

# Picture Planner™ Can Teach Veterans with TBI

By John M. Williams

Nationwide the Pentagon is being challenged to provide veterans with cognitive injuries with access to programs with comprehensive long-term services that encourage personal growth. With such services, veterans can be more active, productive, and independent.

The horror of traumatic brain injuries suffered by U.S. troops in Iraq and Afghanistan is frightening. The most damaging weapon of this war, the improvised explosive device (IED), is leaving a signature wound on these troops: traumatic brain injury. Even when not knocked out by the blast, the forces unleashed by the explosion can leave permanent scars on the brain without visible wounds. Returning soldiers may not even know they have been injured and can't understand the changes in their cognition, behavior and personality. They may find themselves confused, irritable, restless, unmotivated, angry, unable to focus their attention, disorganized, lacking former judgment, slow in thinking, with memory deficits, depressed, and feeling "like a different person," and yet not realize that this is caused by a traumatic brain injury. There have been estimates that between 10 and 20% of soldiers returning from their deployments in Iraq and Afghanistan may have some form of TBI.

An Army psychiatrist, who asked not to be identified, told me, "We are facing a tsunami in dealing with soldiers with TBI. There simply aren't enough of us trained to help everyone with a TBI." He and other military psychiatrists are looking to technology to help soldiers deal with TBI effects.

An innovative new tool available to military personnel working with individuals with TBI is Picture Planner™. (<http://www.cognitopia.com>), an icon-based personal organizer software application that helps individuals with cognitive disabilities build and manage visual schedules for a day, week, month, or even year(s). Unlike paper day planners, the visual schedules made with Picture Planner™ are easily created and changed with a few clicks or screen touches. They can be printed out or synced to an iPad, iPhone, or iPod Touch and used as a prompting system around home, school, or out in the community. Customizable image options let users incorporate photos of actual places, people, and things that mean the most to them. Each icon that is clicked or touched includes an image, text label, and text-to-speech pronunciation of the item, providing multiple sources of user feedback and navigation.

Picture Planner™ uses synthesized speech to provide feedback and aid in accessibility. The program includes a stock library of images and icons to help individuals get started. It is easy to add new images, schedule group activities for multiple users, and move, copy, and schedule repeating activities—all with an icon-driven software interface.

Accessible to veterans with a wide range of cognitive abilities, Picture Planner™ is designed to prompt them easily through competent schedule creation. Picture Planner™ provides many of the functions of a typical calendar program, such as recurring activities and pop-up reminders, but with a more cognitively accessible interface that lets users plan their own schedules for school, home, and community activities.

## Picture Planner's™ Origins

James Keating has autism. His older brother Tom Keating, Ph. D., watched his brother struggle with organizing his life. "James needed help scheduling his appointments and figuring out how to get to them, as well as finding out about community events, and communicating with friends," Keating said. After James moved to live with Tom in the early 1980s and they began working on helping James manage his time and money, it gradually became clear that accessible personal computer software focused on daily living skills could be a great asset. With the goal of assisting his brother and others with cognitive disabilities, paired with an extensive background in the area of supported living, Keating obtained grant funding from the U.S. Department of Education's Office of Special Education and Rehabilitation Services to explore the development of cognitively accessible life management

software. The Picture Planner™ icon-based personal organizer is the first application to emerge from that project (<http://www.cognitopia.com>).

I would recommend the armed services investigate using Picture Planner in working with veterans with TBI. It could make a difference in their lives.

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