Observational Learning in Children with Down Syndrome and Developmental Delays: The Effect of Presentation Speed in Videotaped Modeling

Biederman (1999)

ABSTRACT

“Children with severe developmental delays (three with Down syndrome and three with autism as the primary diagnosis) observed a videotaped model performing two basic dressing skills without prompting, verbal or otherwise, or explanation by an instructor. In a within-subjects design, dressing skills that were presented at a relatively slow presentation speed through videotaped modelling were eventually performed better than those presented at a relatively fast speed. These data in combination with evidence from this laboratory that passive modelling of basic skills is more effective than interactive modelling (e.g., Biederman, Fairhall, Raven, Davey, 1998; Biederman, Davey, Ryder, Franchi, 1994; Biederman, Ryder, Davey, Gibson, 1991) suggest that standard instructional techniques warrant reexamination both from the basis of instructional effectiveness and the efficient use of the allotment of teacher time.

SUMMARY & HIGHLIGHTS

Researchers built on earlier studies showing the power of passive observational teaching of found in video modeling and found that slower presentation of concepts aided in the mastery of behaviors and concepts.

It is for this reason that GemINI slows down the cadence and articulation of words for those with minimal language or more significant developmental delays.

QUOTATIONS

“These data suggest that better learning may result by permitting children with severe delays sufficient time to process observational information. It further reinforces the view that standard classroom instruction and individual instruction using interactive modelling strategies may be less efficient than simple observational arrangements [GemINI note: ‘observational arrangements’ include video instruction] for children with severe delays. Our evidence suggests that video presentation of modelled skills at an appropriate speed has potential as a powerful instructional medium which could have interesting implications for teachers and clinicians in group contexts.”

“Current instructional strategies for children with severe developmental delays often include interactive modelling techniques with instructors delivering physical and verbal guidance and social responses such as "Good job!" or "Good girl!" intended as rewards for appropriate student behaviour. This is known as response-contingent prompting … Recent evidence suggests that passive observational learning may be more effective than interactive modelling as an instructional technique.”

LINK TO STUDY

http://www.down-syndrome.org/reports/93/