

Autism & Key Word Signing (Makaton)

What is the issue?

Interventions utilising sign language have been used with people with autism since the 1970s to teach either receptive and/or expressive communication (Goldstein, 2002). Even though most people with an ASD are not deaf and can hear, it has been found that using signs (from sign languages used by the Deaf community) and speaking at the same time may help people with an ASD to understand language and to communicate. Key Word Sign and Gesture (also known as Makaton and sometimes referred to as 'total communication') uses manual signs used by the Deaf community along with speech to support the communication of individuals with communication difficulties (Grove & Walker, 1990). Signs and speech are used concurrently and only the key words in a sentence are signed. In Australia, the Deaf community sign language is called Auslan. Individual signs of Auslan are used in Key Word Sign for people with communication difficulties, along with the production features of that language, and it is important to note that speech is always used and the key words in a sentence are signed as they are spoken.

What is the hypothesis?

Key Word Sign is types of alternative & augmentative communication (AAC). AAC systems are commonly used with children with autism to provide a means of communication when speech is delayed in developing or is absent. It is important to note that the goal of augmentative and alternative communication (AAC) is rarely to teach students to use speech, although a number of researchers have examined this facet of AAC (Schlosser & Wendt; 2008).

What does the research say?

Research into the effects of signing for people with communication difficulties associated with intellectual disabilities has indicated positive impacts on speech development, social interaction, and vocabulary development (Millar, Light & Schlosser, 2006; DiCarlo et al, 2001). Research and reviews into the use of key word sign with students with autism have focused on a range of questions and issues, including: the ability of student to learn signs compared with aided systems that use pictures or photos; the impact of the use of sign-and-speech interventions compared with speech-only interventions on learning vocabulary; the impact of sign interventions on speech development, and the relationships between fine motor and apraxia measures on the use of signs. In addition, many studies have focused primarily on learning vocabulary (Mirenda, 2003; Goldstein, 2002), rather than functional outcomes or generalisation skills (Schlosser & Wendt, 2008) and most studies have used single subject design or studied only small numbers of children (Wendt, 2009; Schwartz & Nye, 2006). The wide range of research questions and the limited quantity and



quality of the research evidence means that making a simple statement about the effectiveness or otherwise of key word sign for people with autism is difficult.

Research and review findings include the following:

- Using signs can provide effective communication options for students with autism (Wendt, 2009)
- Results indicate quicker learning of vocabulary items under intervention conditions involving sign than with speech training alone (Goldstein, 2002; Yoder & Layton, 1988).
- Signing does not impact negatively on speech production and generally has a positive though modest impact on speech production (Schlosser & Wendt, 2008; Schwartz & Nye, 2006).
- It is becoming clear that individual differences among children with autism may mean a preference for, and greater success with, one type of communication compared with another and individual differences should be taken into account when choosing and designing communication systems (Brunner & Seung, 2009; Wendt, 2009; Tincani, 2004; Anderson, 2002). Those who benefit more tend to be children with more limited communication repertoires (Goldstein, 2002), better fine motor skills (Seal & Bonvillian, 1997) and those children who have better imitation skills (Tincani, 2004)

In summary

It appears from the research evidence available that interventions involving sign language, such as Key Word Sign, may be a useful option for some students with autism to support overall communication skills, when used in conjunction with speech and other AAC strategies including visual supports. Some of the skills that may make signing an appropriate option include good fine motor and imitation skills. It is clear from the evidence that sign language interventions such as Key Word Sign will not slow or stop the development of speech.

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