

Strengths

What are some common strengths of people on the autism spectrum?

The autism spectrum is widely diverse and encompasses many different strengths. Common areas of strong ability include:

- **Math:** Students may excel in arithmetic calculations and higher orders levels of math far beyond grade level. Often, while a student may have a great strength in mathematics, they may not be able to tell a teacher how they arrived at their answer. For these situations, it might be important to relax the requirement of having to show one's work if it is clear the students is getting the right answer. It's fine to spend some time teaching the student how to show their work but there is a point where it presents an unnecessary barrier to success and causes undue frustration.
- **Science:** A few of the many possibilities include astronomy, Earth sciences, natural history, electricity, etc. For example, I remember in middle school answering the questions following various lab experiments. However, having my own chemistry set and being well-read on the subject, I knew the answers without having to go through the experimental procedures. As a result, I finished the curriculum far ahead of my classmates.

What are some things teachers might see in the classroom that are demonstrations of their students strengths?

Some examples include finishing units of work much faster than their classmates or going further in depth in a subject than would be expected at their grade level. Students asking questions examine concepts behind an area of study beyond what would be expected at their grade level is another suggestion that this might be an area of strength.

What are some general suggestions for incorporating these strengths into a) subject matter, b) routines, and c) supporting social relationships?

- **Subject matter:** Enriching the curriculum for the person with autism having a specific strength in a particular area often works well. For example, since I finished my science labs in middle school much faster than anyone else, the science teacher found some more advanced work for me to do.
- **Routines:** Students on the autism spectrum are often great at following the rules - to the proverbial letter! While this can be helpful in ensuring classmates adhere to rules, it's important that the person with autism does not become the class "policeman" or "lawyer."
- **Supporting social relationships:** In the science class mentioned earlier, the teacher paired me with another student who had also quickly finished his labs to work as partners in completing the more advanced work. Thinking back, this student possibly had autism as well. Another possibility is to appoint that advanced student as a sort of lab assistant to help other students. Both of these suggestions can help with social interaction.

Interests

What are some common interests of people on the autism spectrum?

Whether a person has autism or not, interests tend to be tied to strengths. For example, the student interested in earthquake may have a strength in understanding geology. Similarly for computers, chemistry, and other subjects. Another common interest is trains and public transportation systems in general.

What are some things teacher might see in the classroom that could help them identify their students' interests?

In general, if given the chance, all students tend to spend more time on things they like rather than what they dislike. For example, the student who enjoys math and science will be more eager to engage in these subjects than the others such as social studies. If astronomy had been offered in elementary school, I would have eagerly taken to this subject and excelled, which contrasts to my being almost a grade behind in most of my subject at that time.

What are some general suggestions for incorporating student' special interests into a) subject matter, b) routines, and c) supporting social relationships?

Working special interests into school activities may require creativity on the part of the teacher and can be fun. For the student who has a special interest in aviation, the airplanes can be employed to introduce subject matter. For example there's plenty of mathematics involved in calculating distances, speeds, amount of time, etc., when considering flight paths of airplanes. Where an airplane lands can be used to introduce subject related to social studies. Similarly, comparing the need for careful scheduling of flights or maintenance of airplanes can be compared to the scheduling of the day, week, or other period of time for the student. Finally, this interest could be used as a topic of conversation - in moderation of course - in developing social interactions with others. For example, a protocol could be developed where one talks about their interests (in aviation) for a few minutes before handing over control of the subject matter to the other person by talking about their interest.

What should teachers do when a student thinks and/or talks about his/her interest so much that it distracts from his/her classwork?

Should an interest be interfering with classwork, it will be important to schedule times when it is appropriate to talk about the interest and when the student needs to be doing something else. The schedule can be word or picture based, or even a combination of the two. Perhaps even color-coding could be used. Another possibility is exploring a related interest that more closely or even directly coincides with an area of curriculum being taught to a class.

How can teachers help to broaden students' interests, especial when their inters are high focused/narrow?

Suppose a student is fascinated with train schedules to the exclusion of other activities or topics of conversation. This interest can be used as a jumping off point where, after a short time of discussion schedules, other questions can be introduced as "excursions" from the central topic of train schedules. Some possible "excursions" can include characteristics of various stations, time it takes to get between stations, the history of particular stations, what employment opportunities exist getting the train from one place to another, etc. Some students may become overwhelmed with anxiety when these conversation excursions become too long, so it may be necessary to return to the central topic of interest periodically. However, the time spend on these peripheral topics can slowly be increased and may even generate new areas of interests and tap unknown areas of strength.

How can teachers address the issue of peers finding a student's interest age-inappropriate or "babyish"?

One part of addressing this issue might be to have a classwide discussion of each classmate's interest, focusing on the idea that there are wide variations of interests between students. Along with this class-wide discussion, it may be necessary to schedule time for some students when it is appropriate to engage in topics of interest that are dramatically different from those of their peers. Additionally, taking conversational "excursions" related to that interest may be helpful in discovering other, more age-appropriate interests. For example, a teenager fascinated with Thomas the Tank Engine maybe redirected by exploring real trains at the local train station.

How can school teams address the issue of families not wanting their child's special interest to be encouraged at school?

Very often it is a special interest that directly correlates to an individuals' success later in life. For example, my early - and still present - fascination with airplanes is now helpful for planning the sometimes very complicated travel itineraries I undertake when traveling around the world talking about autism. My interest in bicycles led to making friends interested in the same subject and earning money to pay for college as a bicycle mechanic. My interest in music led to degrees in the subject and a 5 years of employment as a professor of music. My current fascination with autism has led to my teaching of the subject as a professor at Adelphi University and visiting countries scattered over six continents consulting and presenting on the subject.

How can teachers both use students' strengths and interests, and also address their areas of difficulty?

Addressing challenges begins with taking an inventory of a student's likes and dislikes, which usually correlated to strengths and challenges. People tend to prefer what they are good at and avoid areas of challenge (often referred to as “weaknesses”). I choose the word "challenge" over weakness as the latter has too many negative connotations whereas the former suggestion that this may be an area that can be overcome, worked around, through, or accommodated for. After taking this inventory, it is important to find at least one strengths to accommodate for a challenge. For example, the student who is good at computers might type his or her responses to a test rather than writing them out by hand if there are motor and proprioceptive conditions leading to a challenge in the physical act of writing.

How could a student's strengths and interests be used to address challenging behaviors?

Depending on the nature of the challenging behavior, it maybe possible to incorporate a strength/ interests into an area of curriculum that is particularly difficult or frustrating for a student. For example, for the individual on the autism spectrum who is fascinated with geology, the topic of rock formation, earthquakes, or other geological events can be tied into history, mathematics, or other area of curriculum. Doing so makes that area of study intrinsically rewarding and works better then promising time with a special interest as a reward for getting through a particular area of difficulty.