Inclusive School Practices Longitudinal Study

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EXECUTIVE SUMMARY

The Clark County School District (CCSD) Student Support Services Division (SSSD) created the Inclusive School Practices (ISP) initiative six years ago to support student-centered schools. SSSD responded to recent research demonstrating poor outcomes for high frequency disability students in resource rooms (Jenkins, 2005). The ISP initiative supported inclusive classrooms by emphasizing collaborative relationships between teachers and differentiated instructional practices to improve student outcomes among low achieving students.

Inclusive school practices include the use of collaborative teaching models, differentiated teaching strategies, instructional materials, student work, and student-centered scheduling. These practices have been associated with improved student social skills, (Vaughn & Klinger, 1998) and gains in reading (Bear & Proctor, 1990; Wilson & Michaels, 2006), mathematics (Calhoun & Fuchs, 2003), science (Lundeen & Lundeen, 1993), and social studies achievement (Patricia & Lamb, 1994). Within the ISP initiative, SSSD provides professional development and other resources to support inclusive classroom practices.

In 2007, SSSD approached the Research Department requesting an evaluation of the ISP initiative. A three-year study documented how schools implemented inclusive school practices. This report reflects the third year of this investigation. The focus of this report relates to the roles and interactions of special education teachers at ISP schools. The data collection methods consisted of an online survey and face-to-face interviews. More than 400 CCSD special education teachers from 148 ISP elementary and middle school sites participated in the survey or interviews.

PRINCIPLE FINDINGS

Inclusion vs. Resource Room

Special education teachers reported that they associate the ISP initiative with

- less time on behavior management;
- significant gains in student self-esteem, motivation ,and emotional development;
- gains in academic skills and knowledge;
- greater student independence;
- greater sense of belonging among students with disabilities;
- enhanced focus for students with disabilities;
- positive support from their administrators;
- meeting student IEP goals between the general and special education teachers; and
- greater outcomes than in a resource room.

Instructional Strategies

The most common inclusive classroom strategies reported include

- small group instruction as the most frequent instructional approach;
- flexible grouping as a consistent characteristic of small group instruction;
- frequent use of differentiated materials including student work;
- differentiated grading of assignments; and
- fifty percent of teachers reported having input into student schedules.

Weaknesses

Special education teachers reported

- communication between general and special education teachers was inconsistent;
- issues of "turf" between general and special education teachers occurred in select schools;
- insufficient time available for collaborative planning (About 50% of teachers surveyed reported having a common preparatory time);
- general education teachers would benefit from additional support from site administrators; This support would be site specific according to the needs of each school; and
- general education teachers were uncomfortable with meeting the needs of students with IEPs.

Recommendations

- General and special education teachers would benefit from ongoing professional development. Many believe an annual refresher course would be beneficial.
- Interviewed teachers suggested increased networked support from peers to share ideas and strategies.
- Clear lines of communication between general education teacher, special education teacher, and administration are necessary.
- Collaborative planning time needs to be a consistent part of the weekly schedule.

The goal of inclusive classroom practices is to improve student outcomes through special education services provided in the general education classroom instead of pulling the child out into a resource room. The special education teacher provides instruction and accommodations alongside the general education teacher. Benefits to the special education student include: exposure to grade-level material (Campbell, 2009), improved social skills (Cole & Meyer, 1991; McGregor & Vogelsberg, 1998; Weiner & Tardif, 2004), increased motivation (Campbell, 2009), and academic achievement (Lindsay, 2007; Walther-Thomas, 1997).

General and special education teachers have reported that the inclusive classroom produces many benefits. Avramidis and Norwich (2002) reported that special education teachers are generally favorable toward inclusion. General education teachers were more open to students with physical disabilities than students with cognitive disabilities. General education teachers with more experience were more resistant to inclusion. If general education teachers believed the disability was innate, these teachers were less likely to differentiate instruction. Teacher attitudes altered through experience with disabled students and professional development workshops. Adequate administrative support also led to attitudes that are more favorable. General education teachers were more open to inclusion for students with mild disabilities than students with more complex disabilities.

In Scruggs and Mastropieri (2007) synthesis of qualitative research, both the general and special education teachers generally perceived co-teaching as positive. However, a number of caveats have been identified including: the teachers in the team need to have compatible beliefs or approaches to teaching, issues of “turf” need to be defused early, and administrative support is crucial. Dedicated planning time was an important aspect for the teaching team. Another study reported 40 minutes in a week of dedicated planning time was insufficient (Leatherman, 2007). Teachers reported needing additional training in special education, support from administrators, participation in decisions about the inclusive classroom, and positive experiences in the inclusive classroom.

Positive attitudes toward inclusion may be undermined by teachers’ negative perceptions of themselves lacking competence in special education teaching, supports or professional development to develop skills, and low administrator support (Larrivee & Cook, 2001; Lindsay, 2007). In a recent review of inclusive practices literature, McGregor and Vogelsberg (1998) suggested that teacher attitudes toward inclusion vary depending on the types of support received in their general education classes. Teachers with supportive administrators reported greater access to collaborative planning time and in-class supports (Burstein, Sears, Wilcoxen, Cabello, & Spagna, 2004; McGregor & Volgelsberg, 1998; Villa, Thousand, Nevin, & Liston, 2005). They also reported feeling more efficacious and competent in

teaching students with disabilities (Minke, Bear, Deemer, & Griffin, 1996). Other suggestions included visiting teacher observations and peer coaching to expose teachers to inclusive practices (Howes, Booth, Dyson, & Frankham, 2005). Further, collaborative teachers (one general and one special education teacher) implemented inclusive strategies more consistently when adequate collaboration, communication, and cooperation among teachers occurred (Minke et al., 1996).

Special education teachers face many challenges when moving from a resource classroom to an inclusion room. The most documented is perceived territorial threats (Daam, Beirne-Smith, & Latham, 2001; Smith & Leonard, 2005), or "turf wars" (Tomlinson, Brimijoin, & Navarez, 2008) by the general education teacher. Other reasons include conflicting personalities between co-teachers, lack of planning time, and limited time in the classroom by the special education teacher (Daam, Beirne-Smith, & Latham, 2001). McLeskey and Waldron (2000) report the loss of personal definition of a teacher with the loss of the resource room and "my" students. McLesky and Waldron also identify an increase in special education teacher responsibilities.

Researchers identified several positive student outcomes of inclusive classroom practices; yet, other researchers found a number of issues in implementing these practices. Such drawbacks warranted an examination of special education teachers' attitudes, beliefs, and practices towards the ISP initiative. The goal of this study was to identify the ISP special education teacher perspective and document their experiences. To obtain an accurate perspective of the special education teacher, the research team utilized a combination of survey and interview measures. The purpose of the survey was to document common perceptions and experiences. Interviews investigated teacher responses in greater depth. The benefit of the interviews was to catalogue successful collaborations and instructional strategies, while also identifying weaknesses in ISP schools that may possibly require additional support.

METHOD

Participants

Special education teachers from 148 elementary and middle schools received an invitation to complete an online survey about the ISP initiative. In all, 402 special education teachers received an invitation. The average (mean) number of years teaching as a special educator was 11.0 years. These teachers taught for CCSD for an average (mean) of 8.6 years. The average (mean) number of years teaching at their current school was 4.0 years and teaching at an ISP school was 3.8 years.

After initial review of the survey results, the research team extended invitations for special education teacher interviews. Thirty-seven teachers volunteered. Nine teachers worked in middle

schools, one in a high school, and twenty-seven teachers worked in elementary schools. Two of the elementary school teachers worked in special education kindergarten programs. According to the interviews, 37.0% reported using small group instruction and centers as the main inclusive instructional strategy. One Teach and One Assist was reported by 18.5%, and 7.4% of special education teachers reported One Teach and One Observe. Another 14.8% reported co-teaching.

Data Sources

Teacher Survey. Special education teacher survey administration began in December 2009 and ended in January 2010. Teachers received invitations to participate in the survey through the district e-mail system, InterAct. The e-mail invitation included a hyperlink that led to a web-based (Zoomerang) survey. Appendix A contains a copy of the survey items. Of the special education teachers contacted, 246, or 61.2% completed the online survey. This was a sufficient amount to assume a representative sample.

Teacher Interviews. The research team created a semi-structured interview protocol to answer inconclusive responses to the survey. The purpose of the interview was to garner details about specific aspects of being a special education teacher in an ISP school. Questions included *what does inclusion look like in your school, how is collaborative planning accomplished, and do students without disabilities benefit from inclusion*? Interviewers asked unstructured questions to encourage teachers to elaborate upon a point they were making and to gain greater description of inclusive classroom practices in their school. A copy of the original interview protocol items is included in Appendix A.

Thirty-nine special education teachers agreed to an interview. Teachers taught between pre-kindergarten and twelfth grade. One teacher taught at a high school, nine were from middle schools and the remaining 29 taught at elementary schools. Requests went out to ISP schools via e-mail and telephone calls requesting special education teachers who would volunteer. The research team scheduled interviews to occur at the teacher's convenience, avoiding any disruptions to instructional time. Most interviews occurred during teacher preparation time. Interviews took approximately 45 minutes.

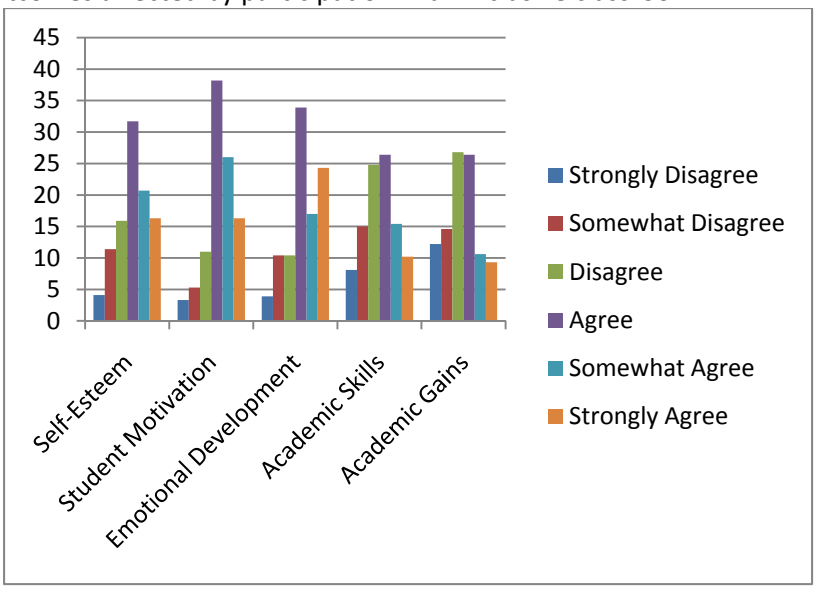
RESULTS

Survey

Student Outcomes. Teachers had strong feelings about student outcomes in the inclusive classroom. Survey items specific to special education student outcomes rated strongly and positively included student self-esteem (68.7% positive), student motivation (80.5%), and emotional development

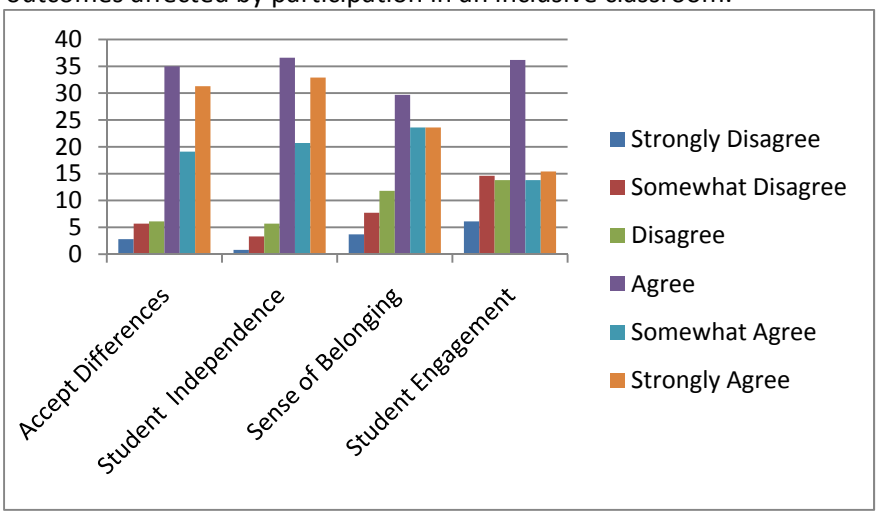
(75.2%). However, teacher perspectives were less clear about gains made by special education students in academic skills (52.0% positive) and gains (46.3% positive).

Figure 1. Perceptions of special education teachers about special education student outcomes affected by participation in an inclusive classroom.



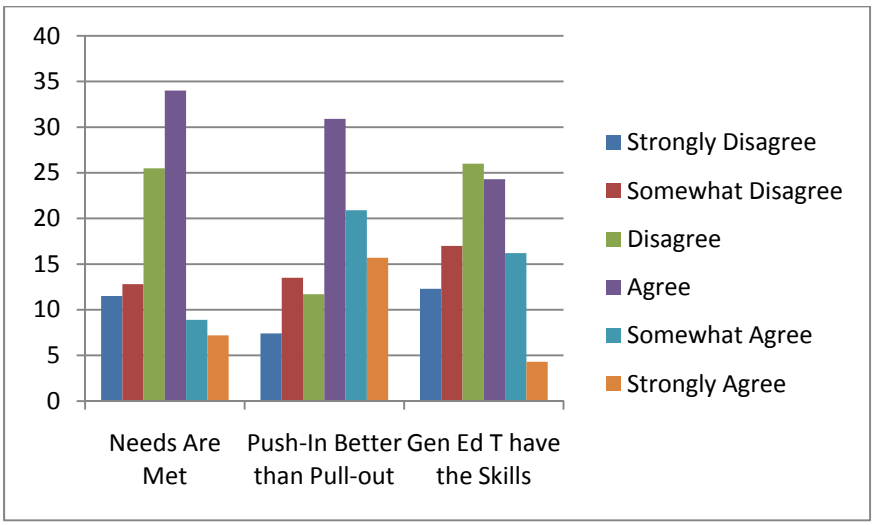
Outcomes at the classroom level had strong positive opinions, specifically the promotion of accepting student differences (85.4%), student independence (90.2%), sense of belonging (76.9%), and student engagement (65.4%). Special education teachers identified behavior modification as a possible distraction, whether implemented by the special education (51.5% agreeing not a distraction) or general education teacher (52.4% agreeing not a distraction).

Figure2. Perceptions of special education teachers about general education student outcomes affected by participation in an inclusive classroom.



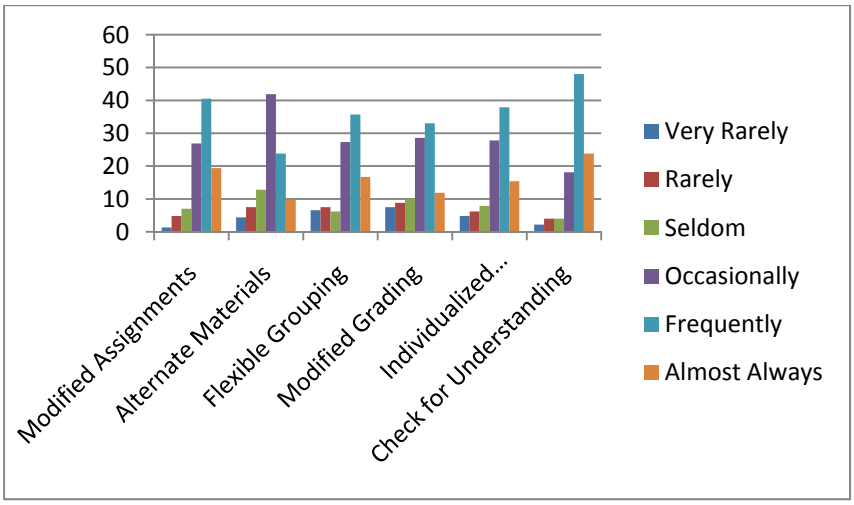
Surveyed teachers reported very favorable beliefs about special education students learning in the general education classroom (95.6%), but special education teachers were less supportive of the effectiveness of instruction in the general education classroom for special education students (27.8% favorable). Sixty percent agreed that the general education teacher was meeting the academic needs of the special education student.

Figure 3. Special education teachers' perception of the success of inclusive classrooms.



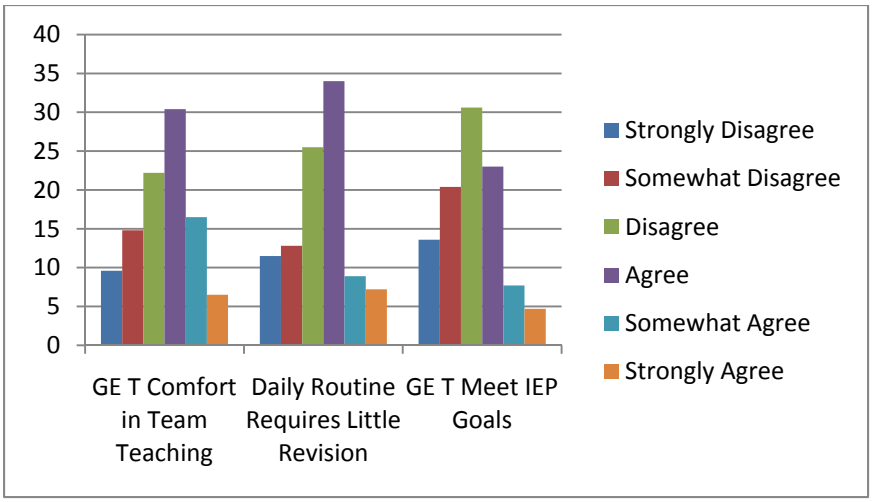
Perspectives about inclusive classroom strategies were favorable with special education teachers reporting a frequent use of specific inclusive strategies including modified assignments (59.9%), alternate materials (33.5%), flexible grouping patterns (52.4%), and differing grading criteria (44.9%) occurring frequently or almost always. Individualized instruction was still occurring with high frequency (53.3%). Checking for student understanding of directions also occurred with high regularity (71.8%).

Figure 4. The frequency of occurrence for specific inclusive classroom strategies.



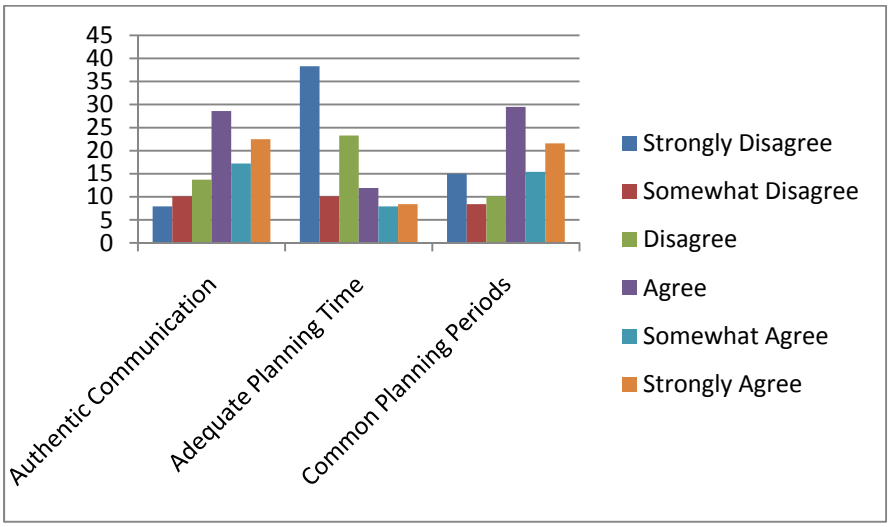
Special education teachers were less favorable about the comfort level of the general education teacher instructing special education students (30.4% agreeing and 23.0% somewhat or strongly agreeing). Changes to daily routines and protocols in the general education classroom were required according to 49.8% of the special education teachers. Special education teachers voiced that general education teachers were not comfortable implementing IEPs with 64.6% believing general education teachers were uncomfortable.

Figure 5. Reported ease of working collaboratively in an inclusive classroom.



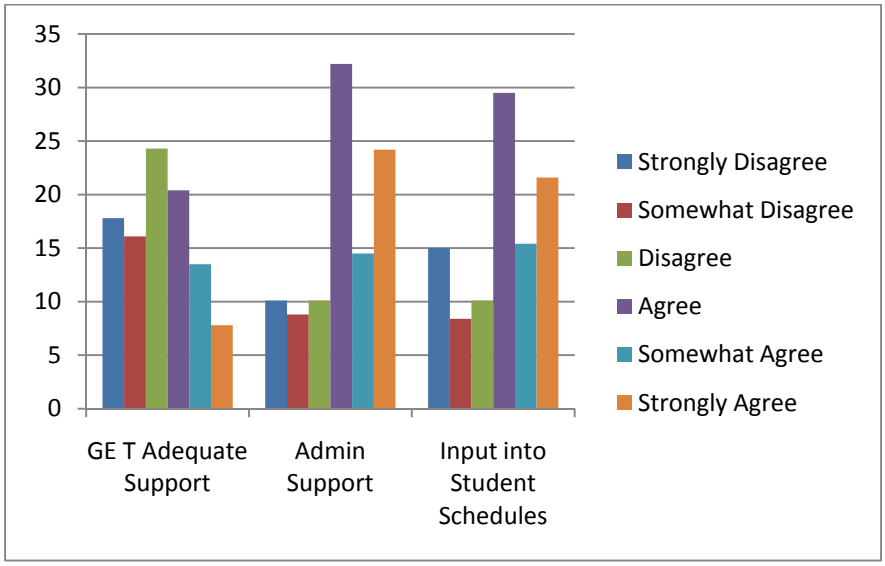
Special education teachers reported communication with the general education teacher and administrators somewhat favorable . Teacher input into student schedules was favorable with 29.5% agreeing and 37.0% somewhat or strongly agreeing. Communication between the special and general education teacher was positive with 28.6% agreeing and 39.7% somewhat or strongly agreeing. Surveyed teachers reported inadequate time set aside for collaborative planning according to special education teachers (71.7%). These teachers reported that common planning periods was infrequent (30.4%).

Figure 6. Perceptions of adequate support structures for inclusive classrooms.



School Support. Special education teachers believed the administrators at their school provided adequate support of the inclusive classrooms (70.9%). Almost 42% (41.7%) believed the general education teachers have adequate support in their classrooms.

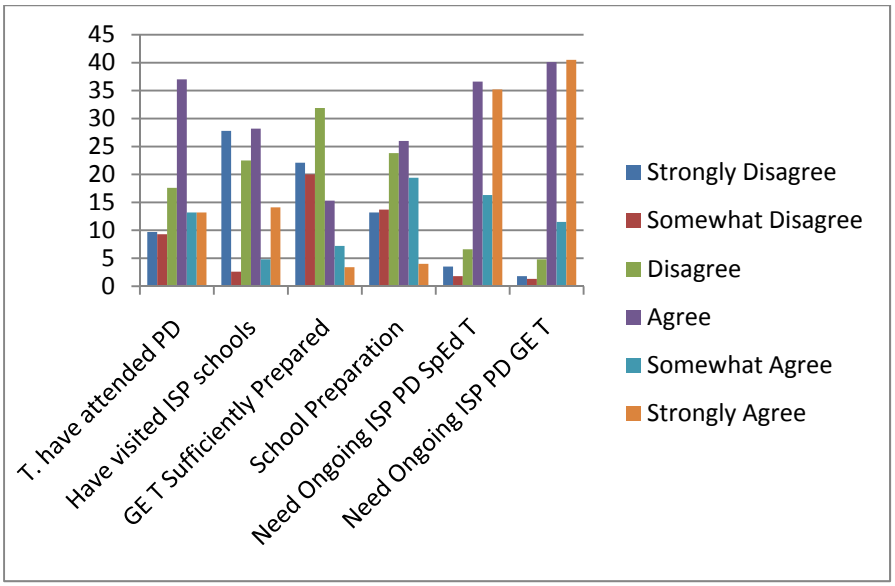
Figure 7. Perceptions of adequate administrative support for inclusive classrooms



Special education teachers did not believe adequate training occurred to support inclusive practices. Twenty-six percent of surveyed teachers agree adequate professional development has occurred at their school, with 63.4% reporting teachers attending ISP workshops. This hesitancy also applied to special education teacher perspectives toward the school's preparation as an ISP school (26.0% agree, 23.4% somewhat or strongly agree). Need for general education teacher ongoing

professional development was strong with 92.5% agreeing more was needed. Special education teachers reported that they also required additional professional development (88.1%).

Figure 8. Teacher perceptions of degree of preparation for inclusive classroom practices.



Teacher Interviews

Benefits. Replies to what strategies special education teachers found effective were grouped into three themes: instruction, assessment, and peer collaboration. Sixty percent of teacher responses related ISP instruction; most focused on instruction (see Table 1). The most common strategy was the use of small groups (56.3%), followed by co-teaching (25.0%), and centers (18.8%). Co-teaching was more common in the middle schools, while centers were more common in elementary schools. The use of differentiated materials accounts for the other 36.0% of ISP instruction. The use of accommodations to assessment accounted for 15.2 % of effective strategies. Peer collaboration accounted for only 9.1 %.

Table 1. Report of effective inclusive practices by effectiveness.

ISP Strategy	Percent reported
Assessment	15.2%
Peer Collaboration	9.1%
Instruction	75.7%
Presentation	*64.0%*
Materials	*36.0%*

When interviewers asked special education teachers how students with disabilities benefit from the Inclusive Schools Practices initiative, 38.7 % reported gains in social skills or socialization. Comments included, "learn to see things from different viewpoints," and, "learn how to live in the world." Another 32.3% of comments reflected academic gains. Sense of belonging accounted for 9.7% of teacher comments and self-esteem another 9.7%. Self-advocacy accounted for 6.5%. One middle school special education teacher clearly summarized these results,

> First of all, their behaviors decrease...They see other kids not acting up...better focus and concentration because (they are) in a regular classroom. They go crazy in a resource room and everyone has a different IEP. It works out better with inclusion; they are smartening up. Kids are passing and they are doing the work.

A follow-up question to academic gains revealed more than half (55.6%) cited gains in mathematics, 33.3% cited gains in reading, and 14.3% identified gains in writing. More than one-third (35.7%) cited gains seen in specific assessments, specifically, CRT scores, DIBELS and term finals. One teacher identified consistent gains in test scores for the last three years. A second teacher reported, "Improved in math and reading—kids have grown in years in just one year." Growth in content was not consistent.

Even though more than half of the teachers identified gains in math, other surveyed teachers believed their special education students struggled with math. Some teachers reported gains only in math. A few teachers couched their comments by identifying individual student differences and abilities. Overall 67.6% of special education teachers agreed that students made academic gains, but gains were inconsistent in content area. Most agreement came from elementary school special education teachers. Middle school teachers were more hesitant to agree that the special education students achieved academic gains.

When asked if non-disabled students benefit from ISP, 81.8% of special education teachers agreed that non-disabled students did benefit. Of these, 7.0% were not as decisive or clear about the benefits. The research team identified three themes as benefits for non-disabled students: tolerance, social skills, and academic gains. Of positive comments from interviewed teachers, 57.8% related to increased tolerance among non-disabled students. Only 10.5% of the comments related to academic gains. Gains in social skills accounted for 31.6% of the positive comments. Six percent of total respondents reported no collaboration or collaborative planning occurring. One teacher reported collaboration occurred, "when I'm in there with the teachers...everyone is like 'everything's great, everything's fine...'"

When asked what changes in the general education classrooms they have observed, about one-third (32.4%) identified changes. All changes observed were positive. These responses included better

structure, differentiated instruction as a regular aspect of the classroom, a more tolerant classroom, and "increased checks for understanding, more interaction, more modeling." Thirteen percent (13.5%) report no changes have occurred since participating in the ISP initiative.

Collaboration/Planning. Interviewers asked special education teachers how collaborative planning occurred at their school. About one-third (34.7%) reported there was structured time set aside for planning with teachers. Some teachers (23.5%) reported common preparatory periods. Some referred to weekly and monthly meetings. One teacher reported meeting "every couple of months." One-half (50.0%) reported collaboration meetings were impromptu and brief. Many teachers (41.7%) accomplished collaborations via email. Another one-third (33.3%) planned with co-teachers during lunch and 25.0% reported planning before or after school, in between classes in the hallway or restroom.

The biggest reported obstacle to collaboration was a lack of time. A few teachers explicitly identified a lack of time, "Often it is a quick word at the starting or end of lesson, chance meeting in the hall, lunchroom or restroom. If feels like it is always rushed and too short". Another teacher reported similar sentiments, "just squeeze in before, after school, kinda thing..." Many others communicated insufficient time in the tone of their voice, by presenting schedules, and in the way, they squeeze planning time in the hallway, during lunch, and via emails. Many teachers used multiple strategies to communicate with fellow teachers.

Communication was another issue. Thirty percent of interviewees identified communication issues between the special and general education teachers. A small fraction referred to communication as a time or scheduling issue. Most responses reflected personal philosophies of teaching. Two special education teachers admitted they personally did not believe inclusion is an effective strategy for students with IEPs. One teacher spoke frankly, "It's very important to them, you know, to our administration...I just kind of take my kids, maybe a couple of others, in the great room and work specifically on whatever we need to work on".

Most special education teachers focused on the general education teachers and their perceptions of the inclusive classroom. One middle school teacher discussed the lack of flexibility and the lack of accommodations or strategies. In describing how well inclusion was working in the math classes, she contrasts that with the English classes in which she collaborates.

> In most of my classes, like my two English classes, the co-teacher does her thing. I walk around. I help the kids...I mean, my kids next year cannot survive in the CC class if we have the same teacher teaching them next year for seventh grade. So that class, I literally teach my own group.

Some general education teachers were defensive. Another middle school teacher discussed how one general education teacher had a mentality of "us and them",

> Have to let the teacher know you are on their side...The teacher wants to teach. They feel threatened in the beginning. Why are you coming into my classroom? I go in to help...If they want to teach, then they can teach. They do not want anyone in the way...They are in control and I am there to help...I do not feel like I'm teaching fifty percent of the time.

This special education teacher admitted his approach to inclusion was primarily consultative, though there were general education teachers who would ask him to teach. When asked about an example, he discussed how one teacher was not feeling well and he taught. The general education teacher sat at his or her desk and helped those students who approached them. A different rationale provided was the perception that the Inclusive Schools Practices were a passing fad.

> I'd say maybe a couple of years ago, there were teachers that did inclusion but were negative about it even though they've been exposed to some classes. In their mind, they thought inclusion was going away and we were going to go back to pull out. And again, that's someone that was really traditional.

Many special education teachers identified flexibility as a requisite characteristic in inclusive classrooms. Teachers at schools who discussed how successful ISP was at their school talked about how flexible the team was. There was a team mindset. These teachers spoke with excitement and discussed growth in specific students or assessments. Teachers who discussed the lack of flexibility in general education teachers were visibly frustrated with inclusion. As noted previously, one strategy was not to teach in the classroom; rather pull students out. One elementary teacher discussed the small number of teachers that "bought into" ISP at her school. She was working well with first and third grade teachers, but interactions with other teachers were strained.

> I can absolutely guarantee it's getting harder, and I can absolutely say the only reason they do it is because we work well together. I've had them both say that, if it wasn't for me, they wouldn't do it (inclusion). There are teachers here that refuse to do it. Absolutely (there is low buy-in at this school), I know that my intermediate fourth and fifth, that none of the teachers want to do it again...I think overall no one wants to do it. I think a lot of it is because of test scores; a lot of people are freaked out by test scores, and freaked out by behaviors. I think they don't know how to work with kids with disabilities...it's overwhelming for someone who doesn't understand it. I think either they get it or they don't.

Many special education teachers interviewed saw more professional development opportunities as a solution.

Professional Development. When asked if there was sufficient professional development opportunities for inclusive classroom practices, two-thirds of respondents (66.7%) replied there were

not enough. Another 12.5% thought the professional development available needs revision. The remaining 20.8% replied there was sufficient professional development available. Almost 30% (29.2%) admitted to attending a district sponsored ISP workshop. Two special education teachers (8.3%) reported not having attended any ISP workshops. A common suggestion was to offer a refresher course at the beginning of the school year. Another common suggestion was to set up regular roundtable discussions to present different strategies or ideas. One specific suggestion was for examples of collaborative lesson plans. "What a lesson plan should look like for two teachers, how two teachers can teach together?"

Several special education teachers specified that professional development workshops target general education teachers. Several teachers identified there is resistance to attending such workshops. Reasons for not attending were a lack of time and motivation. The lack of motivation may stem a lack of awareness. One special education teacher was not aware of district sponsored professional development opportunities. Another two explicitly reported they were not interested in attended ISP workshops.

Several teachers discussed the internal professional development that occurs within their school. Twenty percent (20.8%) reported participating in school level professional development in-services. Several referred to working with instructional assistants, others referred to regular meetings and in-services they have or plan on leading. Two special education teachers referred to workshops conducted by CCSD individuals at the school. One teacher reported inclusive professional development was occurring monthly at her school.

When asked what support the District should provide more than half of the responses (56.7%) identified additional professional development. Specific comments referred to on-going or annual refresher courses. One teacher identified that she was not part of the original ISP school team, but joined the collaboration later. Because she was not part of the original team, she missed workshops the other teachers had attended. Twenty percent reported a need for additional staff.

CONCLUSION

The purpose of this study was to examine the experiences of special education teachers in the inclusive classroom. Special education teachers participated in surveys and interviews. Previous research identified a number of concerns related to inclusive classroom practices including both co-teachers having a similar philosophy (Scruggs & Mastropieri, 2007), avoiding turf battles (Tomlinson, Bimijoin & Lavarez, 2008), the need for administrative support (Larrivee & Cook, 2001; Leatherman,

2007), and establishing shared planning time (Daam, Beinne-Smith, & Latham, 2001). This study identified similar issues. Some positive aspects were identified also.

Inclusive classrooms were more favored over "resource rooms" by special education teachers. These teachers reported small group interaction as the instructional approach, followed by One Teach and One Assist and co-teaching. During classroom observations conducted in the previous year, One Teach and One Assist was the most common instructional approach documented with small group instruction and co-teaching occurring with very little frequency. This incongruity between teacher report and observation bears further investigation.

Special education teachers had highly favorable perspectives toward student outcomes except in academic gains. Interview data provided additional details including identifying less time spent on classroom management and having observed greater concentration in students with IEPs. These teachers supported the general education teachers' ability to expose grade-level content to students with disabilities. They did not believe general education teachers were effectively teaching special education students.

Surveyed teachers reported individualized instruction and flexible grouping as the most common student strategies. This report aligns with the interview data collected. Special education teachers reported frequent use of modified assignments, grading, and materials; however, the observation data from the second year study did not corroborate teacher reports. These teachers reported individual modifications occurred frequently or very frequently, while classroom observers reported seeing this occurring about ten percent of the time.

Previous literature identifies communication between collaborative teachers as a critical component of the inclusion classroom (Scruggs & Mastropieri, 2007). Special education teachers reported communications with co-teachers as generally positive and comfortable. These teachers did suggest more flexibility is required in the classroom. The interview data suggested communication was occurring in brief, random spurts, and emails.

Another issue from the literature includes "turf" battles (Tomlinson, Bimijoin & Lavarez, 2008). Fights over territory were not born out in the survey, which reported equanimity between the general and special education teachers. Interviews identified that "turf" was a particular issue in some schools. For special education teachers protecting their turf referred to feelings of protecting and teaching special education students. When discussing "turf" with special education teachers, they identified the general education classroom and routines as the domain of the general education teachers. Several

teachers perceived themselves as guests or aides in certain classrooms, and collaborators and co-teachers in other classrooms.

Special education teaches' perceptions about collaborative planning time were negative. In the interviews, teachers replied that there was insufficient time in their schedules to collaborate with the general education teachers. Approximately half of the teachers surveyed reported having a common planning period, but only a few interviewed teachers reported having common planning periods. This difference may be a sampling artifact.

Special education teachers were very positive about having supportive administrators in both the survey and interviews. One-half of the teachers surveyed reported providing input into special education students' schedules. These teachers advocated that general education teachers require additional support from administrators. The most common form of support reported was professional development.

One issue not discussed in previous research has been a consistent finding in this three-year evaluation. CCSD ISP elementary schools have struggled in staffing a continuum of student needs. This issue first appeared in initial discussions with principals at the onset of this three-year study. Meeting a wide variety of needs reappeared in special education teacher interviews. Special education teachers across the board discussed this problem, either in trying to meet the wide needs of a diverse population, or in not having to meet diverse needs in the current year or at a particular school. Special education teachers expressed worry about meeting the needs of all students who are below average without sufficient support. Highly demanding student populations have detracted from inclusion without sufficient resources or support.

Surveyed teachers reported both special and general education teachers attended inclusion professional development. Interview data clarified that this occurred at the beginning stages of inclusion at the school and may have been several years ago. Less than half of these teachers visited other ISP schools. While special education teachers believed they could benefit from additional professional development, they were more adamant that general education teachers required more professional development opportunities. One suggestion that occurred consistently from the teacher interviews was that there was an annual workshop or conference for inclusion. A modification of this recommendation may be a support network for ISP teachers perhaps online or an InterAct conference.

Special education teachers reported the major strengths of the ISP initiative include supportive administrators and positive student outcomes. The most vital weaknesses included the lack of structured planning and communication time, and professional development. The immediate

implication may be to focus on helping ISP teachers communicate and identifying structured collaborative planning time.

Implications

This study continues to document the various positive student outcomes. Special education teachers enjoy working with students without IEPs, and work alongside general education teachers. The ISP initiative is a positive initiative according to the perceptions and reports of these special education teachers; however, some schools require additional support, though many teachers would appreciate extra support.

Special education teachers report that professional development for teachers new to the ISP initiative is critical. On-going professional development is also important. One idea that has received much support is networking among co-teachers either online or as regular face-to-face meetings. ISP has an online conference on Interact as part of the ISP initiative. The conference may need better promotion or encouragement to participate. Related, many teachers who responded to the survey have not visited other ISP schools. Visits can be another means of sharing ideas and inclusive classroom practices. The underlying theme appears to be that ISP teachers need contact with other ISP teachers. This may be including sharing ideas and strategies, and bolstering morale among teachers in similar circumstances.

Limitations

The greatest limitation of this study is in focusing on only one-half of a co-teaching team. In focusing only on special education teachers, this study ignores the perspective of the general education teacher. The role of general education teachers has been limited to classroom observations. Parent perspectives, principal perspectives, and now, special education teacher perspectives have been documented. Students and co-teachers observations in the classroom have been obtained. The research team has not documented general education teacher philosophies, and changes in instructional strategies and classroom routines. To obtain the clearest picture of the ISP initiative, general education teacher perspectives are necessary.

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APPENDIX A

Special **E**ducation **S**urvey

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

   A. Most special education students make an adequate attempt to complete their assignments.
   B. Inclusive classroom practices offer mixed group interaction that fosters understanding and acceptance of differences among students.
   C. Increased freedom in a general education classroom creates too much confusion for the special education student.
   D. The presence of special education students has not promoted acceptance of differences on the part of students without disabilities.

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

   A. The special education student develops academic skills more rapidly in a general classroom than in a resource classroom.
   B. Inclusion of the special education student in a general education classroom does not promote his or her social independence.
   C. The special education student is not socially isolated in the general education classroom.
   D. Most special education students do not feel a sense of belonging in general classes.
   E. The self-esteem of special education students improves when placed full time in a general education classroom.

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

   A. Special education students lose the stigma of being “dumb”, “different”, or “failures”, when they are placed full time in a general education classroom.
   B. When special education students are placed full time in general education classes, they spend most of their time just sitting, not actively engaged.
   C. Achievement levels of general education students’ increase with special education students placed full time in the general education classroom.
   D. Inclusive classroom practices improve special education student motivation.

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

   A. Inclusion of special education students requires significant changes in general education classroom procedures.
   B. General education teachers have the instructional skills necessary to work with special education students.
   C. General education teachers have received sufficient training to teach special education students.
   D. General education teachers cannot meet the academic needs of special education students currently in their classrooms.

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

   A. General education teachers are uncomfortable implementing individualized education plans (IEPs).
   B. General education teachers spend too much time on the behavior management problems of special education students.
   C. Special education teachers spend too much time on the behavior management problems of special education students.

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

   A. Special education students should be given every opportunity to function in the general education classroom where possible.
   B. Teaching special education students is more effective by special education rather than general education classroom teachers.
   C. Isolation in a resource classroom has a beneficial effect on the social and emotional development of the special education student.
   D. Including special education students full time in a general education classroom has a negative effect on the emotional development of the students with disabilities.

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

A. Effective special education for students with diverse learning needs can be delivered solely within general education classes.
B. Bringing special education services into general education classrooms causes serious difficulties in determining "who is in charge" between the two co-teachers.
C. General education teachers feel comfortable team teaching content with special education personnel.
D. Special and general education teachers should collaborate on all students' learning problems.

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

A. Special education students have a basic right to receive their education in a general classroom.
B. The general education classroom with special education consultant services is the most effective practice to educate students with diverse learning needs.
C. General education teachers have the necessary support and assistance to implement inclusion.
D. The special education teacher can best meet the instructional needs of students with IEPs in a resource room environment.

9. How often do the following inclusive classroom practices occur in your school?
Very Rarely (1), Rarely (2), Seldom (3), Occasionally (4), Frequently (5), or Almost Always (6)

A. Assignments are adapted according to student needs.
B. Students at our school use alternate materials.
C. Co-teaching teams in our school use flexible grouping patterns.
D. Co-teaching teams provide individualized instruction.
E. Co-teaching teams use different grading criteria based on student needs.
F. Students at our school are monitored for understanding of directions.

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

A. There is adequate planning time with the general education teachers.
B. Administrators at this school provide adequate support for inclusive classroom practices.
C. Special education teachers provide input into student schedules.
D. General and special education teachers have common planning periods.
E. There is authentic communication between special and general education teachers.

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

    A. Inclusion of special education students in a general education classroom necessitates ongoing professional development for general education teachers.
    B. Inclusion of special education students in a general education classroom necessitates ongoing professional development for special education teachers.
    C. I have visited other schools who participate in the Inclusive School Practices initiative.
    D. The teachers in this school have attended professional development workshops related to collaborative teaching models.
    E. The teachers in this school are prepared adequately for inclusive classroom practices.

12. Including this year, how many years have you worked within the Clark County School District?

13. Including this year, how many years have you been a Special Education teacher?

14. Including this year, how many years have you taught Special Education at this school?

15. Including this year, how many years have you taught at an ISP school?

SPECIAL EDUCATION INTERVIEW QUESTIONS

1. What does the special education program look like at your school?

2. What does inclusion look like at your school? (e.g. full inclusion, one inclusion teacher) How many of your students have pullout minutes?

3. What does inclusion look like in one of your classrooms? (co-teaching, two separate groups, small group instruction, one teach/one assist) Which model is the most productive?

4. How have students with disabilities benefited from inclusion?

5. Do you believe the achievement levels of special education students improve in the general education classroom? How much growth?

6. What **inclusion** strategies are the most effective at your school (e.g. differentiated instruction, differentiated homework)?

7. Under what circumstances do special education students excel in the general education classroom (push in) or in a "resource room" (pullout)?

8. Do students *without* disabilities benefit from inclusion? If so, how?

9. How have general education teachers and students reacted to disruptive behavior by special education students? Please elaborate?

10. How many tracks or grade level teachers have inclusive/collaborative consultative classroom (CC) students? Do special education teachers have enough time to effectively teach all students?

11. What inclusion professional development have the teachers at this school attended (1) at the district level, (2) at the school?

12. What specific support from the district is needed in the inclusive classroom?

13. Do teachers have sufficient personnel support in the classroom?

14. How effective are paraprofessionals/aides in the inclusive classroom?

15. How is collaborative planning accomplished and how often?

16. How have routines/procedures in the general education classroom changed since becoming inclusive?

APPENDIX B

ACHIEVEMENT SCORE OUTCOMES OVER TIME

The expected outcome from the ISP initiative is improvement in skills and knowledge among students with IEPs. The common metric for measure of such knowledge has been standardized test scores, in this case CRT scores. Previous analyses of CRT scores associated with the ISP initiative have been simple, one shot comparisons. In the first year, three first year ISP elementary schools were compared to three non-ISP schools. Comparisons were made at the grade level. From the first year, fifth grade students from the ISP schools had higher mathematics and science CRT scores, but third grade students from non-ISP schools had higher reading scores.

In the second year analysis was extended to the entire district for elementary and middle school students. Schools were divided by ISP participation and Title I status. For the elementary schools, ISP school students had lower scores in reading than the non-ISP school students; however, Title I school ISP school students had higher CRT reading scores than non-ISP Title I school students. Non-ISP school students did better in math, except for Title I schools were ISP Title I students were comparable to non-ISP Title I students. Title I ISP elementary school students had higher science scores than Title I non-ISP school students. For middle school students, non-Title I ISP students had higher test scores in reading, mathematics, and science. For Title I students, non-ISP school students had higher test scores in reading and mathematics.

The results of these previous evaluations allow one to suggest a more nuanced approach was needed to identify the differences between students and schools of particular characteristics. The first study looked at schools new to the ISP initiative. Examining schools better established in inclusive classroom practices may provide a more representative picture. In this study, schools had to have participated in the ISP initiative three or more years. The mean year involvement in the first year of the ISP evaluation was 3.2 years. For the schools included in this study, mean year participation was 4.8 years. Schools were narrowed further to middle schools because of the consistency in approach to inclusive school practices. In addition, measuring the difference between students with IEPs and without IEPS was added in this study.

METHOD

Subjects. Middle school students were selected because middle schools have a similar approach to inclusion across middle schools. Some special education teachers are assigned to a content area and co-teach or consult with the content teachers. Other special education teachers are dedicated resource or self-contained teachers. On the other hand, elementary schools use a diversity of strategies at

implementing ISP. Compared to elementary schools the middle schools have a consistent approach to ISP. Sixth graders in the 2007/2008 academic year were followed for three years.

Schools that joined ISP during the three years were excluded from the analysis. Students in these schools would be both in control and treatment groups, if included. Therefore, schools in the treatment group (ISP schools) had at least three years experience under the ISP initiative. This was used as a proxy for fidelity to inclusion along with the parallel approach to inclusion across CCSD middle schools. Seventeen schools were excluded, leaving 35 middle schools available for analysis. Forty percent of the 35 schools were ISP schools and 60 percent were non-ISP schools. Because of low power in the initial analyses (β = .32 - 1.00), the full data set was used instead of randomly selecting students from the schools.

Procedure. A mixed model factorial design was used in this analysis. The within-group variable was CRT scores from the 2007/2008, 2008/2009, 2009/2010 academic years. There were three between group variables, ISP participation (ISP school vs. non-ISP school), Title I status (Title I school vs. non-Title I school), and student IEP status (IEP student vs. non-IEP student). Title I status has been shown previously to have an effect on how the ISP initiative has been approached (Campbell, 2009). In this case, Title I status was treated as a potentially confounding variable. IEP student status was used to examine differences between students with IEP in the general education classroom and low-achieving students without receiving IEP support who received assistance from both teachers. Students in resource classes or self-contained classrooms were not identified or removed. It is assumed that an equal number of resource and self-contained students occur in both the ISP and non-ISP schools.

RESULTS

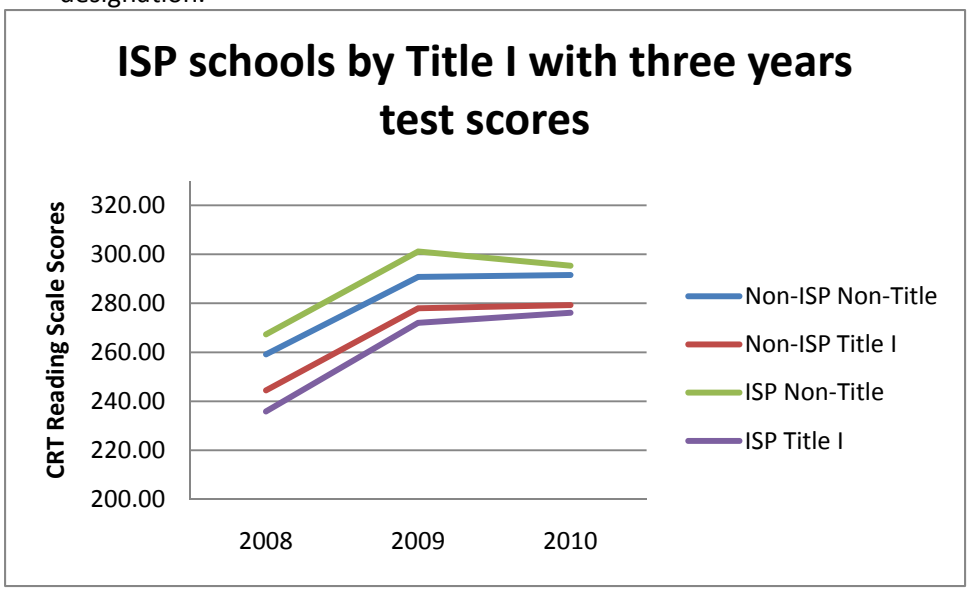
Reading. A mixed model analysis of variance (ANOVA) was used to analyze CRT reading scores. The interaction for all four variables was not significant ($F_{(2, 27762)} = 1.79$, $p = .17$). Two significant interactions included the CRT reading scores over time and the ISP variable. The first significant interaction was between CRT reading scores, ISP status and Title I status ($F_{(2, 27762)} = 3.71$, $p = .03$, partial $\eta^2 = .0002$). The second interaction was between CRT reading scores, ISP status and IEP status ($F_{(2, 27762)} = 7.98$, $p = .001$, partial $\eta^2 = .0004$). The interaction between CRT reading scores, Title I status and IEP status was not significant ($F_{(2, 27762)} = 2.51$, $p = .08$).

Several statistically significant interactions between the within-group variable (CRT reading scores) and one between group variable occurred. One was between reading scores and Title I status ($F_{(2, 27762)} = 6.81$, $p = .001$, partial $\eta^2 = .001$). Another significant interaction was between CRT reading scores and IEP status ($F_{(2, 27762)} = 123.04$, $p < .001$, partial $\eta^2 = .09$). The interaction between CRT reading

scores and ISP status was not significant ($F_{(2, 27762)} = .77$, n.s). The only interaction between two between-group variables that was significant was between Title I status and ISP status ($F_{(1, 27762)} = 6.19$, $p = .01$, partial $\eta^2 = .0004$).

There was a significant main effect for CRT reading scores ($F_{(2, 13881)} = 723.31$, $p < .001$, partial $\eta^2 = .05$), meaning students in 2008 (M = 251.71) had significantly lower scores than they did in 2009 and 2010. There was no difference in CRT reading scores between 2009 (M = 285.47) and 2010 (M = 285.58). There were also main effects for Title I status ($F_{(1, 13881)} = 55.11$, $p < .001$, partial $\eta^2 = .004$). Title I students (M = 264.30) scored 19.91 points on average less than students not in Title I schools (M = 284.21). There was a main effect also for IEP status ($F_{(1, 13881)} = 1313.88$, $p < .001$, partial $\eta^2 = .09$), students with IEPs (M = 225.64) scored on average 97.22 points less than students without IEPs (M = 322.86). There was no main effect for ISP status ($F_{(1, 13881)} = .08$, n.s).

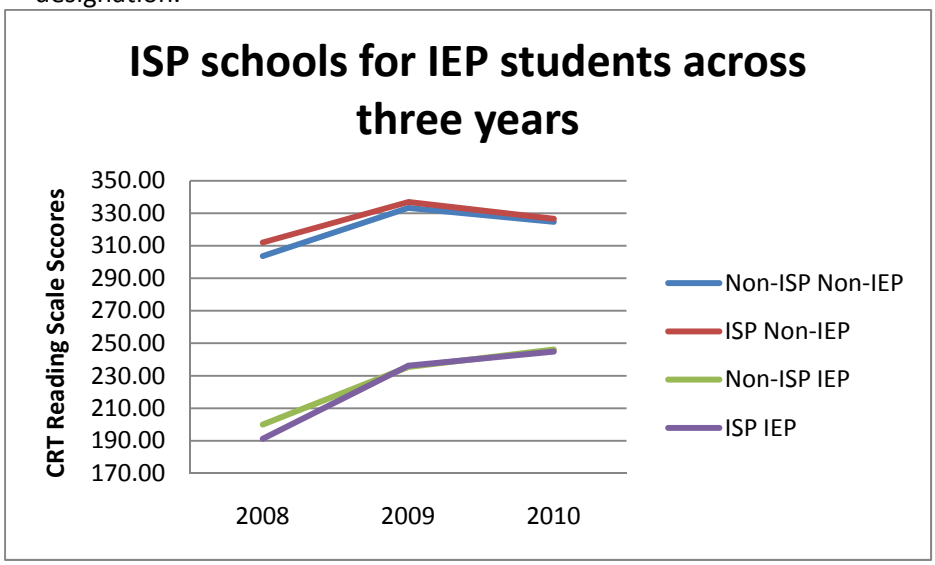
Figure 1. Comparison of CRT Reading scores over three years by ISP and Title 1 designation.



Tukey's HSD was used in examining the interaction between the within-group variable, CRT reading scores, and two of the between-group variables. For the interaction between CRT reading scores, Title I status, and ISP status, all mean comparisons were significant except between the 2009 CRT reading scores and 2010 CRT reading scores for non-Title I schools who did not participate in the ISP initiative. Title I ISP schools made significant gains on the Title I non-ISP schools with Title I ISP schools having a mean difference of 8.64 points in the first year (2008) and reducing that mean difference to 3.14 points in the third year (2010). The difference between school classifications in the third year was statistically significant.

For the interaction between CRT reading scores, ISP status and IEP status, only one mean difference was not statistically significant in the post hoc analysis. There were no significant gains between the first and second year in reading scores for non-ISP IEP students and ISP IEP students in the second year (2009). The ISP IEP students dropped in the third year, but the difference was not as great. The mean difference between the two groups of IEP students in the first year was 8.84 points, while in the third year the mean difference was only 1.25 points.

Figure 2. Comparison of CRT Reading scores across three years for IEP students by ISP designation.

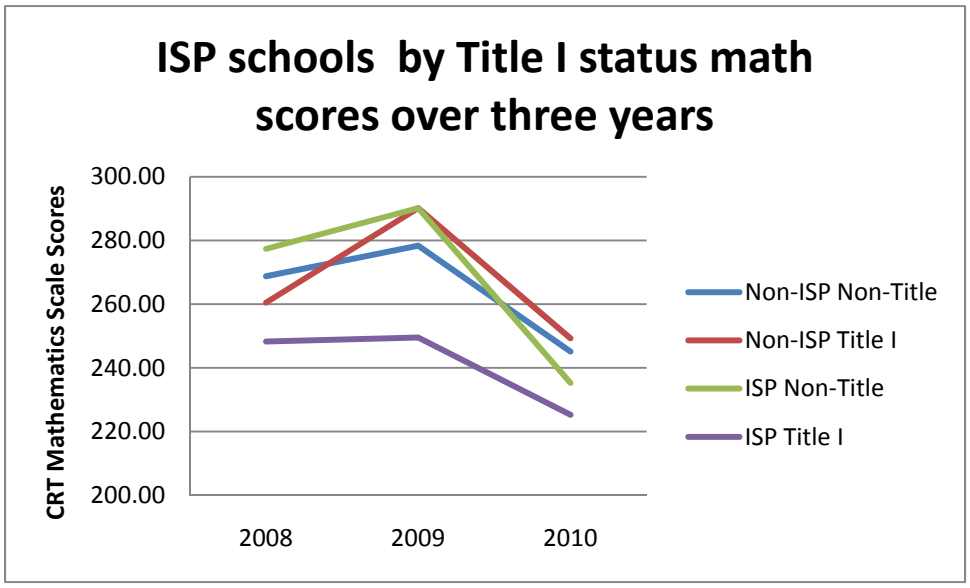


Mathematics. A mixed model analysis of variance (ANOVA) was used to analyze CRT math scores. The interaction for all four variables was not significant ($F_{(2, 27758)} = .04$, n.s). Only one significant interaction included the CRT scores over time and ISP status. The significant interaction was between CRT math scores, ISP status and Title I schools ($F_{(2, 27758)} = 7.20$, $p = .001$, partial $\eta^2 = .001$). The interaction between CRT math scores, ISP status and IEP status was not significant ($F_{(2, 27758)} = 2.16$, $p = .12$). The interaction between CRT math scores, Title I status and IEP status was statistically significant ($F_{(2, 27758)} = 4.13$, $p = .02$, partial $\eta^2 = .0003$).

Several statistically significant interactions between middle school CRT math scores and one between group variable occurred. One was between CRT math scores and Title I status ($F_{(2, 27758)} = 4.42$, $p = .01$, partial $\eta^2 = .0003$). Another significant interaction was between CFT math scores and IEP status ($F_{(2, 27758)} = 296.42$, $p < .001$, partial $\eta^2 = .02$). The interaction between math scores and ISP status was not significant ($F_{(2, 27758)} = .77$, n.s). The only interaction between two between-group variables that was significant was between Title I status and ISP status ($F_{(1, 27758)} = 13.24$, $p < .001$, partial $\eta^2 = .001$).

There was a significant main effect for the three years of CRT math scores ($F_{(2, 27758)} = 378.20$, $p < .001$, partial $\eta^2 = .03$). Students made significant gains between 2008 (M = 263.72) and 2009 (M = 272.32), but CRT math scores dropped between 2009 and 2010 (M = 238.89) when the students entered eighth grade. There were also a main effect for Title 1 status ($F_{(1, 13879)} = 38.80$, $p < .001$, partial $\eta^2 = .003$). Students at Title I schools (M = 248.45) scored on average 19.72 points below non-Title I school students (M = 268.17). There a main effect for IEP status ($F_{(1, 13879)} = 1050.68$, $p < .001$, partial $\eta^2 = .07$); IEP students (M = 207.02) scored 102.58 points, as a group, below students who did not have IEPs (M = 309.60). There was no main effect ISP status ($F_{(1, 13879)} = 1.12$, n.s).

Figure 3. Comparison of CRT Mathematics scores across three years by ISP and Title I designation.



Post hoc analysis using Tukey's HSD identified significant differences across the three years and between all groups for the interaction between CRT math scores, Title I status and ISP status. There was a significant decrease across all groups between the second (2009) and third years (2010). Non-Title I ISP schools had the highest scores for the first two years and the biggest drop in math scores in the third year. Title I ISP schools had the least gains between the first and second year and the smallest drop in the third year.

DISCUSSION

The purpose of this analysis was to follow established ISP schools over three years. The goal was to compare ISP middle schools to non-ISP middle schools across three years. The results can be interpreted as support for ISP in specific populations of students in reading. The mathematics scores do not provide any evidence supportive of the ISP initiative. The first population that benefits from the ISP

initiative is Title I schools involved in the ISP initiative. **ISP students in both Title I and non-Title I schools had significant gains over students who did not participate in the ISP initiative.** There was less growth for the non-Title I non-ISP schools in the final year than the other three types of schools**:** non-Title I ISP schools, Title I ISP schools, and Title I non-ISP schools. **Students in the Title I ISP schools made the most gains across the three years**.

While a smaller population, students with IEPs associated with the ISP initiative made gains in reading. These gains occurred as growth over time. **IEP students who scored significantly lower in the first year (2008) from ISP schools caught up with IEP students from non-ISP schools in the second year (2009***).* ISP school students who did not have IEPs had high CRT reading scores. **ISP students without IEPs had significantly higher reading scores across the three years than any other group of students***.* The last point to be made is that there was a significant drop in scores between the second and third year for non-IEP students; however, IEP students continued to make significant gains during that period.