

A comparison of keyboarded and handwritten compositions and the relationship with transcription speed

Vincent Connelly, Deborah Gee, Elinor Walsh

Abstract

Background. It is well established that handwriting fluency constrains writing quality by limiting resources for higher order processes such as planning and reviewing. According to the 'simple view of writing' then slow keyboarding speed should hinder the quality of keyboarded essay compositions in the same way that slow handwriting hinders handwritten essay compositions. Given a lack of touch-typing instruction in UK schools it was hypothesized that children's written compositions produced via the keyboard would be worse than produced by hand.

Aims. To extend the work of Christensen (2004) and Rogers and Case-Smith (2002) by examining the relationship between handwriting fluency and keyboarding fluency throughout the primary school and studying the link between word-processed compositional quality and keyboarding fluency.

Samples and methods. The handwriting fluency and keyboarding fluency of 300 children in primary school were measured. Year 5 and year 6 children completed a measure of compositional quality by hand and by keyboard.

Results and comment. There was a high correlation between handwriting and keyboarding speed and handwriting speed was consistently faster than keyboarding speed across all ages. Only a small minority of children in years 5 and 6 had faster keyboarding than handwriting speed. Results showed that children's compositional quality was superior in the handwritten scripts as opposed to the keyboarded scripts. Keyboarded scripts were up to 2 years behind handwritten scripts in development. Writing by keyboard does not necessarily lead to improvements in script quality, compared with handwritten scripts. Explicit keyboarding instruction (touch-typing) is needed to develop keyboarding fluency and unlock the full potential of the word processor for children's writing.