

The impact of using graphic representations of signs in teaching
signs to hearing mothers of deaf children

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ABSTRACT

Hearing parents of deaf children who are reliant on Sign Language need to learn to sign to ensure communication mode-match with their children. Signing is vital for parent-child interaction, and has implications for the socio-emotional well-being and educational outcomes of the child. However, poor signing skills of parents is repeatedly reported in the literature, with the majority of children in signing educational programmes reported not to be exposed to signing in the home. Teaching parents to sign therefore appears a priority, with sign teaching strategies being debated in the literature. The learning of Sign Language as a second language by hearing parents of deaf children within the bilingual educational approach, which regards Sign Language as the first language of deaf children, raises the challenges of cross-modality language learning for hearing parents. Reports on teaching methods are mainly anecdotal with only a few studies addressing sign learning by hearing individuals.

While the use of graphic representations of signs is a common practice in teaching signs, there is no empirical data on their influence on the learning of signs. This study explored the contribution of graphic representations of signs in sign teaching. The main aim of the study was to describe the impact of sign illustrations on the teaching of signs to hearing mothers. Two sub-aims were formulated to compare the conditions of sign learning with and without the use of sign illustrations in graphic displays in terms of (a) sign reception and sign production, and (b) the amount and nature of assistance required in learning signs. An Adapted Alternating Treatments Design (AATD), with four theme-based sign sets, and probes balanced for equivalence, was developed and used. Four biological mothers of three boys and a girl in a Grade Three class at a day school for the deaf in an urban area of KwaZulu-Natal, South Africa took part in the study.

The results revealed no significant differences between the two training strategies for sign acquisition, in terms of sign reception and sign production post-training. There were however, significant differences between the two training strategies with regard to assistance required while learning signs. The graphics strategy required significantly less trainer assistance ($p < 0.05$). In addition, there were significant differences in the nature of assistance provided with the use of graphic representations. Significantly fewer repeated demonstrations of signs were required by the participants during self practice ($p < 0.01$).

There was a significantly higher number of corrections with the graphics strategy ($p < 0.01$) initially, and this decreased over time, unlike with the signing-only strategy. It would appear that the sign illustrations were redundant during the initial stages of sign learning using a multimodal approach, but that they were relied on to trigger recall of signs during the self practice phase. Thus, the study confirmed the supportive role of sign illustrations in sign learning. The use of theme-based graphic displays of sign illustrations emerged as a viable method in teaching signs. The implications of these results and recommendations for future research are discussed.

Key terms

AATD, communication displays, deaf children, deaf education, graphic representation of signs, graphic symbols, hearing parents, multimodality, sign illustrations, Sign Language, sign teaching strategies, signing, South Africa, South African Sign Language, theme-based.

OPSOMMING

Horende ouers van dowe kinders wat deur middel van Gebaretaal kommunikeer, moet Gebaretaal aanleer ten einde dieselfde kommunikasie metodes as hulle kinders te hê. Gebaretaal is noodsaaklik vir ouer-kind interaksie en het implikasies vir die sosio-emosionele welstand en opvoedkundige uitkomst van die kind. Die literatuur verwys egter herhaaldelik na ouers se beperkte Gebaretaal vaardighede. Daar word genoem dat die meerderheid kinders in “Gebaretaal” opvoedkundige programme nie tuis aan Gebaretaal blootgestel word nie. Gebaretaal-onderrig vir horende ouers is dus ’n prioriteit, maar die strategieë wat in hierdie programme gebruik word, word in die literatuur gedebatteer. Die uitdaging is egter die kruis-modaliteit aanleer van Gebaretaal deur horende ouers binne ’n tweetalige opvoedkundige benadering, waar die Gebaretaal die tweede taal is. Verslae oor onderrigmetodes is meestal anekdoties, met slegs enkele studies wat uitgevoer is rakende die aanleer van gebare deur horende individue.

Alhoewel die gebruik van grafiese voorstellings van gebare (illustrasies van gebare) algemeen gebruik word om gebare aan te leer, is daar geen empiriese data oor die invloed daarvan op die aanleer van gebare beskikbaar nie. Hierdie studie het gevolglik die bydrae van grafiese voorstellings van gebare op die aanleer van gebare geëksploreer. Die hoofdoel van die studie was om die impak van illustrasies van gebare op die aanleer van gebare aan horende moeders te beskryf. Twee sub-doelstellings is geformuleer om twee metodes, naamlik met grafiese voorstellings en daarsonder, vir die aanleer van gebare, te vergelyk, in terme van (a) begrip en produksie van gebare, sowel as (b) die aantal en aard van ondersteuning benodig tydens die aanleer van gebare. ’n Aangepaste Alternatiewe Behandelings-ontwerp is gebruik, en vier tema-gebaseerde stelle en ekwivalent gebalanseerde stimuli is ontwikkel en gebruik. Die biologiese moeders van drie seuns en een dogter in ’n Graad 3 klas in ’n dagskool vir dowe kinders in ’n stedelike gebied van KwaZulu-Natal, Suid-Afrika, het aan die studie deelgeneem.

Die resultate dui daarop dat daar geen beduidende verskille tussen die twee onderrigmetodes vir die aanleer van gebare in terme van begrip en produksie was na die opleiding nie. Daar was wel beduidende verskille tussen die metodes, met verwysing na die ondersteuning benodig tydens die aanleer van gebare. Die grafiese metode het beduidend minder ondersteuning ($p < 0.05$) deur die navorser vereis. Daar was ook beduidende verskille in die

aard van ondersteuning wat met die gebruik van grafiese simbole vereis is. Die proefpersone het beduidend minder demonstrasies tydens individuele oefensessies ($p < 0.01$) benodig. Die beduidend groter aantal korreksies met die grafiese metode ($p < 0.01$) het in vergelyking met die slegs gebare metode, oor tyd verminder. Dit wil dus voorkom asof die illustrasies van die gebare oorbodig was gedurende die inisiële fase van die multimodale benadering. Daar is egter op hierdie illustrasies staatgemaak om tydens die oefen-fase die herroeping van gebare te fasiliteer. Die studie het dus die ondersteunende rol van grafiese simbole in die aanleer van Gebaretaal bevestig. Die gebruik van tema-gebaseerde grafiese voorstellings van gebare is dus 'n prakties uitvoerbare metode vir die aanleer van gebare. Die implikasies van hierdie resultate en aanbevelings vir verdere navorsing word bespreek.

Sleuteltermes

Aangepaste Alternatiewe Behandelings-ontwerp, dowe kinders, gebaar illustrasies, gebare, Gebaretaal, grafiese voorstellings van gebare, grafiese simbole, horende ouers, multimodaliteit, onderwys vir Doves, strategieë vir die aanleer van gebare, Suid Afrika, temagebaseerd.

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