

*Inclusive Collaboration with Families of Children
with Autism Spectrum Disorders (ASD):
Perceptions of Families, Pre-Service and
In-Service Level Teachers*

MOIRA FALLON and JIE ZHANG

The College at Brockport State University of New York

ABSTRACT: In the social sciences, collaboration among teams is often a requirement. However, integrating collaboration with the principles of inclusion seems to be restricted to the field of education. Collaboration based on inclusive practices improves the diverse quality of team communication, problem solving, and decision making. In the field of education, educators have the primary responsibility for engaging all students in the learning process and actively involving them in the classroom setting and with the course content. Inclusive collaborators understand that their beliefs, values, attitudes, and behaviors set the tone for each decision. They know that all team members can learn across differences and they are determined to reach all. We provide a timely investigation into the needs of families of children with autism for collaboration. The results illustrate the differing perception of essential collaboration skills among pre- and in-service level professionals and families. This demonstrates a need for continuity in collaboration skills of professionals as they move from pre-service into in-service levels in their interactions with families of children with autism. The results of such critical efforts are persons within an organization who possess the ability to work together across their differences.

RESUME: Dans le domaine des sciences sociales et humaines, les équipes doivent souvent communiquer entre elles. Cependant, seul le domaine de l'enseignement paraît s'appuyer sur les échanges et sur les principes d'intégration. Les échanges fondés sur l'intégration, améliorent la diversité des qualités de l'équipe de communication, la résolution de problèmes et la prise de décision. A l'école, les enseignants doivent avant tout faire participer, d'une façon efficace, tous les élèves en classe en les familiarisant avec le contenu du cours afin qu'ils apprennent. Ceux qui se servent des échanges avec l'intégration, comprennent que leurs croyances, leurs valeurs, leurs attitudes et leur comportement jouent un rôle

dans chaque prise de décision. Ils savent que tous les membres de l'équipe peuvent apprendre grâce aux différences et sont déterminés à toutes les comprendre. Dans le cadre des échanges, nous menons, en temps voulu, une enquête sur les besoins des familles dont les enfants sont atteints d'autisme. Les résultats montrent que, lors des échanges, les enseignants qui sont en formation, ceux qui sont en exercice, et la famille, ne priorisent pas les compétences de la même façon. Lors de la transition, de la formation à l'exercice, les enseignants ont besoin d'une continuité pour pouvoir se servir de leurs compétences pendant les échanges avec les familles dont les enfants sont atteints d'autisme. Au sein d'une organisation, les personnes qui savent travailler en surmontant les différences sont celles qui ont fait de tels efforts.

Introduction

Collaboration among professionals and families is not new. In the field of special education, collaboration has been purposeful to some extent in the United States since the implementation of PL 94-142 *Education for All Handicapped Children Act* in 1975 through the Individuals with Disabilities Act (2004). More than thirty years of legislative history (Kroll & Edge, 1997) has supported the involvement of parents in school for the purpose of joint decision making. In the field of education, educators have the primary responsibility for jointly engaging all students in the learning process and actively involving them in the classroom setting and with the course content (Fallon & Brown, 2008). However, many children with autism spectrum disorders (ASD) have been left out of the inclusive setting for a variety of reasons.

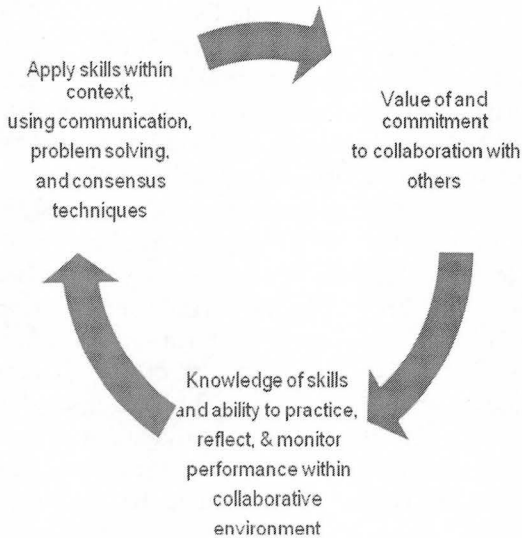
The construct of inclusion is the foundation for creating this community of learners as equal members. What does it mean to be inclusive? Inclusion is a set of core beliefs and practices that support each person as full members of the community who can process and understand the material based on their own unique background and experiences (Shapon-Shevin, 2007, p. xii). Inclusion can only be successful with positive working relationships based on mutual respect and parity (Pugach & Johnson, 1995). Collaboration based on inclusive practices including families of children with ASD improves the diverse quality of team communication, problem solving, and decision making.

Understanding every person's needs and perceptions is a major task for inclusive organizations. In a way, inclusive educators are better armed for this than ever before because so much more is known psychologically about teaching and learning. Just as inclusive educators realize that they are responsible for providing a learning environment for all students, even those who are struggling (Fallon & Brown, 2010),

inclusive collaborators understand that their beliefs, values, attitudes, and behaviors set the tone for each decision. Some research has shown that active collaboration with professionals is especially difficult for families who are culturally diverse (Sheehey, 2006). Professionals should realize that all team members can learn across differences, and they are determined to reach all. The results of such efforts are persons within an organization who possess the ability to work together across their differences, can collaborate and negotiate problem situations, are team members that have mutual goals and similar interests, and have productive interpersonal skills (Friend & Cook, 2007).

This ability to collaborate and to work more effectively with others is built upon three main skills: teamwork, communication, and problem solving. Effective collaboration skills are necessary for special educators and for professionals in any discipline. However, it is critical that professionals and families of children with autism spectrum disorders (ASD) collaborate effectively in order to meet the diverse needs of families and provide effective support systems. Research demonstrates (Friend & Cook, 2007; Abbott, Austin, Mulkeen, & Metcalfe, 2004; Dieker & Berg, 2002) that parental collaboration and involvement is the most critical element in student achievement, both academically and behaviorally.

As shown in Figure 1, the model for building collaborative skills requires three areas of knowledge and skills among families and professionals. Some research suggests that families who receive ongoing collaboration and support do better than families whose support is more short term such as a workshop setting (Parsons, et al., 2011). Therefore, using this model in inclusive settings may result in professionals and family members who possess the ability to work together, can collaborate and negotiate problem situations, are group members that have mutual goals and similar interests, and have productive interpersonal skills (Friend & Cook, 2007).

Figure 1: *Collaboration Skills Model*

In the inclusive classroom, teachers are the authority in decentralized instruction by sharing resources and jointly being responsible for positive student outcomes (Snell & Janney, 2005). They are participants within the school setting for collaborative decision making and cooperative teaching. Together with families, they make critical decisions for the inclusion of children with ASD in schools. Recently, researchers in higher education and business leaders identified collaboration skills as essential program components for all graduates to possess for effective teamwork in workplace communities (Griffin & Warden, 2006; Marklein, USA Today, January 11, 2007, p.9D).

Research has suggested that families and professionals differ in their perceptions of necessary collaboration skills for smooth transitions to inclusive settings. However, little is known about the development of collaboration skills in teachers from pre-service to in-service level teachers working with families of children with ASD. Typically, programs in teacher education require a course in consultation and collaboration. Pre-service teachers need both knowledge of collaboration skills and multiple opportunities to practice interactively using those

skills with one another. However, upon the exit from such a program, many believe that collaboration continues to develop naturally or with little support. Therefore, the purpose of these studies was to begin by measuring the perception of collaboration skills in pre- and in-service teachers with respect to what skills professionals and families felt were important in collaboration.

Methods

Two exploratory studies were undertaken in order to measure the perceptions of collaboration skills, using a self evaluation instrument, of pre- and in-service level professionals and families with children who have been diagnosed with ASD.

Study One: Pre-service Level Teachers

This study is a three year investigation on developing effective cohorts in a graduate program in special education. This study focused on developing collaboration skills needed in a cohort model, based on the following elements or characteristics of effective collaboration: non verbal communication skills, including active listening; verbal communication skills; active listening skills; and problem solving and decision making. Each of these skills was taught by adding the collaboration skills into an existing content activity. Then the instructor required completion of the content task using the collaboration skills emphasized. For example, the content area activity might have been based in math problem solving. The collaboration skill being taught and focused upon might have been verbal questioning. Participants then used self evaluation ratings on the completion of the task, using both math problem solving and verbal questioning skills.

Participants. The subjects of this study are varied in their demographics, but all were new teachers to the profession of special education. Each was previously certified in childhood education and was seeking additional certification in the field of special education which has a professional standard on collaboration (Council for Exceptional Children, 2004). They were all participants in one of three one-year, full time cohorts in graduate special education. All are volunteers who completed a class in collaboration and consultation skills as part of their graduate program. Of the total participants (N=44), six are male and 38 are female. Two participants did not complete the entire program, but did participate in the courses and the study on collaboration. The participants range in age from 22 to 45 years of age. Sixteen percent of the participants are of an ethnic minority, while 84% are Caucasian in ethnicity.

Instruments. The main measure for Study 1 was the self evaluation of the participants' perception of their collaboration skills. The participants recorded this self evaluation in two ways. One was a journal reflection responding to the same prompt, "What is your perception of your collaboration skills today?" Secondly, the participants rated themselves on a checklist of collaboration skills. This instrument was developed by the researcher for the purposes of the study. The self rating and journal reflection by each participant of his/her collaboration skills was in the areas of verbal and non verbal communication, active listening, problem solving and decision making skills over a 13 week period of time.

Procedures. The study took place over a thirteen week period of time during regular semester courses. The same instructor taught the course three times, once a year over the three year period of time. The instructor used the same course activities with required collaboration skills embedded into the activities using a script to ensure consistency in delivery. Participants were taught the collaboration skills and the content area skills using the regular college curriculum. The participants were then directed to apply those skills to a specific performance based activity. Each cohort or team consisted of 5-6 members working as a team. Teams could not observe one another. Performance on team activities was followed up with an individual evaluation session. Team members could not talk to one another during the self evaluation phase. Teams could not interact with other teams during the self evaluation sessions.

During the self evaluation session, the instructor would compile the ratings made by the participants. The ratings were then anonymously delivered to the principal investigator for analysis. After completion of the self rating on the checklist, each participant was asked to write a short journal entry, consisting of one paragraph on his or her performance. Again, interaction or conversation among participants and observers was not allowed. These procedures were repeated once a week for each of the thirteen weeks of the semester's study, varying the content area activity and collaboration skills being taught.

Study Two: In-service Level Teachers/Professionals and Families of Children with ASD

This study is a survey distributed among in-service professionals and families of children with ASD in a middle-sized city in the north-east part of the United States. The study focused on investigating in-service professionals and families' satisfaction level on collaboration for children with ASD from birth through 21 years of age and their families during

two stages: the process of diagnosis and then services after diagnosis, including the development and monitoring of the individualized education plan (IEP)/individualized family service plan (IFSP). The purposes of this study were: (a) to identify the factors associated with parental and professional satisfaction level on collaboration with the current services provided to children with autism in the local areas, (b) to find out the service needs for children with autism which will guide the improvement of collaboration in the process of services in the future, and (c) to investigate whether there are gaps between parental and professional satisfaction on collaboration and to discuss the possible ways to address the gaps. The researchers hoped that results of this study will help educators better understand the current services and the service needs among children with autism, their families, and the professionals who work with them.

Participants. Among 100 surveys which were distributed locally to in-service professionals and families with children with ASD through schools, daycares, professional organizations and agencies, 21 were mailed back to the researchers with the return ratio at 21%. Eighteen out of twenty-one surveys were used in the data analysis process (85.7%) while three cannot be used due to the lack of data reported (14.3%). Out of the eighteen participants who completed the survey and mailed it back, four were parents (22.2%), twelve were professionals working as special education teachers, general education teachers, and other professionals such as counselor and Medicaid service coordinator (66.7%), while two served both roles as family members and professionals (11.1%). The participants reported eighteen children they worked with, including fifteen boys (83.3%) and one girl (5.6%), with the age ranging from 18 months old to 19 years of age.

Instruments. One of the researchers developed a two-page long survey to investigate parental and in-service professional satisfaction on collaboration with the current services provided to children with ASD in a middle-sized city in the north-east part of the United States. The survey was composed of two parts: eight demographic information questions and twenty-seven five-point Likert Scale questions ranging from 1 (very dissatisfied) through 5 (very satisfied).

Procedures. A Convenience sample was used and the "mouth to mouth" method was implemented to distribute a letter and a survey to the parents/professionals with children with ASD from birth to 21 years of age through daycares, schools, professional organizations and agencies working with children with special needs in the local areas. The letter

and survey were prepared in self-addressed stamped envelopes ready to be mailed back to the researcher after the completion.

Results

A composition of the results of these two exploratory studies is found in Table 1.

TABLE 1. Perspectives on Collaboration from Pre-service, In-service Professionals, and Families with Children with ASD

Indicators of Communication Skills for an Effective Diagnostic Process	In-service Level Professionals' Perspectives of Needs for Collaboration During the Diagnostic Process	Families' Perspectives of Students with ASD on Collaboration During the Diagnostic Process
• Brainstormed potential solutions & consequences • Addressed one issue at a time • Did turn taking • Was active listener • Was visually attentive • Suspended judgment; interest in others' viewpoint • Restated or paraphrased key points • Asked for clarification	• Satisfied with the diagnostic process • Satisfied with the disclosure of the diagnosis and the clearness of the diagnostic information • Satisfied with the way of communication on the diagnosis • Satisfied with the amount of information about the disorder, the child & families, and appropriate support/service/education • Satisfied with parental involvement during the diagnosis process	• Satisfied with the diagnostic process • Satisfied with the disclosure of the diagnosis and the clearness of the diagnostic information • Satisfied with the way of communication on the diagnosis • Satisfied with the amount of information about the disorder, the child & families, and appropriate support/service/education • Satisfied with parental involvement during the diagnostic process

Indicators for Effective Problem Solving During IEP Development and Monitoring	In-service Level Professionals' Perspectives of Needs for Collaboration During IEP Development and Monitoring	Families' Perspectives of Students with ASD on Collaboration During IEP Development and Monitoring
• Had appropriate body language • Had professional physical appearance • Appeared confident & approachable • Set agenda • Was verbally prepared • Clearly identified & defined the problem • Generated alternatives • Identified next step • Demonstrated emotional control • Summarized • Willingness to overcome barriers using consensus	• Satisfied with the quality of the child's service/education after diagnosis • Satisfied with the support which meets the needs of the child • Satisfied with behavior supports the child receives • Satisfied with the communications/collaborations between home and professionals • Satisfied with the parental involvement in school/services	• Satisfied with the quality of the child's service/education after diagnosis • Satisfied with the support which meets the needs of the child • Satisfied with the behavior supports the child receives • Satisfied with the communications/collaborations between home and professionals • Satisfied with the parental involvement in school/services

Zhang, J., & Fallon, M.A. (2012). Teaching teacher candidates to collaborate effectively with the diverse needs of families of children with autism spectrum disorders (ASD). Miami Beach, FL, January 18-20, 2012. 13th International Conference on Autism, Intellectual Disabilities, & Developmental Disabilities: Research to Practice.

The results were reported separately as follows below.

Study One: Pre-service Level Teachers

A total of forty-four graduate students pursuing certification in special education completed a 13 week course embedding collaboration skills into content activities. This course was offered once a year as part of a teacher education program for three years. The same instructor taught the course each of the three times offered. The instructor used the same instruments and activities, using a script format to ensure consistency

in delivery. At the conclusion of the course, the instructor rated each participant on his/her collaboration skills.

Qualitative Results. Analysis of the journal entries was completed analyzing for patterns or thematic trends. Three trends occurred and were summarized. First was that participants felt of critical value to developing effective skills were “practice times” in class on collaborative activities and problem solving exercises in a “safe environment.” Perhaps the old adage, “Practice makes perfect” applies to the participants in this study. One participant stated that learning effective collaboration skills “was the foundation” for success in her field and that “parents/guardians, student, teachers, administration, community members need to communicate and share ideas to come to a consensus on how things should be done.” This participant felt that practice time in the college classroom as a safe environment was essential in developing her skills, prior to using them in the workplace.

The second pattern was that observing their peers helped participants to analyze their own skills and to apply their perceptions of “real team members doing their jobs.” This analysis was of importance to participants to developing effective collaboration skills. What appeared to happen was that seeing their peers demonstrate effective skills or in making mistakes in their skills assisted the participant in changing their own patterns of error. One participant summarized that developing equal partnership among students, families, teachers, administrators, and community members was “critical in the real world.”

The third pattern or trend summarized that these participants seemed “unaware of my own habits” and “my own dynamics in collaborating” as the greatest reason to change behaviors. One participant stated “Collaboration is part of inclusion; you can’t have an effective or successful inclusive program without collaboration. Collaboration needs to occur on many different levels, between teachers-teachers, administrators-teachers; teachers-parents, teachers-students, students-students; etc. Within the whole process it is important that all members of the team or all persons involved remain flexible and keep an open-mind.” Some participants stated in their reflections that their cohort members “...seemed more professional” and “...more readily jumped into the mix” as the 13 weeks of the study went on.

Quantitative Results. In addition to the journal entries, participants rated themselves on the percentages of collaboration skills they believe they exhibited each week. At the start of the study, participants rated themselves low in exhibiting collaboration skills. The mean score rating on week one was 8.7% of collaboration skills were perceived by

participants in their interactions. At the end of the thirteen weeks, participants rated themselves as possessing the necessary collaboration skills. The final mean score rating for self evaluation of the participants was 93.4%. At the end of the thirteen weeks, the instructor also rated participants on their exhibited collaboration skills. The final mean score rating of all participants by the instructor was 88.9%.

Study Two: In-service Level Teachers/Professionals and Families of Children with ASD

The researcher was able to use eighteen returned surveys in the data analysis process. Among eighteen children with the age ranging from 18 months old to 19 years of age reported, fifteen were boys (83.3%) and one was a girl (5.6%). The children were diagnosed with autism ($N = 4$, 22.2%), Asperger's syndrome ($N = 2$, 11.1%), Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) ($N = 4$, 22.2%), and autism spectrum disorders (ASD) ($N = 5$, 27.8%). One child was referred as being in need of speech therapy and at risk of having ASD ($N = 1$, 5.6%) while another boy was identified with having PDD-NOS and sensory processing disorder ($N = 1$, 5.6%). Two of the returned surveys with data did not report the gender of the children (11.1%), four did not report the age (22.2%), while one did not report the diagnosis (5.6%).

Among eighteen returned surveys with data, five children were reported to have the first consultation by the age of two (27.8%), one at three-years-old (5.6%), two at four (11.1%), one at six (5.6%), and one at ten (5.6%). Three children got consultations once before diagnosis (16.7%), two got twice (11.1%), one got three times (5.6%), and one got six times (5.6%). Two children were diagnosed at two (11.1%), three as three-year-olds (16.7%), one child at age 5, 6, 7, 8, 10 and 11 respectively (5.6% respectively). Eight of the returned surveys with data did not report the age of the first consultation (44.4%), eleven did not report the number of consultations before final diagnosis (61.1%), while seven did not report the age of diagnosis (38.9%).

Six children were reported in the full time inclusive classroom (33.3%), three received service in inclusive and special education classrooms (16.7%), while two were enrolled in special education classrooms full time in general education schools (11.1%). Five children had services at home (27.8%), and one child received services both in school and at home (5.6%). One returned survey did not report the educational setting. No one reported study in a special school.

Qualitative Results. In addition to reporting demographic information and completing the rating scales, six out of eighteen participants made additional comments on collaboration between in-service professionals and families of children with ASD during diagnosis and services (33.3%). The researcher analyzed their comments for thematic trends and two trends occurred and were summarized. First, both in-service professionals and families of children with ASD felt of critical value an urgent need to improving communication during the diagnostic process. One in-service professional stated that "...on more than one occasion I have been told by parents that they were disappointed by the diagnostic process, the length of time it took to have their child evaluated (to get an appointment), and the lack of relevant information provided to them 'more compassion.' ...for the parents who are struggling to come to terms with an often devastating diagnosis, it seems a shame that more isn't done to support and understand parents at the time of diagnosis." One parent also expressed his/her dissatisfaction on the diagnosis procedure: "My son was originally diagnosed as ODD, was treated very negatively by others at the time (and) even (when) ODD diagnosis was removed and ASD was being questioned. At psych inpatient he was diagnosed as PDD-NOS... Psych has said to leave the PDD-NOS diagnosis as current (and will) have him reevaluated when treatment is not working any more. Confusion over diagnosis that (a) 20 minutes visit with (a) child is what a diagnosis is based on is very scary."

Second, both in-service professionals and families of children with ASD felt of critical value and urgent need to increasing information exchanges through collaboration during the services provided after diagnosis. One in-service teacher mentioned: "All teachers who have been involved with this child have struggled with including this child in age level activities. He has been with us from age 2 and still cannot participate without almost 1:1 supervision-he is in (a) 4 year old classroom now..." Similarly, families of children with ASD also expressed their concerns: "There is not a lot of information on PDD-NOS. ... I kind of wish I knew what 'normal' for him is gonna look like in 5 years, 10 years... I just have to be satisfied that we are doing what we can for him now." "He is now 19 and is struggling to keep a job or go to college due to lack of social skills. His support throughout high school was good but did not prepare him to attend college or to deal with adult issues. There seems to be little support for adults/teens with autism or at least it is difficult to find the appropriate support."

Quantitative Results. Descriptive data of the rating scale were analysed by calculating the means for the variables across both the diagnosis and after diagnosis service processes. In-service level professionals' perspectives of needs for collaboration during the diagnostic process ranged from 3.33 (neutral to somewhat satisfied with the amount of information about the disorder, the child/families, and appropriate support/service/education) to 4.5 (somewhat satisfied to very satisfied with parental involvement during the diagnostic process). Compared to in-service professionals, parental perspectives of needs for collaboration during the diagnostic process were lower, ranging from 3.03 (neutral to somewhat satisfied with the amount of information about the disorder, the child/families, and appropriate support/service/education) to 3.35 (neutral to somewhat satisfied with the way of communication on the diagnosis).

In-service level professionals' perspectives of needs for collaboration for the after diagnosis service, including the development and monitoring of IEP/IFSP, ranged from 3.33 [neutral to somewhat satisfied with (a) the behavior supports the child receives and (b) the communication/collaboration between home and professionals] to 4.5 (somewhat satisfied to very satisfied with parental involvement in school/services). Once again, compared to in-service professionals, parental perspectives of needs for collaboration for the after diagnosis service were lower, ranging from 3.05 (neutral to somewhat satisfied with the quality of the child's service/education after diagnosis) to 3.25 [neutral to somewhat satisfied with (a) the support which meets the needs of the child and (b) the parental involvement in school/services].

Correlations by the rating scale variables between in-service professionals or families who filled in the survey were calculated. Additionally, a one-way ANOVA was used to see whether there was any significant difference within different variables on in-service professionals and families of children with ASD. On the variable of "satisfied with the quality of the child's service/education after diagnosis," negative correlation was found ($r = -.579^*$, $p < .05$). No other correlation was found among the other rating scale variables between in-service professionals or families of children with ASD. No significant differences within different variables were found on in-service professionals and families of children with ASD. The interpretation of these findings will be discussed in the following section of the paper.

Discussion

Limitations

Several limitations exist and should be carefully considered in viewing the results of these two exploratory studies. The limitations include: the studies were conducted over a period of time, a single instructor taught the pre-service level course which was repeated once a year over a three year period of time, and the use of a relatively small number of volunteers. These participants were aware of the critical need for effective collaboration skills in special education. These studies also used a qualitative approach towards self evaluation of perceived collaboration skills. Objective measures outside of self evaluation were not used.

Discussion

Effective collaboration is critical to success in the workplace, regardless of the discipline or profession. The results of these two studies indicate a need for the continual development of collaboration skills in professionals who work with families of children with ASD. Of great concern is the fact essential collaborations skills are perceived differently by professionals at different stages of their careers and by families of children with ASD. Pre-service professionals are preparing to work in a collaborative manner with families of children with ASD. Yet, as pre-service professionals enter the field and further develop their collaboration skills, no correlations were found in these studies in the perception of essential collaboration skills between families and in-service professionals.

These results do indicate that using a self evaluative instrument to measure perceived skills can be an effective tool for families and professionals. While many colleges and universities have teacher education programs that require a knowledge base and skills in collaboration, it is critical to continue to develop these skills more completely from the pre- to in-service levels using instruments that encourage self reflection and evaluation. However, more research is needed to measure the development of those skills starting with pre-service through the careers of professionals.

Some research has found that a significant need exists for qualitative research that is focused directly upon collaborative decision making and interventions (Parsons, et al., 2011). Families indicate that their needs change over time in caring for a child with ASD, so then must the collaboration skills evolve in professionals to respond to those family needs. Such research can provide important insights into family contextual factors and needs. Still, some quantitative research is needed

to evaluate factors related to inclusive environments, among other issues. It is recommended that future studies investigate the differences between self perception and direct observations of collaboration behaviors exhibited in educational environments. It is possible that what we think we are doing in collaborative situations may not be what others who are more expert perceive us as doing.

Implications for Professional Practice.

New methods are needed for pre-service professionals on how to function as team members and develop as collaborative partners throughout their careers with other professionals and families (Whitaker, 2003; Bogue, 2002). It is insufficient for teacher education programs to simply offer a knowledge base in collaboration. Rather, such programs should require collaboration and consultation courses that meet professional standards (Council for Exceptional Children, 2004). These skills must then be developed and practiced over time in the pre-service program. The model for collaboration, developed for these studies, could serve as the basis for developmental collaboration skills in professionals. This would help ensure (Foley, 1997) that pre-service level professionals exit teacher education ready to be true collaborative partners with families in meeting the complex needs of children with ASD.

Once professionals move to the field, collaboration should still be monitored and evaluated. The discrepancies found in these results indicate that in-service professionals and families see their need for collaboration very differently. Professional development needs to build upon basic collaboration skills of teachers in the first five years of their professional career, developing more advanced and effective collaboration with families of students with ASD. One suggestion for in-service practice is to develop teacher learning communities. Such communities (MacGregor, Tinto, & Linbald, 2000) have been very effective in developing collaborative interaction in higher education across disciplines. As new models for implementation are developed, new innovations may arise that allow for effective, joint decision making and continued development of collaboration within the school community.

Some previous research has found that much of the professional interactions between in-service professionals and families are focused on specific interventions (Parsons, et al., 2011). Rather, in-service level teachers need to build upon and demonstrate flexibility in collaboration skills that encourage parental involvement, speak objectively avoiding bias, encourage feedback, promote advocacy, provide necessary explanations, and ask task related questions.

Inclusion requires new partners and new ways of collaborating with families and professionals who work with children who have ASD. These children and their families have complex needs, especially those with culturally diverse backgrounds. Little evidence is available in the research literature that identifies outcome based impacts for families and children with ASD. Further research on effective collaboration can focus educators on policies and best practices that promote wider inclusion of all perspectives (Guldborg, et al., 2011). Dedication to joint collaboration will assist pre-and in-service professionals in becoming more productive problem solvers and team members throughout their careers in collaborating with families of children with ASD.

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Moirra A. Fallon is a Associate Professor in the Department of Education and Human Development at the College at Brockport State of New York. Her research focuses on special education.

Jie Zhang is a Assistant Professor in the Department of Education and Human Development at the College at Brockport State of New York. Her research focuses on exceptional learning.

Authors Address:

Department of Education and Human Development
The College at Brockport State University of New York
350 New Campus Drive
Brockport, New York 14420
U.S.A

EMAIL: mfallon@brockport.edu
 jzhang@brockport.edu