Many students with disabilities use accessibility features and accommodations during instruction and when taking assessments. It is important to consider student perceptions about what works and their preferences when making accessibility and accommodations decisions. Students are often the best source of information about their strengths and needs, and what helps. They have opinions about which accessibility features and accommodations are helpful, as well as whether they like certain tools and would use them.
Students' insights on the usefulness and feasibility of various accessibility features and accommodations should be taken into account when identifying accessibility features and accommodations for instruction and assessment. Decisions are made by individualized education program (IEP) teams and are documented in the student’s IEP. Accommodation decisions made by the team, which may include the student, should be based on the student’s needs, policies, data, and perceptions.

**Accessibility Features and Accommodations Terminology**

Both the Individuals with Disabilities Education Act (IDEA) and the Elementary and Secondary Education Act (ESEA) refer to accommodations. However, a broader approach to accessibility is now often taken that is based on a three-level framework:

- **Universal features** are available to all students as they access instructional or assessment content.
- **Designated features** are available for those students for whom the need has been identified by an informed educator or team of educators.
- **Accommodations** are generally available for students for whom there is documentation on an IEP, Section 504, or English Learner (EL) Plan (Lazarus et al., 2021, p. 6).

The term accessibility features is sometimes used to describe both universal features and designated features. Even though the three-level framework is widely used, the research literature summarized in this Brief typically did not differentiate between the various levels of accessibility. Thus, we do not make that distinction when discussing the research findings.

**Students’ Perceptions**

The National Center on Educational Outcomes (NCEO) synthesized and summarized research on the perceptions of students with disabilities regarding accommodations conducted between 1999 and 2021 (NCEO, 2020, 2021, 2022). Overall, the studies found that students had positive perceptions of accommodations. However, many students had significant concerns about the social stigma of accommodations that were obvious to other students and called attention to their disability. For example, some students had negative perceptions of accommodations that removed them from the general education classroom or required the use of materials or equipment that were readily noticeable to other students (e.g., some types of assistive technology). See Table 1 for research-based findings on student perceptions of selected accommodations.

**Suggested Strategies**

Suggestions for soliciting students' perceptions on accommodations and involving them in advocating for their needs include:

**Talk with students about accessibility and accommodations.** It is important to learn more about how a student perceives their classroom performance and accessibility needs. Information about student perceptions can be gathered by a teacher during discussions with the student. What does a student consider to be their strengths and weaknesses? Did the student perceive an increase in performance resulting from the use of accessibility features or accommodations? The discussion can explore the student’s level of comfort using accommodations. Are they receiving enough practice and support when using accommodations during instruction? Do they feel comfortable using accessibility features and accommodations when taking assessments?

**Involve students in accessibility and accommodations decision making.** Students can provide valuable perspectives about their needs and should, whenever possible, be involved in the accommodations decision-making process. Students should know which accessibility features and accommodations were selected by their IEP team and know the reasons why they were selected. How students are involved can vary greatly depending upon the student's age and characteristics.

Some students, especially older students, have strong opinions about accessibility features and accommodations, and may refuse to use ones that they do not find helpful or do not like. For example, some accessibility features and accommodations are administered individually or in a separate setting (e.g., human read aloud, scribe, etc.). If a student indicates that they
Table 1. Findings of Research Studies that Examined Student Perceptions of Selected Accommodations

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>Number of Studies</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistive Technology (AT)</td>
<td>1</td>
<td>Students reported that they often had little or no input into AT decisions. Students wanted support that enabled them to better use AT.</td>
</tr>
<tr>
<td>Braille</td>
<td>1</td>
<td>Many students who knew braille preferred it over orally delivered assessments.</td>
</tr>
<tr>
<td>Calculator</td>
<td>3</td>
<td>There were mixed findings across studies as to whether students perceived the calculator accommodation to be helpful. Some students had positive perceptions, while others believed that the use of calculators increased their anxiety.</td>
</tr>
<tr>
<td>Extended Time</td>
<td>4</td>
<td>Students generally perceived extended time to be helpful.</td>
</tr>
<tr>
<td>Highlighting</td>
<td>1</td>
<td>Many students who could use a highlighter chose not to use it. Students who did not use the highlighting feature on an assessment did not use it because they did not believe that they needed it, not because of a perceived lack of ability to use the tool.</td>
</tr>
<tr>
<td>Human Read Aloud</td>
<td>2</td>
<td>Students often believed that human read aloud reduced their anxiety, and that it improved performance, though actual performance was not improved for many of these students.</td>
</tr>
<tr>
<td>Large Print</td>
<td>2</td>
<td>Students with visual impairments often preferred large print over orally-delivered exams.</td>
</tr>
<tr>
<td>Magnification</td>
<td>3</td>
<td>Students with visual impairments commonly preferred magnification over no accommodation, but the findings were mixed over whether magnification was preferred over large print. Students reported eye strain with high magnification.</td>
</tr>
<tr>
<td>Manipulatives</td>
<td>3</td>
<td>Students found both physical and virtual manipulatives helpful. They largely preferred virtual manipulatives, even though they tended to perform better with physical manipulatives.</td>
</tr>
<tr>
<td>Multiple Days</td>
<td>1</td>
<td>Students mostly preferred extended time, including extended time that spanned over multiple days, over no accommodation.</td>
</tr>
<tr>
<td>Noise Reduction</td>
<td>2</td>
<td>Most students found headphones helpful to minimize noise and distractions. The “no noise” condition was generally preferred over white noise.</td>
</tr>
<tr>
<td>Paper Format</td>
<td>1</td>
<td>Students preferred accommodations formats that reduced social stigma over obvious assistive technology (AT) devices. Depending on individual preferences, some students favored paper formats over digitally-administered assessments.</td>
</tr>
<tr>
<td>Recorded Oral Delivery</td>
<td>3</td>
<td>Students perceived the recorded oral delivery accommodation as either positive or neutral. Some students with visual impairments preferred recorded oral delivery because they perceived that they could complete the exam more quickly.</td>
</tr>
<tr>
<td>Scribe</td>
<td>1</td>
<td>Many students found the scribe accommodation useful, but there was wide variation across students as to whether they preferred scribe or speech to text.</td>
</tr>
<tr>
<td>Signed Administration</td>
<td>3</td>
<td>Most students who were deaf or hard of hearing preferred signed administration over no accommodation, but there were mixed findings about whether they preferred paper assessments with a human signer, electronic assessments with video support via a video-taped human signer, or electronic assessments with video support via a signing avatar. Students preferred for signed administration to mirror the methods used during instruction (e.g., ASL signing, ASL in combination with fingerspelling, etc.).</td>
</tr>
<tr>
<td>Small Group and Individual Administration</td>
<td>1</td>
<td>Students often had greater confidence and understanding of content when an assessment was administered individually or in a small group; however, students had concerns about the social stigma of being removed from the regular classroom.</td>
</tr>
<tr>
<td>Speech to Text</td>
<td>2</td>
<td>Students generally had a positive to neutral view of speech to text but found it frustrating when the program made mistakes in word recognition. Some students also found it difficult to initially learn how to use the program.</td>
</tr>
<tr>
<td>Student Reads Aloud to Self</td>
<td>1</td>
<td>Many students did not perceive that reading aloud to self improved their performance.</td>
</tr>
<tr>
<td>Test Breaks</td>
<td>1</td>
<td>Students reported that a segmented version of a test with additional built-in breaks did not increase their motivation.</td>
</tr>
<tr>
<td>Text to Speech</td>
<td>4</td>
<td>Most students preferred text to speech over oral delivery, and were comfortable using the software. When available, students generally liked being able to manage the speed of the speech.</td>
</tr>
<tr>
<td>Word Prediction</td>
<td>2</td>
<td>Students generally found word prediction software to be useful and believed that it helped with the writing process.</td>
</tr>
</tbody>
</table>

1 For additional information and details about the studies and findings, see the Accommodations Toolkit (NCEO, 2020, 2021, 2022).
2 A total of 36 studies are included in this table. Several studies reported findings for more than one accommodation.
strongly dislike accommodations that require administration in a separate room because of the social stigma of not taking the test with their classmates, it is important to consider whether there is a need for the separate administration. If it is determined that the student needs the accessibility feature or accommodation which requires administration in a separate setting, this can be discussed with the student. By discussing the purpose of each accessibility feature and accommodation, it may be possible to adjust how the accommodation is provided or help the student feel more comfortable using it.

**Prepare students to advocate for accessibility needs and preferences.** It is the responsibility of educators to ensure that students have access to needed accessibility features and accommodations. All instructional and assessment accessibility features and accommodations identified in the IEP must be provided. However, sometimes accessibility features or accommodations are not provided, and students need to know how to communicate about their needs. For example, on test day there may be logistical issues or a test proctor who does not know which accessibility features and accommodations a student is supposed to receive. Prior to test day, there should be discussions with the student about what to do if they do not receive their accommodations to prepare them to self-advocate for their accessibility needs. Explain the importance of self-advocacy to students. Provide tips for a student to use when advocating for their needs in the classroom and during assessments.

Make sure that all staff involved in teaching or test administration know that students are taught to self-advocate if not provided accessibility features identified on their IEP. Staff also should be provided with guidance regarding the steps to take if a student lets them know that they do not have an assigned accommodation.

**Consider how students with complex communication needs provide input regarding their accessibility needs and preferences.** Information about a student’s perceptions can be gathered in multiple ways, and it is important to consider how the student expresses themselves (e.g., verbally, pointing, using augmentative and alternative communication devices, etc.) to gather this information. Being asked what works or does not work to support their learning or participation in assessments is a challenging question for many students. Students with complex communication needs often need scaffolding to be aware of how they best learn or access assessments. This means both understanding what is being asked by a question and being able to express themselves effectively. Key is integrating these types of questions as part of instruction throughout the year. By doing this, teachers can determine what vocabulary is clearest for the students to understand, what is being asked, and then supporting them to express themselves.

For a student who uses an augmentative and alternative communication (AAC) system\(^1\), the team would determine what is the best way to ask questions about learning using the core and fringe words\(^2\) on the device. Teaching the student to understand the fringe words related to how they learn gives them the vocabulary to

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**Questions to Guide Student-Teacher Discussion**

**Questions that Can Help Guide Accessibility Decision Making**

- What parts of learning are easiest for you?
- What is something in class that you do well?
- What parts of learning are most difficult for you?
- What is something you did in class that is hard?
- Do you use \<<insert accommodation name>> during instruction? Is it helpful?

**After-Test Questions**

- Did you use \<<insert accommodation name>>?
- Was it helpful? If so, how was it helpful?
- Were there any difficulties with the accommodations? (Are adjustments needed?)
- Should this accommodation be used again?

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Note: Questions adapted from the CCSSO Accessibility Manual: How to Select, Administer, and Evaluate Use of Accessibility Supports for Instruction and Assessment of all Students (Lazarus et al., 2021).

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\(^1\)Augmentative and alternative communication (AAC) systems are communication methods (other than oral speech) used to express thoughts and ideas (Kleinert et al., 2010).

\(^2\)Core words refer to the words that make up most of the words in a typical conversation. Fringe words refer to words that are specific to an individual or the context (Kearns & Kleinert, 2020).
answer questions about how they best learn. Some fringe words related to “how I like to learn” might be presented as visuals in a graphic organizer, a word bank or 3D tactile object, or as an image of a book being read, etc. For example, after a student had opportunities to try two strategies to learn new content (e.g., a graphic organizer and fill in the blank questions while using a word bank), then the teacher would use aided language modeling (Keams & Kleinert, 2020) to ask the student which strategy they prefer. By including instruction so students are able to express how they learn, they become stronger self-advocates about their learning as well as their preferred accessibility features and accommodations.

Interview students following the administration of the assessment. Following the test, it is important to evaluate how well the accessibility features and accommodation worked. Ask the student about whether each accessibility feature or accommodation was helpful, easy to use, or confusing. Remember that student needs may change over time, possibly making accessibility features and accommodations that were previously helpful no longer necessary. Students should also be asked whether they have any suggestions for improvement.

Conclusions
Students can provide input and contribute to the accessibility and accommodations decision-making process. They have opinions about their accessibility needs, and the helpfulness of various accessibility features and accommodations. Their insights about the importance, feasibility, and use of various accessibility features and accommodations should be taken into account when decisions are made. Research has shown that student participation in IEP team meetings can provide the team with vital information about their needs and empower students to take ownership of their learning (Thurlow, et al., 2003, 2006, 2013). Involving students in selecting and planning for the use of accessibility features and accommodations can contribute to self-determination skills and a more independent future. Learning how to self-advocate will benefit the student not only on test day, but in many situations where they need accommodations within and beyond the school setting.

Resources
Publications

NCEO Videos Showing Discussions with a Student About Accommodations
Identifying Students’ Accommodations Needs
Individualized Education Program (IEP) Team Meeting
Involving Students for Assessment Accommodations
Meeting with Student After Assessment Accommodation