

MEMORANDUM

July 25, 2012

TO: Education Committee

FROM: Elaine Bonner-Tompkins, Senior Legislative Analyst *EBT*
Office of Legislative Oversight

SUBJECT: **Follow up worksession on OLO Report 2012-3: Services for Students on the Autism Spectrum**

On January 23, 2012, the Education Committee held a worksession on OLO Report 2012-3. Councilmember Phil Andrews requested this study to improve the Council's understanding and oversight of County appropriations aimed at serving students with autism spectrum disorders (ASD) in Montgomery County. OLO Report 2012-3 noted several findings, including the following:

- Local enrollment of students with autism has increased five-fold in the last decade;
- The County's programs comply with special education policy mandate;
- Staff and parents cite several strengths with MCPS' and DHHS' delivery of services; and
- Opportunities exist to evaluate local programs to improve services.

Several additional themes emerged during the Education Committee's discussion with representatives for MCPS, DHHS, and the parent community:

- There is a need for more professional development of staff regarding ASD;
- The County may need to do more to identify children with disabilities earlier to ensure that they receive early intervention;
- There is need for systemic data regarding parents' perspectives on the County's services; and
- School principals play a vital role in delivering special education services

As follow up to the January 23rd worksession, Superintendent Joshua Starr submitted written responses to the four recommended discussion issues posed in the OLO autism report and during worksession (see © 5). On July 30th, the Education Committee will reconvene to discuss MCPS' responses to the following four questions:

- How do MCPS' practices for serving students with ASD align with research-based practices?
- What MCPS efforts are underway to improve the school system's responsiveness to children on the autism spectrum with significant behavioral, emotional, and/or learning needs?
- How does MCPS communicate with parents of children on the spectrum, particularly to enhance the awareness of school-based programs and to reach culturally and linguistically diverse families?
- What are the potential merits and drawbacks of developing a strategic plan to track, understand, and improve the performance of students with ASD?

The following MCPS representatives are scheduled to attend this worksession and address questions:

- Chris Richardson, Associate Superintendent, Office of Special Education and Student Services;
- Gwen Mason, Director, Department of Special Education Programs;
- Felicia Piacente, Director, Division of Prekindergarten Special Programs and Related Services; and
- Kris Secan, Instructional Specialist, Autism Unit.

Also, a representative from the Department of Health and Human Services - likely Joanne Miller who serves as a resource coordinator for the Autism Waiver Program – will be in the audience and available to address or take back questions.

Additionally, the Education Committee should request updates from MCPS representatives on the following initiatives, several of which were mentioned in Superintendent Starr’s March 27th letter:

- The collaborative effort with the Kennedy Krieger Institute to support elementary learning centers designed to support students with ASD;
- The Autism Professional Development Plan piloted in six schools this past school year;
- Details on professional development efforts aimed at improving services administered in non-Autism Programs (e.g. Home School and Emotional Disability Unit placements);
- Professional development specific to serving students with ASD for administrators; and
- The efforts of the Parent Outreach Committee to survey and measure parent satisfaction with the Individualized Education Program process and services.

Finally, at the January 23rd worksession, Superintendent Starr offered to return to the Education Committee to offer a briefing on dispute resolution in special education, due process proceedings, and the IEP process. The Committee should consider futures dates to reconvene for such a worksession that also includes the perspectives of parents on the dispute resolution process.

Committee members are asked to bring their copy of the report to the meeting.¹ As background, the following items are attached:

Item	Begins at:
Executive Summary. Services for Students on the Autism Spectrum, OLO Report 2012-3, January 17, 2012	© 1
Memo from Valerie Ervin to County Council, Worksession on OLO Report 2012-3, Services for Students on the Autism Spectrum, February 27, 2012	© 5
Correspondence from Joshua Starr to Office of Legislative Oversight (Elaine Bonner-Tompkins), March 27, 2012	© 7

¹ See the full report at <http://www.montgomerycountymd.gov/content/council/olo/reports/pdf/2012-3.pdf>

SERVICES FOR STUDENTS ON THE AUTISM SPECTRUM

OFFICE OF LEGISLATIVE OVERSIGHT REPORT 2012-3

THE ASSIGNMENT

This report responds to the Council's request for the Office of Legislative Oversight (OLO) to describe current research on best practices, County services for children with Autism Spectrum Disorder, and the perspectives of staff and parents about what works well and what opportunities exist to improve services.

Overall, OLO found that enrollment of students on the autism spectrum in MCPS increased more than ten-fold in the last decade and that students on the autism spectrum currently account for one in ten students enrolled in MCPS' special education programs. Although Montgomery County's programs comply with policy mandates and most staff and parents cite several strengths with MCPS' and DHHS' delivery of services for students with autism, opportunities exist to improve services and to evaluate the effectiveness of local programs.

AUTISM SPECTRUM DISORDERS

Autism spectrum disorder(s) (ASD) refers to a continuum of complex neurological disorders that can cause delays or problems in a variety of skills from infancy to adulthood. Children on the autism spectrum are a heterogeneous group who fall along the continuum based on the severity of their autism disorder and its co-morbidity with other disabilities, including emotional and intellectual disabilities.

The primary disorders on the spectrum are autistic disorder, Asperger's syndrome, and pervasive developmental disorder. Children diagnosed with an ASD often share challenges in three areas of development - social interaction, language and behavior - that present as ritualistic behaviors. The presence, onset, and severity of symptoms of ASD vary significantly by child. Over time, some children become more interactive and demonstrate fewer behavioral issues, while some continue to have difficulty with these developmental skills into adulthood.

POLICY MANDATES

Federal policy mandates, state regulations, and local policies guide Montgomery County's delivery of services to children on the autism spectrum. The primary applicable federal laws are the Individuals with Disabilities Act (IDEA) and the No Child Left Behind Act (NCLB). Some of the mandates in these laws require MCPS and/or DHHS to:

- Provide early intervention services to children from birth to age three
- Provide a "free and appropriate public education" from birth to age 21
- Educate students in the "least restrictive environment" appropriate
- Create an individualized education plan (IEP)
- Provide procedural safeguards so that parents of students with disabilities can receive prior notice of services and consent for assessments and services, seek independent evaluation, and file complaints;
- Demonstrate adequate yearly progress for all student groups, including those with disabilities.

The Code of Maryland also requires certain processes for serving students with disabilities, including beginning transition planning by age 14; considering nonpublic placements when appropriate; and coordinating the State's Autism Waiver program. MCPS policy requires accountability for performance among all students.

BEST PRACTICES

Over the past decade, both federally-funded researchers and a state-wide task force have identified a number of best practices for improving outcomes among children and students with ASD. These best practices recommend how to plan and measure progress (e.g., process) and specific interventions. Recognized best practices for serving students with ASD are summarized in the table on the next page. Yet, it is important to recognize that research about effective treatments for ASD remains a work in progress with no one set of strategies benefiting every student with ASD.

**SERVICES FOR STUDENTS ON THE AUTISM SPECTRUM
OFFICE OF LEGISLATIVE OVERSIGHT REPORT 2012-3**

Table A: Summary of Best Practices for Serving Students with Autism Spectrum Disorders

Best Practices: Process	Best Practices: Specific Interventions
<ul style="list-style-type: none"> • Set measurable objectives achievable within a year • Document and monitor progress frequently • Provide ongoing supports to parents and include them in the planning process • Develop a plan to train professionals and paraprofessional providers on best practices 	<ul style="list-style-type: none"> • Applied behavioral analysis packages and techniques • Schedules (e.g. written words, pictures, or work stations) • Story-based interventions • Social skills training groups

MCPS AND DHHS SERVICES FOR STUDENTS ON THE AUTISM SPECTRUM

MCPS and DHHS work collaboratively to deliver services to children on the autism spectrum. DHHS serves as the lead agency for the County’s Early Intervention Services Program for Infants, Toddlers, and Preschoolers. In addition, DHHS provides case management of wrap around services for children and families in MCPS’ Autism Waiver Program and administers three other programs that serve young people with developmental disabilities.

MCPS’ Office of Special Education and Student Services serves as the lead agency for the County’s special education programs and the Autism Waiver Program and, under contract to DHHS, provides most of the County’s early intervention services for young children from birth to age 3. MCPS’ school-based services offer a broad range of programs that serve students with ASD, including specific autism programs as well as other special education programs that also serve students with autism. (See Table B at the top of the next page.)

For MCPS programs, an IEP screening team of MCPS staff and an IEP assessment team inclusive of staff and parents assess a student’s need for special education services. A parent may submit a private assessment of disability to the MCPS team for consideration during this process, but the IEP assessment team ultimately determines eligibility. If a child is deemed eligible for services, the IEP assessment team develops a plan that must address the child’s needs and makes a placement decision. At least annually, MCPS must revisit the placement and include parents in the process. The IEP is also used to track the student’s progress toward meeting his/her learning goals.

MCPS and DHHS also work together to provide any related services that are required for a students IEP, such as assistive technology, speech and language services, and occupational or physical therapy.

PROGRAM ENROLLMENT AND COSTS

The number of children and students with ASD who received County services increased from 266 in FY01 to 1,642 in FY11. This five-fold increase over the past decade reflects factors such as the newness of autism as a federal disability classification, improving diagnostic trends, and a better understanding of ASD symptoms. Today, students with autism as a primary disability account for nearly 10% of MCPS’ special education enrollment.

In FY11, the County served 21% of students with ASD in MCPS programs specifically designed for students with ASD and it served the remaining 79% of students with ASD in other special education programs, such as home school settings, that aligned with their IEP goals and also served students with other disabilities, such as emotional disabilities.

The County’s average per student cost of providing services to student with ASD ranged from \$73,000 for nonpublic placements to \$12,000 for home school programs. Overall, MCPS program costs for students with autism totaled about \$52 million in FY11, with an average cost of \$33,000 per student. The table on the next page shows the distribution of students with ASD by special education program and average per student costs in FY11.

Additionally, the Autism Waiver Program that provides wrap-around services for students with eligible children with ASD has an average cost of \$50,000 per student. This program is funded in total by Medicaid.

**SERVICES FOR STUDENTS ON THE AUTISM SPECTRUM
OFFICE OF LEGISLATIVE OVERSIGHT REPORT 2012-3**

Chart B: MCPS Special Education Programs Serving Students with Autism Spectrum Disorders, Enrollment, and Average per Student Costs, FY11

Program/Placement	Description	% of ASD Enrollment	Average per Student Cost
Autism Programs	Pre K – 12 programs that <i>exclusively serve</i> students with ASD	21%	\$33,000
Home School Settings	Serve students in their neighborhood schools	20%	\$12,000
Fundamental Life Skills Programs	Serve students in certificate-bound programs	19%	\$30,000
Nonpublic Programs	Places students in private schools to meet their educational needs	13%	\$73,000
Learning Disability Services	Serve students with specific learning disabilities	11%	\$13,000
Emotional Disability Services	Serve students with emotional disabilities	7%	\$24,000
Learning Centers	Coordinated services for a variety of students with disabilities	6%	\$17,000
Preschool Education Programs	Service preschool students with disabilities	2%	\$20,000

PERFORMANCE AND STRATEGIC PLANNING

Both MCPS and DHHS track County-wide performance measures for early intervening services and special education to comply with MSDE reporting requirements for IDEA. These measures track the collective performance of all students with disabilities, but do not disaggregate or describe the performance of specific disability groups. MSDE’s most recent assessments of DHHS’ administration of the County’s Infants and Toddlers Program (FY09) and MCPS’ administration of IDEA Part B programs (FY09) ranked each program as “high.”

Both DHHS and MCPS track performance data among individual students with ASD to document students’ progress on their learning goals. Both agencies use individualized plan data to adjust strategies and short-term objectives if students are not making desired progress. Yet, neither agency aggregates data on the performance of children with ASD separate from the data they collect and monitor on the performance of students with disabilities overall.

MCPS’ Office of Special Education and Student Services, its Department of Special Education Services, and the program units that serve students with ASD each track performance outcomes aimed at improving services and outcomes among students with disabilities as part of their strategic planning processes. Specific data points collected by MCPS include data on suspensions, graduation rates, LRE, and parent and staff satisfaction. MCPS has the ability to report performance outcomes specific to students with ASD among its strategic plan measures but does not do so because it perceives that its current approaches are sufficient for improving outcomes among students with ASD.

PERSPECTIVES ON SERVICES

OLO conducted interviews and two focus groups to elicit perspectives about the County’s services. Both staff and parents generally have a favorable impression of the Infant and Toddler’s program, the Autism Waiver Program, MCPS’ variety of special education options and services, and MCPS’ social and organizational skills courses for students with ASD. Some of the other strengths in the current provision of services to children and students with ASD that staff and parents identified included close working relationships among staff, services provided through MCPS’ special education pre-kindergarten programs, the support of front line staff, and the expertise of central staff.

Some areas for improvement that staff and parents identified included increasing resources for family support and wrap around services, interventions for meeting the needs of school-age children, support for students across the LRE continuum, communication between staff and families, and outreach to diverse families.

RECOMMENDED DISCUSSION ISSUES

OLO recommends the Council address the following discussion issues to improve their understanding and oversight of County appropriations aimed at addressing the needs of students with ASD.

Discussion Issue #1: How MCPS' and DHHS' practices for serving children with autism spectrum disorders align with research-based best practices identified by federally-funded research studies. OLO recommends the Council discuss this issue with agency representatives to provide a more complete picture of their best practices. Recommended questions for discussion include:

- What are DHHS' and MCPS' perspectives about their best practices for improving outcomes?
- How do agency practices compare to those recommended by the National Academy Science, the National Standards Project, the National Professional Development Center, and the Maryland Autism Task Force?
- How does each agency ensure the use of best practices among its varied programs? How does each agency plan for training, professional development, and the use of best practices among staff and contractors?

Discussion Issue #2: MCPS efforts to improve the school system's responsiveness to children on the autism spectrum with significant behavioral, emotional and/or learning needs. Staff and parents recognize the need for additional and more effective interventions to address the behavioral and emotional needs of some students on the spectrum. Recommended discussion questions include:

- What strategies/practices does MCPS employ to address the behavioral/emotional challenges of students with ASD?
- What is the process for identifying and implementing additional strategies focused on meeting students' "extraordinary" behavioral/emotional needs?
- What strategies/practices does MCPS employ to address the learning needs of students in the "middle" of the spectrum that typically participate in the modified state assessments (i.e. Mod-MSA's)?

Discussion Issue #3: Improving communication with parents of children on the autism spectrum, particularly to enhance awareness of school-based programs and outreach to diverse families. During OLO's interviews, some parents said that neither they nor school-based staff were aware of the potential MCPS resources and program options for children with ASD. For their part, MCPS staff identified "better communication with parents" as an opportunity for improvement. Recommended questions include:

- How does each agency communicate with parents about its services?
- What are the challenges and opportunities for improving parents' understanding of available programs?
- What, if any, additional efforts are underway to communicate to culturally and/or linguistically diverse families?

Discussion Issue #4: Potential merits and drawbacks of developing a strategic plan to track, understand, and improve the performance of students with autism spectrum disorders. Currently, information about how children and students with ASD perform on a countywide level is lacking. OLO recommends that the Council discuss with MCPS whether a strategic plan that would address the collective performance of students with ASD has merit. Recommended discussion question include:

- What planning have the Board of Education and MCPS undertaken to improve the school system's capacity to serve students on the autism spectrum?
- Has the Board or MCPS considered evaluating the school system's services for students on the autism spectrum and/or developing a strategic plan to improve outcomes among students on the spectrum?
- To what extent could focusing on the performance of students with ASD result in progress in MCPS services to students with disabilities overall?

For a complete copy of OLO-Report 2012-3, go to: www.montgomerycountymd.gov/olo

MEMORANDUM

February 27, 2012

To: County Council

From: Valerie Ervin, Education Committee Chair *VE*

Subject: **Worksession on OLO Report 2012-3, *Services for Students on the Autism Spectrum***

This memorandum summarizes the Education Committee's review of OLO Report 2012-3 on January 23, 2012. Councilmember Phil Andrews requested this study to improve the Council's understandings and oversight of Council appropriations aimed at serving students with autism spectrum disorders in Montgomery County.

OLO staff member Elaine Bonner-Tompkins briefed the Committee on the report with a description of OLO's project findings and recommended issues for discussion for the worksession. This briefing was followed by remarks from:

- Joshua Starr, Superintendent of Schools
- Chris Richardson, Associate Superintendent, Office of Special Education and Student Services, MCPS;
- Gwen Mason, Director, Department of Special Education Programs, MCPS;
- Kris Secan, Instructional Specialists, Autism Unit;
- Kate Garvey, Chief, Children, Youth and Family Services, DHHS; and
- Julie Riley, MCPS parent of 4th grade student on the autism spectrum.

The following themes emerged during discussion:

- MCPS agrees that there is need for more professional development of staff, particularly among those serving students on the autism spectrum, and within MCPS' autism programs
- MCPS relies on data to ask good questions, identify needs, and to ensure that it is addressing systemic issues
- The County may need to do more to identify children with disabilities earlier, particularly among children of color, to ensure that children and families receive early intervention services; enhanced community engagement can be a vehicle toward this end.
- There is a need for systemic data regarding parents' perspectives on the County's services and opportunities to build relationships with families as part of the IEP/IFSP process; MCPS has developed a Parent Outreach Committee towards this end.
- School principals play a vital role in delivering special education services.
- MCPS will host two community forums this spring related to autism spectrum disorders: a special education forum in April and a social/emotional learning forum in May.

As follow up to this worksession, the Education Committee is requesting the following:

- A follow up worksession on dispute resolution in special education, due process proceedings and the IEP process for the County Council;
- A written response from MCPS to each of the four recommended issues for discussion referenced in the report and worksession packet, including an update on the parent advisory group described during the worksession; and
- An update on MCPS' professional development plan for its Autism Unit including its vision for professional development for principals, teachers, and paraprofessionals, and the strategies it is undertaking to actualize its vision.

We recommend the Education Committee reconvene after budget in June for a worksession on dispute resolution in special education and that it reconvene on March 26th to follow-up on the January 23rd worksession on the OLO autism report. To prepare for the March 26th worksession, we ask that MCPS staff submit a memorandum in response to the recommended discussion issues and request for an update on its Autism Unit Professional Development Plan by March 19th. Should you have questions regarding OLO Report 2012-3 or this memorandum, please contact Elaine at x77995 or elaine.bonner-tompkins@montgomerycountymd.gov.



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MARYLAND

March 27, 2012



Dr. Elaine Bonner-Tompkins
Senior Legislative Analyst
Montgomery County Office of Legislative Oversight
Stella B. Werner Council Office Building
100 Maryland Avenue
Rockville, Maryland 20850

Dear Dr. Bonner-Tompkins:

Thank you for providing Montgomery County Public Schools (MCPS) staff members with the opportunity to comment and respond to the follow-up questions based upon the January 23, 2012, presentation before the County Council's Education Committee regarding the Office of Legislative Oversight (OLO) report on Autism Spectrum Disorders (ASD) services in MCPS.

Analyses of the follow-up questions have been reviewed carefully by staff in the Office of Special Education and Student Services. The following comments and responses to the questions are provided below:

Question 1: How do MCPS' practices for serving students with Autism Spectrum Disorders align with research-based practices?

MCPS services for students with ASD utilize the majority of research-based practices reviewed in the OLO report. The report cited strategies derived from the field of Applied Behavior Analysis (ABA). MCPS ASD programs have been based on ABA principles for the past 30 years, with specific models and strategies updated over time.

Additionally, there are many best practices for diploma and certificate-bound students with ASD that are not reviewed in the report (i.e., students in Elementary Learning Centers, Learning for Independence, School/Community-based programs, and the Carl Sandburg Learning Center). There are many additional strategies in place in the Aspergers and Autism Resource Services classrooms that are not mentioned in the OLO summary.

The enclosed table summarizes best practices utilized by MPCPS and where they are implemented for students with ADS.

Office of the Superintendent of Schools

850 Hungerford Drive, Room 122 ♦ Rockville, Maryland 20850 ♦ 301-279-3381

Question 2: What MCPS efforts are underway to improve the school system's responsiveness to children on the autism spectrum with significant behavioral, emotional, and/or learning needs?

In fall 2012, MCPS will restructure an existing elementary learning center designed specifically to support students with ASD who are below grade level in achievement and whose behavioral needs surpass what is typically available. This effort will mark the initial phase of collaboration with the Kennedy Krieger Institute, which will eventually expand to include consultation and professional development for other programs and services for students with ASD.

The Department of Special Education Services and the Department of Student Services are in the initial development phase of planning future professional development activities on strategies for working with students with autism for all school psychologists and counselors. The purpose of this professional development is to build the capacity of existing mental health providers to meet the social-emotional needs of students with ASD.

The Autism Unit developed a comprehensive professional development plan for staff serving students with ASD in a variety of settings. The professional development defines the spectrum of autism disorders, explains the ASD characteristics that are often misinterpreted as defiance and aggressive behaviors in school, illustrates typical learning issues that may trigger work refusal, and presents a variety of instructional and behavioral strategies that are helpful for students with significant learning and behavioral needs. The professional development plan was piloted this year at six schools and should be in final form by June 2012.

Question 3: How does MCPS communicate with parents of children on the autism spectrum, particularly to enhance the awareness of school-based programs and to increase outreach to culturally and linguistically diverse families?

MCPS staff members present at community functions such as the Extraordinary Minds Placement Forums, the Department of Family and Community Partnerships Parent Academy events, and the Autism Society of America meetings. Staff members participate in the Special Education Advisory Committee meetings as requested when the topic of autism services is recommended for discussion. Staff members spend significant amounts of time with families who wish to observe different programs and respond to inquiries from families locally and nationally who are interested in services in MCPS.

The Office of Special Education and Student Services Parent Outreach Committee is currently finalizing the first of its projects, a survey designed to measure parent satisfaction with the Individualized Education Program (IEP) process and services. There is active participation by Autism Unit staff and parents on this committee. The survey will be piloted in all prekindergarten special education classes, including the Comprehensive Autism Preschool Program.

MCPS staff communicates with families on an individual basis through a variety of mechanisms such as communication notebooks, e-mail, telephone calls, and parent conferences. Parents receive formal progress updates through the quarterly report card, and the annual and periodic IEP team review process.

MCPS staff members work with parents to guide them to seek assistance through the Montgomery County Department of Health and Human Services (DHHS) if there are developmental concerns in a child under age two-and-a-half. MCPS staff members share information about the Infants and Toddlers intake hotline through the dissemination of fliers on an individual basis, through private pediatricians' offices, local health clinics, and hospitals.

MCPS Child Find staff members offer regular special education screenings through Child Find Clinics at central and community-based locations. In addition, MCPS staff members work with parent community coordinators in DFCP, particularly those who are bilingual, to reach out to families of diverse backgrounds. Staff members also participate in the annual Back-to-School Fair and have presented at several ethnic-specific organizations including the Asian Family Federation.

The MCPS Autism Waiver Program sets the course for staff to work closely with two hundred families receiving waiver services to ensure that families understand and utilize all available resources. Working with DHHS, MCPS staff members conduct outreach activities to families who are waiting to access the program by disseminating materials in multiple languages and conducting community-based workshops for parents. The Autism Waiver office serves as a resource to families so they may access services from other agencies such as the Developmental Disabilities Association and DHHS.

Question 4: What are the potential merits and drawbacks of developing a strategic plan to track, understand, and improve the performance of students with autism spectrum disorders?

MCPS currently collects a range of student achievement data ranging from individual student data to the performance of groups of students including students with disabilities on county and state accountability measures. The heterogeneity of this population and the range of cognitive abilities covered by the term ASD does not lend itself to one specific measurement plan, as delineated in the January 2012 OLO report on ASD. MCPS supports and acknowledges the merits of monitoring and implementing an action plan to improve the performance of students with disabilities as a subgroup. One of the most important factors that must be monitored by disability is the graduation rate. Annually, the Maryland State Department of Education issues the annual census data report that provides this important information by disability category.

As the nation embarks upon the implementation of the Common Core State Standards and the implementation of the Partnership for Assessment of Readiness for College and Careers

Assessments, which will be used to obtain valid and comparable measures of student achievement throughout the United States, MCPS must focus on ensuring that all students, including students with disabilities, continue to demonstrate improved performance outcomes to prepare for college and career readiness.

MCPS remains committed to improving the quality of instruction for students with autism, and commits to professional development and research-based best practices to enable staff members to provide students with autism the foundation they require to prepare for a full and successful adult life.

Sincerely,



Joshua P. Starr, Ed.D.
Superintendent of Schools

JPS:ra

Enclosure

Copy to:

Dr. Lacey
Mrs. Richardson
Ms. Mason
Mrs. Piacente
Mrs. Secan
Ms. Webb

**Summary of Montgomery County Public Schools Implementation of Research-based Practices
Identified by the National Academy of Sciences (NAS) and the National Standards Project (NSP)
Young Children Birth–Age 8**

Evidence Based Best Practice for Young Children Birth–Age 8	Comprehensive Autism Preschool Program (CAPP)	Autism Programs K–3
<i>25 Hours per Week of Instruction</i>	Yes—30 hours per week	Yes—30 hours per week
<i>Individualized Attention</i>	Yes	Yes
<i>Small Group Instruction</i>	Yes	Yes
<i>Direct 1:1 Contact</i>	Yes—20 hours intensive teaching	Yes—As necessary
<i>Opportunities for Interaction With Typical Peers</i>	Yes—Head Start, pre-K	Yes—Grades K–3 inclusion Peer Buddy/Best Buddy Program
<i>Teaching Functional Communication</i>	Yes—Mand training, sign language, Augmentative and Alternative Communication (AAC), and Picture Exchange Communication System (PECS)	Yes—Mand training, sign language, AAC, and PECS
<i>Play Skills</i>	Yes—Natural Environment Teaching training	Yes—As appropriate which turns into activity schedules
<i>Instruction + Generalization</i>	Yes—Applied Verbal Behavior (AVB) Strategies	Yes—AVB Strategies
<i>Comprehensive Behavioral Treatment for Young Children</i>	Yes—Applied Behavioral Analytic Program	Yes—Applied Behavioral Analytic Program

**Summary of Montgomery County Public Schools Implementation of Research-based Practices
Identified by the National Academy of Sciences (NAS) and the National Standards Project (NSP)
Pre-K–Grade 12**

Treatments Identified by NSP	CAPP	Autism Programs Grades K–3	Autism Programs Grades 3–9	Autism Programs Grades 9–12	Asperger Programs Grades K–5	Asperger Programs Grades 6–8	Asperger Programs Grades 9–12	Middle School Resource Services
<i>Functional Assessment of Behavioral Issues</i>	Yes— Data based functional assessment to include sequential analysis, interview, and rating scales	Yes— Data based functional assessment to include sequential analysis, interview, and rating scales	Yes—Data based functional assessment to include sequential analysis, interview, and rating scales	Yes—Data based functional assessment to include sequential analysis, interview, and rating scales	Yes—Data based functional assessment to include sequential analysis, interview, and rating scales	Yes—Data based functional assessment to include sequential analysis, interview, and rating scales		Yes—Data based functional assessment, interview, and rating scales
<i>Antecedent Package</i>	Yes—Errorless learning, time delay, priming, and stimulus variation	Yes—Errorless learning, time delay, priming, and stimulus variation	Yes—Errorless learning, time delay, priming, stimulus variation, and modification of events that precede target behavior	Yes Modification of events that precede target behavior	Yes Modification of events that precede target behavior	Yes Modification of events that precede target behavior	Yes Modification of events that precede target behavior	Yes Modification of events that precede target behavior
<i>Behavioral Package</i>	Yes—Toilet training, discrete trial, functional communication, generalization, mand training, task analysis, and token economy	Yes—Toilet training, discrete trial, functional communication, generalization, mand training, task analysis, and token economy	Yes—Toilet training, discrete trial, functional communication, generalization, mand training, task analysis, and token economy	Yes—Discrete trial, functional communication, generalization, sabotage training, task analysis, and token economy	Yes—Task analysis, change to motivation system, token economy, behavior contract, teaching functional alternative, and reinforce alternate behavior	Yes—Task analysis, change to motivation, system, token economy, behavior contract, teaching functional alternative, and reinforce alternate behavior		Yes—Task analysis, token economy, and generalization

**Summary of Montgomery County Public Schools Implementation of Research-based Practices
Identified by the National Academy of Sciences (NAS) and the National Standards Project (NSP)
Pre-K–Grade 12**

Treatments Identified by NSP	CAPP	Autism Programs Grades K–3	Autism Programs Grades 3–9	Autism Programs Grades 9–12	Asperger Programs Grades K–5	Asperger Programs Grades 6–8	Asperger Programs Grades 9–12	Middle School Resource Services
<i>Live Modeling</i>	Yes Demonstrate target behavior	Yes Demonstrate target behavior	Yes Demonstrate target behavior	Yes Demonstrate target behavior	Yes Demonstrate target behavior, verbal modeling	Yes Demonstrate target behavior, and verbal modeling	Yes Demonstrate target behavior, and verbal modeling	Yes Demonstrate target behavior, and verbal modeling
<i>Video Modeling</i>						Yes—video modeling		
<i>Naturalistic Teaching Strategies</i>	Yes—Natural Environment Teaching (NET)	Yes—NET, providing choices, embedded teaching, and incidental teaching	Yes—NET, providing choices, embedded teaching, and incidental teaching	Yes—NET, providing choices, embedded teaching, and incidental teaching	Yes—adult support in the natural setting to encourage conversation modeling, recognizing attempts, role play, and problem solving strategies	Yes—Direct adult support in the natural setting to encourage conversation modeling, recognizing attempts, role play, and problem solving strategies	Yes—Direct adult support in the natural setting to encourage conversation modeling, recognizing attempts, role play, and problem solving strategies	Yes—Direct adult support in the natural setting, incidental teaching, encouraging conversation, modeling, recognizing attempts, role play, and problem solving strategies

**Summary of Montgomery County Public Schools Implementation of Research-based Practices
Identified by the National Academy of Sciences (NAS) and the National Standards Project (NSP)
Pre-K–Grade 12**

Treatments Identified by NSP	CAPP	Autism Programs Grades K–3	Autism Programs Grades 3–9	Autism Programs Grades 9–12	Asperger Programs Grades K–5	Asperger Programs Grades 6–8	Asperger Programs Grades 9–12	Middle School Resource Services
<i>Schedules</i>	Yes—Photo and picture schedules, and class schedules	Yes—Photo and picture schedules, written schedules, individual and class schedules	Yes—Photo and picture schedules, written schedules, individual and class schedules	Yes—Photo and picture schedules, written schedules, individual and class schedules	Yes—Photo and picture schedules, written schedules, individual and class schedules, and warning of changes in schedule	Yes—Photo and picture schedules, written schedules, individual and class schedules, and warning of changes in schedule	Yes—Written schedules, personal agenda, and checklists for scheduling	Yes—Written schedules, individual schedules, class schedules, personal agenda, and warning of changes in schedule
<i>Self-management</i>	Yes—Tokens, visual prompts, and picture activity schedules	Yes Checklists, visual prompts, tokens, and picture activity schedules	Yes Checklists, visual prompts, tokens, picture activity schedules	Yes Checklists, visual prompts, tokens, and picture activity schedules	Yes—Checklists, visual prompts, tokens, self-rating sheets, and rubrics	Yes— Checklists, visual prompts, contracts, self-rating sheets, and rubrics	Yes Checklists, visual prompts, contracts, self-rating sheets, and rubrics	
<i>Story-based Interventions</i>	Yes—Social stories	Yes—Social stories	Yes—Social stories	Yes—Social stories	Yes—Social stories, cartoon strips, and conversations	Yes—Social stories		Yes—Social stories, cartoon strips, and conversations

(h)

- Interventions are used in all classrooms in each program/grade level. Specific classrooms may implement additional strategies identified in the report. Many classrooms implement other evidence-based strategies *not* recognized in the report.
- The evidence-based strategies identified above are used in other settings as appropriate to address the needs of students with ASD (i.e., Carl Sandburg Learning Center, Learning for Independence, School/Community-based Programs). Self-management and story-based interventions are used to support students who receive services in the general education environment or in self-contained classrooms.
- The reports cited do not summarize many of the best practices appropriate to the education of students with ASD who are diploma bound. Therefore, there are many additional strategies in place in the Aspergers Services and Autism Resource Services that are not represented on the chart. Examples include, but are not limited to, social-thinking concepts, theory of mind exercises, social scripting, conflict resolution, self-assessment, and regulation strategies as well as direct social skills instruction and organizational strategies for students.
- In response to the National Professional Development Center statements on Pages 14 and 15 of the OLO report.
 - **Parental Implemented Interventions**—All programs share interventions in place for individual students. Assistance is available if parents wish to use those practices beyond the school day.
 - **Social Skills Training Groups**—Group meetings to include instruction, role playing or practice, feedback are available in the Asperger Programs, Grades 1–8, and the middle school resource services.
 - **Speech Generated Devices and Computer-aided Instruction**—Available and taught in all CAPP and Autism classes.
 - **Speech Generated Devices and Computer-aided Instruction**—Available and taught on an individual basis, as appropriate, in all Asperger and resource services classes. *Model Me* video instruction is available in the resource classes.
 - **Picture Exchange Communication Systems**—Available and taught in all CAPP and Autism classes.
- National Research Council, National Standards Project, and Maryland Autism Task Force statements on Pages 15–18 are a combination of hypothetical standards and subjective evaluations that are beyond our capacity to measure.
 - MCPS has a continuum of services for students with ASD, including intensive early intervention.
 - In the last 10 years, four different books (*Right from the Start: Early Intervention for Young Children with Autism*, Sandra Harris, Ph.D. and Mary Jane Weiss; *School Success for Kids With Autism*, Andrew L Egel, Ph.D., Katherine C. Holman Ph.D., Christine H. Barthold, Ph.D.; *School Success for Kids With Asperger's Syndrome: A Practical Guide for Parents and Teachers*, Stephan Silverman and Rich Weinfeld; *Preschool Education Programs for Children with Autism*, Harris, Sandra L., Ed.; Handleman, Jan S., Ed.) have highlighted our Classic Autism and Aspergers services as model programs.
- MCPS utilizes consultative services from experts in the field such as the South Carolina Early Autism Project, the University of Maryland, and others.