

autism at-a-glance

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Autism at-a-Glance is a publication of the Center on Secondary Education for Students with ASD (CSESA).



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Promoting Literacy Outside the School Environment

Autism at-a-Glance is a series of practitioner and family-friendly documents created by the Center on Secondary Education for Students with ASD (CSESA) designed for high school staff members supporting students on the autism spectrum, as well as family members of adolescents with ASD. The purpose of the *Autism at-a-Glance* series is to provide a current summary of topics relevant to high school students with ASD as well as practical tips and resources for school and community personnel and family members.

This *Autism at-a-Glance* was designed to support parents and other family members in supporting adolescents on the autism spectrum as they develop their literacy at home and in the community.



According to the National Assessment of Educational Progress, only 37% of 4th to 12th grade students in the US have achieved proficiency in reading. For the other 63% of students who still struggle in some way with literacy, there are negative impacts on future academic success. Literacy not only affects one's ability to read books, but also plays a hand in a wide range of both school-related subjects like science, history, and math, as well as areas of life outside of the classroom. Adults who do not have fully developed literacy skills will likely have limitations on how fully they participate in the workforce, manage healthcare, investments, and taxes, as well as many other aspects of daily life.

Beyond these implications, increased ability to read and comprehend text has been shown to result in improved vocabulary and general understanding of language. This enhanced development of skills is especially important for students with ASD, who may struggle with verbal and social communication.

Compared to their peers, students with ASD tend to develop reading skills at a slower pace, and many experience challenges with deep comprehension of reading material despite showing aptitude for individual word decoding and sight word recognition. Research suggests this may be due to the



Literacy Development Tips

challenges that social communication and oral language comprehension pose for many individuals with ASD, and these difficulties have been linked to academic performance in areas related to literacy, such as syntax, vocabulary, narrative, and inferencing skills. Additional diagnoses that often accompany autism, such as ADHD, can also play a part in struggling literacy levels in students with ASD.

Written language can be especially beneficial for students on the autism spectrum because with reading, they are able to control the amount of information they take in at one time and can reread as needed. This makes reading and writing a potentially less stressful means of interaction than spoken language that they can utilize when they want/need to.

Overall, improved literacy skills better prepare students with ASD for situations that demand comprehension of written text and/or verbal interactions, making them important skills to promote and encourage beyond just what is included in school curriculum.

Literacy Development Tips

Due to differences in cognitive and social development, adolescents with ASD may not learn as effectively with traditional teaching methods as their peers do. For this reason, special attention should be paid to the teaching and learning strategies used with these individuals outside of school to promote educational success. Here are some strategies

designed specifically to facilitate literacy skill development in adolescents with ASD that can be used at home.

Take Advantage of Existing Interests

Provide your teen with books that are about things in which they have already shown interest in (e.g. American history, types of cars, space exploration). This will provide internal motivation for them to read, which can be expanded upon later into a wider range of topics. You can also provide choices between multiple options of reading material, so that your teen feels engaged in the activity.

Activate Prior Knowledge and Build Background Information Before Reading

Often students with ASD are not as familiar with in-school and out-of-school activities (e.g., recreational activities, sports teams, clubs) as their peers, and may have more limited topics of interest, which leads to a less extensive store of background knowledge related a broad variety of topics and themes. For reading material covering topics in which your teen does not already have an established interest, it can be beneficial for successful comprehension to expose them to an overview of the chosen subject before diving into the text.

An example of this would be watching an educational YouTube video on the subject prior to reading. Being equipped in advance with this relevant background knowledge gives your teen material to connect new information to while reading the text to help make inferences that fill in gaps in the text and contribute to



higher level understanding.

Use Visuals

Ensure the literacy resources used with your teen have a balanced ratio of pictures and illustrations to text, as research has shown that many students benefit from visual supports. Coupling images with the words on a page can result in higher levels of retention.

Use graphic organizers with them at home when they are reading both narrative and content area texts. The Florida Center for Reading Research has some excellent, free online resources that can be adapted for any age, visit the Resources section at the end of this document to access these.

Balance Task Difficulty

Students with ASD will not want to return to an activity that triggers feelings of frustration or insecurity that may be caused by too much exposure to upper level reading materials too quickly. To avoid this frustration, balance higher level reading tasks, such as books that require readers to have a wider range of vocabulary and background knowledge, with lower level reading tasks, such as comic books or computer games that may have more visuals than other literacy tasks. Building upon success and enjoyment of reading lower level materials may challenge them to persevere and read at the higher level.

Utilize All Available Resources

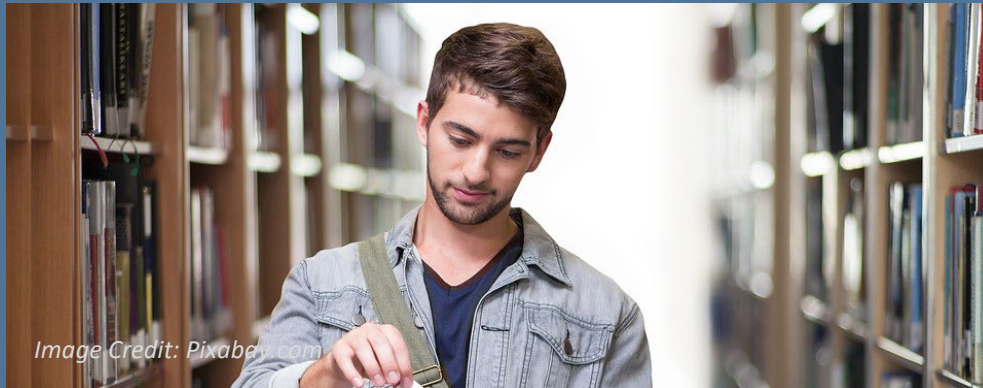
Do not limit your literacy resources to books. You can help to ensure continued interest in reading by using a variety of material such as:

- educational computer games
- word-based board games
- comic books
- magazines
- newspapers
- park or restaurant signs
- online content on topics of interest

Try to incorporate literacy into activities that are a part of your teen's everyday routines (e.g., reading through the lyrics of their favorite song) to improve their operational understanding of literacy. This way, they are exposed to literacy practices more often, and in contexts that are more generalizable to real world situations.

Each type of material varies in difficulty, so make sure to choose resources that are of an appropriate difficulty level for your teen.





Read Aloud & Think Aloud

Research shows that students with ASD benefit from watching and using other individuals as a model for the behavior they want to perform. In this way, reading aloud with your teen supports their fluency development and helps them to learn with material that they might not have been able to comprehend on their own due to reading level restrictions. Reading aloud to a student with ASD can also help them understand how to use expression and tone to convey meaning in a way that they might not have been able to pick up on otherwise. By hearing and watching you speak the words on the page, they are exposed to examples of the types of volume and facial expressions that are appropriate for each situation.

While you are reading to your teen, make sure to pause periodically to explain the thought processes that you are using to understand the text. Encourage them to follow your example when it is their turn to read. This could be in the form of relating the content to personal experiences or making inferences by linking together different parts of the story or connecting something in the story to their background knowledge. This practice of “thinking aloud” has been shown to play a positive role in reading comprehension development in students with learning challenges like ASD.

Ask Questions, Reread, & Retell

Pausing to ask questions during the reading can increase both comprehension and retention of the reading material. You can ask different questions

based on the kind of material your teen is interacting with at the time. With a fictional story about specific characters, a good question to facilitate emotional comprehension might be “How do you think ____ is feeling about ____?” Try to ask questions that require some degree of inference generation, so that your teen can hone skills like drawing from personal experience and knowledge. You can also ask general questions like “What do you think about the story so far?” to give your teen an opportunity to express their own thoughts and feelings about what they have read. Additionally, ask your teen to pose their own questions about the text. You can start with concrete questions about the “who, what, when and where” of a text, and then move into more difficult questions asking, “why and how.”

Multiple readings of stories or texts allow for deeper engagement with the text with each reading. You can set a different purpose for each reading and vary the types of questions you ask each time. For example, one read-through can focus on just understanding the basic plot of a story, while the next can focus on the causes and consequences of the characters’ actions.

You can also facilitate comprehension by having your teen retell the story once they are finished reading it the first time. This enables them to gain a better grasp of the plotline and themes within the story. Depending on your teen’s current reading level, it may be helpful/necessary for you to prepare visual cues, like a plot diagram, for them to use to successfully retell the story in chronological order.



Encourage Your Teen

Positive reinforcement is a method of encouragement that involves rewarding someone when they exhibit behaviors that you want to increase. It has been proven to be effective from early childhood all the way into adulthood. You can use this positive reinforcement with your teen to motivate them to read more often in the future. However; try to avoid using tangible rewards such as food or money, as these are only external motivators, and the long-term goal is for your teen to enjoy reading and have genuine desire to read. Instead, try using encouraging words of praise, like “Good job!” or pointing out how much they have learned about a topic to make them feel proud of what they have accomplished, and want to accomplish more.

For more information about providing reinforcement, please check out *Reinforcement* from the Autism Focused Intervention Resources and Modules at afirm.fpg.unc.edu.



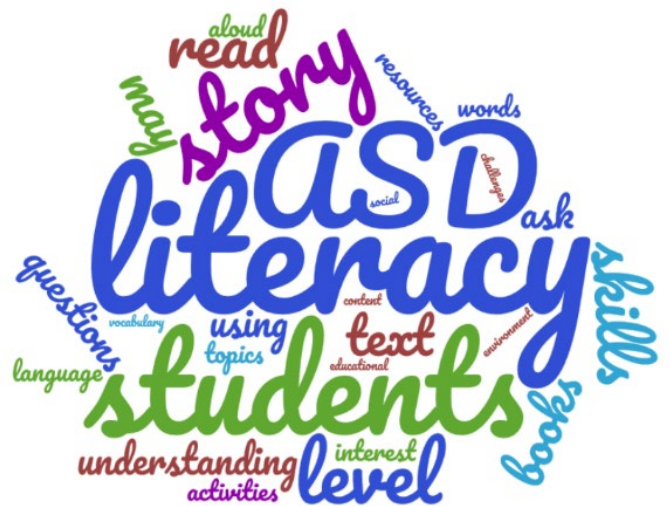
Autism Focused Intervention
Resources & Modules



Staying on-task?

If your teen is having trouble staying on task during activities involving literacy, try:

- Checking to be sure that the environment in which they are reading is not too distracting. A distracting environment may be an environment that is too noisy, consists of moving objects, has strange smells, etc.
- Allowing your teen to interact with the reading, whether this be through pointing, drawing or highlighting on/near specific words or phrases.
- Consider having your teen act out a story with you. This allows for movement and can deepen their understanding of a story plot and character interactions.



Resources

Literacy Games

Bank Street College of Education. (1997). Six Games for Reading. Retrieved from <http://www.readingrockets.org/article/six-games-reading>

Educational Literacy Apps

Common Sense Education. (n.d.). Elementary School Reading Apps and Websites. Retrieved from <https://www.commonsense.org/education/top-picks/elementary-school-reading-apps-and-websites>

Reading Questions

Cam Everlands Primary School. (n.d.). Questions to ask your teen when you read together. Retrieved from <http://www.cameverlands.org.uk/questions-to-ask-your-child-when-you-read-together/>

AFIRM Module: Reinforcement

Sam, A., & AFIRM Team. (2015). *Reinforcement*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://afirm.fpg.unc.edu/reinforcement>

AFIRM Module: Visual Supports

Sam, A., & AFIRM Team. (2015). *Visual supports*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://afirm.fpg.unc.edu/visual-supports>

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The Nation's Report Card. (2017) How did US students perform on the most recent assessments? Retrieved October 29th, 2018, from <https://www.nationsreportcard.gov/>



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