



College of Education

# The ASD-Michigan Project

## Educating Michigan’s Students with Autism Spectrum Disorder: An Initial Exploration of Programming

Summer Ferreri, Ph.D. and Sara Bolt, Ph.D.

### Background

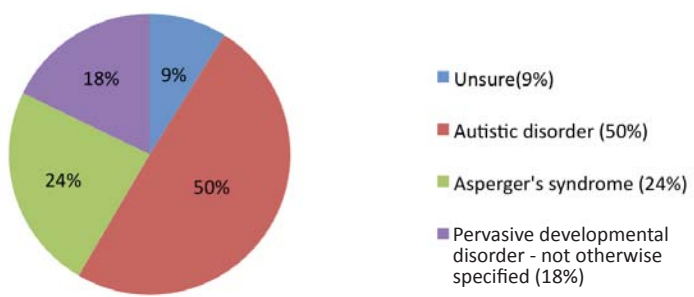
“The ASD-Michigan Project” is the first study of its kind to examine the extent to which Michigan public school professionals are trained in effective practices for educating students with Autism Spectrum Disorder (ASD) and how often they use such practices with students.

Little is known about the status of education in Michigan for students with ASD. That makes the findings especially valuable for Michigan policy makers and education leaders, who are under increasing federal mandates – including the No Child Left Behind Act and the Individuals with Disabilities Education Act – to ensure all students succeed in the classroom.

The research also has broad social and economic implications, since children with ASD who do not receive appropriate educational services grow up to be undereducated adults with ASD. Instead of potentially becoming productive members of the community, they may require taxpayer-provided supports for the rest of their lives.

The problem is urgent. The number of Michigan public school students with ASD is 15,403 (latest official number) and rising. Autism is the fastest-growing developmental disability in the

Figure 1 – Diagnosis on the Autism Spectrum of Students Studied



country, according to the Autism Society of America, affecting 1 in 110 U.S. children. It is a complex neurobiological condition with no cure, impairing a person’s ability to communicate, socialize and learn. Symptoms are expressed in atypical behavior ranging from mild to severe.

A number of different approaches have been developed to address the academic, behavioral, communicative and social skills needs of students with ASD. It wasn’t until 2009, however, that the relative effectiveness of these various interventions was determined by an expert panel convened by the National Autism Center. The panel reviewed 775 studies related to the treatment of individuals with ASD and categorized each approach based on the level of research-based evidence to support it. The

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resulting National Standards Project identified several practices that were found to have significant, positive effects on the learning and development of individuals with ASD.

Looking to determine if these effective methods were being used in Michigan classrooms, Michigan State University College of Education researchers surveyed school professionals and parents of K-12 students with ASD to examine:

- the type of services students with ASD in Michigan’s K-12 schools receive,
- the extent to which the services represent evidence-based practices,
- school professionals’ training on such practices, and
- parents’ satisfaction with the services.

## Findings

### ■ Many educators of students with ASD are not using proven, effective teaching strategies.

Researchers found that 41 percent of Michigan teachers are not using Applied Behavior Analysis (ABA) and 44 percent are not using Social Stories, both of which are established, evidence-based practices for teaching students with ASD. Wealthier school districts were more likely to use unproven teaching strategies.

### ■ Even when educators reported using effective strategies, most didn’t report using them regularly.

While no national standards for intensity of interactions have been set, ABA is an evidence-based practice and may help achieve optimum

results for individuals with ASD. However, only 32% of ABA users in the study employed the technique at least one to five hours per week.

Many Michigan education professionals lack the training necessary to effectively teach students with ASD.

Many special educators who reported using research-supported strategies said they learned these strategies through training obtained after their initial certification. General educators reported quite limited training in the strategies, and paraprofessionals reported receiving training often through peer or self-training rather than via more formal instruction.

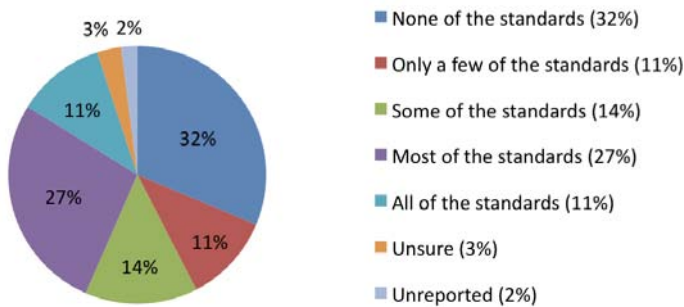
Researchers found a need for educator training at every level (e.g., undergraduate, graduate, professional development, etc.): “Teacher preparation institutions should prepare their special educators and general educators alike to enter the workforce armed with training in the most effective practices for individuals with ASD. Additionally, a structured and comprehensive training forum should be required for paraprofessionals ...”

Many educators have low academic expectations for students with ASD, even though high expectations for students are an important aspect of effective teaching.

One-third of the 194 Michigan teaching professionals responding said their target students with ASD *wouldn’t* meet any grade-level achievement standards.

### ■ Many Michigan students with ASD do not have access to the curriculum offered other students, despite the federal requirement that all students, including those with disabilities, have access to the general curriculum.

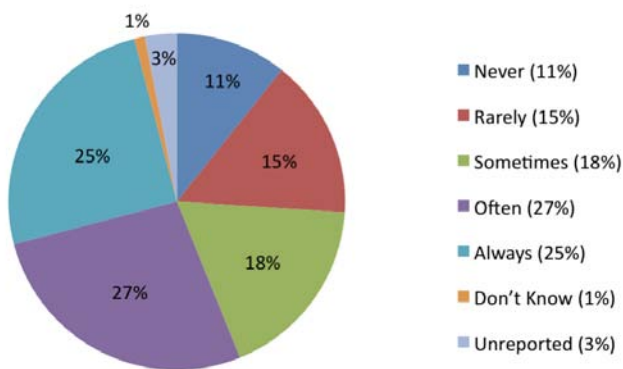
**Figure 2 – Teacher Expectations for Students to Meet Grade-Level Achievement Standards**



Low expectations for students with ASD may be reflected in the alternate curriculum they are offered. 26% of the targeted students with ASD never or rarely had learning opportunities that reflected the general education curriculum. This was especially true in wealthier districts where more specialized pull-out services and programming are offered.

Most parents report having to request services for their children with ASD beyond those originally provided by the school. Most also say they have sought services for their children with ASD outside of school.

**Figure 3 – Student Exposure to General Curriculum**



While the 34-parent sample was limited primarily to those who were contacted by teachers about participating in the survey – and

thus may not be representative of all Michigan parents – 62% of the 34 parents reported some level of satisfaction with their child’s progress toward educational goals.

However, more than three-quarters (76%) of parents sampled said they had to request services beyond what the school originally offered. And 85% of those parents seeking outside services spent an average of \$8,000 per child per year and in some cases as much as \$100,000.

## Conclusions

- **Better training of school professionals is needed to ensure students with ASD make academic progress.**

Study findings indicate that some Michigan teaching professionals have insufficient training as they attempt to educate the state’s growing population of students with ASD – a situation that if left unaddressed will take its toll in unrealized human potential and unsustainable costs to taxpayers.

- **Better access to statewide data on students with ASD is crucial to determine whether the services Michigan schools provide are helping students succeed.**

The researchers successfully gathered information on educational services for students with ASD across the state, but encountered many roadblocks that restricted the type and amount of information that could be studied. Rules surrounding the confidential nature of disability status made data access and analysis particularly complex.

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Statewide datasets on special education personnel and students are very limited, and it was extremely difficult to identify which schools and teachers had children with ASD.

To ensure data were systematically collected throughout the state, researchers resorted to calling schools and tracking down email addresses of special education teachers and consultants likely to be teaching students with ASD.

It was not possible to directly contact parents to independently identify their level of confidence in their child's instruction, so researchers had to depend on teachers to relay their request for information to parents. Given a very low parent response rate initially, the researchers sought additional parent participation via advertisements. Despite these efforts, only 34 parents responded, meaning the perspectives of more than 80% of parents were not represented. Therefore, it was not possible to determine the level of parent satisfaction for the educational services provided to the vast majority of students.

Furthermore, although data on educational outcomes are collected on all students as a part of the statewide accountability system, there is no systematic reporting at the state level of outcomes for students with ASD. Without specific performance data on students with ASD, it is very difficult to determine the effectiveness of existing educational services.

If outcomes cannot be tracked, it's impossible to know:

- how well, or if, students are learning,
- how to improve services, curriculum or training, or
- where to focus reform efforts.

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## About the Authors

### Summer Ferreri

Assistant Professor  
Department of Counseling, Educational Psychology and Special Education

Summer Ferreri is an assistant professor of special education. Her primary research focus is on the development, implementation and evaluation of effective interventions to increase social, communicative, and academic skills and decrease disruptive behaviors of students with Autism Spectrum Disorders (ASD) in applied settings. More specifically, she has conducted research with children with ASD to (a) determine the function of gestural behaviors through functional analyses, (b) increase communicative behavior using current technology and evidence-based strategies, (c) improve school-readiness behaviors using behavioral-based interventions, and (d) decrease disruptive behavior and pica. She has also conducted research on parents' and professionals' training and implementation of such interventions.

### Sara Bolt

Associate Professor  
Department of Counseling, Educational Psychology and Special Education

Sara Bolt is an associate professor of school psychology. Her research focuses on examining assessment tools that can enhance instructional decision-making for students who are at-risk for poor academic outcomes. She also conducts research on accommodations for diverse learners (e.g., students with disabilities, English language learners), and more generally on methods for the effective inclusion of all students in large-scale assessment and accountability programs.