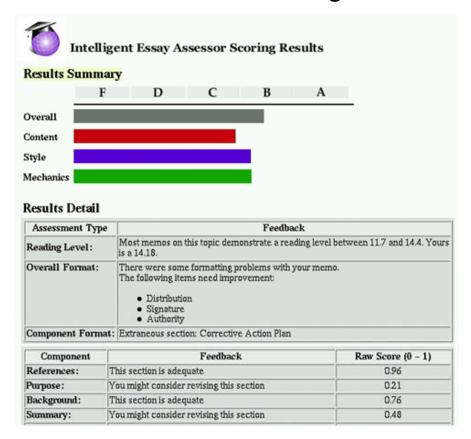


Automatically Critiquing Writing for Army Educational Settings



Last year the Intelligent Essay Assessor™ (IEA) graded assignments written by Captains attending the resident Combined Arms and Services Staff School (CAS3) at Ft. Leavenworth, KS. IEA performed as well as the better CAS3 instructors. The embedded feedback system, shown above, provides more than grades; it provides specific suggestions to improve the memo. IEA works by actually understanding the meaning of the memo, not just through keywords or assessment of reading difficulty.

The automatic essay scoring facility is particularly well suited to distance-learning environments. The essay scoring feedback is returned online in seconds and suggests which sections should be rewritten, which encourages the student to revise before submitting the memo in final form. This type of practice is the fastest road to improved writing. The tutorial aspect of the product can be

adapted to many Army courses, for enlisted personnel and officers of all levels, in distance learning settings as well as in traditional classrooms.

IEA is a product of Knowledge Analysis Technologies (KAT), a four-year-old company with proprietary machine-learning technology for computer understanding of text. "Using innovative text understanding software, we provide services that promote job performance based on text and comprehensive learning through written expression and offer rapid, economical, valid, reliable assessment of learning."

KAT's technologies are based on years of intensive R&D at Bellcore, the University of Colorado, and the company itself with license to patents as well as substantial proprietary software and know-how





Joseph Psotka ARI_LDRU@ari.army.mil Lynn Streeter

US Army Research Institute, Alexandria, VA Knowledge Analysis Technologies, Boulder, CO

(ARI/LDRU/Mktg-jk.1102-26/1c)