The effects of vowel identification training on sentence-level speech recognition

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Recent work examined the effects of a novel computer-based approach to speech recognition training involving vowel identification [C. Richie, J. Acoust. Soc. Am. 121, 3045 (2007)]. When vowel identification training was done under auditory-visual conditions with noise participants demonstrated modest improvements in sentence recognition, and when training was done under visual-only conditions participants failed to show improvements in sentence recognition. However, sentence recognition was assessed for the CID Everyday Sentences in terms of words correctly recognized. Improvements in speech recognition may have occurred following training on a level lower than the word, and gone unrecognized given this scoring method. The purpose of the present study is to determine whether vowel identification training leads to improvements in speech recognition on a test of sentence recognition, as measured by correct identification of consonants and vowels. These findings have implications for sentence recognition test scoring methods. The role of acoustics in improving speech recognition will also be discussed. (Supported by Butler University HAC grant #027096)