



**BRAIN INJURY
ASSOCIATION
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No Brain Injury is
Too Mild to Ignore,
or Too Severe to
Lose Hope

Questions about Speech and Communication after Brain Injury

By Marilyn Lash, MSW and Roberta DePompei, PhD

Introduction

I often hear the term cognitive communication. What does that really mean?

Communication is much more than words. It involves listening, speaking, reading, writing and gesturing. Cognitive communication is the combination of thinking skills and language (i.e., the ability to use language and all the underlying skills for communication, including attention, memory, self-awareness, organization, problem-solving and reasoning). When these thinking skills are combined with language, the result is communication.

Our son's speech was really slow and difficult to understand for several months after his brain injury. As he made physical progress, his speech also improved. Is there any reason to have him followed by a speech pathologist now he is back in school?

The ability to speak and hold conversations can be misleading. Although speech skills often return after a brain injury, language and communication still can be affected. While conversation may seem "normal" in non-stressful situations, this can change when the child/adolescent is tired or under stress.

In school-age adolescents, changes in communication likely are to manifest under the pressures of time, being graded on work, completing assignments and keeping up with classmates. A speech and language pathologist can evaluate ongoing progress, identify problems and help the student develop compensatory strategies. As part of the educational team, the speech pathologist can help others recognize and respond to changes in cognitive communication.

Our son was doing pretty well in school until he went to junior high school. Now he has a lot more reading assignments and homework. Even though he spends much more time on his homework, he can't seem to keep up and is falling behind.

As a child matures, new difficulties in learning or language can appear as the reading, writing and thinking skills required in school become more complex. Because of this, it is important to monitor a student's language development and learning skills through adolescence. Additionally, as students enter middle, junior high and high school, the nature of



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schoolwork changes. The schoolwork required from higher grades involves more abstract reasoning and problem-solving, placing new demands on different parts of the brain than those used in earlier grades. Finally, multiple classes and teachers result in different teaching styles and homework assignments. Any difficulties experienced as a result of these changes are an indication that a student's cognitive communication abilities need to be reevaluated.

How do we find a speech and language pathologist who has experience with students with brain injury?

Speech and language pathologists may be licensed in their state and also may be certified by the American Speech-Language-Hearing Association. When choosing any professional, it is important to ask questions to make the right fit between a specialist, your child and your family. Look for a speech and language pathologist who has experience with brain injury and worked with clients of similar age. If your child is in school, look for a speech and language pathologist who regularly works with schools and is familiar with special education.

What are some of the changes or warning signs that parents and educators can watch for?

Although it is important not to wait until the student is in trouble to get help, too often it is failing or lowered grades that signal difficulty. Early warning signs that an evaluation by a speech and language pathologist is needed include: 1) speaking or writing that is disorganized, 2) difficulty concentrating and paying attention, 3) confusion when new ideas are introduced, 4) a slower rate of handling information and 5) difficulty learning new vocabulary or grasping ideas. By evaluating these areas every three months during the two years following a brain injury, difficulties can be spotted early and help provided before the student experiences failure.

Our child is non-verbal. I hear a lot about augmentative communication and technology, but it sounds complicated. Could this help and how expensive is it?

Augmentative communication does not always require technology, such as computers, and it does not have to be expensive. An augmentative communication system is defined as any device or method which helps existing communication skills. For example, sign language, picture notebooks, word boards and tape recorders can be part of an augmentative communication system. Even when computers are involved, prices vary widely and choosing the level of technology should depend on how and where the device will be used, costs, maintenance and repairs. Additionally, the personal choice of the user should be a major factor in the decision.



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There are so many options in augmentative communication that they often are described under three categories—"no, low or high" technology.

If technology is needed for communication, what should we look for?

Hardware (i.e., the machine or equipment) and software (i.e., the program that runs the machine) can be standard "off-the shelf" items found in most computer stores or customized for the individual's needs. When shopping for a computer, it is important to identify the method used to select messages (i.e., pointing, typing or pressing a switch). Voice output produces sounds so that messages are stored in a device and retrieved by choosing a key or picture on the board (digitized output). A device even can speak once messages are typed in or stored (synthesized output). There are many choices for keyboard design such as pictures, bigger or smaller keys and keys with guides to help position fingers. Some screens speak when touched or have menus that lead to message screens. The size and weight of a device is another consideration as it affects how portable it is. There is no one correct answer for everyone and technology must be matched carefully to the needs and preferences of the user.

Who pays for communication systems?

There are many possible sources but obtaining approval can be complicated, especially for more costly systems. If the system is needed for learning, then funding through special education is possible. A doctor's prescription may help with payment under insurance plans. Funding through the Medicaid program of Bureau for Children with Medical Handicaps also is possible, but regulations vary from state to state. Vendors usually can provide advice on funding options. Because funding is complicated, it is important to try out or rent a system before purchase. In fact, renting a system may be preferable if the child's needs are changing rapidly. Advocacy by parents and professionals, as well as appealing denials for payment can lead to approval for funding.

Marilyn Lash, MSW, has over 20 years of experience working with persons with disabilities and their families in medical, rehabilitation, educational and vocational settings. Currently the Director of L&A Publishing/Training, she firmly believes that families are the experts and long term care providers. Consequently, her publications and training emphasize coping strategies for families and practical interventions by professionals and educators. She also chairs BIA's Special Interest Group on Children and Adolescents with Brain Injury.

Roberta DePompei, PhD has presented and published articles and co-authored a text in the area of traumatic brain injury (TBI) in both children



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and adults. Dr. DePompei's major area of interest is in brain injury and the resultant cognitive-communicative disorders. She has developed support groups and conducted research on the impact of brain injury on the family system and communication. She has conducted numerous workshops and presented papers on these topics at international, national, state, and local conferences.

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*Additional information can be found at: Helpline: 1.800.444.6443
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