

PERSPECTIVES – News and Comments¹

Effective Homeschool Programming for Students with Autism Spectrum Disorder

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Abstract

Many parents and/or caregivers of children with autism spectrum disorder (ASD) are frustrated with services offered and/or provided through the public school setting. The services for children with ASD may be limited because teachers may not be adequately prepared to meet the needs of the increasing number of students being identified with ASD, and/or because students with ASD may not respond to traditional methods of instruction. Some parents of children with ASD are concerned with educational programming available through public school systems, because they may believe public schools are unable and/or unwilling to develop and implement effective programming. Thus, the decision to remove these children from public school and provide services through homeschools has become increasingly more prevalent as parent educators can provide more individualized and structured routines and curriculum options. This article provides an overview, with some guidelines/suggestions, for developing effective homeschool programming that can help parents of children with ASD reflect on and/or revise current homeschool instructional strategies, in conjunction with evidence-based practices. In sharing the information, we hope to help others work collaboratively to improve the academic and social learning outcomes for homeschooled children with ASD.

Keywords: homeschooling, homeschool, home education, parent perspective, strategies, interventions, programming, student outcomes.

AUTISM SPECTRUM DISORDER (ASD) is a multifaceted neurodevelopmental disorder that adversely impacts communication, learning and social interactions. Individuals with ASD may have restricted interests and repetitive behaviors that can negatively impact their ability to function properly in school and other areas of life (American Psychiatric Association (APA), 2013). The range of symptoms of the disorder is on a spectrum because the characteristics are so varied in severity. The causes of ASD are unknown, and there is no standard, one size fits all treatment for ASD (Simpson & Smith-Myles, 2016). The purpose of this article is to provide ideas and/or share suggestions with potential/current homeschool providers. While there are limited resources available related to homeschooling and ASD, there are Evidence Based Practices (EBPs) which can be used effectively in home settings. The decision to homeschool (non-institutional schooling often in the home setting facilitated by parents) has increased significantly in the United States over the past 50 years. It is estimated that there were only 13,000 students who were homeschooled in the 1970s, and there were over 2 million in 2015 - approximate 2-8% growth per year (Ray, 2013; Ray, 2015; Ray, 2016). The percentage of

parents/caregivers of children with Autism Spectrum Disorder (ASD) choosing to homeschool has increased as well.

According to data from the 2016 National Survey of Children's Health, 2.79% of US children aged 3-17 have ASD (Xu et al., 2019). To complicate matters, there is evidence to suggest that the prevalence of school aged children in the United States with ASD may be higher than previously reported. This may be due to cultural, ethnic, and gender differences and the fact that many students with ASD who have the ability to meet academic expectations go undiagnosed (Travers et al., 2014). Considering the rapid increase in the homeschool movement in conjunction with the rise in ASD diagnoses, it is likely that the number of students with ASD served in homeschools will also increase (Dolan, 2017).

Many parents and/or caregivers of children with ASD become frustrated with services offered and/or provided through public schools. One study by the Easter Seals reported that 70% parents of children with ASD are concerned with the quality of services provided in public schools (Hurlbutt, 2011). The services for children with ASD may be limited for several reasons such as large class sizes, high stakes testing, minimal or inconsistent expertise regarding ASD, ineffective behavior

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management plans/policies, concerns about bullying, curriculum content, dissatisfaction with academic instruction, diet and/or health concerns, as well as the potential negative effects of being labeled and served by special education (Dolan, 2017; Spiegler, 2017). In some cases, removing these children from public school and providing service through homeschools has become increasingly more popular, because children with an ASD frequently present very complex difficulties with traditional educational programs. This can lead to increasing delays when compared to other children of the same age. Many children with an ASD may have average or above average intellectual capabilities, but still become academically and/or socially delayed when schooled in a traditional manner (LaPage & Courey, 2014). Depending on the procedures and policies related to diagnosis and the provision of services in different states and local school systems, determining the cause of the delay can be a complicated, time consuming process (Wilkinson, 2017). Even when this process is carried out by an effective, truly collaborative team through an extensive, comprehensive process using current and appropriate assessment tools, there is often a disconnect between the assessment results and the subsequent development of the Individualized Education Plan (IEP). The realities of limited resources and/or knowledge of which EBPs should be implemented with students diagnosed with ASD are a serious concern (Wong et al., 2015). Failing to provide services or improperly served students with ASD can profoundly impact student progress. Depending on the student, they may suffer from depression, social stigma and isolation. They may be viewed by teachers and peers as unmotivated, “lazy” and/or a behavior problem for refusing to work or follow school rules.

One major advantage of homeschooling is the autonomy to be flexible with scheduling, setting, and curriculum topics. Before investing a large sum into a single curriculum, remember that one curriculum is unlikely to meet all a student’s needs. Be sure to consider the realities of the situation, including the preferred teaching style in conjunction with the child’s learning style. Although the research does not support learning styles theory, there is evidence that understanding of student differences will improve instruction (Willingham, Hughes, & Dobolyi, 2015).

Developing a Schedule

FAMOUS HOMESCHOOLING FAMILIES on television or YouTube depict them all sitting around the kitchen table learning together. This can cause an unrealistic expectation for students on the spectrum. Some kids may work best in the afternoon, others the evening, and others in the morning. Consider when the child’s brain is best engaged and try to teach them during that part of the day. This can make a huge difference in the child’s learning experience, even if it inconvenient for the teacher to repeat a lesson for siblings that were unable to learn it earlier in the day. Set measurable educational goals for what is being taught each day, which includes some form of assessment of whether the goal(s) was mastered. Consider the child/children’s learning preferences, long/short term goals, and resources to develop a schedule. It is important to consider transition time, breaks, subjects, and so forth, in order to plan a realistic and flexible

schedule. Remember to Task analyze (break activity or behavior into manageable steps), and take advantage of online resources such as (Khan Academy) or other Technology Aided Instruction or interventions to increase/maintain, and/or improve daily living, work/productivity, and recreation/leisure capabilities (Wong et al., 2015).

It is natural to try and develop a permanent schedule for homeschooling days that includes the times expected for accomplishing specific tasks. Some students thrive on a very rigid schedule and this may be the most productive way to run the homeschool. Meltdowns, inconsistent sleeping patterns, daily effectiveness of medication, and many other variables can throw a wrench in the best laid plans. Visual supports are an EBP recommended for individuals with ASD across settings and subjects (Wong et al., 2015). It may help to have a simple list of tasks that need to be accomplished in contrast to a strict schedule. Small lists or picture charts of expected routines can be used from the moment a child wakes up, even if the time that they wake up is inconsistent from day to day. An example would be to have a small list of self-cares for the child to complete when they awake (go potty, brush teeth, take medication, get dressed, eat breakfast, etc.). Breakfast is a great time to go over a posted calendar and meal plan for the day with your child. Comfort in knowing what will be happening throughout the day, including what foods will be available, can go a long way in ensuring a child’s willingness to participate in their schooling activities. After breakfast another small list of chores is appropriate to prepare their environment for an organized day (make bed, put away pajamas, pick up toys, and meet at the kitchen table for school). These lists should be short and not take much time if a child is young and can gradually increase in length as they grow older. A couple of subjects are best taught in small amounts daily. There can be a small list of daily items that must get completed or even just a stack of daily worksheets, if that works better. Math and reading should be done every day, at least in small doses. Depending on the student, other subjects can be done this same way, or other subjects can be taught more like a public-school does with block scheduling. If the child does not transition easily, then reduce the number of transitions. Subjects like history, science, geography, foreign language, music, art, and so forth can be rotated from day to day. Let the child spend longer amounts of time on these subjects by alternating the days that are assigned.

Reinforce Learning

WHEN PARENTS ARE not actively teaching, they should look for opportunities to reinforce what has been learned, or even teach new concepts in available day to day life. Reinforcement, modeling and naturalistic instruction are also EBPs recommended for students with ASD (see Table 1). Find a child’s favorite recipe and let them help make it, and double it and help them to see that the double of $\frac{1}{4}$ is $\frac{1}{2}$. Later, take a muffin recipe and triple it in advance. Then let the child divide the ingredient amounts by 3 as they are cooking to make a batch of their favorite muffins. Go over paystubs and household budget with children so they can see what how money is handled, discuss the difference between needs and wants, and discuss the difference between standard of living and quality of life. It is

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helpful to have multiple ways to teach different topics. Somedays a lesson at the table may not be possible for the child. Consider having a video on hand that can be put on that covers the same topic if needed. When math flashcards are rejected, is there an app that turns math facts into a game? Keep several days' worth of plans or prepared worksheets on hand, so that if the day does not go as planned and the child is refusing a specific

topic, another item on the list may work for the child. Later, the parent can go back to where the refusal happened (later in the same day or even on a different day), when the child is better able to handle the assignment.

Table 1

Preparing for Success: Learners on the Spectrum

Recommendation	Notes
Know the EBPs for ASD	Be familiar with the EBPs for recommended for ASD associated and learn to implement them correctly. (AFIRM modules - https://afirm.fpg.unc.edu/afirm-modules ; AIM modules https://autisminternetmodules.org/user_mod.php)
Learn about teaching	Attend a homeschool convention and/or Autism conventions; Do not force your child to learn topics in a specific order (e.g., algebra before geometry). Do not be afraid to skip traditional textbooks for YouTube videos.
Learn about High Leverage Practices (HLPs)	Determine if any of the Council for Exceptional Children HLPs - 22 practices intended to address critical practices may be useful (https://highleveragepractices.org/701-2-2/)

Table 2

Behavior Management Suggestions

Behavior	Response
Refuses to read	Use an audiobook; ask the child to follow along as they listen. Try having the child use a talent like coloring, drawing or building with manipulatives to keep hands busy while listening. Leave close captioning on when watching TV to reinforce sight words.
Verbally answers questions, but not write them down	It is ok to write “verbally completed with mom” at the top of a worksheet if the child is not willing to fill it out for themselves some days. Video verbal answers for additional documentation.
Refusing to work	Try switching subject matter. Take a break; work a special interest into that topic. Gently discern the purpose (or function) of the refusal and address it. See NPDC EBPs (Functional Behavior Assessment)
Frustrated, bored or tired	Take a break; add in physical activity. This can be overt with a quick discussion on managing their own symptoms with physical activity, or discreetly if the child is not agreeable to using activity.
Distracted by electronics	Integrate access to electronics at the end of an activity or include the need for electronics within an activity (find a picture or video that best represents a concept). Change the Wi-Fi password or use an app that allows you to control access to the electronic and internet usage.
Meltdown	Walk away from school. The child needs their sensory, emotional, and physical symptoms taken care of above all else. Learning cannot happen at this time. There will be other days.
Inappropriate social behavior and/or destructive	Remember your purpose for school – to learn academic, problem solving and social interaction skills needed for real life. It may be better to drop the academic curriculum to teach a larger lesson on social behavior in order to meet your broader educational goals.

Integrate Social Development

IT IS ESSENTIAL for homeschool students with ASD to develop both the academic and social interaction skills needed to function in the home and community settings (Schetter & Lighthall, 2009). One way to enhance their self-esteem and develop confidence with successful interactions with others is to involve them in community resources. Find at least one activity that involves public acknowledgement of skills (e.g., sports team, individual sports like archery, snowboarding, martial arts, etc., online contests, science fairs, technology fairs, music recital, art displays, summer reading competition at the library, horse shows, county or state fair displays, Lego Club and Competitions). Be open minded, and consider including ALL requests to learn any topic. Use a variety of current and relevant resources, such as YouTube videos. Integrate the child's interests into planning the homeschool year. Most special interests can be readily integrated into science and social studies lessons. Integrating real life skills into the academic experience will enhance the educational experience as they increase their comprehension and reasoning skills. Teaching cognitive interventions is a High leverage teaching practice that can be integrated in many ways (McLeskey, et al., 2017). Teach life skills and practical skills along with academics to teach students about potential employment options and/or self-help skills.

Introduce small carpentry projects or let the child take apart a broken appliance and discover how it is made. Watch YouTube videos on how to fix things around the house and let the child help to the best of his/her ability. Teach the child about how much money can be saved by knowing how to change a tire or plunge a toilet, by showing them what these tasks cost if they are hired out. When they need something assembled or would like something done for them, let them struggle with it a little bit first, and tell them to "think like an engineer" and try to come up with a solution, before the adult steps in too quickly. Take advantage of "teachable moments" such as watching and learning from hired help in the home. If, for example, a plumber (or other contractor) comes to the house, consider asking the person if they would be willing to share a bit about their profession. Encourage children to ask questions and reinforce positive interactions and meaningful communication. Follow up on the visit with a discussion about what was learned and/or the pros and cons of that profession. If a storm causes the power to go out, take advantage of talking about electricity. If a child shows an extreme interest in a topic, let them explore it. Kids on the spectrum are frequently "specialists." Their future job choice may be determined by their ability to explore these special interests. Extra-curricular activities can also be used to teach and/or reinforce academics, communication and/or social interaction skills in varied settings.

Rules and Procedures

IT IS ESSENTIAL for instructors with students on the spectrum to be organized and prepared (lesson plans, subject resources, assessments, work portfolio, important records, etc.). Be sure tasks and materials are ready ahead of time to maximize

instructional time and minimize the potential of losing attention and/or motivation. Clarify the "when" and "where" for academic work; avoid the temptation to regularly use entertainment areas with easy access to comfortable seating and television (unless those resources are integrated into a specific learning activity). Consider integrating visual supports to structure the learning environment and adhere to a daily routine. This can include both the physical structure (arrangement of objects or visual boundaries) of the area as well as the instructional support materials (visual display that supports a desired behavior or skill) such as labels, written words, schedules, drawings, schedules, maps, and organization systems (Wong et al., 2015). Homeschooling with younger children in the home can involve distractions and competition for parental time. Help siblings learn to use a timer or timer app; parents should let children know that they do want to spend time with them, but they need to be allowed to finish the task at hand. Watch children for their natural indicators that they need a break. They do not necessarily need to know they are having a break. They can be sent to do a quick physical outdoor chore like walking a dog or taking out the trash if that seems to be helpful to them. They could have quiet Lego time, if that helps them re-center themselves. Although the Homeschool environment can provide a structured, individualized program for children with ASD, and instructors can take steps to prevent undesired behavior, it is important to be prepared to address them should they occur. Table 2 reveals a list of behavior supports that may be useful.

Final Thoughts

ALTHOUGH SCHOOLS ARE legally required to provide a free, appropriate, public education, the appropriateness of the program is often a contentious issue. The realities of meeting the needs of large groups of students with varied needs simultaneously when tied to rigid schedules, predetermined curriculum standards, mandated testing, limited resources (human and otherwise), zero-tolerance discipline plans, and so forth, cannot be ignored by parents who feel their child's needs are not met (Dolan, 2017; Hurlbutt, 2011). Taking into consideration the growing number of students with ASD, the potential benefits of early, intensive instruction, and the growing number of students being served in homeschool settings, more research is needed in this area related to how schools, and other organizations designed to support students with disabilities, can better support children with ASD and their parents. Such research could help both the children and their parents to better understand the nature of the disability itself, and associated EBPs. This will help to maximize the potential for meaningful instruction and measurable progress in both settings.

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Endnote

1. The “Perspectives – News and Comments” section of this journal consists of articles that have not undergone peer review. * *HSR*