Language and Literacy

Albertini, J. (2000). Endnote: Advances in literacy research and practice. Journal of Deaf Studies and Deaf Education, 5(1),123-125. [AN 1747]

> *This introductory article introduces the current advances in literacy research and practice of deaf educators and researchers in the field of deaf education.*

Albertini, J. (2000). Schreiben als dialogischer Prozess, eigenes Produkt and individueller Ausdruck--Ergebnisse angewandter paedagogischer Forschung [Dialogue, ownership, and voice: Results of research on writing]. In J. A. Albertini, E. Ehrhardt, & H. C. Strauss (Eds.), Kommunikation and Kreativitaet [Communication and Creativity] (pp. 113-119). Villingen- Schwenningen: Neckar Verlag. [AN 1759]

> *In this essay, the learning, teaching, and testing of writing are considered from the points of view of dialogue, ownership, and voice. It is argued that writing may be taught as a dialogic process, and that such an approach will encourage the emergence of the writer's voice and enhance the writer's ownership of process and product. The implications of such an approach for teaching and assessing deaf students are discussed.*

Albertini, J. (2002). Wie Gehorlose schreiben lernen: Die Interaktion von Sprache, Modalitat, and Unterricht [Learning to write if you are deaf The interaction of language, modality, and instruction]. Hor Pad, 56, 74-79. [AN 1758]

> *For deaf students, learning a language often occurs in parallel with learning the functions and the conventions of writing. If writing, like language, is best learned through social interaction, then the teacher needs to consider how best to promote interaction through the choice of language, modality, and method of instruction. Research indicates a relationship between proficiency in a sign language and writing skills.*

Albertini, J., Ehrhardt, E., & Strauss, H. (Eds.). (2000)., Kommunikation and Kreativitaet [Communication and Creativity]. Villingen-Schwenningen: Neckar Verlag. [Book]

> *This collection of research reports and essays on the themes of teaching, assessment, and rehabilitation of people with disabilities is divided into three sections. The first focuses on creativity in the lives of children with disabilities. In the second section, the interaction of hearing loss with speech, sign, writing, and technology is considered. Finally, the empirical results of two research projects are reported, an analysis of the technical register found in professional certification exams in Germany and an analysis of an experimental distance learning project at a technical college for deaf students in Germany.*

Albertini, J., & Lang, H. (2000). Deaf students' writing and authentic science activities. NTID Research Bulletin, 5(1), 1-5. [AN 1748]

> *We analyzed informal writing samples related to hands-on activities in science class. Our suggestions that teachers use informal writing and hands-on activities, is based on the assumption that learning science is a social and culturally situated activity. According to this view, children learn science be adopting the language patterns of competent users. They explore and find multiple ways of completing a task by working with experts and, given meaningful and engaging contexts, they construct new understandings of science phenomena and gradually incorporated the language patterns of science in their own discourse.*

Albertini, J., & Schley, S. (2003). Writing: Characteristics, instruction, and assessment. In M. Marschark & P. Spencer (Eds.), Handbook of deaf studies, language, and education (pp. 123-135). New York: Oxford University Press. [AN 1757]

> *Several conclusions may be drawn from. recent studies in the teaching and assessment of writing with deaf students. First, aspects of form (that is, grammar are resistant to change even when deaf students write with purpose and focus on meaning. Grammatical and lexical performance will not improve significantly without direct instruction, and by all accounts, changes in grammatical and lexical performance will occur only over periods of years and in programs where students are encouraged to write frequently and at length. However, programs that encourage students to write from personal experience and in various genres will likely foster the development of discourse organization and fluency. Analyses of organization, content, and effect of genre, revealed similarities in the writing of deaf and hearing students. For deaf students, the use of more familiar genres, those that emphasize communication, self-expression, or imagination, will be beneficial.*

Berent, IC;. (2001). English for deaf students: Assessing and addressing learners' grammar development. In D. Janakova (Ed.), International seminar on teaching English to deaf and hard-of-hearing students at secondary and tertiary levels o f education: Proceedings (pp. 124-134). Prague, Czech Republic: Charles University, The Karolinum Press. [AN 1729]

> *Deaf learners generally experience tremendous difficulty in acquiring spoken languages in contrast to their natural and effortless acquisition of signed language. Without full access to the sounds and intonations of a spoken language, the acquisition process for deaf learners is often labored and unnatural and occurs at a much slower rate than for hearing learners. This paper provides guidelines for teachers of deaf students on classroom methods, for assessing and addressing students' English gram mar development.*

Berent, 113j. (2001). Review of C. Neidle, J. Kegl, D. MacLaughlin, B. Bahan, & R. G. Lee, The syntax of American sign language: Functional categories and hierarchical structure (Cambridge, MA: The MIT Press, 2000). Language, 77, 839-842. [AN 1740]

This book provides broad theoretical coverage of the syntax of American Sign Language (ASL), the visual-gestural language of the Deaf community in the United States and much of Canada. It also provides orienting information concerning the sociolinguistic context in which ASL is used and a discussion c f methodological considerations for eliciting and analyzing sign language data.

Berent, G. (in press). Sign language-spoken language bilingualism: Code-mixing and mode-mixing by ASL-English bilinguals. In T. K. Bhatia & W. C. Ritchie (Eds.), ***The handbook of bilingualism*****. Oxford, UK: Blackwell Publishers. [AN 1761]**

This chapter focuses on a largely unexplored area of SL-SpL bilingualism that relates to the unique variable - modality - that distinguishes sign languages from spoken languages. Whereas spoken languages are communicated through the auditory-vocal (AV) modality, sign languages are communicated through the visual-spatial (VS) modality. When a sign language and a spoken language are in contact, the two distinct modalities allow extraordinary options for language mixing.

Berent, G., & Clymer, E. (2000). Supporting English acquisition: A professional development web site for professionals serving deaf and hard-of-hearing students. ***NTID Research Bulletin, 5 (3),*** **1, 3-5. [AN 1746]**

The SEA Web site is an online professional development tool for English teachers, content teachers, and other professionals serving deaf and hard-of-hearing students. Its goal is to help educators promote students' English acquisition and literacy development by explaining the challenges that English poses for deaf and hard-of-hearing students, summarizing the characteristics of specific English structures and processes, translating English language research findings into everyday language, and discussing research implications and suggesting applications to the teaching/learning process.

Berent, G., Samar, V., & Parasnis, I. (2000). College teachers' perceptions of English language characteristics that identify English language learning disabled deaf students. ***American Annals of the Deaf, 145(4),*** **342-35 8. [AN 1705]**

A survey solicited the intuitions of experienced teachers and tutors of English to deaf college students regarding the degree of difficulty deaf students with and without learning disabilities might be expected to have in dealing with 30 specific English language phenomena.

Caccamise, F., & Mitchell, M. (1999). Secretarial 3 & NTID/RIT Secretarial Videotapes. [see "Available for Purchase"]

and

Caccamise, F, & Mitchell, M. (1998). SIGNS for legal and social work terminology. [see "Available for Purchase"]

and

Caccamise, F., & Lang, H. (2000). Signs for science and mathematics terminology: A resource text for teachers and students (2nd ed.). Rochester, NY: NTID (national distribution via Greater Los Angeles Council on the Deaf Bookstore, Harris Communications, Assistive Communication Center, Butte Publications, and RIT Bookstore). [see "Available for Purchase"]

Using a systematic process developed at NTID during the 1970's, skilled signers knowledgeable about legal, social work, secretarial, science and mathematics were interviewed in order to collect the signs they use for terminology in each of these areas. These signs, together with signs collected from previously published materials, were then shared with other legal, social work, secretarial, science and mathematics experts who provided judgments of their acceptability. Based on the results often his process, and respondent's sociolinguistic background, signs were selected for inclusion in these publications. In addition to information about this process and signs: (1) the legal-social work book includes suggestions and guidelines for effective use of sign language vocabulary for legal and social work terminology and information and readings from the National Association for the Deaf and the Registry of Interpreters for the Deaf, and (2) the science and mathematics book includes a selected reading list on science and mathematics education for students who are Deaf resources and strategies for ASL interpreting of technical information, and sign formation guidelines based on the structure of naturally developed signs.

Caccamise, F., Newell, W., Mumford, B., & Hoke, L. (2000). American sign language (ASL) and deaf culture materials: distributors, ASL curriculums, and technical communication. NTID Report, Rochester, NY. [AN 1588] or *http://www.rit.edu/ fccncr/ASLDCM.HTML*

This paper includes (1) a listing of distributors of ASL and Deaf culture materials,(2) a listing of major ASL curriculums, and (3) information about sign language materials for technical communication.

Fischer, S. (1998). Critical periods for language acquisition: consequences for deaf education. In A. Weisel, (Ed.), *Issues unresolved: New perspectives on language and deaf education (pp.* 9-26). Washington DC: Gallaudet University Press. [AN 1475]

This chapter focuses on critical periods for language acquisition and their consequences for deaf' education. Keeping the long-term interests of the child in mind, I suggest reserving the use of artificial sign systems for metalinguistic purposes, exposing children and adults to native sign language, allowing adults and children to develop natural sign systems in an organic way, and relying on contextualized print to supplement the acquisition of the spoken language.

Fischer, S. (2000). More than just handwaving: The relationship between sign language and linguistic theory. Lane, H., & Emmorey, K., eds. (in press). *The signs of language revisited.-An anthology to honor Ursula Beliugi and Edward Klima (pp.* 195-213). Mahwah, NJ: Lawrence Erlbaum Associates. [AN 1592]

Thirty years ago, sign language was generally considered as an oddity, a marginalized and messy system of communication with little or no autonomous grammar and little or nothing to teach linguists or linguistics. Over the last generation, sign languages all over the world have been recognized as full fledged languages with much to teach us about the human capacity for language and the nature of language itself. I hope that Nihonsyuwa will also earn its rightful place as one of those languages.

Fischer, S., Delhorne, L., & Reed, C. (1999). Effects of rate of presentation on the reception of ASL. *Journal of Speech, Language, and Hearing Research, 42:* 568-582. [AN 1668]

We began this paper by posing questions about production bottlenecks and limitations on language processing. Nobody can sign as fast as our higher speed stimuli, yet native signers were able to process signing at several times normal rate. Our subjects' processing o1d time-compressed signing broke down at about the same rates as that of hearing subjects dealing with time-compressed speech. We believe that this is no accident. Just as earlier literature showed that there appeared to be a constant cross-modal rate of uttering propositions, our results show that there is a relatively constant rate independent of modality beyond which native users of a language are unable to process that language for meaning. Disruption of factors in processing language (such as degree of nativeness, amount of redundancy in the signal, and amount of context lead to patterns of errors similar to those we found, with greater disruption causing processing to occur at a more surface level. Our results, based on ideal conditions except for rate of presentation, show that there is ,7 reception bottleneck as well as a production bottleneck in language processing. Where that reception bottleneck lies perception, memory, interpretations a subject for future research.

Fischer, S., Foster, S., Gustina, D., & Senior, G. (2002). Correlates of success in learning to sign. *NTID Internal Report.* [AN 1771]

NTID Communication policy states that all faculty must demonstrate certain levels of sign language competence in order to achieve tenure and promotion. While it is clear that many faculty can achieve that competence within 6 years, it is not clear that all faculty can do so. Our goal has been to find out what factors are important for success in achieving sign competency. We hope that our findings will contribute to the improved signing competence of our faculty and thereby enhance students' access to information in the NTID environment.

Fischer, S., & Gough, B. (1999). Some unfinished thoughts on FINISH. Sign Language & Linguistics, 2(1), 66-78. [AN 1674]

The sign in ASL with the most varied meanings (though many of the meanings are related), syntactic uses, and interesting grammatical ramifications is FINISH. There are about seven different meanings and at least four grammatical functions it can take. It interacts in very interesting ways with processes in ASL of negation, interrogation, and subordinate conjunction, and also with specific kinds of verbs.

Kelly, R., Albertini, J., & Shannon, N. (2001). Deaf college students' reading comprehension and strategy use. American Annals of the Deaf, 146(5), 385-400. [AN 1766]

Two reading comprehension studies were conducted with 46 deaf college students for the purpose of 1) examining their comprehension of college level science related material and 2) what strategies may be useful in improving their understanding. The results suggest that students profess a better understanding of what they read than they are able to demonstrate. Also, their inability to identify a topically incongruent sentence further suggests a need for more careful self-monitoring of their reading. The second study on strategy review instruction showed that higher level readers benefited from instruction, but lower level readers did not. Post study interviews and a read aloud task were conducted with the students to obtain additional information about their comprehension, reading habits, and use of reading comprehension strategies.

Kelly, R., Lang, H., Mousley, K., & Davis, S. (2003). Deaf college students' comprehension of relational language in arithmetic compare problems. Journal of Deaf Studies and Deaf Education, 8(2), 120-132. [AN 1743]

In this study of deaf college students' performance solving compare word problems, relational statements were either consistent or inconsistent with the arithmetic operation required for the solutions. The results support the consistency hypothesis Lewis and Mayer (1987) proposed based on research with hearing students. That is, deaf students were more likely to miscomprehend a relational statement and commit a reversal error when the required arithmetic operation was inconsistent with the statement's relational term (e.g., having to add when the relational term was less than). Also, the reversal error effect with inconsistent word problems was magnified when the relational statement was a marked term (e.g., a negative adjective such as less than) rather than an unmarked term (e.g., a positive adjective such as more than). Reading ability levels of deaf students influenced their performance in a number of ways. As predicted, there was a decrease in goal-monitoring errors, multiple errors, and the number of problems left blank as the reading levels of students increased. Contrary to expectations, higher reading skills did not affect the frequency of reversal errors.

Lang, H., & Albertini, J. (2001). Construction of meaning in the authentic science writing of deaf students. Journal of Deaf Studies and Deaf Education, 6(4), 258-284. [AN 1730]

This study examines how students construct meaning through writing during authentic science activities. To determine how well students understood science concepts, we analyzed 228 writing samples from deaf students in grades 6 through 11 as well as the explanatory and reflective comments of their teachers.

Lang, H., & Dowaliby, F. (1999). Adjunct aids to instructional prose: A multimedia study with deaf college students. Journal of Deaf Studies and Deaf Education, 4(4), 270-282. [AN 1640]

A computer-based science lesson was administered to 144 deaf college students grouped into low, middle, and high reading ability levels. Five instructional conditions were compared

text-only, text and content movies, text and sign movies, text and adjunct questions, and all of these together.

Lang, H., & Stokoe, W. (2000). A treatise on signed and spoken language in early 19th century deaf education in America. *Journal of Deaf Studies and Deaf Education, 5(2),* 196-216. [AN 1712]

This paper summarizes the early work o f Frederick Augustus Porter Barnard, a deaf scientist and educator, on communication and teaching in classrooms for deaf students. Although published only two decades after formal schooling began in America, Barnard's analysis of sign language, in particular, displays a thorough understanding of critical issues, written in an undated style. Making this a must reading for all who teach deaf students today.

Marschark, M. (2002). Foundations of communication and the emergence of language in deaf children. G. Morgan & B. Woll (Eds.), *Current developments in child signed language research.* Amsterdam: J. Benjamins. [AN 1779]

This chapter focuses on what it is that children bring to language acquisition and the ways in which the contexts of language learning influence what the child learns and how. The foundations of communication and the emergence of language in deaf children will be seen to reside in and reflect the nexus of early social and cognitive development, with healthy doses of genetic and environmental influence (Akamatsu, Musselman & Zweibel 2000: Marschark & Everhart 1997.

Marschark, M. (1999). Interactions of cognitive processes and reading in deaf learners: Understanding differences. In J. Leybaert & G. Durand (Eds.), *Surdite et acces -- la langue ecrite: de la recherche et la pratique. Actes du colloque international,* Volume 1 (pp. 95-109). Paris: ACFOS. [AN 1650]

This article describes ways in which reading-related cognitive abilities of deaf children may differ from those of hearing children and may vary more broadly across deaf children than they do across hearing children.

Marschark, M. (in press). Interactions of language and cognition in deaf learners: From research to practice. *International Journal of Audiology.* [AN 1777]

It is well-established that deaf children begin school lagging in general language skills relative to hearing peers, and that deaf and hearing students differ with regard to literacy and other academic skills. These domains typically are treated separately, by different groups of researchers, with little consideration to common factors that might underlie them. It appears, however, that both of these situations might reflect d differences in conceptual and content knowledge, as well as linguistic knowledge, between and among deaf and hearing learners.

Marschark, M. (2001). Language development in children who are deaf: A research synthesis, Alexandria, VA: National Association of State Directors of Special Education. [AN 1774]

> *This document is designed to provide educators with an objective synthesis of the current research regarding language development in the children who are deaf. Unfortunately, many of the research findings are contradictory or inconclusive, and numerous questions remain unanswered. What is clear from the research is that intervention plans and educational programming decisions should be made based on the needs, capabilities, and circumstances of the individual child. The child who has hearing aids, the child who has cochlear implant and use oral-auditory strategies, and the child with a cochlear implant for whom using sign language in addition to oral-auditory training has been recommended, and the child who uses sign only, will all need different support strategies.*

Marschark, M. (1998). Memory for language in deaf adults and children; *Scandinavian Audiology, 27,* Suppl. 49: 87-92) [AN 1654]

> *This article considers the results of previous studies and some new findings in examining the possible impact of spoken language and sign language fluencies/preferences on the structure and process of memory in deaf individuals.*

Marschark, M. (in press). Metaphors of sign language and sign language users: A window into relations of language and thought. In H. Colston &A. Katz (Eds.), *Figurative language comprehension: Social and cultural influences.* Mahwah, NJ: Lawrence Erlbaum Associates. [AN 1778]

> *As its title suggests, this chapter is about the metaphoric aspects of sign language and the use of such figurative devices by sign language user. Distinguishing and then integrating these domains requires consideration of three primary areas of investigation, each of which will be described here to only a limited extent-albeit for different reasons.*

Marschark, M., & Lukomski, J. (2001). Understanding language and learning in deaf children. In M.D. Clark, M. Marschark, & M. Karchmer (Eds.), *Cognition, context, and deafness (pp.* 71-86). Washington, DC: Gallaudet University Press. [AN 1688]

> *This chapter examines the cognitive functioning of deaf learners and the extent to which any reliable differences between them and hearing peers might explain other observed differences in academic achievement.*

Marschark, M., LePoutre, D., & Bement, L. (1998). Mouth movement and signed communication. In R. Campbell, B. Dodd, & D. Burnham (Eds.), *Hearing by Eye 11: Advances in the psychology of speechreading and auditory-visual speech (pp.* 245-266). East Sussex, UK: Psychology Press Ltd. [AN 1691]

This chapter considers the possibility that during signed communication, there are other things going on in addition to the "simple" connection between the manual articulatory apparatus of one person and the visual reception apparatus of another.

McEvoy, C., Marschark, M., & Neslon, D. (1999). Comparing the mental lexicons of deaf and hard of hearing individuals. *Journal of Educational Psychology, 91(2),* 312-320. [AN 1652]

This study compared the organization of verbal concept knowledge in deaf and hearing adults. A semantic association task was used to estimate the mental lexicons of deaf and hearing adults for a sample of words that were either sound-related or not sound-related Observed similarities and differences between deaf and hearing adults were comparable for sound-related and not-sound-related words.

Reeves, J., Newell, W., Holcomb, B., & Stinson, M. (in press). The sign language skills classroom observation: A process for describing sign language proficiency in classroom *settings. American Annals of the Deaf.* [AN 1704]

In collaboration with teachers and students at the National Technical Institute for the Deaf (NTID), the Sign Language Skills Classroom Observation (SLSCO) was designed to provide feedback to teachers on their sign language communication skills in the classroom. In this article, the impetus and rationale for developing the SLSCO is described. Previous studies related to classroom signing and observation methodology are reviewed.

Samar, V., Parasnis, I., & Berent, G. (2002). Deaf poor readers' pattern reversal visual evoked potentials suggest magnocellular system deficits: Implications for diagnostic neuroimaging of dyslexia in deaf individuals. *Brain and Language,* 80, 21-44. [AN 1713]

This article presents the visual evoked response evidence that deaf adult poor readers compared with deaf adult good readers, have deficient occipital lobe responses and hyper-reactive frontal lobe responses to very low-contrast visual patterns.

Schiavetti, N., Whitehead, R., Whitehead, B., & Metz, D. (1998). Effect of fingerspelling task on temporal characteristics and perceived naturalness of speech in simultaneous communication. *journal of Speech, Language, and Hearing Research, 4(1),* 5-- 17. [AN 1696]

This study investigated the effect of fingerspelling task length on temporal characteristics and perceived naturalness of speech produced during simultaneous communication. Five temporal measures were calculated from acoustic recordings, and perceived speech naturalness was rated by a panel of listeners using a 9 -point scale.

Singleton, J., Supalla, S., Litchfield, S., & Schley, S. (1998). From sign to word: Considering modality constraints in ASL/English bilingual education. *Topics in Language Disorders, 18(4).* [AN 1767]

As the bilingual education movement receives greater attention within deaf education settings, a theoretical framework for organizing and implementing the American Sign Language (ASL) and English learning experiences among deaf students has not been fully articulated in the literature to date. In this article, the traditional notion of ASL/English bilingualism is critically examined. This model is then contrasted with the "ASL/English as a spoken language" bilingual model in which the modality constraints facing the deaf child are presented as the fundamental issue for ASL/English bilingualism. Empirical and applied research supporting this modality constrained bilingual model is also discussed.

Snell, K.. (2002). Dichotic gap detection and speech recognition in noise. *Assoc. Res. Otolaryngol.* Abs.:81. [AN 1789]

In an earlier study, we found that speech- understanding in a fluctuating background is related to temporal processing as measured by the detection of gaps in noise bursts. Fifty adults with normal or mild high frequency hearing loss served as subjects. Gap detection thresholds in noise were obtained using a 150-ms noise burst with the gap placed close to carrier onset. NU- 6 word scores for the subjects were obtained at a presentation level of 55 dB HL in competing babble levels of 50, 55 and 60 dB HL. A repeated measures analysis o f covariance of the word scores examined the effects f age, absolute sensitivity, and temporal sensitivity. The results of the analysis indicated that word scores in competing babble decreased significantly with increases in babble level, age, and gap detection thresholds. The effects of absolute sensitivity on word scores in competing babble were not significant. These results suggest that in the absence of clinically significant hearing loss, age and temporal processing influence speech understanding in fluctuating backgrounds. In a more recent study, gap detection thresholds were obtained in comparable dichotic conditions with similar groups of younger, middle-aged, and older listeners. The relationship between dichotically obtained gap thresholds and speech scores will be presented. Finally, a third study was designed to determine the effect of moderate to severe hearing loss on temporal acuity and its relationship to speech discrimination in noise. Gap detection thresholds and word scores were obtained across a range of background noise levels in 13 young subjects. Five had normal hearing; eight had moderate to severe bilateral hearing losses. The relationship between gap detection thresholds and speech scores in younger adults with moderate to severe hearing loss will be discussed. This research was supported by the Rochester International Center for Hearing and Speech Research and a grant from NIA.

Snell, K., & Frisina, D. *(2000).* Relationships among age-related differences in gap detection and word recognition. *The Journal of the Acoustical Society of America, 107(3), 1615-1626.* Ipswich, MA: EBSCO Publishing. [AN *1787]*

The relationships among age-related differences in gap detection and word recognition in subjects with normal hearing or mild sensorineural hearing loss were explored in two studies. In the first study, gap thresholds were obtained for 40 younger and 40 older subjects. The gaps were carried by 150-ms, modulated, low pass noise bursts with cutoff frequencies of 1 or 6 kHz. The noise bursts were presented at an overall level of 80 dB SPL in three background conditions. Mean gap thresholds ranged between 2.6 and 7.8 ms for the younger age group and between 3.4 and 10.0 ms for the older group. Mean gap thresholds were

significantly larger for the older group in all six conditions. Gap thresholds were not significantly correlated with audiometric thresholds in either age group but the 1-kHz gap thresholds increased with age in the younger group. In the second study, the relationships among gap thresholds, spondee-in-babble thresholds, and audiometric thresholds of 66 subjects were examined. Compared with the older subjects, the younger group recognized the spondees at significantly lower (more difficult) spondee-to-babble ratios. In the younger group, spondee-in-babble thresholds were significantly correlated with gap thresholds in conditions of high frequency masking. In the older group, spondee-in-babble thresholds, gap thresholds, and audiometric thresholds were not significantly correlated, but the spondee-in-babble thresholds and two audiometric thresholds increased significantly with age. These results demonstrate that significant age-related changes in auditory processing occur throughout adulthood. Specifically, age-related changes in temporal acuity may begin decades earlier than age-related changes in word recognition.

Snell, K., & Hu, H. (1999). The effect of temporal placement on gap detectability. *The Journal of the Acoustical Society of America, 106(6), 3371-3577.* Ipswich, MA: EBSCO Publishing. [AN 1788]

The detectability of a masked sinusoid increases as its onset approaches the temporal center of a masker. This study was designed to determine whether a similar change in detectability would occur for a silent gap as it was parametrically displaced from the onset of a noise burst. Gap thresholds were obtained for 13 subjects who completed five replications of each condition in 3 to 13 days. Six subjects were inexperienced listeners who ranged in age from 18 to 25 years; seven subjects were highly experienced and ranged in age from 20 to 78 years. The gaps were placed in 150-ms, 6-kHz, low passed noise bursts presented at an overall level of 75 dB SPL; the bursts were digitally shaped at onset and offset with 10-ms cosine-squared rise fall envelopes. The gated noise bursts were presented in a continuous, unfiltered, white noise floor attenuated to an overall level of 45 dB SPL. Gap onsets were parametrically delayed from the onset of the noise burst (defined as the first nonzero point on the waveform envelope) by 10, 11, 13, 15, 20, 40, 60, 110, 120, and 130 ms. Results of ANOVAs indicated that the mean gap thresholds were longer when the gaps were proximal to signal onset or offset and shorter when the gaps approached the temporal center of the noise burst. Also, the thresholds of the younger, highly experienced subjects were significantly shorter than those of the younger, inexperienced subjects, especially at placements close to signal onset or offset. The effect of replication (short-term practice) was not significant nor was the interaction between gap placement and replication. Post hoc comparisons indicated that the effect of gap placement resulted from significant decreases in gap detectability when the gap was placed close to stimulus onset and offset.

Snell, K., Mapes, F., Hickman, E., & Frisina, D. (2002). Word recognition in competing babble and the effects of age, temporal processing, and absolute sensitivity. *The Journal of the Acoustical Society of America, 112(2), 720-727.* [AN 1786]

This study was designed to clarify whether speech understanding in a fluctuating background is related to temporal processing as measured by the detection of gaps in noise bursts. Fifty adults with normal hearing or mild high frequency hearing loss served as subjects. Gap detection thresholds were obtained using a three-interval, forced-choice paradigm. A 150--ms noise burst was used as the gap carrier with the gap placed close to carrier onset. A high-frequency masker without a temporal gap was gated on and off with the noise bursts. A

continuous white-noise floor was present in the background. Word scores for the subjects were obtained at a presentation level o f 55 dB HL in competing babble levels of '50, 55, and 60 dB HL. A repeated measures analysis of covariance of the word scores examined the effects of age, absolute sensitivity, and temporal sensitivity. The results of the analysis indicated that word scores in competing babble decreased significantly with increases in babble level, age, and gap detection thresholds. The effects of absolute sensitivity on word scores in competing babble were not significant. These results suggest that age and temporal processing influence speech understanding in fluctuating backgrounds in adults with normal hearing or mild high frequency hearing loss.

Stokoe, W., & Marschark, M. *(1999)*. Signs, gestures, and signs. In L. Messing & R. Campbell (Eds.), *Gesture, speech, and sign (pp. 161-182)*. Oxford: Oxford University Press. [AN 1653]

This chapter focuses on the signs produced using either the vocal apparatus or the manual brachial facial apparatuses of human beings for the purposes of social communication. Included within that category are the signs of sign language: linguistic elements that semantically and syntactically comprise countless social communication systems around the world and may have had special significance in the origins of human language.

Toscano, R., McKee, B., & Lepoutre, D. (2002). Success with academic English: Reflections of deaf college students. American Annals of the Deaf, 147(1), 5-23. [AN 1755]

The study identified social, educational; and demographic characteristics of deaf postsecondary students who demonstrated strong reading and writing skills. Questionnaire information, information from institutional databases, and in depth personal interviews were used to identify factors and characteristics that positively influenced the attainment of strong academic literacy skills.

Whitehead, R., D'Avonzo, S., Grazionao, T., Metz, D., & Schiavetti, N. (1998). Production and perception of final consonant voicing in speech produced by inexperienced signers during simultaneous communication. Journal of Communication Disorders, 31, 337-346. [AN 1664]

This study investigated the potential influence of alterations in the temporal structure of speech produced by inexperienced signers during simultaneous communication on the perception of final consonant voicing. Inexperienced signers recorded words that differed only in the voicing characteristic of the final consonant under two conditions: 1) speech alone and 2) simultaneous communication.

Whitehead, R., Weglarski, A., Sewall, A., Schiavetti, N., & Metz, D. (2000). Effect of vowel environment on consonant duration: An extension of normative data to adult contextual speech. Journal of Communication Disorders, 33, 1-10. [AN 1663]

This study investigates the effect of vowel environment on fricative consonant duration in contextual speech, produced by adults. Results indicated significant effects of vowel context

on consonant duration in contextual speech and revealed anticipatory scanning effects that are similar to those seen with nonsense syllables in previous studies.

Whitehead, R., & Whitehead, B. (1999). Effect of vowel environment on fricative consonant duration in speech produced during simultaneous communication. Journal of Communication Disorders, 32, 423-434. [AN 1658]

This study investigated the effect of vowel environment on fricative consonant duration in speech produced during simultaneous communication (SC). Ten normal-hearing, experienced sign language users recorded palatal and alveolar fricatives produced in four vowel environments in contextual sentences under SC and Speech-only (SO) conditions.

Winston, E., & Monikowski, C. (2000). Discourse mapping: Developing textual coherence skills in interpreters. In Cynthia B. Roy (Ed.). Innovative Practices for Teaching Sign Language Interpreters. Washington, D.C.: Gallaudet University Press. [AN 1682]

This book chapter examines three aspects of a message for successful interpretation: accurate content (themes, topics, and events); appropriate context (register, settings, speaker's goals, etc; and appropriate linguistic form (discourse structures, transitions, vocabulary, etc.)

Note: *[AN XXXX] represents a local NTID publications designation. Please include when requesting copies of these publications.*