Meeting the Common Core State Standards for Students With Autism

The Challenge for Educators

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How can we ensure that students with autism spectrum disorders have access to the curriculum that is provided to all students?

The current reauthorization of the Elementary and Secondary Education Act will require students across the nation, including students with disabilities, to meet the Common Core State Standards (CCSS), a set of grade-level expectations. These rigorous standards define what students should know and be able to do to be ready for college and careers (Common Core State Standards Initiative, 2010). As of September 2012, 45 states had adopted these standards, which the National Governors Association of the Consor-
tium of Chief State School Officers developed. Although the CCSS present expectations of what educators should teach, the CCSS allow school districts and educators to decide how they should teach the content, skills, and processes needed to help students reach these high expectations. School districts throughout the country are focusing their energies on aligning their educational programs to the CCSS.

Aligning educational programs for students with disabilities to these high standards will challenge the general and special educators who support these students. All educators who work with students with disabilities need to consider specifically how the students’ disabilities affect the students’ involvement and progress in the general curriculum. Scholarly articles have furnished some guidance on the support and accommodations needed for specific populations of students with disabilities, such as students with significant cognitive disabilities (Clayton, Burdge, Denham, Kleinert, & Kearns, 2006) and visual impairments (Lohmeier, 2009). This article expands the knowledge base by exploring the particular challenges that the CCSS English Language Arts standards will present to students on the autism spectrum, given the nature of the disability.

**Psychological Theories of Autism**

Three psychological theories explain some of the characteristics of autism: (a) delayed theory of mind (Baron-Cohen, 1995), (b) weak central coherence (Frith & Happe, 1994), and (c) impaired executive function (National Research Council, 2001). Understanding these theories may help teachers and parents better address the needs of this group as they relate to the new CCSS.

**Lack of Theory of Mind**

Theory of mind (ToM) is the ability to recognize and understand the thoughts, feelings, beliefs, and intentions of other people. Students with strong ToM know that other people have thoughts that differ from their own and understand that they need to consider these differences during all social interactions. Another term for weak ToM is “mind blindness,” which is difficulty “putting oneself in another person’s shoes” (Baron-Cohen, 1995). Individuals with autism spectrum disorders (ASD) often find it challenging to understand the nonverbal cues (facial expression, gestures, and body language) that indicate another person’s thoughts, feelings, intentions and beliefs; or they may misinterpret those cues and respond very differently than one might expect.

For example, consider the case of Charlie, a seventh grader with autism. Sometimes when another student looked at Charlie to determine whether he needed help with his writing assignment, Charlie misinterpreted his peer’s concerned facial expression and became upset because the other child was looking at him in a way that he perceived as a threat. The CCSS consider this lack of social awareness about the feelings of others not only in the English language arts standards but also in content standards in such other areas as science and mathematics.

This weak ToM also manifests when individuals with ASD do not understand how their actions or behaviors affect others or how they relate to how others perceive them. This deficit has implications not only in social interactions but also for instruction in content areas that may ask students to interpret within text the thoughts, feelings, and intentions of characters. Understanding how and why a character behaves in a certain way is critical for accurate comprehension and written narrative related to story text.

**Weak Central Coherence**

Another factor to consider, which relates to the new CCSS for students with ASD, is the potential complications that result from weak central coherence. A student with strong central coherence has the ability to see the big picture from a collective set of details. Children with ASD can be remarkably good at attending to detail but appear to have considerable difficulty perceiving and understanding the overall picture or gist of something (Frith & Happe, 1994).

**Example: Sarah.** When Sarah, a third-grade student with Asperger’s syndrome read a novel set in the 1800s about a family traveling across the country in a horse-drawn covered wagon, she focused all her attention on the horse. Because of her passion for horses, she wanted to know and read about all the attributes of the animal. This intense interest and focus on the horses, which was only a small part of
the story, rendered Sarah unable to understand the overall theme.

Example: José. José, a fifth grader with autism, read a book about pirates and their journey on boats in the Caribbean. His extreme fear of sharks made him unable to concentrate on the content of the novel and instead focused all his attention on finding more information about sharks.

The result of this concentrated focus on details is that students have much difficulty assimilating information, discovering meaning, and comprehending information. Because the new CCSS challenge teachers to promote higher level thinking and comprehension, aspects unique to students with ASD should be at the forefront. For example, some students with autism may have a large vocabulary but fail to understand simple comments or directions (Lord & Rhea, 1997). Other students with ASD demonstrate strength in word decoding and are able to do so quite easily yet experience great challenges in comprehension.

Impaired Executive Function

With adoption of the new CCSS in English language arts for children with ASD, educators also need to recognize potential deficits in executive functioning. The National Research Council (2001) found that students with ASD who have executive functioning issues struggle with organization and planning, working memory, inhibition control, impulse control, time management, prioritizing, and using new strategies. Students with ASD exhibit these issues with difficulty initiating their work, staying on task, and being able to organize themselves. For older students, long-term assignments and projects prove to be difficult because planning, prioritizing, and recognizing the length of project sections are all areas of weakness. Frith (2008) noted that individuals with “executive functioning differences” have trouble generating and manipulating ideas; this difficulty may be an issue with the new CCSS. Students with ASD may have difficulty integrating new information, situations, or rules with existing concepts and knowledge, especially in times of stress. Therefore, while introducing the new CCSS, general and special education teachers need to attempt to reduce stress; provide structure for students; and remember the potential limitations of ToM and central coherence, as well as how executive function might affect the learning of students with ASD.

Implications of These Characteristics for the CCSS

Reading

As a result of the potential areas of difficulty for students with ASD, the academic aspects of the CCSS may intertwine for this population. Classroom teachers must understand how these difficulties appear in relation to English language arts. For example, CCSS: Reading Literature K.3 indicates that students in kindergarten should identify characters, settings, and major events in a story with prompting and support. Some young children with ASD are able to answer simple who, what, and where questions because this information is concrete; and students read picture books that offer additional cues. Questions that ask why and how can be much more difficult. By second grade, the CCSS indicate that students should be able to describe how characters in a story respond to major events and challenges (CCSS: Reading Literature 2.3). This theme of examining and understanding character traits and how a character’s actions propel a story requires strong ToM. Because many students with ASD struggle with ToM, they may be unable to describe the mental state of the characters or may be unable to imagine how a character feels and thinks. These problems may challenge teachers while they implement the new standards. Because individuals with ASD do not understand how actions affect other people, they may have great difficulty trying to determine why a character responds to an event in a certain way. Challenges in this area may also prevent students from being able to predict the behavior of the characters in a story.

In addition, deficits of central coherence and executive function may cause students with ASD to have difficulty paying attention to the relevant parts of the story, although they can pay attention to unimportant details. Many students in the general education classroom can easily pick out the characters, setting, and major events in the story; however, students with ASD may struggle. Some of them read every word of text at the same priority level and are unable to recognize the important sections and words that may offer clues. Others cannot build relationships among words or see connections. This difficulty leads to inability to see how words connect to form a cohesive whole. As students move to higher grades, the demand for students to integrate information for multiple purposes becomes more challenging.

Example: Charlotte. Charlotte, a child with ASD who was in second grade, was able to read and decode words in the second-grade-level story that her language arts group was reading. She was able to name the characters in the story; however, when the teacher asked how the characters responded to events in the story, she became very anxious, stammered, and often gave an answer that did not relate to the story. Because of her ToM and central coherence challenges, she had no idea how the words that she read related to one another and to the story line. She also did not understand the characters’ thoughts, feelings, and intentions (CCSS: Reading Literature 2.3). Hence, she struggled to meet the CCSS at her grade level. Charlotte’s teacher looked for ways to address her ToM and central coherence challenges. The teacher considered cognitive behavioral strategies such as social narratives (Wragge, 2011). Charlotte’s teacher hoped that a social narrative strategy could help her learn about the thoughts and feeling of others. Specifically, the teacher decided to use Social Stories (Gray, 2000), a type of social narrative strategy that teaches social skills by describing a situation, skill, or concept in a way that a child can easily understand and that includes relevant social cues, perspectives, and
common responses in a specifically defined style and format. Educators can use a Social Story to explain a social experience in literature to clarify characters’ perspectives, intentions, and beliefs.

Charlotte’s teacher created a Social Story to teach Charlotte the characters’ thoughts, feelings, and intentions (see box, “A Social Story About Gina and Maria” for the Social Story that Charlotte’s teacher created). She used the Social Story to teach Charlotte social understanding of a scene in a book that she was reading about two girls, Maria and Gina. The scene implies that Gina did not tell Maria that she did not like Maria’s shoes because she did not want to hurt Maria’s feelings. Descriptive, perspective, and directive sentences are essential components of a Social Story. To help Charlotte understand the characters’ perspectives and intentions (directive), Charlotte’s teacher included answers to such questions as “Why didn’t Maria just say what she thought?” and “What will the character say instead?” within the Social Story. In this Social Story, Charlotte’s teacher described the key social events in the story (descriptive), explained how the characters were feeling, and emphasized text and picture cues that depicted these emotional states (perspective).

Example: Stephen. Another example of how the CCSS in English language arts and difficulties with executive functioning, ToM, and central coherence can affect students with ASD is the case of Stephen, an eighth-grade student with Asperger’s syndrome. His class read a book about a young boy named Matt. The book describes Matt as a socially awkward child who lacks friends at school and whose peers often bully him and ostracize him. One day, he stops coming to school. As the days go by, everyone at his school notices that he is no longer present. When the teacher asked Stephen why Matt no longer went to school, Stephen had absolutely no idea. Most of the other students in the class were able to express ideas about why Matt was not in school, but Stephen was unable to view the situation from Matt’s perspective. Stephen’s teacher therefore knew that he was not meeting the CCSS: Reading Literature 8.3, which states that students should be able to analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.

To help Stephen understand the story, his teacher decided to use another type of social narrative, a Comic Strip Conversation (Gray, 1994), because this type of social narrative could assist Stephen in understanding the thoughts and feelings of the characters through the use of illustrations. This strategy could help him comprehend how and why characters in stories respond to major events and challenges, as well as how particular lines of dialogue or incidents in a story or drama propel the actions, reveal aspects of a character, or provoke a decision. To use this strategy, Stephen’s teacher enlisted the help of other students in the class to create a comic strip that illustrated the key story conversations and emotional thoughts of the main characters. Thought bubbles indicated the characters’ conversations and emotions. For example, the thought bubble for Matt read “I am a loser. Everyone hates me. I am never going back to school!” This visual depiction of the conversations and thoughts of the characters in the story helped teach Stephen how the actions of Matt’s peers made him feel and act.

Figure 1 shows the comic strip conversation that Stephen’s teacher used to help him understand Matt’s feelings.

**Speaking and Listening**

The new CCSS also emphasizes speaking and listening, so educators need to consider the needs of students with ASD in these areas. For example, the CCSS expects kindergarten students to be able to ask and answer questions to seek help, obtain information, or clarify what they do not understand (CCSS: Speaking and Listening K.3). Many children with ASD do not ask questions or seek help from others. Because of the ToM deficit, children with ASD may not understand that others have information that can be useful to them unless someone explicitly teaches them. One of the communication characteristics of ASD is “marked impairment in the ability to initiate [emphasis added] or sustain a conversation with others.” (American Psychiatric Association, 2000, p. 75). Children with autism may respond to questions but have more difficulty spontaneously initiating questions. The speaking and listening standards become more complex in higher grades. By second grade, students should be able to ask and answer questions about what a speaker says (CCSS: Speaking and Listening 2.3); and by fifth grade, students should be able to summarize the points that a speaker makes (CCSS: Speaking and Listening 5.3). Teachers need to think carefully about each student’s ability to speak and listen, and they also need to consider the characteristics of students with ASD that relate to this area of emphasis in the CCSS.

**A Social Story About Gina and Maria**

Maria and Gina are best friends. They spend all their time together. One day, Maria came to school with shoes that were hot pink with orange stripes and purple bows. Gina thought that they were the ugliest shoes that she had ever seen. She did not want to hurt Maria’s feelings, so she just said “Oh, Maria, you got new shoes. Where did you get them?” Sometimes, it is important to not say what you are really thinking so that you do not hurt other people’s feelings.
For example, during journal time, John, a child with autism who was in kindergarten, chose to write about frogs, a topic that interested him. While John was writing, his pencil broke. John rummaged through his desk to find another pencil but quickly discovered that he did not have one. He became very anxious and muttered under his breath that he was stupid for not having another pencil. This very bright, high-functioning child did not have the social and communication skill to raise his hand and ask his teacher for a pencil because he did not realize that his teacher could help him by providing another one (CCSS: Speaking and Listening K.3).

Naturalistic intervention (Franzone, 2010) and peer-mediated instruction and intervention (Neitzel, Boyd, Odom, & Edmondson Pretzel, 2008) were strategies that John’s teacher used in teaching him to ask for help. Naturalistic interventions focus on teaching skills within the context of daily routines and activities and use a child’s interests to motivate him or her to produce the target behavior.

In John’s case, the team identified the target behaviors of raising his hand, waiting for the teacher to call on him, and asking for help. Because of John’s interest in frogs, the teacher attached a small card with a picture of frogs and the word “help” to the corner of his desk. The card, his journal, and his pencil were the only items on the desk. The teacher arranged the environment to elicit the target behavior. She taught John through modeling and guided practice to hold up the card, wait until an adult acknowledged him, and ask for help when he needed it. To foster generalization of the skills, she taught him this strategy within and across content areas.

John’s teacher also chose peer-mediated instruction and intervention (PMII) to teach John to ask a peer for help because of the strong empirical base of this strategy for students with ASD (Neitzel et al., 2008). The teacher selected classmates who exhibited good language and social skills and who interacted positively with others. John’s teacher used role play to teach the peers to identify the behaviors that John demonstrated when he needed help. The peers then practiced prompting John to use his help card for assistance. When they were comfortable with the strategies, the peers implemented them to support and instruct John. Consistent with PMII, the teacher provided continuous feedback and reinforcement to John’s peers to ensure fidelity. This combination of strategies not only provided John with the skills to ask for help but also allowed him to master the standard for Speaking and Listening K.3 in the CCSS.

**Writing**

The new CCSS also emphasizes written expression as a part of the English language arts standards. Teachers of children with ASD need to consider how written expression expectations change over the grade levels. For example, the standards expect kindergarten students to learn to use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events; to tell about the events in the order in which they occurred; and to provide a reaction to what happened (CCSS: Writing K.3). This theme continues through the grades, with the demands becoming more complex. By 11th grade, the standards expect students to write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences (CCSS: Writing 11-12.3).

Because of executive functioning challenges, many students with ASD have trouble initiating the writing task or generating ideas independently. The writing standards are likely to be very difficult for students with ASD, who have difficulty retaining information while applying information (e.g., remembering parts of a story while writing). Students with ASD often struggle to communicate the details of a story (while they are telling it ver-
bally or in writing) in an organized, sequential manner while simultaneously monitoring the story that they are sharing. Some students with ASD are not able to be mindful of the part, the goal, or the completed project and thus have great difficulty completing a project. Additionally, competing interests distract them. Students often appear to be noncompliant with writing tasks; however, they really may have no idea how to get started, have no idea what to write, or do not know how to ask for help to begin the task.

**Example: Jack.** Jack, a child in fifth grade who had Asperger’s syndrome, was very bright, had an advanced vocabulary, and had highly developed knowledge in geography and meteorology. Jack was socially motivated to keep up with his peers academically. He became very anxious if he noticed that his peers were completing assignments faster than he was, and he also became upset if he received a lower grade on quizzes or tests than his peers. Following a class field trip to a local theater, the teacher asked students to write about the play they had seen by using descriptive details and clear event sequences (CCSS Writing: 5.3). Jack initiated his task by writing his name on the paper. He then looked at his classmates’ papers to see what they were writing. The teacher assistant assigned to work with Jack redirected his attention and told him to start writing. Jack sat and thought and then started to fidget and move around on his chair. He had many sensory tools that he used for keeping himself calm and emotionally regulated. He pulled out his weighted blanket and put it on his lap. He took out a rubber pull toy and manipulated it in an effort to calm himself. He continued to sit. After about 5 minutes, he started to become more and more anxious. Jack kept saying that he did not know what to write. The teacher assistant then sat with Jack and asked him very specific questions about the play, and she helped Jack put the questions and his answers into the format of a graphic organizer. From the graphic organizer that the teacher assistant and Jack made, he was able to complete his writing assignment.

Jack’s teacher and the assistant chose a graphic organizer because it is a visual support that can assist any student in planning paragraphs, pulling important information from content, sequencing ideas or information for writing or answering questions, and sequencing the steps in a job or task (Quill, 1995). This evidence-based practice was exactly the strategy that Jack needed to meet the CCSS 5.3 successfully.

**Example: Cody.** Cody’s teacher shared an example of the complexity of the writing process as students with ASD move up the grade levels. The class had just finished reading a novel about dreams. For the writing assignment about the story, the teacher asked students to write about a personal dream about their future, to indicate why the dream was important to them, and to describe the steps that they needed to take to achieve the dream (CCSS: Writing 11-12.3). Cody, an 11th-grade student with ASD, had a great deal of difficulty generating ideas about his dreams. He shared with his teacher that he did not really like reading the book and did not want to engage in the activity. His teacher decided to sit with him and provide him with visual supports that would show Cody exactly how much writing he needed to do and when he would be finished. The teacher created a graphic organizer to show him specifically what he had to fill in related to the concepts. Because Cody could see the beginning, middle, and end of the task, as well as the framework of what the writing should look like at each step, he complied with the directions. Once again, the strategy that moved the task forward at the same time allowed Cody to meet the new English language arts CCSS.

**Final Thoughts**
To assist teachers of students with ASD in thinking about the CCSS in English language arts in reading literature, speaking and listening, and writing (Common Core State Standards Initiative, 2010), we have provided a sampling of some of the standards that may be especially difficult for students (see Table 1). We have paired these standards with potential evidence-based strategies that teachers may want to consider to address difficulties in ToM, central coherence, or executive functioning. The box “Additional Resources to Explore” suggests further sources of information. The combination of strong strategy instruction that aligns with potential disability issues related to the CCSS can create a win/win situation for students with autism in these new CCSS.

The need to build a bridge between practice techniques and the CCSS is critical for all children, including children with ASD.

**Additional Resources to Explore**
We encourage all teachers to learn more about the CCSS by visiting http://www.corestandards.org/. In addition, while you are identifying your own students’ potential struggles with these standards, consider visiting the National Professional Development Center on Autism Spectrum Disorders web site at www.autismpdc.fpg.unc.edu and the Ohio Center for Autism and Low Incidence web site at www.ocali.org for more evidence-based practice ideas.
initiatives expect all children to be able to meet these college and career standards. If we are to ensure that all students—including students with ASD—achieve these standards, educators must recognize how ASD can affect students’ performance in the general curriculum. Educators must also understand evidence-based strategies that can assist these students in meeting the new CCSS. While these standards move from adoption into practice, teachers of students with ASD can use the information provided about how specific characteristics of students with ASD may affect their performance on the English language arts CCSS. Educators can use the suggested specific evidence-based strategies to assist all students, but these strategies can help students with ASD achieve the same rigorous standards expected of all children.

**References**


| Table 1. Sampling of CCSS, Classroom Behaviors, and Evidence-Based Strategies |
|---------------------------------|---------------------------------|---------------------------------|
| **Sampling of CCSS in ELA**     | **Classroom Behaviors**         | **Evidence-Based Strategy**     |
| Ask and answer questions to seek help, obtain information, or clarify something that is not understood.  
K.3 Speaking and Listening | Student may not be able to initiate asking for help or clarification. May sit and do nothing. May try to escape or avoid the task. | Naturalistic intervention  
Peer-mediated instruction and intervention |
| Describe how characters in a story respond to major events and challenges.  
2.3 Reading Literature | Student may struggle to answer correctly in response to questions about character perspectives and responses. | Social Narratives of Social Stories and Comic Strip Conversations |
| Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.  
5.3 Writing | Student may have difficulty separating fact from fantasy. Student may have difficulty initiating writing tasks or knowing what to write about and be unable to retrieve language needed to write in a sequential organized fashion. | Prompting  
Visual supports |
| Analyze how particular lines of dialogues or incidents in a story or drama propel the actions, reveal aspects of a character, or provoke a decision.  
8.3 Reading: Literature | Students have difficulty determining how dialogue or incidents in a story propel a character’s actions | Social Narratives of Social Stories and Comic Strip Conversations |
| Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.  
11-12.3 Writing | Student may have great difficulty organizing writing with well-structured event sequences and instead may focus on unimportant details. | Visual supports |

**Note.** CCSS = Common Core State Standards; ELA = English language arts.


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