**CHALLENGE**

Understanding meaning and intent are among the most difficult tasks a language analyst faces. In addition, language analysts must not only work with accuracy but also with speed, cognitive effort, and the ability to sustain attention across long durations. In response, CASL researchers have developed a rich suite of software tools and course materials to prepare analysts to meet these challenges.

**SOLUTION**

CASL’s cognitive readiness suite includes aids for improving analytic, attentional, memory, listening, and other essential intellectual skills and abilities. The regimen includes the following:

- **Divergent Thinking training** to improve the ability to generate as many relevant solutions as possible to an open-ended problem.
- **Long-Term Memorization strategies** for improving their ability to retain information.
- **Working Memory Training (WMT) program** designed to improve ability in core cognitive skills relating to memory and attention, which are critical to language comprehension, language acquisition and problem solving.
- **Language-Specific WMT in Arabic, Farsi, and Spanish** combined with target language practice in an engaging iPad app.
- **Language-Specific Sound training in Mandarin and Korean** to improve nonnative speech sound perception and allow for cognitive resources to focus on higher-level processes such as vocabulary learning.

The suite is validated with rigorous empirical testing in analyst-relevant terms that include not only accuracy but also response speed, cognitive effort, and the ability to sustain attention across longer durations. Results show that the training leads to improvements in cognitive skills vital to language analysts.

**MINDFULNESS TRAINING**

CASL is developing and testing a new program for mindfulness training, which might improve attention and stress resilience. This type of training has been tested in a military population and has provided promising preliminary results, implying prevention of stress-induced cognitive or attention decline (Jha et al., 2010).