student benefits of inclusive classroom practices, principals were very positive (Figure 2). There was disagreement that pullout instruction was a positive instructional practice. Principals had mixed opinions that only special education students benefit from inclusive classroom practices. Principals believe inclusion benefits all students and that special education students can make gains in academic achievement.

Figure 2. Principal perceptions about benefits of inclusion for the school.



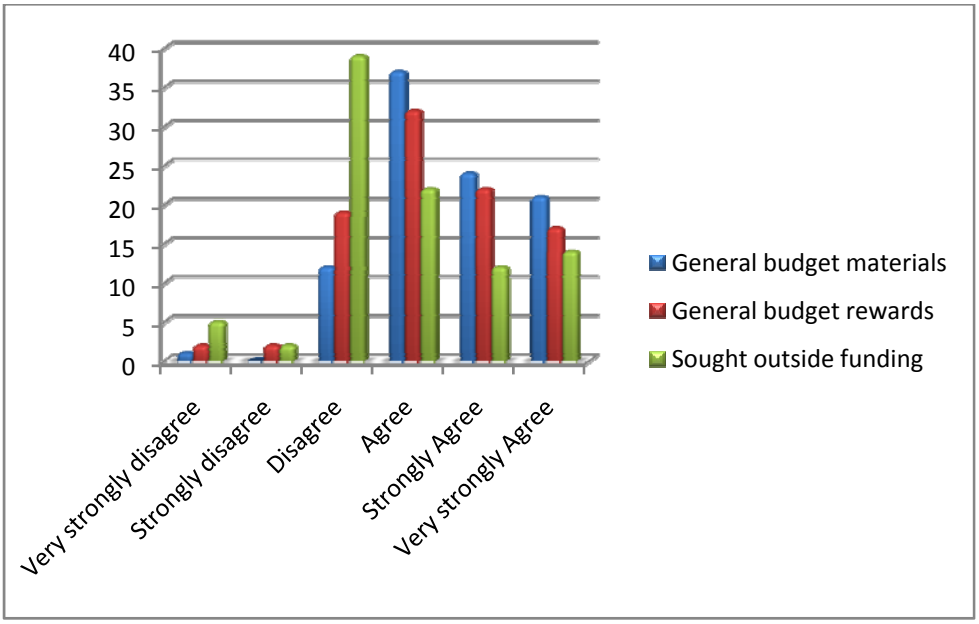
When asked about how prepared teachers were to use inclusive classroom practices, principals expressed negative attitudes (Figure 3). More than half were dissatisfied toward teacher preparation in inclusive classroom practices, differentiated instruction (51.0%), collaboration (58.0%), and accommodations (44.0%). Only 18% were strongly positive (strongly agree or very strongly agree) about teacher preparation for inclusive classroom practices.

Figure 3. Principal perceptions about teacher preparation for inclusive classroom practices.



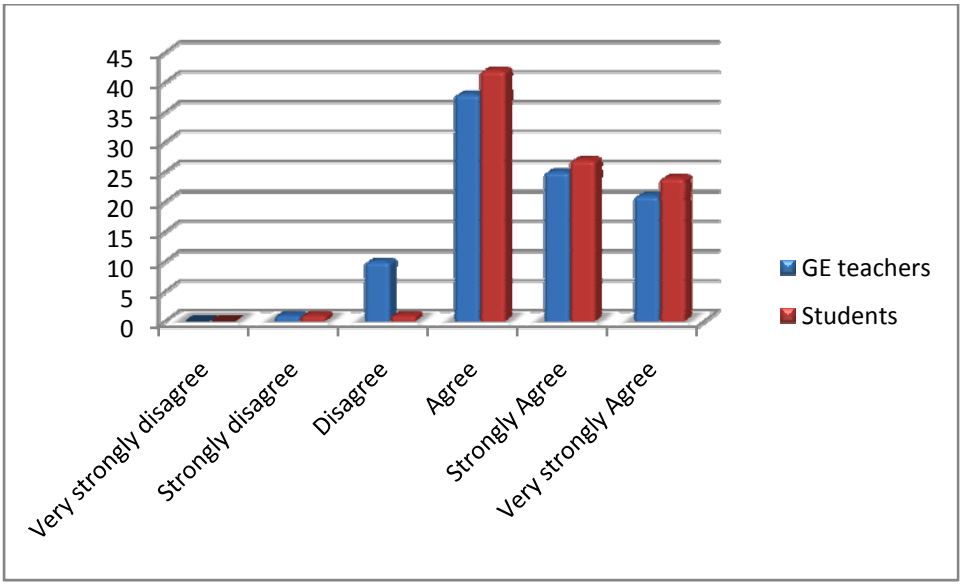
When asked about funding the ISP initiative for their school, responses were less positive. Inclusive materials received the most support with 47.4% of principals replying that they provide strong support and 39.0% supporting. Those principals who did not provide funding for inclusive materials were limited to 13.7%. Funding ISP rewards received almost as much support as materials. Strong support for rewards accounted for 41.5% of principal responses and 34.0% provided some support. However, 24.5% did not fund inclusive rewards. Only 27.7% strongly supported, and 23.4% supported, ISP through external funding, whereas, 48.9% did not seek external funding.

Figure 4. Principal perceptions about teacher preparation for inclusive classroom practices.



Support for special education teachers in the general education classroom was generally positive. Principals perceived students as more positive about special education teachers in the general education classroom. Support by general education teachers was perceived as strongly supportive (48.4%) or supportive (40.0%) of special education teachers with a small percentage disagreeing (11.6%). Student support was almost completely supportive of special education teachers (strongly supportive 53.7%, supportive 44.2%) with only 2.1% disagreeing.

Figure 5. Principal perceptions about support for special education teachers by students and general education teachers.



ISP Professional Development. Principals were involved in professional development with 79.4% having attended the ISP administrative workshop. Another 70.1% reported having attended ISP workshops with teachers, and another 54.6% held ISP professional development opportunities at their school. A few (13.4%) led inclusive practices workshops at their schools. However, the mean number of ISP workshops attended was 2.7, or roughly sixteen hours of professional development.

Specific relationships existed between the number of ISP professional development opportunities attended by principals and specific survey items. The more PD workshops attended the more positive perceptions of ISP benefits for students and more negative attitude towards pullout, or resource room instruction (see Appendix B). Principals who participated in four or more PD were more likely to support inclusive classroom practices with general budget

funding. These principals also sought external monies to fund inclusive classroom practices more often than principals lacking the same amount of professional development.

Teacher Preparation. Positive perceptions about teacher preparation for inclusive classroom practices by principals was associated with more reports of peer tutoring occurring, more likely funds were sought and appropriated towards ISP materials, and the increased likelihood that the schools master schedule was designed to accommodate special education students first (see Appendix B). Teachers were more likely to have volunteered to collaborate, instead of principals appointing collaborative teachers. Observations indicated these principals had more collaborative classrooms at their schools. Positive principal perceptions towards teacher preparation were associated with negative perceptions towards pullout, or resource room, instruction, and more positive attitude towards academic gains made by special education students.

Classroom Observations

Twenty classroom visits occurred over four months in the 40 schools. The average number of years participating in the ISP initiative for these forty principals was 2.6 years. The ethnic makeup was slightly larger than the district with 52.7% of the students being of Hispanic origin and 16.0% African American. Of the classrooms visited, 48.5% were collaborative (two teachers present). The fewest collaborative classrooms at one school was four (out of 20), while the highest was 19. Middle schools had significantly more collaborative classrooms than elementary schools. Title I schools were significantly less likely to have two teachers in the classroom during observations than non-Title I schools.

Five specific collaborative models were identified through classroom observations. One Teach/One Assist referred to one adult engaged in direct instruction, while the other adult assisted individual students during instruction. One Teach/One Observe referred to one adult observing the class, while the other teacher instructed students. This model has been associated with higher classroom management needs. Two Groups meant teachers split students into two groups and provided separate instruction for each group. Co-teaching referred to teachers instructing together by taking turns leading instruction in a more conversational style. No Direct Instruction meant that teachers were not instructing, rather, students were working independent of instruction while teachers were engaged in other activities. The majority of observed classrooms consisted of both teachers assisting students. Individual assessments or "benchmarking" also occurred frequently.

One Teach/One Assist was the most prevalent collaborative teaching model with 100.0% of the schools implementing this model. One Teach/One Assist (33.9%) was also the most common collaborative instructional model of collaborative classrooms observed. The second most prevalent model was One Teach/One Observe with 82.5% schools implementing, followed by teachers teaching two groups of students with 72.5% of the schools. Thirteen schools, or 3.3%, engaged in the Co-teaching model. All but one school had classrooms were No Direct Instruction was occurring. No Direct Instruction was the second most frequent model (27.4%) occurring *across all classrooms*, followed by One Teach/One Observe (19.6%). The last two models in frequency across all classrooms were Teaching Two Groups (14.8%) and Co-teaching (4.3%).

The One Teach/One Assist model was more prevalent in middle schools than elementary schools. Observers documented students working on collaborative activities in 95.0% of the schools, but only 15.7% of the classrooms. Observers documented small group instruction in 82.5% of the schools, but occurred in only 11.1% of the classrooms.

Three specific instructional inclusive strategies were sought in observations. Advanced or graphic organizers occurred in 29 of the schools, but only 4.8% of the total classrooms. Use of multi-modal instruction happened in 34 of the schools and 11.8% of the classrooms. Tiered lessons or work occurred in 14 schools, and only 3.5% of classrooms. These instructional activities were consistent across elementary and middle schools. Multi-modal instruction occurred more frequently in Title I schools than in non-Title I schools.

There were specific associations between the collaborative teaching models. Three models produced two moderate correlations. There was an inverse correlation between One Teach/One Observe and One Teach/One Assist. Schools tended to have One Teach/One Observe or One Teach/One Assist. The correlation between Co-teaching and One Teach/One Assist was positive, meaning both models tended to appear together with approximately the same frequency.

Specific relationships arose between the type of the collaborative models and instructional strategies. There was a moderate positive correlation between class size and the number of collaborative classrooms in schools. This corresponded with more collaboration observed in the middle schools. Larger classes were associated more with One Teach/One Assist and One Teach/One Observe models. As would be expected, schools with more collaborative classrooms had more of each model, but there were significantly more classrooms

without direct instruction as well. In other words, there was less direct instruction. Schools that implemented One Teach/One Assist also implemented Co-teaching.

Significant relationships occurred between the student activities and three instructional strategies (see Appendix B). Multi-modal instruction occurred (naturally) with manipulatives, while advanced and graphic organizers did not correlate with any student activity. There was a moderate, inverse correlation between seatwork and multi-modal instruction. Schools with a high frequency of seatwork had few instances of multi-modal instruction, and schools frequently engaged in multi-modal instruction seldom used seatwork. In addition, teachers who used tiered work more frequently had students engaged in class discussions and writing activities. Multi-modal instruction correlated positively with small group instruction, meaning both tended to occur at the same rates within individual schools.

Comparisons occurred between inclusive classroom practices by how long they were involved in the ISP initiative. Schools were divided into three groups based on years involved with the ISP initiative. The first group was involved with ISP two years and less, the second group was involved for three years and the final group was four years or more. The model One Teach/One Observe occurred most often in the third year than the schools engaged four years or more. Co-teaching occured more often in schools in their first two years opposed to schools involved with ISP longer than two years (see Appendix B). Whole class instruction dropped significantly between the first two years of ISP and four years or more. However, the number of classrooms in which students worked independently increased between the third year and four years.

In comparing, the principal survey results with the observations, significant correlations appeared between the number of years a principal remains at a school and specific instructional strategies utilized at the school. The longer a principal remained at a school, the frequency of tiered student work and students working independently increased. As principal years at school increased, there were decreases in the frequency in use of multimodal instruction. The number of ISP professional development opportunities did not predict any instructional activity.

Principal perceptions about teacher preparation were inversely associated with the observation of No Direct Instruction. Higher rankings towards staff supportive of Co-teaching were associated with lower observations of No Direct Instruction. The same inverse relationship occurred between No Direct Instruction with principal perceptions of teacher preparation in collaborative teaching and accommodations.

Schools with a high frequency of One Teach/One Observe had principal perceptions that were negative towards inclusive classroom practices having a positive impact on student achievement. Principals with high perceptions of gains in student social skills were associated with a greater number of teachers engaged in small group instruction. Increased use of advanced or graphic organizers occurred with principal belief that inclusive classroom practices have a positive impact on student achievement. High use of multi-modal instruction was positively associated with perceived gains in student motivation. The belief that general and special education teachers treat each other as equals was associated with increased use of tiered assignments. Student engagement was positively associated with the One Teach/One Observe model, the use of graphic and advanced organizers, and inversely related to seatwork.

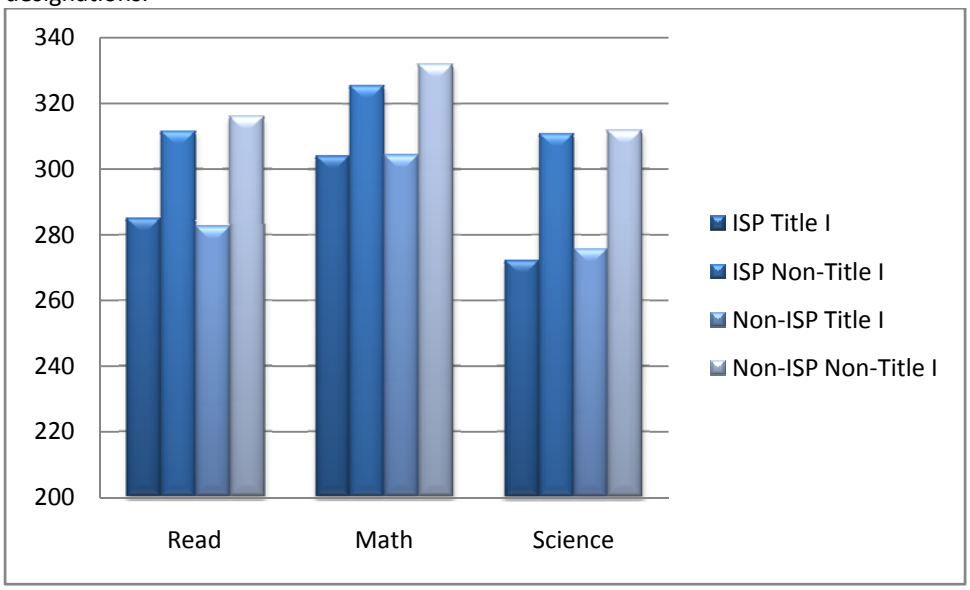
Academic Achievement

Student achievement was measured using the Nevada Criterion Referenced Tests in reading, mathematics, and science. The middle schools had higher reading scores than elementary schools. Middle schools had higher scores than elementary schools in the area of science. There were no differences in the mathematics scores. Title I schools had significantly lower CRT scores than non-Title I schools in reading, mathematics, and science (see Appendix B).

Experience as a principal was related weakly to reading, mathematics, and science CRT scores. The number of years participating in the ISP initiative was not associated with CRT scores in any content area. Years as principal at the current school predicted CRT Reading, Mathematics, and Science scores. Small group instruction correlated inversely with the reading, mathematics, and science CRTs (See Appendix B). Schools with a high number of classes with small group instruction had lower CRT scores.

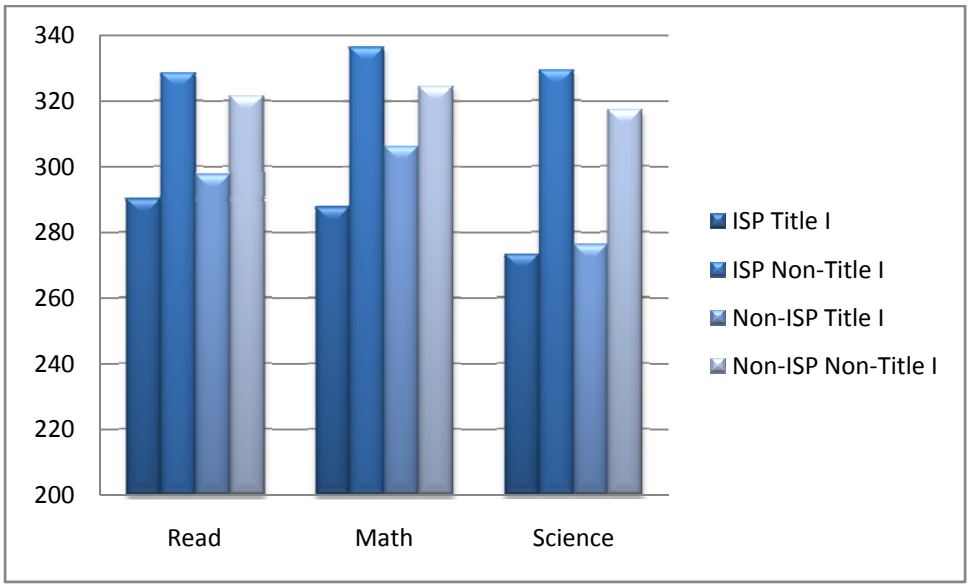
Title I ISP elementary schools had higher CRT Reading scores than non-ISP Title I elementary schools (see Figure 6). ISP non-Title I elementary schools had lower CRT Reading scores than the non-ISP non-Title I schools, but had higher scores than all Title I schools. Non-ISP non-Title I elementary school had higher CRT Mathematics scores than all schools. There were no differences in CRT Mathematics scores between Title I ISP elementary schools and Title I non-ISP elementary schools. ISP elementary schools had lower CRT Science scores than all non-ISP elementary schools. Title I elementary schools had significantly lower CRT Science scores than the non-Title I elementary schools.

Figure 6. Elementary school CRT Reading, Mathematics and Science scores by ISP and Title I designations.



ISP non-Title I middle schools had highest CRT Reading, Mathematics, and Science scores than all non-ISP and ISP Title I middle schools (see Figure 7). Title I ISP middle schools had lower scores than Non-ISP Title I middles schools in reading, math, and science. All Title I schools had significantly lower scores than the non-Title I schools in reading, mathematics, and science.

Figure 7. Middle School CRT Reading, Mathematics and Science scores by ISP and Title I designations.



Fidelity of ISP implementation

In an analysis of ISP initiative fidelity, principals were categorized by participation in the last three years of Inspiration Awards. Inspirations Awards were recognition for school staff in their inclusive classroom practices within CCSD by a collaboration of community entities. All participating ISP schools were eligible to submit an application for consideration. Interested schools submitted a portfolio of school policies and practices that support inclusive practices. A panel of judges reviewed the portfolios and visited schools in identifying the Inspiration awardees. Three groups of ISP principals were created from this list. The low group self-selected themselves out of the Inspiration Awards by not participating. The medium group submitted portfolios, but did not receive recognition. The high group received recognition at least once in the three years Inspiration Awards were awarded. Principals who attended three or more professional development workshops were more likely to submit portfolios for the Inspiration Awards. Principals who participated in the Inspiration Awards were more likely to believe inclusion improves academic achievement. These principals were more likely to promote common planning periods and use general budget funds for reinforcing the ISP initiative. Inspiration Award participating principals were more likely to express a supportive culture for special education teachers.

Conclusion

The purpose of this study was to examine the principal's role in the ISP initiative. The original framework created by the ISP Advisory Committee suggested that principal beliefs and knowledge about inclusive classroom practices influence school culture, professional development, student schedules and budget. Principal attitude and knowledge would influence

the degree of inclusive classroom practices implementation, in turn, affecting student outcomes. Principal experience and years at current school influenced academic achievement directly. Years as principal at the current school predicted the degree of tiered work used and the number of classrooms where students work independently.

There was no direct influence of inclusive classroom practices and academic achievement except the inverse relationship between number of classes engaged in small group instruction and CRT scale scores. One explanation may be that these results are not indicative of ISP failing, rather, it may be indicative of a different CCSD initiative. CCSD adopted a three-tier Response to Instruction model (RTI). Tier 1 and Tier 2 interventions emphasized small group instruction. Students who were not meeting benchmarks were more involved in small group instruction. In this case, the high number of small group instruction may represented higher number of students who were not meeting formative assessment benchmarks. This would reflect RTI assessment more than the ISP initiative.

Professional development in relation to the ISP initiative affected principal perceptions towards inclusive classroom practices. Analysis suggested that a critical point appeared between three and four professional development opportunities, or approximately 15 to 20 hours. After three professional development workshops, principals focused more on the needs of special education students in scheduling and funding.

When a principal felt that teachers were prepared adequately in inclusive classroom practices a number of positive associations appeared including student scheduling, the school budget, peer tutoring, and a culture supportive of inclusive classroom practices. Teacher preparation in Co-teaching was associated with the use of tiered student work. Paradoxically,

teacher preparation related inversely with observations of No Direct Instruction. Principal perceptions of teacher preparation did not directly relate to academic achievement.

No specific inclusive classroom practice directly influenced student achievement. Whereas, principal years of experience and student engagement directly influence CRT scores (see Appendix D). While these results suggested disregarding inclusive classroom practices, the comparisons between ISP schools and non-ISP schools supported the ISP initiative. Inspiration Awards were used as a proxy for initiative fidelity since no measure was established to evaluate ISP directly. Self-selection or not participating, schools suggested a lack of fidelity at implementing inclusive classroom practices. Few schools submitted applications for consideration considering the large number of ISP schools. Other results within this study suggested that the lack of knowledge and experience accounted for a lesser degree of implementation. This would be consistent with evaluative research in which three to five years are required before a program reaches full implementation (Case, Speece & Molloy, 2003; Rand, 2009).

Implications

Professional development is clearly an important aspect of supporting ISP. Principals do not fully support ISP until after the third professional development workshop or some equivalent in personal study and experience; afterwards, principal buy-in appears. This support includes more focus on student schedules, budgets and supporting staff professional development. Respondents to the principal survey indicate that 57.4% have participated in two or fewer ISP workshops.

Principals view professional development for their teachers as critical. When they perceive teachers as adequately prepared, the more support is put in place and collaborative models are adopted, such as peer tutoring. The belief about teacher preparation appears to stem from the principal's insufficient engagement in ISP; 52.5% of the respondents have been ISP schools less than three years.

Principals could be encouraged to remain at the same school. Research findings suggest that the ISP initiative influences principals at about three years of exposure. However, principals reported remaining at a school 3.5 years. Currently, average ISP participation is at 2.6 years for CCSD schools. Principals are leaving before full ISP implementation. This is particularly challenging for CCSD because to the fluid transfers that comes from a large and quickly expanding district. Changes in incentives to remain at a school may be necessary. How these practices affect student outcomes requires further investigation.

The highlight is that inclusive classroom practices are having a positive effect on student outcomes. ISP middle schools have higher CRT scores in reading, mathematics, and science. These results correspond with a previous study. The first study year found the ISP initiative was associated with gains in social, personal, and academic outcomes. Parents associated with ISP schools had more positive perceptions than did parents of non-ISP schools (Marchand & Campbell, 2008). Title I schools may need additional support. Better coordination between administrative departments and divisions may be one solution. A specific evaluation of this problem would identify weaknesses and possible solutions to this problem.

Limitations

The lack of evidence from classroom observations of collaborative teaching models and inclusive classroom strategies influencing student achievement is not surprising after reviewing these implications. These inclusive classroom practices are not been implemented with consistency or fidelity. Only half of the classrooms that purport to be collaborative had two adults present in the classroom when visited by the study observers and the most common model was One Teach/One Observe. It may be that when there were two adults 34% of time one is responsible for classroom management, while the other adult teaches, or this second person is uncomfortable in these classrooms. These reasons would explain the high occurrence of the One Teach/One Observe model. Additionally, observers did not make the distinction of whether the second adult was the special education teacher or a paraprofessional. If most of the One Teach/One Observe model includes a paraprofessional, the expectation would be that the paraprofessional would not be engaged in direct instruction. They would assume a more supportive role.

Finally, information about the ISP initiative is still lacking. Student achievement has been measured over two years. Other student outcomes, like social skills, motivation and self-esteem also were investigated. Parents' perceptions have been acquired. Principal knowledge, skills, and responsibilities were identified. General education teachers' professional development has been tracked; they also have been observed in their classrooms.

One important aspect that is missing is the special education teacher. They play a critical role in supporting a school's effort at inclusive classroom practices. They play a critical role in implement the specific strategies in the classroom. They may provide immediate support for general education teachers. Special education teachers could provide more site-

based professional development opportunities. Their knowledge of specific students is critical when developing student schedules. The ISP research program has not identified or investigated the responsibilities of the ISP special education teacher. To complete the picture of inclusive classroom practices within CCSD, an in-depth study of the ISP special education teacher is needed.

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Appendix A

ISP Principal Survey

NAME OF SCHOOL: _____

Leadership Information:

1. Select one: elementary or middle school principal:
2. Years in CCSD: _____
3. Years as Principal: _____
4. Years as Principal at this specific school: _____

Professional Development

5. Mark all that apply to professional development at your school site.
   - o I have attended ISP workshops with my staff.
   - o I have attended administrative workshops sponsored by ISP.
   - o I have requested school specific support/training provided by an ISP facilitator.
   - o I have led an inclusive practice workshop.
   - o Paraprofessionals from our school site have attended ISP trainings.
   - o Paraprofessionals from our school site have attended other inclusion trainings.
6. How many ISP strategy workshops or book studies have you attended? _____
7. How many other inclusion workshops not sponsored by ISP have you attended? _____

For the following items select Strongly Disagree (1), Somewhat Disagree (2), Disagree (3), Agree (4), Somewhat Agree (5), Strongly Agree (6)

Philosophy

8. Inclusive practices improve the social skills of students with disabilities.

   1 2 3 4 5 6

9. Inclusive practices improve the self-esteem of students with disabilities.

   1 2 3 4 5 6

For the following items select Strongly Disagree (1), Somewhat Disagree (2), Disagree (3), Agree (4), Somewhat Agree (5), Strongly Agree (6)

10. Inclusive practices improve motivation of students with disabilities.

1 2 3 4 5 6

11. Inclusive practices improve academic achievement of students with disabilities.

1 2 3 4 5 6

12. Students with disabilities learn best in a pull-out (resource/specialized) model.

1 2 3 4 5 6

13. Students with IEPs in our school can attain substantial academic gains.

1 2 3 4 5 6

14. Inclusive practices benefit all students.

1 2 3 4 5 6

15. Inclusive practices predominantly benefit only students with disabilities.

1 2 3 4 5 6

16. Special Education teachers are engaged predominantly in co-teaching.

1 2 3 4 5 6

Commitment and Support

17. I participate in Individualized Education Plan (IEP) meetings.

1 2 3 4 5 6

18. Our School Improvement Plan is aligned with ISP practices.

1 2 3 4 5 6

19. I have allocated general budget funds for alternative materials related to inclusive practices.

1 2 3 4 5 6

20. I have allocated general budget funds for rewards and other incidental expenses related to inclusive practices.

1 2 3 4 5 6

21. I have sought outside funding to support inclusive practices.

1 2 3 4 5 6

22. Our staff is supportive of learning and implementing co-teaching strategies.

1 2 3 4 5 6

For the following items select Strongly Disagree (1), Somewhat Disagree (2), Disagree (3), Agree (3), Somewhat Agree (4), Strongly Agree (5)

23. Our school has implemented Peer Assisted Learning Strategies (PALS) or a similar program.

1 2 3 4 5 6

24. Our staff is encouraged to try new ideas and techniques.

1 2 3 4 5 6

25. General Education teachers treat special education teachers as equals in the classroom.

1 2 3 4 5 6

26. Special Education teachers are treated as equals in the collaborative classroom by the students.

1 2 3 4 5 6

27. Our teachers are sufficiently trained in differentiated instructional strategies.

1 2 3 4 5 6

28. Our teachers are sufficiently trained in co-teaching.

1 2 3 4 5 6

29. Our teachers are sufficiently trained in accommodations.

1 2 3 4 5 6

30. How often do you review school data (i.e. standardized tests) with regard to student growth?

- Annually
- Each semester
- Quarterly
- Monthly

Scheduling

31. Teachers volunteered to co-teach.

1 2 3 4 5 6

32. Co-teachers were assigned by administrators.

1 2 3 4 5 6

33. When scheduling, students with disabilities are assigned first.

1 2 3 4 5 6

34. Special Education teachers are assigned as needed to meet IEP mandates.

1 2 3 4 5 6

For the following items select Strongly Disagree (1), Somewhat Disagree (2), Disagree (3), Agree (3), Somewhat Agree (4), Strongly Agree (5)

35. General Education and Special Education teachers have common planning periods.

1 2 3 4 5 6

36. Co-Taught classes have a balance of general and special education students.

1 2 3 4 5 6

37. Students with disabilities are assigned evenly between classrooms.

1 2 3 4 5 6

38. Special Education teachers provide input in student schedules.

1 2 3 4 5 6

39. General Education teachers provide input in student schedules.

1 2 3 4 5 6

40. Percentage of students with disabilities does not exceed 34% percent of a General Education classroom.

1 2 3 4 5 6

41. General Education teachers rotate co-teaching duties annually or biannually.

1 2 3 4 5 6

42. Peer tutoring is a common strategy in our school.

1 2 3 4 5 6

Paraprofessionals

43. Paraprofessionals only work with students of a specific category (i.e. autism, mental retardation, etc.).

1 2 3 4 5 6

46. Paraprofessionals work with any students who need assistance.

1 2 3 4 5 6

47. With which specific categories do your current paraprofessionals work?

1 2 3 4 5 6

48. What are you hoping to gain from the ISP initiative?

49. What has been your experience with the ISP initiative?

50. Do you have further comments related to the ISP initiative?

FOSL-ISP Classroom Walk

Date: _____ **School:** _____

Time: **AM** **PM** **Room/Teacher:** _____

Period: **Beg** **Mid** **End** **Subject/ No. Student:** _____

Students understand the objective (could students rephrase?)

____Yes ____No

Level of Engagement

____Off-Task ____Discussion ____Transition

____Listening/Watching ____Manipulatives ____Non-Instructional

____Seatwork ____ Presentation/Performance

____Reading ____Students working on individual tasks

____Writing

Quality of Engagement

____Personal Response (personalized assignments/responses)

____Clear/Modeled Expectancies (clear/relevant standards)

____Emotional/Intellectual Safety (freedom to take risks)

____Sense of audience (students emotionally involved)

____Choice (decision-making opportunities)

____Authentic (meaningful, significant, ownership)

____Novelty or Variety

Collaborative Strategies (Learning with others)

____ How many adults in classroom?

____ Adults teaching separate groups ____Whole group instruction

____ One adult teaching/One adult observing ____Small group instruction

____ One adult teaching/One adult assisting individual students ____Students working in pairs or small groups

____ Adults teaching together ____Students working alone

____ Adults are engaged in individual activities

____ Use of advance/graphic organizers

____ Presentation of material is multi-modal (auditory/visual/tactile)

____ Tiered assignments

Bloom's Taxonomy

____Low (knowledge, comprehension)

____Middle (application, analysis)

____High (synthesis, evaluation)

Context/Notes:

Appendix B

Table 3. Spearman correlations between Principal PD and perceptions of student outcomes

	No. PD	Social skills	Limited Special education	Self-esteem	Motivation	Better in pull-out	Academic Achievement	All Students benefit
No. PD	-	.21*	-.12	.18	.20	-.32**	.17	.26**
Social skills		-	-.52**	.80**	.75**	-.47**	.70**	.71**
Limited to special education			-	-.55**	-.50**	.38**	-.53**	-.47**
Self-esteem				-	.83**	-.46**	.78**	.63**
Motivation					-	-.62**	.86**	.62**
Better in pull-out						-	-.58**	-.47**
Academic achievement							-	.65**
All students benefit								-

Table 4. Spearman rho correlations between survey items related to teacher's preparation for inclusion.

	Teacher DI	Teacher do-teaching	Teacher accommodations	Peer tutoring	General budget for ISP material	General Budget for ISP reward	Special education students scheduled	Teacher volunteer	Prefer pull-out	Make academic gains
Teacher DI	-	.73**	.78**	.43**	.17	.27*	.25*	.41**	-.22*	.28**
Teacher co-teaching		-	.71**	.37**	.26**	.27**	.29**	.43**	-.24*	.27**
Teacher accommodations			-	.37**	.17	.23*	.24*	.37**	-.13	.24*
Peer tutoring				-	.31**	.34**	.04	.29**	-.12	.26**
General budget for ISP material					-	.78**	.34**	.32**	-.35**	.60**
General budget for ISP reward						-	.34**	.32**	-.41**	.54**
Special education scheduled first							-	.30**	-.32**	.41**
Teachers volunteer								-	-.23*	.42**
Prefer pull-out									-	-.48**
Make academic gains										-

Table 5. Pearson correlation coefficients between school demographics and collaborative models.

	Collaborative classrooms	Two groups	1T/1O	1T/1A	Co-teach	No instruction
Class size	.39*	-.01	.43**	.49**	.31	-.16
Collaborative classrooms	-	.24	.40*	.71**	.46**	.56**
Two groups		-	-.04	-.12	-.02	.07
1T/1O			-	.16	.15	.23
1T/1A				-	.36*	.10
Co-teach					-	-.03

Table 6. Pearson correlations between student learning activities and differentiated instructional or strategies.

	MModal	Tiered	Listen	Seatwork	Reading	Writing	Discussion	Manipulatives	Presentations
Organizer	.02	-.03	-.10	-.27	.0002	.31	.21	.15	.15
MModal	-	-.24	.12	-.42**	.11	-.17	-.18	.59**	.15
Tiered		-	.12	.24	.21	.59**	.32*	-.09	.11
Listen			-	-.17	-.08	.07	.31	-.12	.24
Seatwork				-	-.30	-.08	.29	-.19	-.18
Reading					-	.42**	-.19	-.15	.24
Writing						-	.27	-.13	.27
Discussion							-	-.11	.18
Manipulatives								-	-.11

Table 7. Pearson coefficients between differentiated instruction strategies and presentation of learning material.

	Whole group	Small Group	Pairs	Alone
Organizer	.12	-.05	.19	-.31
MModal	-.03	.43**	.23	-.06
Tiered	-.02	.01	.30	.08
Whole group	-	-.17	.11	-.57**
Small groups		-	.23	-.06
Pairs			-	-.28

Table 8. Pearson correlations between Principal experience at current school and number of professional development workshops with differentiated instructional strategies.

	No. of ISP PD	Whole group	Small group	Student pairs	Working Alone	Organizer	Multimodal	Tiered
Years at School	.19	-.23	-.15	-.19	.10*	-.12	-.37*	.31*
No. of ISP PD	-	-.07	.19	.18	.06	-.11	.20	-.07
Whole group		-	-.17	.11	-.57**	.12	-.03	-.02
Small group			-	.23	-.06	-.05	.43**	.01
Student pairs				-	-.28	.19	.23	.30
Working Alone					-	-.31	-.06	.08
Organizer						-	.02	-.03
Multimodal							-	-.24

Table 9. Correlations between teacher collaboration model and principal perceptions of teacher inclusion preparation.

	Prepared for DI	Prepared for co-teaching	Prepared for accommodations	Supportive of co-teaching
Two groups	-.03	-.11	-.09	-.28
1 Teach/1 Observe	.19	.17	.08	.0001
1 Teach/1 Assist	-.25	-.11	-.04	.13
Co-teaching	.06	.13	.02	-.14
No Direct Instruction	-.29	-.42**	-.42**	-.60**

Table 10. Pearson correlation coefficients of CRT scores and collaborative teaching models.

	2 groups	1T/1O	1T/1A	Co-teach	No Instruction
CRTread	.07	-.05	.11	.23	-.03
CRTmath	-.01	-.14	-.04	.09	-.11
CRTscience	.14	-.01	.20	.20	-.10
2 groups	-	.08	-.28	-.01	-.17
1T/1O		-	-.34*	-.19	.11
1T/1A			-	.36*	-.02
Co-teach				-	-.15

Table 11. Kruskal-Wallis Chi-square for principal survey items where number of principal professional developments opportunities was the independent variable (one or none, two or three, four or more).

	X^2	df	p
Sought outside funding for ISP	7.89	2	.02
Used general budget to support ISP	6.93	2	.03
Special education students scheduled first	5.06	2	.08

Table 12. Mean rank of significant items or near significant survey items.

	0 -1	2 - 3	4 or more
Sought outside funding for ISP	40.11	48.68	57.95
Used general budget to support ISP	40.04	54.78	54.35
Special education students scheduled first	39.63	48.80	53.08

Table 13. Means for all K-8 ISP schools of Title I and non-Title I schools CRT Reading, Mathematics and Science scores.

	Reading	Mathematics	Science
Elementary School			
Title I	285.0	304.1	272.1
Non-Title I	311.6	325.5	310.8
Middle School			
Title I	290.1	287.7	273.2
Non-Title I	328.5	336.5	329.3

Table 14. ANOVA of use of One Teach/One Observe Model by category of years of experience.

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
Between	69.72	2	34.86	3.97	.03	.18
Within	324.66	37	8.78			
Total	394.38	39				

Table 15. Means and standard deviations (below) of collaborative model, One Teach/One Observe by years of experience.

	M	S
0 to 1	3.90	3.06
2 to 3	6.86*	3.48
4 or more	3.00	2.48

The median split on the collaborative model, Co-teaching, was significant, t(30.64) = 2.16, p = .04, d = 14.28. Principals with two or fewer years of experience with the ISP initiative used co-teaching more often (M = 1.40, s = 1.79) than the principals with three or more years of experience (M = .40, s = 1.05).

The median split on the collaborative model Two groups was significant, t(38) = 2.10 p = .04, d = .97. Principals with three or less years of experience as principal used the Two groups model more often (m = 4.24) than principals with four or more years of experience (M = 2.26).

Table 16. ANOVA of years of principal experience with ISP and frequency of students working independently

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
Between	136.68	2	68.34	3.98	.03	.18
Within	635.10	37	17.17			
Total	771.78	39				

Table 17. ANOVA of principal years of experience use of whole group instruction.

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
Between	152.41	2	76.20	3.33	.05	.15
Within	846.70	37	22.88			
Total	999.10	39				

Table 18. Means and standard deviations (below) of whole group instruction by years of experience.

	M	S
0 to 1	19.75	4.54
2 to 3	19.57	2.88
4 or more	15.54*	5.81

Table 19. Means and standard deviations (below) of frequency of independent school work by years of experience.

	M	S
0 to 1	16.35	4.53
2 to 3	13.86	4.45
4 or more	19.15	3.24

Table 20. ANOVA table for Elementary School CRT Reading

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
ISP	11498.57	1	11498.57	2.32	.13	.000
Title I	12470950.70	1	12470950.70	2518.61	.000	.03
ISP x Title I	161558.17	1	161558.17	32.63	.000	.001
Within	358366884.71	72379	4951.53			
Total	7122333518.00	72378				

Table 21. ANOVA table for Elementary School CRT Math

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
ISP	153477.78	1	153477.78	25.38	.000	.000
Title I	8353988.04	1	8353988.04	1381.70	.000	.02
ISP x Title I	133588.07	1	133588.07	22.10	.000	.000
Within	437839169.53	72416	6046.17			
Total	7967333573.00	72420				

Table 22. ANOVA table for Elementary School CRT Science

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
ISP	22813.04	1	22813.04	4.64	.03	.000
Title I	6286771.71	1	6286771.71	1278.36	.000	.05
ISP x Title I	8061.38	1	8061.38	1.64	.20	.000
Within	116872214.24	23765	4917.83			
Total	2274271077.00	23769				

Table 23. Means and standard deviations of CRT Reading, Mathematics, and Science elementary school scores by ISP participation and Title I classification.

	ISP		Non-ISP	
	Title I	Non-Title I	Title I	Non-Title I
Read	285.03 (70.66)	311.62 (70.69)	282.53 (71.87)	315.95 (70.36)
Math	304.08 (79.55)	325.52 (75.73)	304.30 (80.38)	331.95 (77.35)
Science	299.49 (71.37)	310.80 (69.60)	275.71 (69.24)	311.71 (71.22)

Table 24. ANOVA table for Middle School CRT Reading

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
ISP	233.53	1	233.53	.04	.84	.000
Title I	7933021.73	1	7933021.73	1315.27	.000	.02
ISP x Title I	429601.42	1	729601.42	71.23	.000	.001
Within	421257817.27	69843	6031.50			
Total	7528007840.00	69847				

Table 25. ANOVA table for Middle School CRT Math

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
ISP	93449.29	1	93449.29	9.63	.002	.0001
Title I	9238929.40	1	9238929.40	952.39	.000	.01
ISP x Title I	1877553.13	1	1877553.13	193.55	.000	.003
Within	677521372.43	69842	9700.77			
Total	7987076237.00	69846				

Table 26. ANOVA table for Middle School CRT Science

Source	Sum of Squares	Degrees of Freedom	Mean Square	F	p	Partial eta squared
ISP	53842.66	1	53842.66	8.15	.004	.0003
Title I	6271271.86	1	6271271.86	948.98	.000	.04
ISP x Title I	148890.31	1	148890.31	22.53	.000	.001
Within	154029432.30	23308	6608.44			
Total	2463609659.00	23311				

Table 27. Means and standard deviations of CRT Reading, Mathematics, and Science middle school scores by ISP participation and Title I classification.

	ISP		Non-ISP	
	Title I	Non-Title I	Title I	Non-Title I
Read	290.14 (79.64)	328.51 (77.12)	297.56 (79.83)	321.44 (77.31)
Math	287.74 (96.67)	336.45 (98.68)	306.25 (100.23)	324.69 (98.68)
Science	273.19 (79.37)	329.27 (80.62)	276.18 (83.01)	317.28 (81.83)

Appendix C

Best Practices by Principals for Inclusive Classroom Practices

ISP Study Year II

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Principal leadership has been recognized as a necessary element in the successful implementation of inclusive practices (Cruzeiro & Morgan, 2006). Source of this leadership comes from the power structure within the school or district (Leo & Barton, 2006) as filtered through the principals vision and mission for the school (Cruzeiro & Morgan, 2006; Parker & Day, 1997), and further refined by the establishment of specific structures and support (Lieber, Hanson, Beckman, Odom, Sandall, Schwartz, Horn & Wolery, 2000).

Research about the role of principals in inclusive classroom practices is recent enough that cataloging best practices have not been explored adequately. Previous research has focused on principal characteristics that are supportive of inclusive classroom practices. This has provided knowledge of the minimal requirements in leadership. Few examination of exemplary sites has been conducted. Identifying successful patterns between exemplary schools allows other schools to target key characteristics and provide students with access to the success seen in the exemplary schools. Such case studies can raise the principals' expectations from minimum requirements for inclusion to insuring the success of all students. In an attempt to begin this process, two principals were interviewed about the inclusive classroom practices they initiated in their schools.

Method

Two principals were chosen by the positive reputation surrounding their inclusive classroom practices. Staff from schools around the district had visited the schools as models in implementing inclusive classroom practices. Additionally, both schools have received recognition as recipients of "Inspirational Awards" for two consecutive years within the district's Inclusive Schools Practices initiative (ISP). In addition to the recognition, the awards included monetary grants to support inclusive classroom practices.

Participants

At the time of the interviews, neither principal had remained at their respective schools. The elementary principal had moved to an area administrative position, while the middle school principal moved to a central office administrative position. The tenure of the elementary school principal as relative to her school site was five years, while the middle school

principal remained at her school three and one-half years. Both principals moved into the schools from another administrative position.

Interviews

In-depth interviews were semi-structured with the specifically structured questions relating to professional history and inclusive classroom practices within their school and followed up with probes. All questions were open-ended. The initial interviews lasted approximately one hour. Each interview was recorded on digital video and transcribed. Field notes were also made, at the time of the interview. During analysis of the transcript, follow-up interviews were conducted. Member checking was used to check accuracy, completeness, and fair representation (Creswell, 2005).

Analysis

A content analysis was conducted where ideas were coded and sorted into larger themes. Each code reflected each separate idea or concept. Themes were developed through constant comparison between the code categories within the transcripts and field notes, and follow-up interviews. Thirteen categories emerged through continual comparative analysis, in which participants' responses were compared and connected with other categories. Three final themes were identified. These themes were temporal in nature.

<table>
<tr><th>Codes</th><th colspan="2">Themes</th></tr>
<tr><td>1. Philosophy of student needs</td><td colspan="2" rowspan="3">What was brought</td></tr>
<tr><td>2. Experimental approach</td></tr>
<tr><td>3. Teacher transfer/follows</td></tr>
<tr><td>4. Lead teachers</td><td rowspan="3">Staffing</td><td rowspan="7">The process</td></tr>
<tr><td>5. Teacher buy-in</td></tr>
<tr><td>6. Special programs</td></tr>
<tr><td>7. Co-planning</td><td rowspan="4">Strategies</td></tr>
<tr><td>8. Purposeful Scheduling</td></tr>
<tr><td>9. Flexibility</td></tr>
<tr><td>10. Professional Development</td></tr>
<tr><td>11. Funding</td><td colspan="2" rowspan="3">Follow-up</td></tr>
<tr><td>12. Classroom management</td></tr>
<tr><td>13. Sense of community</td></tr>
</table>

Findings

What Was Brought

The first theme related to what principals brought with them as they moved to a new school. Both principals came into each school with a focus on student needs. Both had specific goals to improve student achievement. Inherent was the belief that students could and would improve, though at different rates. There was a philosophy of providing students with what they need; this required an open attitude towards experimenting to find effective strategies. Furthermore, both principals reported sitting down with their staff to brainstorm about ideas. The elementary principal reported:

> And so, we really just kinda sat down together and determined, you know, looking at what we had resource wise and the number of people we had. What could we do to meet kids' needs that were both Special Ed and Non-Special Ed and even our ELL population because it was growing even after we opened the school? So, we developed a learning lab, actually more than one. So that we serviced students who had IEP's as well as students who didn't. It was based on need.

Administrators and teachers agreed that special education students need to be included in general education classes to receive grade-level curriculum. Special education teachers or paraprofessionals would provide the support special education students required.

A more tangible aspect of leadership involved principals bringing teachers with them into the new school. Both principals brought in a number of general education and special education teachers with them from the previous schools. The middle school principal related:

> Part of it is 15 people retired right before I came in. So, I got to hire (for those) 15 (who) retired with the other Principal. So right there your staffing with people who believe in that. That was part of it. The other part of it was we were growing in our Special Ed numbers, and, also, I was able to bring in some Special Ed teachers that I had worked with before. So, they knew the philosophy. They knew, basically, how I did business and so they were already co-teaching at _____ and doing some of those things. So, they could come over and model. . .

The first aspect was familiarity with principal philosophy, implying that this experimentation with inclusive classroom practices occurred before coming to this school. It also signifies that these teachers bought into inclusive classroom practices before transferring to the new school.

The Process

The theme, Process, refers to the issues related to implementing inclusive classroom practices. There were two subthemes: Staffing and Strategies. Staffing referred to issues related to those teachers who transferred into the school with the principal, new hires, teacher buy-in, and providing staff with relevant professional development. Strategies referred to inclusive classroom practices in the school.

The teachers who transferred with the principal took a lead role with inclusive classroom practices. They had the experience with inclusive classroom practices and established support of the principal. These teachers were responsible for demonstrating inclusive classroom practices with which they had the greatest success. The experience of student success that followed these teachers encouraged teacher buy-in from those teachers who were at the school with the previous administration. The elementary school principal reported,

> We simply didn't put students into classroom where we didn't feel like the teacher was going to meet their needs. Which was, you know, it was kinda hard because sometimes you would classes where you had more students with IEP's than you really wanted to. You didn't want to over load classrooms. You needed a nice even split, but if it was best for the children then we did it. And we had some key teachers who would say give me those struggling students because they really knew how to differentiate instruction.

Teacher resistance preventing the implementation and effectiveness of initiatives has been well documented. (Evans, 1996; O'Hanlon, 2009; Turnbull, 2002). In these cases, unique hiring opportunities allowed both principals to reduce teacher resistance. These opportunities may have been instrumental in the success of the inclusive classroom practices at these two schools. Each principal needed a significant number of teachers to fill vacancies. Filling these vacancies with teachers who were positive or open to inclusion provided a sufficient number of teachers supportive of inclusive classroom practices. Once a majority of teachers bought-into inclusive classroom practices, the school culture was supportive and open.

Inclusive classroom practices did not begin all at once, nor was it an initiative that was pushed top-down. Principals came into their new schools with evidence that student outcomes where not acceptable. Initial brainstorming sessions with school staff lead to the development of ideas specific to each school. For the elementary school principal, it was the development of Learning Labs. Students with IEP's were given additional exposure to core curriculum within

Learning Labs. The success of these students led to these students receiving more instruction in the general education classroom. Low achieving students and English Language Learners were soon attending the Learning Labs. Learning Lab instruction included instruction from both special education teachers and the Literacy Specialist. Computer software, such as Read 180, was also available to reinforce learning.

The needs of the middle school suggested challenging the instructional philosophy. This principal had started co-teaching in the previous school, so this became the starting model. Most special education teachers were moved from resource rooms to providing support in the general education classrooms. The special education teachers were no longer responsible for creating lesson plans. Their responsibility moved from teaching content to providing the different modifications and accommodations to the grade level curriculum standard.

A second program, Core academies, was also developed for the middle school students. Low achieving students were not assigned to elective courses. Rather they spent twice the amount of time in an academy on core content (English Language Arts and Mathematics). Students would spend 100 minutes in the core content areas, instead of the typical 50. Students were exposed to grade level curriculum while receiving remediation. As the academies succeeded more students were included:

> So our original intent was not Special Ed focused even though AYP was our, that was our area and we had a lot of bubble kids as well. So that kind of evolved over that first year and then the next thing you know it was for everybody. Anyone who was not proficient and that kind of sky rocketed, but I think there was a lot of vision on the Administrative side as far as what we expected and what we believed could happen. I think there was a strong willingness on the staff to do business different. We had to do a lot of educating of that, a lot of sharing of information, results and that kind of stuff.

Inherent to the middle school academies was the promotion of collaborative planning between general and special education teachers. Teachers discussed which strategies were working for each student. Specific sets of times were set for collaborative planning between co-teachers and special planning days were set up for content areas. As the middle school principal saw it, “It is not a Special Ed issue. It is just that we are we doing business different than we were doing before, to meet the kids who don’t fit in that nice little square.”

For the elementary school, collaborative planning was a separate, conscientious issue not directly addressed in the first year. Collaborative planning appeared more slowly with lead teachers. Later these leads reached out to other interested teachers. The focus of collaborative planning was communication, and discussing the needs of each child.

> It was a huge process. We made sure that grade levels had common prep periods so that our Special Ed teachers were able to meet with them during those periods and obviously not daily, because of their own schedules, but at least once a week. They had the Special Ed teacher who worked with their grade level meeting with them and they coordinated together when we had some classrooms had the Special Ed teachers went in and did some co-teaching. They coordinated on their planning so it wasn't like a teacher and an aide. It was really a co-teaching experience in those classrooms. And our grade levels really collaborated on what they were doing and how they could meet the needs across the grade level of students who were struggling in either reading or math.

These programs required not only changes in staff schedules, but student schedules as well. For the middle school principal, changes in how students were scheduled coincided with the implementation of the core academies. For both principals student schedules had to be strategic.

> I wouldn't say 100% staff buy-in, because that is a rarity, but what we really did was also made sure we placed our students with an IEP and our ELL students in classrooms of teachers we knew would meet their needs. We didn't necessarily use every one of our eight first grade classrooms or our third grade classrooms. We really, strategically placed kids, and we always made sure that we kept those classrooms a little smaller, so as students came in throughout the year we could put them in there if they needed to be.

Students entered collaborative classrooms initially based on the abilities of the student and the ability of the general education teachers in working with these students and with special education teachers. Middle school students were exposed immediately to co-teaching, since two teachers had began co-teaching before transferring to this school with the principal. These classes became models for other teachers in that school.

Implementing inclusive classroom practices required school staff to be flexible. The principals' philosophy of experimenting with different strategies filtered down. Teachers communicated when a strategy was not working, when a revision was needed, or when an approach needed to be discarded and new strategy tried. These principals allowed teachers to be flexible and to experiment. One principal described their staff as having an open attitude and a "focus (that) was always on what we need to do for our kids."

Follow-up

Once the principals established inclusion in the first classrooms, several events occurred. The first was to learn about the Inclusive Schools Practices initiative sponsored by the district. One principal was invited to participate and the other petitioned. Participation in the district initiative provided formal professional development and funding to support inclusive classroom practices. Both principals attended the formal professional development opportunities with staff; immediately followed by discussions between the school administrations and the teachers about these Inclusive Schools Practices workshops.

One finding that appears inconsistent with the school success with inclusive classroom practices was the lack of inclusive classroom practices professional development. Neither principal reported attending or seeking professional development, or sending teachers to professional development workshops until joining the district inclusive school practices later. One potential explanation was a lack of awareness regarding the presence of a district initiative: Inclusive School Practices. Prior to participating in this initiative, professional development consisted of book studies and discussions of course work or conference presentations. The informal approach was perceived as more informative, matching students needs better than the more formal district-sponsored workshops. Professional development began in the second year and continued.

While district funding focused on professional development and in-school support, money won as exemplary schools from an external agency went directly to student learning supports. Those funds went towards student reward systems and technology designed to promote student learning. Some funding went towards curriculum programs. As more teachers' interest in inclusive classroom practices increased within each school, some of the funding contributed to their participation in Inclusive Schools Practices professional development.

As the first inclusive classrooms demonstrated success, more teachers within the school expressed interest in becoming an inclusive classroom. These teachers participated in the professional development workshops, began collaborative planning, and began inclusive classroom practices. Teachers created a cohesive community. The elementary school principal

reported a final conversation she had with her teachers before her transfer, "This is about you, and the community here. This is not about me. Yes, I was a part of it. Yes, I helped to lead you down this path but you have to keep this on… We did this together and what will make me the happiest here is that you continue this." There was further emphasis on students feeling they were connected to the school community. "I will be honest with you, the antidotal piece for the kids was for the first time, for many, they were finally accepted in school. *They felt like they belonged*. They felt success. These were the kids that were always in trouble. Not that they weren't ornery in there, they were ours and we kept them there." (italics added by author).

Conclusion

While many principals expect students to make gains, enough do not convey these expectations that can be translated into student success. The two principals interviewed in this project made their expectations clear that all students could succeed, these teachers can teach, with sufficient support. Cross (2008) has argued that students need to hear three statements throughout their academic career: Learning is important, you can do it, I will not give up on you. The principal surrounded themselves with people who had the similar philosophies. What principals did not know is what support students needed.

This study supports the research of Robinson, Lloyd and Rowe (2008; see also Institute of Education Sciences, 2008) meta-analysis of leaderships establishing, communicating, and monitoring goals and expectations. Staff were included to ensure clarity and consensus about those goals. Robinson has suggested clear goals and expectations have a large effect on student success. Teachers become more focused and coordinated as a team.

Clear lines of communication allowed the expansion of inclusive classroom practices from the lead teachers to later adapting teachers. One facet of this openness was evident in conversations between teachers and principal. Some conversations were explicit brainstorming sessions. Teachers came forward with the idea or knowledge about inclusive classroom practices. Principals responded by experimenting with one or two teachers. Key staffs were successful with inclusive classroom practices. This lead to greater buy-in from more teachers as teachers saw success in the special education students and low achieving students, and the inclusive classroom practices expanded year-by-year.

A core of teachers was early adapters. These teachers piloted the first inclusive classroom practices and became models for other teachers when specific strategies were successful. Additionally, teachers worked together in planning and in discussing what to discard or revise. Furthermore, they assumed the responsibility in revising the strategies and communicating those revisions with the school staff. Inclusive classroom practices began with the initiating teachers and expanded out based on their success. A tipping point was reached where several classrooms of inclusive practices were embraced by most of the school. These schools were not large, so expansion moved quickly. The significant number of experienced and willing teachers at these two schools quickly adapted inclusive classroom practices accelerating expansion.

School staff was open to experimentation. Some teachers had already found success with inclusive classroom practices before transferring with the principal to the new school. These previous experiences provided a comfort level allowing for immediate experimentation, evaluation, and refinement. This flexibility identified and provided the required support.

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Appendix D

The Influence of Student Engagement and Cooperative Learning on Academic Achievement

ISP Study Year II

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The Influence of Student Engagement Cooperative Learning and Academic Achievement

Student engagement refers to the degree of cognitive, emotional, and behavioral investment a student devotes to their learning. Engaged students may express excitement about learning or understanding a new concept, or may be deeply involved in a project. The opposite of engagement would be disaffection, or off-task (Skinner, Kindermann, & Furrer, 2007). Engagement has been divided further into active or passive engagement (Shapiro, 1996; Vile Junod, DuPaul, Jitendra, Volpe, & Cleary, 2006). Active engagement refers to active attention and response to the task; while passive engagement refers to providing a level of compliance to request from instructor.

The previous evaluation of the Inclusive School Practices initiative also included measuring student engagement. In that evaluation, students in ISP schools reported more engagement than students from non-ISP schools. All schools showed a drop between the winter and spring administrations of the survey. This was attributed to the standardized testing that was occurring during administration of the survey. Engagement dropped for fourth and fifth grade students, but not third grade students. In classroom observations, no differences existed in engagement between ISP classrooms and non-ISP classrooms.

For this study, engagement was evaluated through classroom observations also. Two sections of Learning Walk checklist were relevant to engagement. The first was the list of engaging student activities. These items were listed by degree of engagement, with the first activity being off-task, followed by listening and seatwork. The second part of the list included reading, writing, student discussion, use of manipulatives, and student presentations.

A second classification system was part of a district initiative and on the original checklist. District consultants developed eight categories based on supposition by Schlecty (2002, p. 18-21, 26-30). They were: Personalized Response, Clear Modeled Expectancies, Emotional or Intellectual Safety, Sense of Audience, Collaborative Learning, Student Choice, Authentic Work, and Novel or Variety in activities. There were three categories of engagement based on this list. First, off-task occurred if three or more students were off-task. If so, that line in the first list was checked. Second, if three or more categories, or qualities of engagement, were present during that observation, then that class was classified as

engagement. If less than three categories were checked and the class was not off-task that class was qualified as compliant.

Pairs of observers visited forty schools 4 times over four months. Five classrooms were visited per school per visit; so twenty classroom observations occurred per school. Thirty of the schools were elementary schools, and ten were middle schools.

Most learning occurred as whole group instruction (38.20%) or in students working alone (35.03%). These two strategies occurred in every school. Collaborative learning occurred in 38 schools and 15.67% of the classrooms. Students were primarily engaged in either seatwork (worksheets) (36.75%) or listening to the teacher (26.11%). All student-learning activities are in Table 1. There were no differences in student activities between elementary and middle schools.

Table 1. Occurrence of student learning activity as observed.

Activity	Frequency by Classroom	Percentage
Listening to teacher	152	26.12
Seatwork	213	36.60
Reading	68	11.68
Writing	44	7.56
Class discussion	50	8.59
Use of manipulatives	39	6.70
Presentation or Performance	16	2.74
Total	582	100

Title I schools had significantly fewer students engaged in writing activities. They also tended to have less students involved in student discussions. Title I teachers tend to use manipulatives more often.

Thirty-six of the schools had at least one classroom one off-task. Title I schools had more off-task classrooms than non-Title I schools. Twenty-seven schools were classified as having engaged classrooms; the minimum was three classes for three schools. Four of those schools had at least 25.0% of classrooms observed classified as engaged. Middle school classrooms tended to have more engaged students than elementary schools.

The number of engaged classrooms per school was correlated with the inclusion measures. Two of the correlations were significant. Engagement was positive associated with the model One Teach/One Observe. The use of advanced or graphic organizers was strongly

correlated with engagement. Of student activities, engagement was inversely correlated with seatwork.

Examining individual characteristics produced some correlations. All correlations are in Table 2. Advanced and graphic organizer correlated with each characteristic, except Emotional Safety and Authentic Activities. Multi-modal instruction was correlated with Novelty and Sense of Audience suggesting students are instructed each other using multi-modal approaches. Tiered work was correlated with Emotional Safety and Novelty. The inclusive practice teaching students in two groups correlated positively with Student Collaboration and Clear Expectations. Clear Expectations correlated positively also with No Direct Instruction and students working alone.

An examination of activities over time demonstrated consistency over time in the percentage of student activities (see Table 2). Listening to the teacher and seatwork were consistently the most common activities. Reading was more frequent in the second half of the observations compared to the first. There was an increased use of manipulatives in April, and a sharp drop in writing in March. Results from statistical analysis indicate no differences over time.

Table 2. Percentage of student activity over time.

	February	**March**	**April**	**May**
Listening to teacher	32.4	27.3	22.3	24.1
Seatwork	34.6	40.0	36.3	38.0
Reading	8.2	8.7	13.0	12.0
Writing	9.0	4.8	8.5	7.9
Class discussion	7.1	9.6	8.3	9.8
Use of manipulatives	5.9	5.7	9.6	5.9
Presentation or Performance	2.8	3.9	1.9	2.3

When examining the district model for engagement a similar pattern appears (see Table 3). Collaboration remained high, as might be in an evaluation in which collaboration was a key construct. Personal Response and Clear Expectations were observed frequently as well. Emotional Safety and Novelty were not consistent.

Table 3. Percentages of occurrence of CCSD model of engagement over time

	February	**March**	**April**	**May**
Personal Response	17.8	14.2	19.3	11.7
Expectations	18.3	14.8	11.2	16.9
Safety	12.5	10.7	4.9	10.7
Audience	10.6	11.2	10.7	9.2
Choice	12.1	13.2	15.4	13.4
Authenticity	6.2	7.9	9.4	6.0
Novelty	4.4	7.9	8.9	9.4
Collaboration	18.1	20.0	20.3	22.8

When looking at academic achievement only Emotional Safety and Choice predicted CRT Reading, Mathematics, and Science scores. For student activities, schools were students were engaged in writing had higher CRT reading scores. These were also non-Title I schools. These results are not favorable towards Schlecty's model.

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