



Inclusive Education in the United States: Middle School General Education Teachers' Approaches to Inclusion

Megan Mackey

Assistant Professor, University of Hartford, Connecticut, United States of America,
www.hartford.edu mmackey@hartford.edu

Research examined how three middle school teachers included students with disabilities in their general education classrooms. Purposive sampling was used to select a sixth grade science teacher, seventh grade social studies teacher, and eighth grade math teacher whose classrooms were identified as exemplifying the characteristics of inclusive settings. Each participant had at least six years of teaching experience. The qualitative techniques of interviews, observations, and document analyses were utilized to tell the stories of the three teachers. The specific themes and areas that emerged from the data were preparation, attitudes, and expectations; planning time, collaboration and in-class supports; and instructional strategies. Data revealed that all participants had little pre-service preparation specific to working with students with disabilities and varying levels of in-class supports, but all had positive attitudes about having students with disabilities in their general education classrooms. Each teacher developed and implemented numerous instructional practices which have implications for the effective inclusion of students with disabilities in general education classrooms.

Keywords: Inclusion, General Education Classroom, Middle School, Disabilities

INTRODUCTION

The landscape of education in the United States has changed dramatically over the past four decades. The passage of the Education for All Handicapped Children Act (EAHCA) in 1975 guaranteed all children access to a free, appropriate public education (FAPE), regardless of the nature or severity of their disability. This legislation brought students with moderate to severe disabilities into public schools for the first time and promoted the placement of students with disabilities in general education classrooms.

The passage of this act dramatically increased the number of students with disabilities who are educated in general education classrooms. Approximately 59% of students classified with disabilities spend 80 percent or more of each school day in a general education classroom (U.S. Department of Education, National Center for Education Statistics, 2012). This practice of educating students with disabilities alongside non-

disabled peers in general education classrooms is commonly referred to as “inclusion.” The goal of inclusive education is to allow all students the opportunity to learn and participate in a class that provides challenges and occasions for success (TASH, 2011).

The secondary school setting adds a unique wrinkle to inclusive education and presents a considerable challenge. Factors such as a wide range of skill levels, high number of students seen in a day, content specific training, and curriculum demands contribute to teacher difficulties in developing effective inclusion programs in secondary schools (Dukes & Lamar-Dukes, 2009). Scheduling challenges, standardized testing, and teacher collaboration also pose significant challenges to implementing successful inclusion in secondary schools (Kozik, Cooney, Vinciguerra, Gradel, & Black, 2009). In addition, most secondary school teachers are responsible for teaching five classes and more than 125 students on a daily basis. Limited class and contact time prevent many teachers from developing in-depth understandings of individual student abilities and needs, and therefore, limit the amount of individualized instruction.

Research on Middle School Inclusion

Research shows that within a single district, special education can vary from building to building and classroom to classroom (Burstein, Sears, Wilcoxon, Cabello, & Spagna, 2004; Idol, 2006; McLeskey & Waldron, 2002; Rea, McLaughlin, & Walther-Thomas, 2002). Idol’s (2006) research in the four secondary schools revealed practices that showed considerable variation in structure and implementation of special education services from building to building. Rea et al. (2002) revealed that the two middle schools in their study differed a great deal not only in the structure of their special education services, but also in the intensity of special education service delivery.

Other research pertaining to middle school inclusion has examined the effectiveness of co-teaching in general education classrooms (Bryant-Davis, Dieker, Pearl, & Kirkpatrick, 2012; DeVecchi & Rouse, 2010; Simmons, Carpenter Dyal, Austin, & Shumack, 2012; Wischnowski, Salmon, & Eaton, 2004) and the impact of specific teaching strategies (Berkeley, Marshak, Mastropieri, & Scruggs, 2011; Okolo, Ferretti, & MacArthur, 2007; Scruggs, Mastropieri, & Marshak, 2012; Solis, Ciullo, Vaughn, Pyle, Hassaram, & Leroux, 2012; Vaughn & Fletcher, 2012). Researchers have also examined the attitudes and perceptions of students (Ashby, 2010; Hampshire, Butera, & Bellini, 2012; Knesting, Hokanson, & Waldron, 2008) and those of pre-service teachers (Burke & Sutherland, 2004; Hadadian & Chiang, 2007; Sze, 2009).

The studies described above have contributed a great deal to the body of literature pertaining to inclusion, but there are still many areas that warrant further examination. First, almost all of the middle school inclusion research that exists has explored a single area of inclusion such as inclusion structure; teacher, pre-service teacher, and student attitudes; co-teaching; instructional strategies; values and skills necessary for effective inclusion; classroom interactions; or RtI. The current study explored a number of different areas. Second, the design of the existing research included either surveys, interviews, observations, interventions, pre-posttests, focus groups, or document

analysis. Few studies combined more than one of these methods. Only one study combined interviews, observations, and document analysis in middle school (Knesting et al., 2008) like the current study, but that research examined students' transition to middle school. Finally, many existing studies have explored the inclusive education experiences of pre-service or beginning teachers. This research examines the inclusive education practices of teachers with at least six years of experience. To date, no research has used a case study approach to examine how middle school general education teachers include students with disabilities in their classrooms.

Research Question

This research attempts to add to the existing research on inclusion, specifically targeting a middle school, grades 6 through 8, setting. The purpose of this study was to examine the experiences and practices of middle school teachers in inclusive classroom situations. The following question was explored: How do three middle school general education teachers include students with disabilities in their classrooms?

METHOD

To explore inclusive education in middle school classrooms, this research focused on how three general education teachers made sense of, and practiced, inclusion in their respective classrooms. Vygotsky's (1978) social constructivist theory posits that a person's knowledge is constructed by the interactions and social influences we experience in our environment. According to Udvari-Solner (1996), when the social constructivist view is applied to teaching, a person learns, develops, and grows as a teacher through interactions with students in his/her classroom. Students with special needs have individualized education programs (IEPs) that call for teachers to develop and incorporate specialized instructional strategies and accommodations to meet their needs. Social constructivist theory interprets the role of an educator as the person responsible for learning about the students in his/her classroom and using that knowledge to create developmentally appropriate classroom practices (Mallory & New, 1994).

Participant Selection

Purposive sampling was used to select participants for this study in order to reach teachers who implemented the characteristics of inclusion described below. The Director of Instruction and Special Programs and the associate dean of education of a local university nominated middle schools that included teachers they had seen apply the following characteristics of inclusive classrooms: 1) Students with disabilities received their educational services in the general education classrooms with appropriate in-class support. 2) Cooperative teaching was utilized (Friend & Cook, 2012). 3) Curriculum and instruction that demonstrated differentiated instructional strategies (King, 2003). Next, the principals of the three nominated middle schools and nominated teachers in his/her school that s/he believed implemented many of the defining characteristics of inclusion outlined above. Third, a preliminary screening of teachers was conducted to determine if they implemented some of the defining characteristics of an inclusive classroom. In the end, three teachers from the same middle school were

selected for participation. One teacher was a Caucasian female in her late 20s in her fifth year of teaching sixth grade science and her sixth year of teaching overall. Another teacher was a Hispanic man in his early 30s in his sixth year of teaching seventh grade social studies. He was bilingual in English and Spanish and served as the school's English Language Learner (ELL) Coordinator. The third teacher was a Caucasian female in her late 30s in her sixth year of teaching eighth grade mathematics and her seventh year of teaching overall.

Setting

Research was conducted in a middle school in the southwest United States. Over 65% of the middle school's student population qualified for free and reduced lunch compared to 34% in the district and 51% in the county. Table 1 shows the demographic and enrollment data for middle school. English Language Learner (ELL) Plans were created for students whose home language was something other than English, usually Spanish, and who struggled academically as a result. Individual Literacy Plans (ILP) were developed for students who did not have a diagnosed disability, but who struggle with reading. Individualized Education Programs (IEP) were created for students diagnosed with a disability.

Table 1: Demographic Data and Enrollment Summary

<i>White (Non-Hispanic)</i>	<i>Hispanic</i>	<i>Black (Non-Hispanic)</i>	<i>Asian or Pacific Islander</i>	<i>Total Students</i>
142	82	2	1	227
Total Number of Students with an English Language Learner (ELL) Plan = 18				
Total Number of Students with an Individualized Education Plan (IEP) = 30				
Total Number of Students with an Individual Literacy Plan (ILP) = 85				

Research Components

Pre-observation and post-observation semi-structured interviews were conducted. Transcribed notes for both the pre-observation and post-observation interviews were distributed to each participant within a week of the interview. The role of a "complete observer" was utilized for the observations (Murray-Seegert, 1989). The study commenced approximately five weeks into the school year. Anecdotal notes were recorded during whole class observation, with special consideration given to instructional strategies, assignments and assessments, and classroom community. Participants were observed over the course of nine weeks and saturation of data for the math teacher was met after approximately 21 hours on 17 different days, after approximately 30 hours over 20 days for the science teacher, and after approximately 28 hours over 22 days in the classroom and 5 hours on a class field trip for the social studies teacher. Prolonged engagement allowed the researcher to make repeated observations of the same phenomenon over a period of time (Merriam, 1998). The vast majority of the data came from formal interviews and observations, but information also

came from additional sources as well. Informal conversations with participants provided information pertinent to the research and were recorded in fieldnotes. Classwork, exams, articles, and additional materials were gathered as well. All of the data gathered through the pre-observation interview, observation sessions, informal conversations, artifacts, and post-observation interview were combined and analyzed. Analysis was begun as soon as data collection commenced and continued throughout the data collection process (Merriam, 1998). Data analysis included an examination of fidelity of implementation regarding the inclusion of students with disabilities in general education classrooms based on the characteristics identified for the purposeful sampling process.

RESULTS

The purpose of the research was to add to the knowledge base surrounding the real-life structure and implementation of inclusion by examining the question, “How do three middle school general education teachers include students with disabilities in their classrooms?” Findings are organized around the specific themes and areas that emerged from the data: preparation, attitudes, and expectations; planning time, collaboration and in-class supports; and instructional strategies.

Preparation, Attitudes, and Expectations

All three teachers in this study felt their undergraduate programs had not adequately prepared them to meet the needs of students with disabilities in their classroom. The math teacher and the social studies teacher earned a master’s degree in English Language Learner (ELL) education. Both credited their master’s program for better preparing them by equipping them with specific strategies to meet the needs of students with disabilities in their classrooms. The science teacher’s master’s degree was geared toward earning a principal’s license, but she felt some of the courses offered in the program provided a more in-depth examination of teaching students with disabilities.

All three teachers differed greatly in their standards and expectations for students. When asked about the specific diagnoses of the students with disabilities in her classroom during the pre-observation interview, the math teacher stated, “I haven’t gotten the paperwork on everybody, so I can’t really answer that question.” The teacher further explained that she could tell that the student in her class who used a wheelchair had multiple disabilities, but she was unsure what her expectations were supposed to be for that student. She stated that she did her best to understand her students’ needs as quickly as possible, but noted that it was usually well into every school year that she finally received all of the IEPs, ELL plans, and ILPs. Despite not having the IEPs, the math teacher felt confident in her ability to meet the needs of all learners.

The science teacher tracked down a full copy of the IEPs for all of her students shortly after the pre-observation interview, because she was “persistent about it.” She reported that the IEPs helped guide her teaching because they listed the students’ specific disabilities. She said that she used that information to research ways to meet those students’ needs. The science teacher reported that she did a lot of in-class assignments in order to provide students with assistance, because a lot of the students “have issues

where they cannot get help at home.” She said that she had grown to be more empathetic to students’ home situations and as a result she tried not to assign too much homework.

The social studies teacher reported that he received a full copy of the IEPs for all of his students at the beginning of the year, but only because he went to the special education teacher and demanded them. He reported that the IEPs helped him identify specific student needs, but that he relied heavily on his own interactions with, and observations of, the students in his class to determine how to meet their needs. It was these interactions that guided his expectations for student learning.

Planning Time, Collaboration, and In-Class Supports

All three teachers stated the belief that the inclusion of students with disabilities in their classrooms improved their instructional preparation, but in certain circumstances, teachers expressed concern about having an adequate amount of time to plan. The math teacher felt that the hour of planning she was allotted each day was woefully inadequate, so she devoted a great deal of time above and beyond that to plan for instruction. She acknowledged that the inclusion of students with disabilities in her classroom forced her to think through her lessons more thoroughly in order to make sure she presented the material in such a way as to help every student understand it.

Depending on the unit or lesson, the science teacher sometimes felt that the hour of planning each day was an adequate and other times she felt it was an insufficient amount of time. She felt it was imperative that she be well-prepared for classes that contained students with disabilities so that no child fell through the cracks.

The social studies teacher reported that for his first few years of teaching he spent a lot of time above and beyond the daily hour of planning time developing his curriculum from scratch. As a sixth-year teacher, he found the hour of planning an adequate amount of time to prepare his lessons. When he planned for instruction, the social studies teacher tried to put himself “in the shoes of the students who struggled.” He prepared lessons in which he made the content area knowledge understandable for all students, not just for the average or high achiever.

All three teachers were scheduled to collaborate with two other teachers in their content area for half an hour one morning a week. These meetings typically consisted of teachers discussing content, curriculum, and ideas. Each was also scheduled to collaborate with the other members of their grade-level team for half an hour one morning a week. The team typically used their meeting time to discuss student issues, upcoming activities, parent meetings, and other general concerns. Observations showed that all of the meetings typically lasted fifteen to twenty minutes, rather than the half hour provided.

The math and science teacher received paraprofessional support in their classes and the math teacher also had the support of the special education teacher in one class. The social studies received no in-class support. The team collaborations did not include the

special education teacher or the paraprofessionals. Furthermore, neither of the two teachers with in-class supports collaborated with the paraprofessionals who provided students with disabilities support within their classrooms. Also, the math teacher did not collaborate with the special education teacher either. Teachers received no formal training or support for the process of collaboration.

Observations revealed that the paraprofessional in one of the math teacher's classes offered little in the form of student or teacher support. The paraprofessional was assigned to a student who was non-verbal and whose physical disabilities necessitated the use of a customized wheelchair. The paraprofessional would often enter late and create a distraction such as when announced during class, "I had my stitches taken out yesterday." She would leave the student in the back corner of the classroom and sit at a desk next to students without disabilities. The paraprofessional sometimes engaged students sitting next to her in conversations, which prompted the math teacher to move to their location and say, "Okay, let's get focused." The math teacher expressed helplessness about the situation. She noted, "Sometimes I feel like I'm teaching the paras too. They seem to just want to be students." This teacher acknowledged that she had not attempted to communicate her specific classroom expectations to the paraprofessional, but she wished that the paraprofessional would better assist students in the class.

There was quite a disparity between paraprofessionals working with students in the science classroom. The paraprofessional who was assigned to work one-on-one with a student diagnosed with autism and the ELL paraprofessional would arrive well before the bell and sit next to their respective students. Each would quietly direct their student and offer soft verbal prompts when necessary. A third paraprofessional assigned to work with four students with disabilities regularly arrived late. She would loudly state something like, "Get to work!" to students, causing other students to look. During another observation, one of the students with disabilities asked the teacher how to score a question on the homework they were reviewing and the teacher asked the paraprofessional to help the student. The paraprofessional took the paper from the student and scored the question herself without saying a word to the student. The paraprofessional kept the paper and continued to score it as the science teacher read each question, gave the correct answer, and provided the point total. The science teacher said she struggled a great deal with how to handle situations with that paraprofessional. She stated that it was a district problem because the district did not provide training or guidance to paraprofessionals. "They hire people and then they just leave them. They dump them."

The math teacher was the only teacher in the study who had the opportunity to utilize cooperative teaching in her classroom. She received the support of the special education teacher in one of her classes. This was the first year she had a special education teacher in her classroom. The two teachers had not met at the beginning of the year to discuss their roles within the classroom, but the math teacher was pleased with the roles they both settled into. Despite the fact that they had not communicated regarding their classroom roles and expectations she noted, "The way his personality is makes it great.

He just came right in and started working with the students. He likes to wander and help everyone.” She continued, “I like the way things are.” These teachers utilized a “one teach, one drift” model of co-teaching (Friend & Cook, 2012). In this model, the math teacher, as the content area expert, was primarily responsible for instruction while the special education teacher was primarily responsible for offering students assistance throughout the lesson. Upon entering the classroom each day, the special education teacher immediately began to circulate and he assisted students as they worked on their warm-up activity. During direct instruction, the special education teacher typically stood in the back of the classroom. During the guided practice and independent practice portions of the lesson, the special education teacher again circulated the classroom.

Instructional Strategies

All three teachers in the study utilized instructional strategies and lesson structures that they believed provided the optimal learning environment for students with and without disabilities. The math teacher stated that “all students, especially students with disabilities, benefited from a reliable, predictable lesson structure.” Her lessons were deliberate and regimented and the structure and sequence of her teaching was predictable. Observations revealed that the same basic lesson structure of a warm-up activity, grading of homework, direct, teacher-led instruction, and homework time was utilized daily. The math teacher pointed to her use of wait time, discussions with individual students, and questioning, such as, “What went wrong?” “What went right?” “What don’t you get?” as strategies that contributed to her effectiveness in teaching students with disabilities. Observations revealed numerous instructional strategies utilized by the math teacher including the use of different colored markers on an overhead projector for every step of a problem to help students distinguish between the different steps in the problem. She also liked to call on various students to describe how they solved problems in order to informally assess their understanding of the concept.

The math teacher was confident that these strategies combined with her step-by-step verbalization and demonstration of the solving of problems, use of numerous examples and practice problems, mnemonic devices, cloze notes, whiteboards, and visuals helped all students with disabilities achieve success in her classroom.

Just like the math teacher, the science teacher believed that all students benefited from a predictable lesson structure. Observations revealed that the same basic lesson structure of a warm-up activity, grading of homework, direct instruction, and homework time was utilized daily in her classroom. Before each unit, the science teacher gave students a pre-test. Often, she administered the pre-test through the *Classroom Performance System (CPS)* (eInstruction, 2007). The *CPS* allowed students to respond to questions projected on a screen using wireless remote controls. The science teacher liked using the *CPS* because she felt it helped reduce the students’ test anxiety. Also, with the *CPS* she was able to examine responses for the whole class and for individual students.

Whenever possible, the science teacher incorporated models to demonstrate what she was teaching. For example, when teaching about the solar system, she used a floor lamp to represent the sun and a globe for Earth to demonstrate rotation and revolution. She came up with a rhyme to help students remember the order of eclipses more easily. “To remember an eclipse that’s lunar, it goes the sun, the Earth, then the moon. To remember an eclipse that’s solar, reverse the order.” The science teacher created a video set to Michael Jackson’s song, “Billie Jean.” It contained pictures of the eight phases of the moon with their appropriate labels interspersed between images of Michael Jackson performing the “moonwalk.” She also had students create moon booklets out of construction paper that helped them remember the phases of the moon.

The science teacher took her classes to the library to help students gain in-depth knowledge and understanding of something specific, like a planet. For that particular unit, she also incorporated an art-based activity in which students created papier-mâché planets. She often pulled in research articles that pertained to what students were learning.

The science teacher pointed to the aforementioned strategies, plus her use of color-coded notes that coincided with the *Step Up to Writing* (Auman, 2007) program, the use of models and materials to reinforce information from the notes, encouraging students to paraphrase or summarize notes, reading the notes out loud to students, reading questions and answers on the *Classroom Performance System (CPS)* (eInstruction, 2007) out loud to students, and hands-on activities to reinforce understandings as strategies that helped students with disabilities reach success in her classroom. The prior to the assignment of the challenge. The rubric included not only content-based indicators, but also group process and individual contribution indicators. At the conclusion of the challenge, each student was asked to evaluate the other members of the group. These evaluations factored into the overall grade for the challenge.

During independent work time, the social studies teacher would remind students that they could go to the “round table” in the classroom to get assistance. The social studies teacher would sit at this round table and offer help to students. He found this to be an extremely effective way of supporting students in his class. For something like a map activity, the teacher would read the first direction to the students at the table and remind them to label the bodies of water and to neatly color each of them. While those students worked on the first task, the teacher would circulate the classroom. If he noticed students who had fallen behind in their work, he would ask them to move to the round table to receive some support.

The social studies teacher pointed to his use of hands-on activities, maps, visuals, supplemental reading materials, and alternating between whole group instruction, small group work, and individual learning as strategies that contributed to his effectiveness in teaching students with disabilities. He provided students with ample in-class support, especially through the use of the round table as a small group meeting area. This teacher utilized supplemental reading materials, video clips, and pictures to reinforce units and concepts he was teaching. He gave quizzes orally, read through each question, and

provided a visual to help students further understand the definition. Observations revealed that he utilized a wide variety of instructional strategies on a regular basis in his classroom.

DISCUSSION

The high standards set forth by IDEA and NCLB place increased demands upon educators as they are held accountable for ensuring that students meet predetermined standards of achievement on local curricular standards and state-mandated assessments (Darling-Hammond, 2006). This research yielded important information pertaining to what middle school general education teachers, based on their preparation, training, and support, were able to do while facing high standards of accountability from outside agencies and school administration (Darling-Hammond; McLeskey & Billingsley, 2008; Smith & Tyler, 2011).

All three teachers in this study took only one undergraduate special education course and as a result, they felt their undergraduate programs had not sufficiently prepared them to meet the needs of students with disabilities in their classroom. This feeling of inadequate preparation supported existing research (Burns & Ysseldyke, 2009; Cook, Cameron, & Tankersley, 2007). Despite receiving little to no professional development during their tenure, all three teachers were confident in their ability to meet the needs of all students in their inclusive classroom. This conclusion differed from the findings of other studies (Burke & Sutherland, 2004; DeSimone & Parmar, 2006; Mainzer, Deshler, Coleman, Kozleski, & Rodriguez-Walling, 2003; Otis-Wilborn, Winn, Griffin, & Kilgore, 2005; Rea et al., 2002; Wilkins & Nietfield, 2004). Each of the participants in this research had at least six years of teaching experience and had completed a master's degree. Perhaps their positive attitudes toward inclusion, strong self-efficacy in meeting all students' needs, and feelings of preparedness would not have been so strong had research been conducted with participants with fewer years of experience or if these participants had not yet begun their master's program.

A number of studies have indicated that general education teachers feel that they are not provided with enough time to plan for the instruction, collaboration, and cooperative teaching that is necessary to implement inclusion (Burstein et al., 2004; Ross, 2002; Santoli, Sachs, Romey, & McClurg, 2008; Wilkins & Nietfield, 2004; Zindler, 2009). The math teacher was the only participant to support the findings of these studies and that was only in respect to the amount of time allotted to planning for instruction. Otherwise, data from this research contrasted the results of all of the above research. The science and social studies teacher felt an hour a day was ample time to plan and all three teachers felt that the half hour a week they met with their grade-level and content area teams was an adequate amount of time to collaborate.

Teachers accomplished many tasks during their content area and grade-level meetings, but none of them used the faculty collaboration time to plan specifically for inclusion. This collaboration time could have used it to share instructional strategies and methods,

develop supports for students who were struggling or classified with a disability, or discuss ways to adapt assignments and assessments to meet the needs of all learners.

According to the findings of numerous studies, teachers feel they lack the in-class supports necessary to implement the practices that characterize inclusion (Burstein et al., 2004; Ross, 2002; Wilkins & Nietfield, 2004). In research conducted by Burstein et al., teachers reported that a key barrier to successful inclusion was the lack of support in the form of personnel. Both the science and math teachers felt that the in-class supports they received from paraprofessionals and the special education teacher were sufficient. The social studies teacher was the only teacher in the study who echoed these sentiments since he had no in-class support. One possible explanation for this is that the students with disabilities in his class did not have significant enough needs for paraprofessional or in-class special education teacher support. Another possible explanation is that social studies is not considered a high-stakes content area, meaning that there are no standardized assessments associated with it and therefore, less accountability in the form of test results.

Administrative support for educators in inclusive classrooms has been identified as a key element of successful inclusion (Kozik et al., 2009; Leatherman, 2007; Santoli et al., 2008; Villa, Thousand, Nevin, & Liston, 2005). All three teachers were provided time to collaborate, but no formal training or support for the process of collaboration. Teachers in this study were required to meet at designated times each week and submit meeting notes to the principal, but they received no feedback regarding the content of the notes, their discussions, or their agendas. For teachers in this study, administrative support in the form of professional development around collaboration and co-teaching could have improved the experience of teachers, support personnel, and students in each of the inclusive classrooms.

Teachers are faced with the challenge of making mandated curriculum interesting, relevant, and accessible to all students in their general education classroom. With this in mind, teachers should design their lessons to include a mixture of instructional strategies so that mastery of curriculum content is attainable by all learners (Tomlinson & Edison, 2003; Villa et al., 2005).

All three teachers in the study differentiated their classroom instruction by incorporating a variety of evidence-based strategies into the way they presented information to students. All of them used visuals, graphic organizers, multi-modal presentations, peer support (Broderick et al., 2005; Tomlinson & Eidson, 2003), color-coded notes, and demonstrations in their teaching. In addition, the math teacher used mnemonic devices, cloze notes, study aids, and whiteboards. The science teacher included instructional videos and the Classroom Performance System (CPS) (eInstruction, 2007) while the social studies teacher utilized a round table, read alouds, and integrated scenarios and supplemental videos into his presentations. The use of technology, in varying degrees, by all three teachers was another way they responded to the needs of all learners (Broderick et al., 2005; Tomlinson & Eidson, 2003; Villa et al., 2005).

All of the evidence-based differentiation strategies described above were gradually incorporated by the teachers in this study over the course of their tenure and were utilized in an effort to be responsive to student need. Since each teacher was left on his/her own to make sense of inclusion, each incorporated different strategies based on what they learned in their graduate work, what experience taught them, and what they believed made the most sense for their subject area.

CONCLUSION

All three teachers in this study had been left completely on their own to make sense of inclusion, navigate co-teaching situations, and manage paraprofessional activity. They each arranged their classrooms, developed lesson structures, and incorporated instructional strategies that they thought were most effective for students with and without disabilities. There was great variation from teacher to teacher, but observations revealed many positives in the approaches taken by each teacher. However, there were also areas of concern such as student performance being attributed to factors beyond their control, management of paraprofessionals, and lack of collaboration with the special education teacher.

Teachers like the ones in this study and the professionals who support them within the classroom, need opportunities to increase their knowledge, understanding, and implementation of inclusive practices within their classrooms. There are a number of things that administrators, general education teachers, special education teachers, and paraprofessionals can do in order to maximize the effectiveness of in-class supports. District and/or building administrators need to provide teachers and paraprofessionals with opportunities to enhance their collaboration skills. Teachers and paraprofessionals need to be open to developing collaborative relationships. Finally, general education teachers, special education teachers, and paraprofessionals need to be consistently supported throughout the collaboration and inclusion process. All students, not just students with disabilities, would benefit a great deal if all of the stakeholders took an active role in improving the effectiveness of in-class supports.

REFERENCES

- Ashby, C. (2010). The trouble with normal: the struggle for meaningful access for middle school students with developmental disability labels. *Disability & Society*, 25(3), 345-358.
- Berkeley, S., Marshak, L., Mastropieri, M. A., & Scruggs, T. E. (2011). Improving student comprehension of social studies text: A self-questioning strategy for inclusive middle school classes. *Remedial & Special Education*, 32(2), 105-113.
- Broderick, A., Mehta-Parekh, H., & Reid, D. K. (2005). *Differentiating instruction for disabled students in inclusive classrooms*, 44(3), 194-202.
- Bryant-Davis, K. E., Dieker, L., Pearl, C., & Kirkpatrick, R. (2012). Planning in the middle: Co-planning between general and special education. *Journal of Educational & Psychological Consultation*, 22(3), 208-226.

- Burke, K., & Sutherland, C. (2004). Attitudes toward inclusion: Knowledge vs. experience. *Education, 125*(2), 163-172.
- Burns, M. K., & Ysseldyke, J. E. (2009). Reported prevalence of evidence-based instructional practices in special education. *The Journal of Special Education, 43*(1), 3-11.
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B., & Spagna, M. (2004). Moving toward inclusive practices. *Remedial and Special Education, 25*(2), 104-116.
- Cook, B. G., Cameron, D. L., & Tankersley, M. (2007). Inclusive teachers' attitudinal ratings of their students with disabilities. *The Journal of Special Education, 40*, 230-238.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. California: Sage Publications.
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education, 57*, 300-314.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Deshler, D. D., Schumaker, J. B., Lenz, B., Bulgren, J. A., Hock, M. F., Knight, J., & Ehren, B. J. (2008). Ensuring content-area learning by secondary students with learning disabilities. *Journal of Education, 189*(1/2), 169-181.
- DeSimone, J. R., & Parmar, R. S. (2006). Issues and challenges for middle school mathematics teachers in inclusion classrooms. *School Science & Mathematics, 106*(8), 338-348.
- DeVecchi, C., & Rouse, M. (2010). An exploration of the features of effective collaboration between teachers and teaching assistants in secondary schools. *Support for Learning, 25*(2), 91-99.
- Dukes, C. & Lamar-Dukes, P. (2009) Inclusion by design: Engineering inclusive practices in secondary schools. *Teaching Exceptional Children, 41*(3), 16-23.
- Education of All Handicapped Children Act. (1975). *Pub. L. No. 94-142*. Retrieved February 1, 2013, from Thomas (Library of Congress) <http://thomas.loc.gov>
- eInstruction. (2007). eInstruction: Changing the face of education. Retrieved June 1, 2013 from <http://www.einstruction.com>
- Friend, M. & Cook, L. (2012) *Interactions: Collaboration skills for school professionals (7th ed)*. Upper Saddle River, NJ: Pearson Education Inc.
- Futernick, K. (2007). *A possible dream: Retraining California teachers so all students learn*. Sacramento: CSU Center for Teacher Quality.
- Hadadian, A., & Chiang, L. (2007). Special education training and preservice teachers. *International Journal of Special Education, 22*(1), 103-106.
- Hampshire, P., Butera, G., & Bellini, S. (2012). Self-management and parents as interventionists: Improving homework performance in middle school students with disabilities. *Beyond Behavior, 21*(1), 28-35.
- Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special Education, 27*(2), 77-94.
- King, I. C. (2003). Examining middle school inclusion classrooms through the lens of learner-centered principles. *Theory into Practice, 42*(2), 151-158.

- Knesting, K., Hokanson, C., & Waldron, N. (2008). Settling in: Facilitating the transition to an inclusive middle school for students with mild disabilities. *International Journal of Disability, Development & Education*, 55(3), 265-276.
- Kozik, P.L., Cooney, B., Vinciguerra, S., Gradel, K., & Black, J. (2009). Promoting inclusion in secondary schools through appreciative inquiry. *American Secondary Education*, 38 (1), 77-91.
- Leatherman, J. M. (2007). I just see all children as children: Teachers' perceptions about inclusion. *The Qualitative Report*, 12(4), 594-611.
- Mainzer, R. W., Deshler, D., Coleman, M. R., Kozleski, E., & Rodriguez-Walling, M. (2003). To ensure the learning of every child with a disability [Electronic version]. *Focus on Exceptional Children*, 35(5), 1-16.
- Mallory, B. L., & New, R. S. (1994). Socializetildil constructivist theory and principles of inclusion. *Journal of Special Education*, 28(3), 322-338.
- McLeskey, J., & Billingsley, B. S. (2008). How does the quality and stability of the teaching force influence the research-to-practice gap? A perspective on the teacher shortage in special education. *Remedial and Special Education*, 20(5), 293-305.
- McLeskey, J., & Waldron, N. L. (2002). School change and inclusive schools: lessons learned from practice. *Phi Delta Kappan*, 84(1), 65-72.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Murray-Seegert, C. (1989). *Nasty girls, thugs, and humans like us*. Baltimore: Paul H. Brookes Publishing Co.
- Okolo, C.M., Ferretti, R.P., & MacArthur, C.A. (2007) Talking about history: Discussions in a middle school inclusive classroom. *Journal of Learning Disabilities*, 40 (2), 154-165.
- Otis-Wilborn, A., Winn, J., Griffin, C., & Kilgore, K. (2005). Beginning special educators' forays into general education. *Teacher Education and Special Education*, 28(3/4), 143-152.
- Paliokosta, P., & Blandford, S. (2010) Inclusion in school: a policy, ideology or lived experience? Similar findings in diverse school cultures. *Support for Learning*, 25 (4), 179-186.
- Rea, P. J., McLaughlin, V. L., & Walther-Thomas, C. (2002). Outcomes for students with learning disabilities in inclusive and pullout programs. *Exceptional Children*, 68(2), 203-222.
- Ross, S. (2002). *Teachers' feelings of competency in educating children with special needs in the general education setting*. Unpublished masters thesis, Touro College, New York.
- Santoli, S., Sachs, J., Romey, E. A., & McClurg, S. (2008). A successful formula for middle school inclusion: Collaboration, time, and administrative support. *Research in Middle Level Education Online*, 32(2), 1-13.
- Scruggs, T. E., Mastropieri, M. A., & Marshak, L. (2012). Peer-mediated instruction in inclusive secondary social studies learning: Direct and indirect learning effects. *Learning Disabilities Research & Practice (Blackwell Publishing Limited)*, 27(1), 12-20.
- Simmons, K. D., Carpenter, L., Dyal, A., Austin, S., & Shumack, K. (2012). Preparing secondary special educators: Four collaborative initiatives. *Education*, 132(4), 754-763.
- Smith, D.D. & Tyler, N.C. (2011). Effective inclusive education: Equipping education professionals with necessary skills and knowledge. *Prospects*, 41(3), 323-339.

- Solis, M., Ciullo, S., Vaughn, S., Pyle, N., Hassaram, B., & Leroux, A. (2012). Reading comprehension interventions for middle school students with learning disabilities: A synthesis of 30 years of research. *Journal of Learning Disabilities, 45*(4), 327-340.
- Sze, S. (2009). A literature review: Pre-service teachers' attitudes toward students with disabilities. *Education, 130*(1), 53-56.
- TASH (2011). *TASH and NDSS Partner with CPSD for Congressional Briefing on Education Reform*. Retrieved February 1, 2013 from <http://tash.org/tash-and-ndss-partner-with-cpsd-for-congressional-briefing-on-education-reform/>
- Tomlinson, C. A., & Eidson, C. C. (2003). *Differentiation in practice: A resource guide for differentiating curriculum, Grades 5-9*. Alexandria, WV: Association for Supervision & Curriculum.
- U.S. Department of Education, National Center for Education Statistics (2012). *Digest of Education Statistics, 2011* (NCES 2012-001), Chapter 2. <http://nces.ed.gov/fastfacts/display.asp?id=59>
- Udvari-Solner, A. (1996). Theoretical influences on the establishment of inclusive practices. *Cambridge Journal of Education, 26*(1), 101-120.
- Vaughn, S., & Fletcher, J. M. (2012). *Response to intervention with secondary school students with reading difficulties*. *Journal of Learning Disabilities, 45*(3), 244-256.
- Villa, R.A., Thousand, J.S., Nevin, A., & Liston, A. (2005). Successful inclusive practices in middle and secondary schools. *American Secondary Education, 33*(3), 33-50.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wilkins, T., & Nietfield, J. L. (2004). The effect of school-wide inclusion training programme upon teachers' attitudes about inclusion. *Journal of Research in Special Educational Needs, 4*(3), 115-121.
- Wischnowski, M. W., Salmon, S. J., & Eaton, K. (2004). Evaluating co-teaching as a means for successful inclusion of students with disabilities in a rural district. *Rural Special Education Quarterly, 23*(3), 3-14.
- Zindler, R. (2009). Trouble in paradise: A study of who is included in an inclusion classroom. *The Teachers College Record, 111*(8), 1971-1996.

Turkish Abstract

ABD'de Kaynaştırma Eğitimi: Ortaokul Öğretmenlerinin Kaynaştırma Eğitimi Yaklaşımları

Bu çalışma üç ortaokul öğretmenin engelli öğrencileri normal sınıflara nasıl entegre ettiklerini araştırmıştır. Sınıfları kaynaştırma sınıfı özelliklerini gösteren biri 6. Sınıf fen bilgisi öğretmeni, biri 7. Sınıf sosyal bilimler öğretmeni ve son olarak da 8. Sınıf matematik öğretmeni üç öğretmenini seçmek için amaçlı örnekleme kullanılmıştır. Her bir öğretmen en az 6 yıllık deneyime sahiptir. Nitel görüşme, gözlem ve analiz yöntemleri öğretmenlerin hikayelerini anlatmak için kullanılmıştır. Toplanan verilerden ortaya çıkan özel tema ve bölümler hazırlık, tutum, beklentiler, planlama zamanı, işbirliği, sınıf içi destek ve öğretim stratejileridir. Elde edilen veriler tüm öğretmenler engeli olan veya sınıfta farklı derecelerde destek ihtiyacı olan öğrencilerle çalışmak için özel olarak az miktar hizmet öncesi eğitim almıştır, fakat öğretmenlerin hepsi sınıflarında engeli olan öğrencilerle kaynaştırma sınıflarına olumlu tutum sergilemektedir.

Herbir öğretmen kaynaştırma sınıflarında bulunan engelli öğrencilerin sürece etkili katılımı için çeşitli öğretim uygulamaları geliştirmiş ve tatbik etmiştir.

Anahtar Kelimeler: Kaynaştırma, Genel Eğitim Sınıfı, Ortaokul, Engellilik

French Abstract

L'Enseignement Inclus aux États-Unis: Général de Collège les Approches de Professeurs d'Enseignement à Inclusion

La recherche a examiné comment trois professeurs de collège ont inclus des étudiants avec des handicaps dans leurs salles de classe d'enseignement générales. L'échantillonnage résolu a été utilisé pour choisir un professeur de sciences de sixième année, le professeur de sciences sociales de septième année et le professeur de maths de huitième année dont les salles de classe ont été identifiées comme l'exemplification des caractéristiques de fixations incluses. Chaque participant avait au moins six ans d'expérience enseignante. Les techniques qualitatives d'entretiens, des observations et des analyses de document ont été utilisées pour dire les histoires des trois professeurs. Les thèmes spécifiques et les domaines qui ont apparu des données étaient la préparation, des attitudes et des espérances; en planifiant temps, collaboration et supports dans-classe; et stratégies d'instruction. Les données ont révélé que tous les participants avaient peu de préparation de pré service spécifique au travail avec des étudiants avec des handicaps et le changement des niveaux de supports dans-classe, mais tout avaient des attitudes positives de l'ayant d'étudiants avec des handicaps dans leurs salles de classe d'enseignement générales. Chaque professeur a développé et a mis en œuvre les nombreuses pratiques d'instruction qui ont des implications pour l'inclusion effective d'étudiants avec des handicaps dans des salles de classe d'enseignement générales.

Mots-clés: Inclusion, Salle de classe d'Enseignement Générale, Collège, Handicaps

Arabic Abstract

التعليم الجامع في الولايات المتحدة: مقاربات لتضمين اساتذة المدرسة المتوسطة للتعليم العام

فحص البحوث كيف شملت ثلاثة مدرسين المدارس المتوسطة الطلاب المعوقين في الفصول الدراسية للتعليم العام. تم استخدام أخذ العينات هادف لتحديد مدرس العلوم للمستوى السادس ، مدرس الدراسات الاجتماعية للمستوى السابع ، و مدرس الرياضيات للمستوى الثامن الذين اعتبر فصولهم يمثل لوضع الشامل . كان كل مشارك ست سنوات على الأقل من الخبرة في مجال التدريس. واستخدمت التقنيات النوعية من المقابلات، والملاحظات، والتحليلات وثيقة لتحكي قصص من المعلمين الثلاثة . كانت الموضوعات والمجالات المحددة التي برزت من البيانات إعداد والمواقف والتوقعات؛ الوقت التخطيط والتعاون وبدعم في الدرجة؛ والاستراتيجيات التعليمية. وكشفت البيانات أن جميع المشاركين قد كان استعدادا قليلا قبل الخدمة محددة للعمل مع الطلبة ذوي الإعاقة ومستويات متفاوتة من الدعم في فنتها، ولكن كان كل المواقف الإيجابية عن وجود طلاب ذوي الإعاقة في فصول التعليم العام الخاصة بهم. وضعت كل معلم ونفذت العديد من الممارسات التعليمية التي لها آثار على إدراج فعالة من الطلاب ذوي الإعاقة في فصول التعليم العام.

الكلمات المهمة: تضمين، فصول التعليم العام ، مدرسة المتوسطة، الإعاقة