



National Center and State Collaborative

# NCSC Brief

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## Promoting Communication Skills in Students with Significant Cognitive Disabilities

### Introduction

The ability to communicate is an essential skill for access to the general curriculum. This is especially true for students with significant cognitive disabilities, some of whom do not currently have sufficient communication skills to participate fully in the educational process.

The importance of communication for students with hearing, vision, and speech disabilities was recently highlighted in a joint Dear Colleague letter from the U.S. Departments of Education and Justice.<sup>1</sup> This letter reinforces the requirements of the Individuals with Disabilities Education Act (IDEA) to provide all students with a disability with a free and appropriate public education, and Title II of the Americans with Disabilities Act (ADA) to ensure that communication for a student with a disability is as effective as communication for a student without a disability.

Poor post-school outcomes are evident when students who need appropriate communication

<sup>1</sup> The Dear Colleague letter was released by the U.S. Department of Education, Office for Civil Rights and Office of Special Education and Rehabilitative Services, and the U.S. Department of Justice's Civil Rights Division in November, 2014. It is available at: <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-effective-communication-201411.pdf>. Also available are two supporting documents – FAQ: <http://www2.ed.gov/about/offices/list/ocr/docs/dcl-faqs-effective-communication-201411.pdf>; and Parent Fact Sheet: <http://www2.ed.gov/about/offices/list/ocr/docs/dcl-factsheet-parent-201411.pdf>

systems do not have them in high school or leave school without them.<sup>2</sup> There is also evidence that the lack of appropriate communication systems is potentially dangerous to the student's basic health and well-being.<sup>3</sup>

Communication skills have been a focus of the National Center and State Collaborative (NCSC) as it developed its alternate assessment based on alternate achievement standards (AA-AAS). The lessons learned during that development work, combined with research, demonstrate the importance of promoting communication skills in students with significant cognitive disabilities.

### All Students Can Communicate

All students communicate to express themselves in some way, whether through oral speech or other methods of communication. The students

<sup>2</sup> Source: Kleinert, H., Kearns, J., Quenemoen, R., & Thurlow, M. (2013). *Alternate assessments based on common core state standards: How do they relate to college and career readiness?* Minneapolis, MN: University of Minnesota, National Center and State Collaborative. Available at: <http://ncscpartners.org/Media/Default/PDFs/AA-AAS-College-Career-Readiness-NCSC-9-24-2013.pdf>. See also: Kleinert, H., Garrett, B., Towles, E., Garrett, M., Nowak-Drabik, K., Waddell, C., & Kearns, J. (2002). Alternate assessment scores and life outcomes for students with significant disabilities: Are they related? *Assessment for Effective Intervention*, 28(1), 19-30.

<sup>3</sup> Source: Kleinert, J., Holman, A., McSheehan, M., & Kearns, J. (2010). *The importance of developing communicative competence: Synthesis Report #1*. Lexington, KY: University of Kentucky, National Alternate Assessment Center. Available at: <http://www.naacpartners.org/publications/2010KleinertHolmanMcSheehanKearns.pdf>

with significant cognitive disabilities who use forms of communication other than oral speech may use gestures (e.g., pointing), signs, pictures, eye-gaze, or augmentative and alternative communication (AAC)<sup>4</sup> methods. A few students (approximately 10% of students with significant cognitive disabilities) communicate primarily through cries, facial expressions, or change in muscle tone, and do not yet have clear use of objects/textures, regularized gestures, pictures, or signs.<sup>5</sup>

How students receive communication from others also varies. Many follow directions provided by words that are spoken, signed, printed, or any combination, without additional cues. Others will require additional cues (such as gestures, pictures, objects, or demonstrations/models) to follow simple directions, while some students will alert to input from another person but need physical assistance to respond.<sup>6</sup> A smaller percentage of students do not appear to show a consistent receptive response, or more precisely, we cannot say exactly what they do understand. They may not yet understand communication directed toward them, or their responses to other environmental stimuli are interpreted as not meaningful and therefore reported as not existing.

### The National Joint Committee for the Communication Needs of Individuals with Severe

<sup>4</sup> According to the American Speech and Hearing Association (ASHA), "Augmentative and alternative communication (AAC) includes all forms of communication (other than oral speech) that are used to express thoughts, needs, wants, and ideas." See: <http://www.asha.org/public/speech/disorders/AAC/>.

<sup>5</sup> Sources: Kearns, J., Towles-Reeves, E., Kleinert, H., Kleinert, J., & Thomas, M. (2011). Characteristics of and implications for students participating in alternate assessments based on alternate academic achievement standards. *Journal of Special Education, 45*(1), 3-14. Towles-Reeves, E., Kearns, J., Flowers, C., Hart, L., Kerbel, A., Kleinert, H., Quenemoen, R., & Thurlow, M. (2012). *Learner characteristics inventory project report: A product of the NCSC validity evaluation*. Minneapolis, MN: University of Minnesota, National Center and State Collaborative.

<sup>6</sup>Source: Kearns, J., Towles-Reeves, E., Kleinert, H., Kleinert, J., & Thomas, M. (2011). Characteristics of and implications for students participating in alternate assessments based on alternate academic achievement standards. *Journal of Special Education, 45*(1), 3-14.

Disabilities conducted a comprehensive review of the literature on communication interventions for this population—96% of the studies found positive results.<sup>7</sup> Intervention in communication is necessary and should occur as soon as possible when a student with a significant cognitive disability enters kindergarten unable to use oral speech or an alternative form of communication to produce a reliable response. No student with a significant cognitive disability should reach grade 3, which is when he or she is likely to first participate in the AA-AAS, without an understandable expressive communication system!

## Current Communication Skills Need Improvement

Studies of the communication skills of students with significant cognitive disabilities indicate the need for improvement for many of these students.<sup>8</sup> As shown in Figures 1 and 2, about 70% of students with significant cognitive disabilities have symbolic expressive and receptive communication skills. Only about 3% have uncertain responses to stimuli; and an additional approximately 9% alert to or respond to stimuli in their environment (see Figure 2).

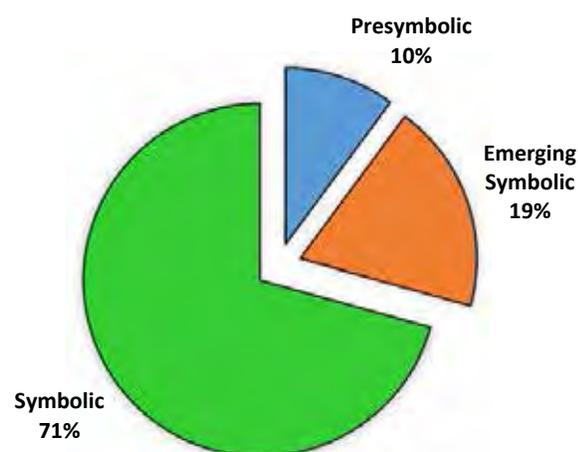
## Successful Communication Intervention

More than 20 years of research confirm that intervention in communication produces

<sup>7</sup> Source: Snell, M., Brady, N., McLean, L., Ogletree, B., Siegel, E., Sylvester, L., Mineo, B., Paul, D., Ronski, M., & Sevcik, R. (2010). Twenty years of communication intervention research with individuals who have severe intellectual and developmental disabilities. *American Journal on Intellectual and Developmental Disabilities, 115*, 364-380. Available at: [www.aiddjournals.org/doi/abs/10.1352/1944-7558-115-5.36](http://www.aiddjournals.org/doi/abs/10.1352/1944-7558-115-5.36).

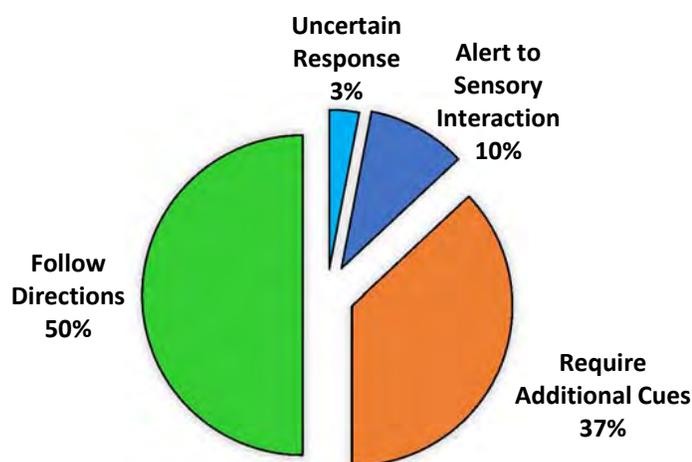
<sup>8</sup> Sources: Kearns, J., Towles-Reeves, E., Kleinert, H., Kleinert, J., & Thomas, M. (2011). Characteristics of and implications for students participating in alternate assessments based on alternate academic achievement standards. *Journal of Special Education, 45*(1), 3-14. Towles-Reeves, E., Kearns, J., Flowers, C., Hart, L., Kerbel, A., Kleinert, H., Quenemoen, R., & Thurlow, M. (2012). *Learner characteristics inventory project report: A product of the NCSC validity evaluation*. Minneapolis, MN: University of Minnesota, National Center and State Collaborative.

**Figure 1. Expressive Communication of Students with Significant Cognitive Disabilities**



Source: Kearns, J. F., Kleinert, H. L., Kleinert, J. O., & Towles-Reeves, E. A. *Learner characteristics inventory*. Lexington, KY: National Alternate Assessment Center. Percentages shown here are the percentages based on teachers who responded.

**Figure 2. Receptive Communication of Students with Significant Cognitive Disabilities**



Source: Kearns, J. F., Kleinert, H. L., Kleinert, J. O., & Towles-Reeves, E. A. *Learner characteristics inventory*. Lexington, KY: National Alternate Assessment Center. Percentages shown here are the percentages based on teachers who responded.

improved communication outcomes.<sup>9</sup> Ideally, communication interventions should begin during early intervention programs, as soon as an expressive or receptive delay is noted. Communication intervention should be in place prior to preschool and kindergarten to ensure that the student with a significant cognitive disability has access to the general curriculum.

The NCSC created a comprehensive Communication Tool Kit to promote communication skills in students with significant cognitive disabilities.<sup>10</sup> It includes seven components and an introductory call to action:

1. Identifying communication
2. Considering hearing, vision, and motor factors
3. Selecting targets
4. Selecting AAC
5. Teaching communication targets
6. Embedding communication into academic content
7. Monitoring progress

These components, shown in Figure 3, are publicly available. They were designed to assist teachers and speech-language pathologists as they begin to intervene with students. Parents and guardians will find them useful also.

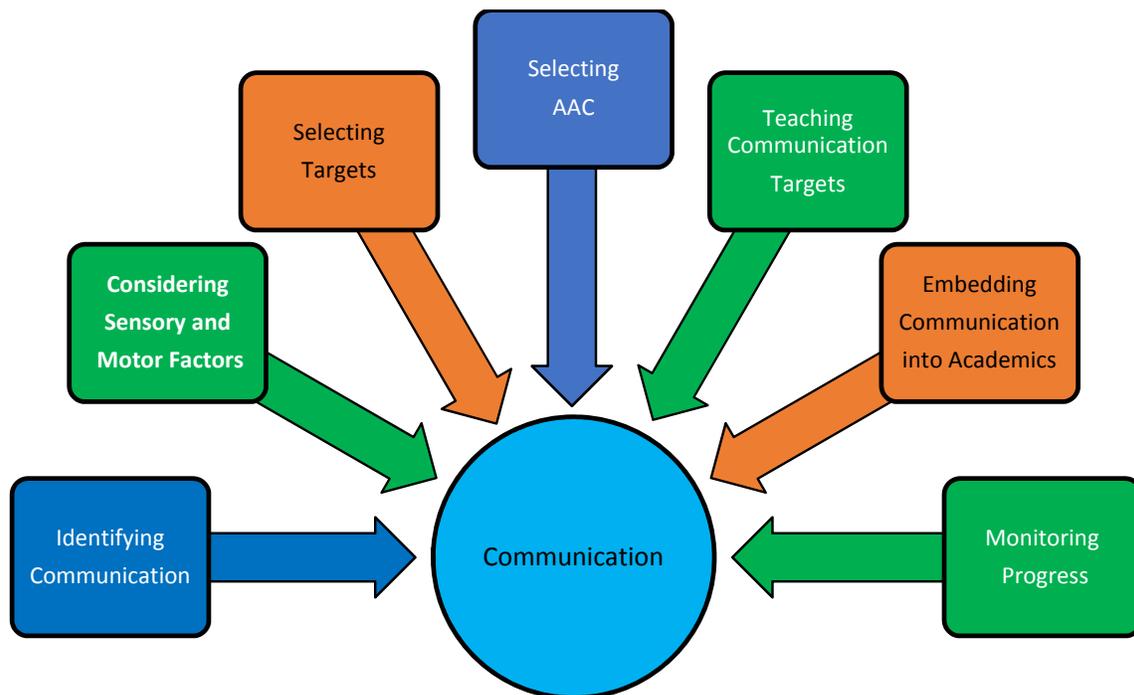
## Document Communication Needs and Services

The communication needs of students with significant cognitive disabilities who do not currently use oral speech should be

<sup>9</sup> Source: Snell, M., Brady, N., McLean, L., Ogletree, B., Siegel, E., Sylvester, L., Mineo, B., Paul, D., Ronski, M., & Sevcik, R. (2010). Twenty years of communication intervention research with individuals who have severe intellectual and developmental disabilities. *American Journal on Intellectual and Developmental Disabilities, 115*, 364-380. Available at: [www.aiddjournals.org/doi/abs/10.1352/1944-7558-115-5.364](http://www.aiddjournals.org/doi/abs/10.1352/1944-7558-115-5.364).

<sup>10</sup> The NCSC Communications Tool Kit is available at: [https://wiki.ncscpartners.org/index.php/Main\\_Page](https://wiki.ncscpartners.org/index.php/Main_Page). Scroll down to Communications Tool Kit link.

**Figure 3. Components of the NCSC Communications Tool Kit**



documented on the student's Individualized Education Program (IEP). A collaborative team approach to intervention can occur through the IEP process. The IEP team can authorize the supports and services needed to produce *documented* communication progress. Simply stated, the percentages of students who do *not* have an observable mode of communication should decrease dramatically with appropriate interventions.

Related services such as speech/language services, physical therapy, occupational therapy, and assistive technology are likely to be needed by these students throughout their school years to ensure that they have access to the general curriculum. Speech/language services should be continued throughout students' academic career for those who may not progress toward oral speech as their primary means of communication. This is important because as these students develop language, and the use of AAC, their language skills will continue to grow. Depending on the student's disability-related needs, a vision or hearing specialist may be needed on the IEP team as well.

For those students with significant cognitive disabilities who are English language learners (ELLs), attention must be given to their development of English language skills, as well as their communication skills. English language development educators should be on the IEP teams for these students.

### Monitor Student Communication Progress

It is important for the IEP team, including a speech-language pathologist, to identify and document for each individual student the communication intents and modes used by the student who is not effectively using oral speech. The team should also identify and implement AAC to support the student's communication growth and language development. Finally, the team should monitor the student's progress in communication across modalities.

At a district level, monitoring students who do not use oral speech to ensure access to related services and the availability of AAC is important. In addition, it is important to provide professional

development opportunities for all team members on evidence based practices for developing communication.

At a state policy level, the Learner Characteristic Inventory (LCI)<sup>11</sup> can be used to identify students who are communicating at a pre-symbolic expressive communication level and with receptive response levels at any of the following four levels: (a) follows 1 -2 step directions, (b) follows 1-2 step directions with cues, (c) alerts to social interactions, or (d) provides inconsistent receptive responses. When a student is identified, immediate instructional interventions should begin. LCI data also can help state and local education leaders monitor how to provide

support to ensure all students are getting the interventions they need.

## Summary

There is no more important educational outcome than that of communication for students with significant cognitive disabilities. Communication serves as the foundation for access to the general curriculum and instruction. Moreover, communication plays an important role in the development of social skills and is fundamental to the establishment of relationships and friendships. All of these, taken together, are essential for preparation for college, career, and community.

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<sup>11</sup> Kearns, J. F., Kleinert, H. L., Kleinert, J. O., & Towles-Reeves, E. A. (2006). *Learner characteristics inventory*. Lexington: University of Kentucky, National Alternate Assessment Center.

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The NCSC state partners participating in the spring 2015 NCSC operational assessment are: Arizona, Arkansas, Connecticut, District of Columbia, Idaho, Indiana, Pacific Assessment Consortium, Maine, Montana, New Mexico, Rhode Island, South Carolina, South Dakota, and US Virgin Islands. As of spring 2015, additional states are members of the NCSC Consortium, representing varying levels of participation. They are: California, Delaware, Florida, Louisiana, Maryland, New York, Oregon, Pennsylvania, Tennessee, and Wyoming.

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