

# Successful Participation at School: Strategies for Students With Autism Spectrum Disorder (ASD)

School occupational therapy practitioners promote students' successful and independent participation in routines, tasks, and relationships across school-based settings. Through education team collaboration and partnership with students, occupational therapy practitioners foster student access to and adequate progress in the national and/or state-mandated curriculum. With a commitment to evidence-based practices, occupational therapists design strengths-based interventions that diminish or eliminate barriers to participation and build competencies required for academic, social, school-based extracurricular, and routine-oriented tasks. Occupational therapy practitioners support the development and implementation of data collection methods to monitor the effectiveness of intervention and supports like those suggested in this document.

Children on the autism spectrum can present with varying areas and degrees of strength and need. All items are written with the intent that an educator can differentiate supports and interventions to create the best fit between the student and the strategies.

As an educator, if you want to:	Consider these strategies:	Your occupational therapy practitioner can collaborate with you to:
<p>Improve engagement and sustained attention to curriculum-based instruction</p>	<p>Use Positive Behavioral Intervention and Supports to promote success.<sup>1</sup></p> <p>Provide differentiated instruction in order to meet the needs of diverse learners.<sup>2</sup></p> <p>Provide visual cues that help a student attend to salient features of activity, group conversation, or lecture, including limiting the amount of competing visuals in the classroom.<sup>2</sup></p> <p>Promote auditory salience by reducing the amount of competing noise and amplifying the volume of the speaker.<sup>2</sup></p> <p>Use a visual timer to assist students with gauging time.</p> <p>Use developmentally appropriate language—pay attention to the number of words used at one time, language complexity, and time between statements (processing time).<sup>3,4</sup></p> <p>Use preferred objects, special interests, or favorite characters within lessons.<sup>5</sup></p> <p>Use a playful approach and/or humor when teaching.<sup>6</sup></p> <p>Try pauses, novel voices, whispers, or silly tones to capture attention.<sup>5</sup></p> <p>Break larger tasks into small chunks.</p> <p>Intersperse seated work with movement, or integrate movement into activities.<sup>2</sup></p> <p>Provide seating and positioning options and alternatives, such as ball chairs, standing desks, seat cushions, and tables of sufficient height to work while standing.<sup>7</sup></p> <p>Vary your position in the room while providing instruction.</p> <p>Provide structure for written assignments and activities (e.g., graphic organizers).</p> <p>Provide alternate strategies for written productivity/use of technology (portable word processors, word prediction software).</p>	<p>Identify alternative activities/tasks or provide modifications/accommodations to tasks that foster participation in school routines and curriculum-based instruction.</p> <p>Develop solutions, both individual and classroom based, that promote and reinforce sustained attention, including strategies related to sensory processing, executive functions, and positive behavior supports.</p> <p>Create modifications and accommodations to the classroom environment based on universal design principles.<sup>8</sup></p> <p>Identify technology supports to meet student needs.</p>

As an educator, if you want to:	Consider these strategies:	Your occupational therapy practitioner can collaborate with you to:
Promote friendship and peer interaction	<p>Create a structured, supported buddy system and develop peer-mediated instruction intervention.<sup>2</sup></p> <p>Teach students about inclusion, diversity, neurodiversity, and creating relationships that build on each other's strengths.<sup>9</sup></p> <p>Teach peers strategies to interact successfully with students with ASD (Peer-Mediated Instruction and Intervention).<sup>2</sup></p> <p>Offer opportunities for the student with ASD to build on areas of strength and provide leadership within small groups or classroom activities.</p> <p>Use the student's preferences to create activities and games to incorporate peers into play with the student.<sup>7</sup></p> <p>Develop social stories to ease fears with social situations and improve confidence with conversation.<sup>10</sup></p> <p>Explain complex social rules and the hidden curriculum.<sup>11,12</sup></p> <p>Prevent and/or immediately address bullying.<sup>13</sup></p>	<p>Enhance inclusiveness of the setting.</p> <p>Create games and activities that provide the <i>just right challenge</i> to promote successful social participation.</p> <p>Foster positive peer interaction at recess and in the lunchroom.</p> <p>Identify after-school activities that are a fit for the student.</p> <p>Integrate strategies in a way that works for the classroom systems and culture.</p>
Help a student manage his or her emotions and behavior	<p>Incorporate stress reduction techniques prior to challenging activities (deep breathing, stretching, meditation, yoga, mindfulness).<sup>14,15</sup></p> <p>Support the student's ability to identify and gauge emotions.<sup>16</sup></p> <p>Help the student learn emotional regulation and coping strategies.<sup>17</sup></p>	<p>Integrate tips from the AOTA School Mental Health Toolkit information sheets.</p> <p>Address emotional regulation and identify necessary referrals.</p> <p>Run groups with other educational team members about emotional regulation and conflict resolution.</p>
Improve participation in classroom routines	<p>Establish classroom roles that match the student's strengths.</p> <p>Make classroom routines explicit, visual, and consistent.<sup>2</sup></p> <p>Support executive functions by breaking down classroom routines to create small, explicit steps.</p> <p>Provide Positive Behavior Intervention and Supports to teach and positively reinforce participation.<sup>2</sup></p> <p>Use social narratives to teach routine-oriented skills.</p>	<p>Identify areas of student strength and establish roles for the student.</p> <p>Create antecedent modifications that promote successful participation in routines.<sup>2</sup></p> <p>Implement a cognitive behavioral approach to teach classroom participation.<sup>2,18,19</sup></p> <p>Integrate newly acquired, routine-relevant skills into the classroom routine.</p>
Support and teach executive function skills	<p>Teach a common vocabulary for key skills in the classroom—positively reinforce use of those skills (e.g., “flexible,” “Let’s set a goal,” “What’s your plan?” Let’s make a Plan B”).<sup>20</sup></p> <p>Create a fit between the student's executive function abilities and the task demands, classroom environment, and classroom expectations—this also helps avoid overload.<sup>2</sup></p> <p>Create supports for time management and organization.<sup>2</sup></p> <p>Model problem solving and cognitive flexibility.<sup>2</sup></p> <p>Use Positive Behavior Intervention and Supports to teach and positively reinforce executive function-related skills.<sup>21</sup></p>	<p>Integrate emerging evidence-based curricula to teach executive function skills like cognitive flexibility and problem solving.<sup>18,19,20</sup></p> <p>Create classroom and/or student supports for goal setting, goal-directed persistence, planning, organization, and time management.</p>

## References

1. LaVigna, G., & Willis, T. (2012). The efficacy of positive behavioural support with the most challenging behaviour: The evidence and its implications. *Journal of Intellectual and Developmental Disability*, 37, 185–195.
2. Wong, C., Brock, M. E., Cox, A., Fetting, A., Fleury, V. P., Hume, K., . . . Schultz, T. R. (n.d.). *Evidence-based practices for children, youth, and young adults with autism spectrum disorder*. Retrieved from <http://fpg.unc.edu/sites/fpg.unc.edu/files/resources/reports-and-policy-briefs/2014-EBP-Report.pdf>

## References (cont.)

3. Kossovaki, L., Guldberg, K., & Jones, G. (2012). The effect of adult interactive style on the spontaneous communication of young children with autism at school. *British Journal of Special Education*, 39, 173–184.
4. Wagner, A. L., Wallace, K. S., & Rogers, S. J. (2014). Developmental approaches to treatment of young children with autism spectrum disorder. In J. Tarbox, D. R. Dixon, P. Sturmey, & J. L. Matson (Eds.), *Handbook of early intervention for autism spectrum disorders* (pp. 393–427). New York: Springer-Verlag.
5. Dunst, C. J., Hamby, D. W., & Trivette, C. M. (2012). Meta-analysis of studies incorporating the interests of young children with autism spectrum disorders into early intervention practices. *Autism Research and Treatment*, 2012, 1–10. <http://dx.doi.org/10.1155/2012/462531>
6. Nadel, J., Martini, M., Field, T., Escalona, T., & Lundy, B. L. (2008). Children with autism approach more imitative and playful adults. *Early Child Development and Care*, 178, 461–465.
7. Case-Smith, J., Fristad, M. A., & Weaver, L. L. (2014, January 29). A systematic review of sensory processing interventions for children with autism spectrum disorders. *Autism*. <http://dx.doi.org/10.1177/1362361313517762>
8. CAST. (2011). *Universal Design for Learning Guidelines version 2.0*. Wakefield, MA: Author.
9. Maich, K., & Belcher, E. C. (2011, October 24). Using picture books to create peer awareness about autism spectrum disorders in the inclusive classroom. *Intervention in School and Clinic*, 206–213. <http://dx.doi.org/10.1177/1053451211424600>
10. Kokina, A., & Kern, L. (2010). Social Story™ interventions for students with autism spectrum disorders: A meta-analysis. *Journal of Autism and Developmental Disorders*, 40, 812–826.
11. Smith Myles, B. (2014). Making sense of the hidden curriculum. Retrieved from <http://www.education.com/reference/article/hidden-curriculum-school-asperger/>
12. Smith Myles, B., Trautman, M., & Schelvan, R. L. (2004). *Asperger syndrome and the hidden curriculum*. Shawnee Mission, KS: Autism Asperger Publishing Company.
13. Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: a systematic and meta-analytic review. *Journal of Experimental Criminology*, 7(1), 27–56.
14. Singh, N. N., Lancioni, G. E., Manikam, R., Winton, A. S. W., Singh, A. N. A., Singh, J., & Singh, A. D. A. (2011). A mindfulness-based strategy for self-management of aggressive behavior in adolescents with autism. *Research in Autism Spectrum Disorders*, 5, 1153–1158. <http://dx.doi.org/10.1016/j.rasd.2010.12.012>
15. Koenig, K. P., Buckley-Reen, A., & Garg, S. (2012). Efficacy of the get ready to learn yoga program among children with autism spectrum disorders: A pretest–posttest control group design. *American Journal of Occupational Therapy*, 66, 538–546. <http://dx.doi.org/10.5014/ajot.2012.004390>
16. Samson, A. C., Gross, J. J., Hardan, A. Y., Phillips, J. M., & Podell, R. W. (2015). Emotion regulation in children and adolescents with autism spectrum disorder. *Autism Research*, 8(1), 9–18.
17. Scarpa, A., & Reyes, N. M. (2011). Improving emotion regulation with CBT in young children with high functioning autism spectrum disorders: A pilot study. *Behavioral and Cognitive Psychotherapy*, 39, 495–500.
18. Rodger, S., & Bradenburg, J. (2009). Cognitive orientation to (daily) occupational performance (CO-OP) with children with Asperger’s syndrome who have motor-based occupational performance goals. *Australian Occupational Therapy Journal*, 56(1), 41–50. <http://dx.doi.org/10.1111/j.1440-1630.2008.00739>
19. Rodger, S., Ireland, S., & Vun, M. (2008). Can cognitive orientation to daily occupational performance (CO-OP) help children with Asperger’s syndrome to master social and organisational goals? *British Journal of Occupational Therapy*, 71(1), 23–32.
20. Kenworthy, L., Gutermuth A., L., Alexander, K. C., Bal, E., Cannon, L., Luong-Tran, C., ... Willis, M. C. (2015). Randomized controlled effectiveness trial of executive function intervention for children on the autism spectrum. *Journal of Child Psychology and Psychiatry*, 55, 374–383.
21. National Autism Center. (2009). *Evidence-based practice and autism in the schools: A guide to providing appropriate interventions to students with autism spectrum disorders*. Retrieved from [www.nationalautismcenter.org/resources/](http://www.nationalautismcenter.org/resources/)

This information was prepared by Katie C Alexander, MS, OTR/L and Heather Miller Kuhaneck, PhD, OTR/L, FAOTA, with contributions from AOTA 2015 Autism Workgroup.

Occupational therapy is a skilled health, rehabilitation, and educational service that helps people across the lifespan participate in the things they want and need to do through the therapeutic use of everyday activities (occupations).

Copyright © 2015 by the American Occupational Therapy Association. This material may be copied and distributed for personal or educational uses without written consent. For all other uses, contact [copyright@aota.org](mailto:copyright@aota.org).