



Tips for Science Teachers Working with Students with Autism

Having students with High Functioning Autism (HFA) in your science classes has its advantages and challenges. These tips can help make the experience better for both your students and you.

Advantages for students with HFA:

- **Labs:** Procedures and rules provide comfort to many students with HFA who become anxious without routine. Having clear guidelines and protocols that are followed during each lab will provide them comfort during lab time and allow them to excel often better than typical learners. These students are more likely to stick to the protocols.
- **Lab roles:** Information gatherer, protocol checker, measurer, and time keeper are roles that students with HFA will do exceedingly well. Their self-esteem and confidence will build when you assign them these roles.
- **Factual Writing:** These students are concrete/literal thinkers and will do better sticking to the facts and what they have observed from their perspective.

Challenges for students with HFA:

- **Group work:** Social situations are very challenging because they often have a difficult time taking the perspective of others. Having roles helps clarify what they are supposed to do in the group. Social time also means conversations with others. Try practicing scenarios to help guide them with appropriate conversations during lab time
- **Question/Answer/Review sessions:** Set Limits. Often, students want to prove they “know it all” which can be slightly off-putting for the rest of the class. Allowing them to have ‘three talking turns that last 30 seconds each per review session will give them the rule and then they will not dominate the conversation.
- **Writing:** Writing in a way that helps the reader understand what they observed requires taking the perspective of the reader. This will often be difficult. If you explain that they will be helping someone who doesn’t understand the experiment, they will often write to be the expert. Creative Writing is frequently challenging because these students like concrete thoughts. It is very difficult to have “create a story/imagine you were a plant and going through the water cycle” type questions. They will often get stuck on even where to start on this. Instead, provide concept maps and clear choices, vocab lists, etc. that they can build from.
- **Reading textbooks and worksheets:** Reading lots of words and no images or diagrams is hard for visual learners to engage and gather information from. Instead chose options with pictures, graphs, and other visual cues. Also, worksheets that have clear answer spaces and flow charts frequently help.
- **Executive function:** Have clearly marked parts of the binder for homework to do, homework to turn in, notes, review guides, etc. because organization is frequently a challenge.

Excerpted from “Solving the Autism Puzzle Piece by Piece: Strategies for Teachers and Parents, Bruno & Pontello