

Analysis of Syntax Errors in Written Language of 8th Grade Students with Hearing Impairment

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Abstract

Children with hearing loss confront a diversity of developmental challenges in the areas of language and literacy. This research studied ‘Syntactical Error Analysis’ in the written Urdu language of students with hearing impairment of 8th grade. The sample of the study consisted on the conveniently selected 100 students of 8th grade with hearing impairment studying in public and private institutions of Lahore and Sahiwal divisions. A self-developed writing test, consisting three open-ended questions was used to collect data. Data obtained were organized, tabulated and analyzed by using SPSS. Besides calculating the frequency distributions of demographic variables, descriptive statistics were used for data analysis. The analyses include mean, standard deviation, minimum and maximum value. Inferential statistical analyses e.g. independent sample t-test and analysis of variance (ANOVA) were used to compare errors of students on different institutions. On the basis of analysis, it is found that the majority of the respondents committed Syntactic Omission Errors whereas the Syntactic Addition Errors and Syntactic Substitution Errors are highly related with each other. Committing Syntax errors in written language is not affected by the gender of respondents and divisional difference, but on the basis of institutions.

Keywords: syntax, omission, addition, substitution

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Introduction

The typical meaning of a hearing deficiency is any decreasing of an individual's capacity to hear. The term hearing impairment is regularly seen defiantly as it accentuates what individuals can't do (Yasamsal, Yucel, & Sennaroglu, 2013). Hearing issues influenced the capacity of learners to learn spoken language and in elders it can be ground work related problems (Giddens, 2009).

Children with hearing impairment face multiple challenges in the area of language and literacy skills (Kilpatrick, 2015). Literacy is usually comprehended as the talent to write, read and numeracy (Merriam-Webster). A person's literacy is subject to his or her advancement of language. Language is the medium or path by which ideas are generated while reading and writing (Schmitz & Keenan, 2005). Language is a vital source of communication among individuals. Individuals can impart their thoughts, feelings, goals, convictions or sentiments to another by the common code of language. Language is an important source of communication among individuals that a concept about a society without language is unnatural. Normally, the scope of languages never considered while utilized constantly. The most prevalent types of communication barrier begin by itself and are specifically the after effect of the hearing loss. Said barriers are related particularly with language and speech. The speech and language barriers become troublesome for those with HL to control their possessed particular speech and comprehend what others need to state, in this manner, making it very difficult to hold a discussion altogether (Haynes, Moran & Pindzola, 2012). It is discovered that deaf or hard of hearing students show off slower charges of vocabulary acquisition with appreciate to identical-age children with normal hearing. Certainly, it has been proven that the vocabulary of 6-year deaf child is corresponding to that of 9 months of hearing child, independently of the degree of deafness (Mayne, Yoshinaga-Itano, Sedey, & Carey, 2000).

A child with HL, with or without extraordinary requirements, goes to the procedures of reading and writing with diverse strengths and challenges. It is because of individual diversity in psychological, neurological, tactile or physical potential, development, skill, and experience. The comprehension of how to read and write, such as comprehension of how to listen and speak, is grounded in conversational speech wherever physical and social setting strengthen a wide range potential for language utilize and meaning (Snow & Ferguson, 1977; Waterson & Snow, 1978).

The potential to write is an evolved talent, which includes many factors. For some learners obtaining this ability is tough and challenging. Writing is the best stage of communication and is an essential talent to broaden and foster (Giddens, 2009). Deaf or hard of hearing individuals consider writing skills as an essential component in job-associated conversation and community participation. Writing is a useful activity for children who're deaf, and additionally fulfills individual while socio cultural objectives similar those of hearing peers. It is described also as, writing is a social manner in itself that represents a way to convey a message to someone else and it applies to all youngsters (Dorn, Soffos, 2000).

Learning to write is difficult for all children. This is even extra genuine for deaf and hard-of-hearing (D/HH) children whose writing competencies had been shown to be especially low (Rinaldi & Caselli, 2009). Students who are deaf or hard of hearing rating in the low-average range when tested on background knowledge, contextual language, and story creation (Anita, Kreimeyer & Reed, 2005). However, in spite of the years of instruction, mostly stay unable to provide clear and error free texts. As a result, students on this populace might also are seeking help in editing or revising their work (Schmitz & Keenan, 2005). Researchers and Instructors have centered on improving the writing skills of students with hearing loss for more than a century. Even as a few increases have been made, the written expression of students hearing deficiency remains a mission (Albertini & Schley, 2003; Rose, McAnally, & Quigley, 2004).

The previous studies show that most of the students who are deaf or hard of hearing fail to master the complicated writing method (Cheng & Rose, 2008). Worldwide and national investigations have demonstrated that many hard of hearing individuals entered in school without an acquisition of proper language even without the oral or manual source of communication. Consequently, without an acquisition of basic/native language (sign language), the process of education may be affected and also affect the generation of written language with simple grammatical structures, limited vocabulary, and challenges in regards to verbal accent and agreement (Rodrigues, Abdo & Silvia, 2012).

The syntactic arrangement of language deals with the rules that followed while grammatical arrangements of words in the sentence. A typical syntactic language component found in the reading and writing of certain speech groups is the dropping of such inflectional endings as <ed> and <s>. The lack of tense, explicit marking and number does not mean, as has been stated by a few, that the language community does not have a comprehension of these ideas. The reader and writer are completely mindful of the past, present and future and in addition, the way that things

can shift in the amount; these ideas are essentially not expressly set apart on the syntactic or morphological level. Rather, setting is utilized for such checking. The omission of the <ly>, as in <Do it quick> for <Do it quickly>, is significantly more normal. This oversight of the <ly> happens not just with readers and writers within a specific language, yet in addition crosswise over languages, including people who talk the standard language.

Deaf and hard of hearing face outstanding troubles by writing manifested by several errors in the sentence because of their problems in getting access to and learning morphological and syntactical structures, each auditory or visually. The problems those children revel in with analyzing make them a limited experience to models of desirable writing. Similarly, being teachers of d/hh opt to implement strategies restricted written production of said students as well as writing on sentence level, although correct, exposure to lack hobby, informatively and harmony (Antia, Reed, & Kreimeyer, 2005). Even though, a few progress inside the manufacturing of syntactical shape with increasing age were pronounced this development is deliberate than this displayed through their peers with normal hearing (Heefner & Shaw, 1996).

They are characterized as native and rigid due to using fewer phrases, greater incomplete sentences and primary syntactic structures, less subordinate clauses, less noun phrase modifiers, omissions of feature phrases (Wolbers, Dostal & Bowers, 2012). Research-primarily based evidence shows that students who are deaf or have difficulty in hearing, while compared with their peers with normal hearing, generate the smaller amount of words, produce shorter and easier sentences, illustrate much less complex syntax and descriptive phrases, use identical phrase's time and again make noticeably greater mechanical mistakes, and developing coherent texts and feature issue using feature phrases (Yoshinaga-Itano & Snyder, 1985; Marschark, Mouradian, & Halas, 1994; Yoshinaga-Itano, Snyder, & Mayberry, 1996; Marschark, Lang, & Albertini, 2002; Singleton, Morgan, DiGello, Wiles, & Rivers, 2004).

The attention here is on investigating the cognitive procedures utilized when people are proficient readers productive and successful in their home (first) language and in the English (second) language. In any case, on account of the varied conditions and experiences reported by bilingual students, the findings of the biliteracy research reported carefully rather to be taken over generalize. Generally, there is a positive and strong relationship between the procedures and strategies utilized as a part of the first and second languages (Carrasquillo, Kucer, & Abrams, 2004; Fitzgerald, 1995; Jimenez, Garcia, and Pearson, 1995, 1996). People who

are proficient in more than one written language are able to effectively employ methodologies utilized as a part of the primary language for use in the second language.

Mayer (2007) located that it is at degree three, connecting writing to spoken language and signed language, in which the writing of youngsters who are deaf easily discriminated with their hearing peers. Although the similarities found in uses of English among deaf students and nonnative speakers, there are sizeable variations among American Sign Language and plenty of spoken languages that cause additional troubles for the deaf (Schmitz & Keenan, 2005).

In second language acquisition, a more uplifting state of mind created towards the student's errors. Mistakes were never again considered while evil signs or disappointment signs, in learning and educating, to be eradicated some ways, rather, they were viewed as an essential element in the process of learning language. Errors are "systematic i-e happened frequently and not perceived by the student. Henceforth, they are just find by the instructor or specialist not by the student (Gass & Selinker, 1994). The knowledge or poor knowledge of 1st language or native language influence the learning process of second language and cause the occurrence of interlanguage errors. This impact is known as language transfer. Inter language errors are those because of 1st or native language. Deaf and hard of hearing learners are much like different bilingual learners in that they are capable of draw upon properly-advanced conceptual expertise and earlier reports in a single language to convey extra "cognitive power" to the literacy tasks the use of 2nd language (English vs. ASL), (Cummins, 1994).

Error Analysis is carried out to identify the kind of learner's errors and to obtain information on common difficulties in language learning. The identification of strengths and weaknesses may occur when an error analysis is carried out. It is useful in the teaching learning process as a guideline.

Writing is considering an essential component for community participation as well as in the job associated conversation to deaf and hard of hearing. On the other hand, literature provides us the evidence about lacking such students in this skill which is disappointing.

Significance

Keeping in view the vital role of writing more specifically for students with hearing impairment as well as characteristics of deaf and hearing impaired student's writing, consistently using fewer phrases,

greater incomplete sentences and primary syntactic structures etc, it seemed desirable to conduct an analysis of syntax errors in the written language of students with hearing impairment (H.I). Furthermore, there is no research work conducted on the syntax errors committed by students with hearing impairment of 8th grade. This research study will be an invaluable treasure for student and teachers of H.I. The findings of this study will be useful in teaching-learning activities. It will also be valuable in favor of the further research works in this field.

Objectives

Major objectives of the study were to:

- i. Identify common errors in the written language of students with hearing impairment.
- ii. Find out the most common types of Syntax errors made by 8th grade students with hearing impairment.
- iii. Compare syntax errors of students with hearing impairment on different demographic variables.

Methodology

The research design of this study was quantitative by nature. The purpose of the study was to analyze the syntax errors in the written language of Urdu among 8th grade students with hearing impairment. The test has been validated and the pilot tested on a small scale after which it has been administered on the research sample conveniently selected 100 8th grade students with hearing impairment. Students' responses had then been analyzed for syntax errors. The responses were organized, tabulated and entered and descriptive and inferential analysis was used to answer different research questions. On the basis of analysis, conclusions were drawn and to end with some suggestions and recommendation on the basis of acquired information by the target population.

Population

The population of this study comprised of the students with hearing impairment of 8th grade studying in Public & private institutes of Lahore & Sahiwal division.

Sample and Sampling technique

The sample of the study was consisting on the conveniently selected 100 students of 8th grade with hearing impairment from the public & private institutions of Lahore & Sahiwal division.

Instrument

To carry out the Analysis of Errors, committed by 8th grade students with hearing impairment, a writing test, comprising of three open-ended items i.e. (a) 10 short questions about themselves, (b) a letter to uncle telling him about your school and (c) an essay on “Favorite Personality” was used.

Data Collection & Data analysis

The researcher personally visited the institutions for the purpose of data collection. Researcher shared the purpose and significance of the study with the administration asking prior permission and time for the administering test. On given time researcher administered the test in a period of one & half hour allocated for this task. Alongside the researcher, respondents were also supervised by the educator to ensure that learners wrote in their comfort zone as the researcher’s presence may cause of external exam fear.

Data obtained from the targeted population by administering test on the sample was organized, tabulated and analyzed using SPSS. Besides calculating the frequency distributions of demographic variables, descriptive statistics were used for data analysis. The analyses include mean, standard deviation, minimum and maximum value.

Inferential statistical analyses e.g. independent sample t-test and analysis of variance (ANOVA) were used to compare errors of students on different institutions. Post hoc multiple comparisons were used to see the significant difference between the institutions. Only the groups with significant differences were reported in Post hoc analysis.

Results

Table 1

Descriptive Statistics of Syntax Errors

| Sr | Errors | N | Range | Min | Max | Mean | SD |
|----|-------------------------------|-----|-------|-----|-----|------|------|
| 1 | Syntactic Omission Errors | 100 | 16 | 1 | 17 | 10.3 | 3.23 |
| 2 | Syntactic Substitution Errors | 100 | 13 | 0 | 13 | 5.0 | 3.34 |
| 3 | Syntactic Addition Errors | 100 | 16 | 0 | 16 | 3.0 | 3.26 |

The greatest problem area lies in 'omission'. Because the component of syntax is missing in the native language of respondents which is sign language.

Table 2

Independent sample t-test comparing syntax errors on the basis of divisions

| Test Variable | Division | N | Mean | S.D | T | Sig. |
|---------------|----------|----|------|------|-------|-------|
| Syntax | Lahore | 50 | 18.9 | 5.60 | 1.110 | 0.618 |
| | Sahiwal | 50 | 17.7 | 5.57 | | |

There is no significant statistical difference between the two geographical areas, suggesting that the education culture is of limited importance.

Table 3

ANOVA comparison of the average in the syntax errors on the basis of institutions

| Variance | Sum of Squares | d.f | Mean Square | f | Sig. |
|----------------|----------------|-----|-------------|-------|-----------|
| Between Groups | 1564.693 | 9 | 173.855 | | |
| Within Groups | 1530.307 | 90 | 17.003 | 10.23 | p < 0.001 |
| Total | 3095.000 | 99 | | | |

This shows that there is a significant difference in the average syntax errors on the basis of institutions.

Table 4

LSD multiple comparisons of average syntax errors on the basis of the institutions

| Institute (I) | Institute (J) | Mean Difference (I-J) | Sig. |
|--|---|-----------------------|-------|
| Govt. Secondary School for H.I. Kasur | Govt. Secondary School For H.I. Okara | 10.100* | 0.000 |
| | Govt. Special Education Center, Deepalpur | 10.833* | 0.000 |
| | Govt. Deaf & Defective Hearing Model Girls School, Chuburji | 11.500* | 0.000 |
| | Anayat Foundation Academy for Deaf, lhr | 11.800* | 0.000 |
| | Govt. Secondary School for H.I. Pakpattan | 12.313* | 0.000 |
| | National Special Education Center, Joher Town | 6.318* | 0.001 |
| | Govt. Special Education Center, Chunian | 6.500* | 0.004 |
| | Hamza Foundation Academy for the Deaf, lhr | 9.500* | 0.000 |
| | National Special Education Center, Joher Town | 3.285* | 0.048 |
| | Hamza Foundation Academy for the Deaf, lhr | 6.467* | 0.000 |
| Govt. Higher Secondary School for H.I. Sahiwal | Govt. Secondary School For H.I.Okara | 7.067* | 0.000 |
| | Govt. Special Education Center, Deepalpur | 7.800* | 0.000 |
| | Govt. deaf & Defective Hearing Model Girls School, Chuburji | 8.467* | 0.000 |

| | | | |
|---|---|--------|-------|
| | Anayat Foundation Academy for Deaf, lhr | 8.767* | 0.000 |
| | Govt. Secondary School for H.I. Pakpattan | 9.279* | 0.000 |
| | Govt. Secondary School For H.I. Okara | 3.782* | 0.039 |
| | Govt. Special Education Center, Deepalpur | 4.515* | 0.017 |
| National Special Education Center, Joher Town | Govt. Deaf & Defective Hearing model girls School, Chuburji | 5.182* | 0.022 |
| | Anayat Foundation Academy for Deaf, lhr | 5.482* | 0.003 |
| | Govt. Secondary School for H.I. Pakpattan | 5.994* | 0.000 |
| | Govt. Special Education Center, Deepalpur | 4.333* | 0.049 |
| Govt. Special Education Center, Chunian | Govt. deaf & Defective Hearing model Girls School, Chuburji | 5.000* | 0.048 |
| | Anayat Foundation Academy for Deaf, lhr | 5.300* | 0.015 |
| | Govt. Secondary School for H.I. Pakpattan | 5.813* | 0.004 |

By comparing the means of all institutions on Syntax Errors it is found that Govt. Secondary School for H.I. Kasur has significant difference with eight institutes followed by Govt. Higher Secondary School for H.I. Sahiwal who has significant difference with seven institutes, National Special Education Center, Joher Town with five institutions and Govt. Special Education Center, Chunian with four institutions.

It seems as this is the impact of classroom instructions. The average value of committing errors by the respondents of public institutions was high as compare to private institutions. Usually private institutions are more structured and organized.

Conclusion

It was concluded from the study that the majority of the respondents committed Syntactic Omission Errors whereas the Syntactic Addition Errors and Syntactic Substitution Errors are highly related with each other.

It shows respondents don't have the vocabulary of syntax. Syntax was missing in sentences rather than they replace words with others or use some additional. It is assumed that the reason behind syntax errors are may be the practice of sign language, in which syntax is missing. Committing Syntax errors in written language is not affected by the gender of respondents and divisional difference, but on the basis of institutions. It is observed that institutional differences on syntax errors were more. Performance of private institutions was better than the public institutions. Ratio of syntax errors were high in the performance of respondents belonging to public institutions.

Discussion

Kilpatrick (2015) added that the syntactic development of deaf/hard of hearing students is same to some extent, but not exactly the same as of hearing students. A hearing impaired student's writing has a tendency to reliably demonstrate a presentation of thoughts, yet inability to completely create or set up said thoughts because of an absence of semantic and syntactic aptitudes (Dostal & Wolbers, 2014). While defining characteristics of deaf and hearing the impaired student's writing found consistently using fewer phrases, greater incomplete sentences and primary syntactic structures, less subordinate clauses, less noun phrase modifiers, omissions of feature phrases in writing (Wolbers, Dostal & Bowers, 2012). Consequently, without an acquisition of basic/native language (sign language), the process of education may become affected and also affect the generation of written language with simple grammatical structures, limited vocabulary, and challenges in regards to verbal accent and agreement (Rodrigues, Abdo & Carnio, 2012).

Deaf and hard of hearing face outstanding troubles by writing manifested by several errors in the sentence because of their problems in getting access to and learning syntactical structures, each auditory or visually. The problems those children revel in with analyzing make them a limited experience to models of desirable writing (Antia, Reed, & Kreimeyer, 2005). A gap between was also found in the syntactic skills of deaf and hearing children.

Some other authors remarked about the trouble facing by deaf and hard of hearing (D/HH) students in writing. They commit various errors at the sentence level and face problem in learning grammatical structure. Likewise, in light of the fact that numerous D/HH students experience issues with reading, their presentation to models of good written work might be restricted (Yoshinaga-Itano & Snyder, 1985; Marschark,

Mouradian, & Halas, 1994; Yoshinaga-Itano, Snyder, & Mayberry, 1996; Paul, 1998; Marschark, Lang, & Albertini, 2002; Singleton, Morgan, DiGello, Wiles, & Rivers, 2004). A few progresses inside the manufacturing of syntactical shape with increasing age were pronounced this development is slower than their peers with normal hearing (Heefner & Shaw, 1996).

In contrast, Burman, Evans, Nunes & Bell (2007) found, the children on this examine who had been deaf produced short length sentences and less lexical diversity as compare to the hearing students, they were on the same patterns in syntax errors as hearing peers, and the students with cochlear implants introduced much less than one word to their sentences over nine months' time.

Future Researches Proposed

Following further studies may be conducted in the light of the present research

1. A large scale study should be conducted across the province and in other provinces as well to have a much clearer picture of the current phenomenon.
2. The present study may also be replicated on other academic levels.
3. Factors causing these errors may also be investigated.
4. Factor Analysis about the missing/lacking element of syntactic in sign language should conduct.

Recommendations

1. On the basis of conclusions of this study it was recommended that there is need to add the component of syntax in sign language & bring it in practice. It will enhance the ability of students with hearing impairment in using syntax.
2. On the basis of findings, it is suggested that the importance of education culture is need to delimit.
3. Public institutions should be organized and structured on the pattern of private institutions.

References

- Albertini, J. A., & Schley, S. (2003). *Writing: Characteristics, Instruction, and Assessment*. Deaf Studies, Language and Education, New York: Oxford University Press, 123-135.
- Antia, S. D., Reed, S., & Kreimeyer, K. H. (2005). Written language of deaf and hard-of-hearing students in public schools. *Journal of Deaf Studies and Deaf Education*, 10(3), 244–255.
- Burman, D., Evans, D., Nunes, T., & Bell, D. (2008). Assessing deaf children's writing in primary school: grammar and story development. *Deafness & Education International*, 10(2), 93-110.
- Carrasquillo, A., Kucer, S. B and Abrams, R. (2004). *Beyond the Beginning: Literacy Interventions for Upper Elementary English Language Learners*. Clevedon, England: Multilingual Matters Ltd.
- Cheng, S., & Rose, S. (2008). *Assessing Written Expression for Students Who are deaf or hard of hearing: Curriculum based measurement* (Report No 11). Minnesota: Research Institute on Progress Monitoring.
- Cummins, J. (1994). Knowledge, power, and identity in teaching English as a second language. In Genesee, F., & Richards, J. C. *Educating second language children: The Whole Child, the Whole Curriculum, the Whole Community* (pp. 33-58). England: Cambridge University Press.
- Dorn, L. J., & Soffos, C. (2000). *Scaffolding young writers: A writers' workshop approach*. Portland, Maine: Stenhouse Publishers.
- Dostal, H. M., & Wolbers, K. A. (2014). Developing language and writing skills of deaf and hard of hearing students: A simultaneous approach. *Literacy Research and Instruction*, 53(3), 245–268. doi: 10.1080/19388071.2014.907382
- Fitzgerald, J. (1995). English-as-a-second-language learners' cognitive reading processes: A review of research in the United States. *Review of Educational Research*, 65(2), 145-190.
- Gass, S. M & Selinker, L. (2008). *Second Language Acquisition: An Introductory Course*. [Adobe Digital Editions version]. Retrieved

from <https://blogs.umass.edu/moiry/files/2015/08/Gass.Second-Language-Acquisition.pdf>

- Giddens, E. (2009). *Teaching written language to students who are deaf or hard of hearing* [Master's thesis]. Retrieved from http://digitalcommons.wustl.edu/pacs_capstones/186
- Haynes, W. O., Moran, M. J., & Pindzola, R. H. (2012). *Communication Disorder in Educational and Medical Setting*. Canada: Jones & Bartlett Learning.
- Heefner, D. L., & Shaw, P. C. (1996). Assessing the written narratives of deaf students using the six-trait analytical scale. *The Volta Review*, 98(1), 147–168.
- Jimenez, R. T., Garcia, G. E., & Pearson, P. D. (1995). Three children, two languages, and strategic reading: Case studies in bilingual/monolingual reading. *American Educational Research Journal*, 32(1), 67-97.
- Jimenez, R. T., Garcia, G. E., & Pearson, P. D. (1996). The reading strategies of bilingual Latino/a students who are successful English readers: Opportunities and obstacles. *Reading Research Quarterly*, 31(1), 90-112.
- Kilpatrick, J. R. (2015). *Developing a Written Language Inventory for Deaf and Hard of Hearing Students: A Systemic Functional Grammar Approach* [Doctoral Dissertation]. University of Tennessee. Retrieved from https://trace.tennessee.edu/utk_graddiss/3433
- Marschark, M., Lang, H. G., & Albertini, J. A. (2002). *Educating deaf students: From research to practice*. New York: Oxford University Press.
- Marschark, M., Mouradian, V., & Halas, M. (1994). Discourse Rules in the Language Productions of Deaf and Hearing Children. *Journal of Experimental Child Psychology*, 57(1), 89-107.
- Mayne, A. M., Yoshinaga-Itano, C., Sedey, A. L., & Carey, A. (1998). Expressive vocabulary development of infants and toddlers who are deaf or hard of hearing. *Volta Review*, 100(5), 1–28.
- Mayer, C. (2007). What matters in the early literacy development of deaf Children. *Journal of Deaf Studies and Deaf Education*, 12, 411-432.

- Paul, P. V. (1997). *Literacy and deafness: The development of reading, writing, and literate thought*. Boston, US: Pearson Education.
- Rinaldi, P., & Caselli, C. (2009). Lexical and grammatical abilities in deaf Italian preschoolers: the role of duration of formal language experience. *Journal of Deaf Studies and Deaf Education*, 14 (1), 63-75.
- Rodrigues, M. G. G., Abdo, A. G. R., & Carnio, M. S. (2012). Influence of the type of visual stimulus in the written production of deaf signers without complaints of writing impairments. *Revista da Sociedade Brasileira de Fonoaudiologia*, 17(2), retrieved from <http://dx.doi.org/10.1590/S1516-80342012000200018>
- Rose, S., McAnally, P. L., & Quigley, S. P. (2004). *Language learning practices with deaf children* (3rd Ed.). Austin, TX: PRO-ED, Inc.
- Schmitz, K. L and Keenan, S. K. (2005). Evaluating Deaf Students' Writing Fairly: Meaning over Mode. *Teaching English in the Two-Year College*, 32(4), 370–378.
- Singleton, J. L., Morgan, D., DiGello, E., Wiles, J., & Rivers, R. (2004). Vocabulary use by low, moderate, and high ASL-proficient writers compared to hearing ESL and monolingual speakers. *Journal of Deaf Studies and Deaf Education*, 9(1), 86–103.
- Snow, C. E. & Ferguson, C. A. (1977). *Talking to children: language input and acquisition*. New York: Cambridge University Press.
- Waterson, N. & Snow, C. (1978). *The development of communication*. New York: John Wiley and Sons.
- Wolbers, K. A., Dostal, H. M., & Bowers, L. M. (2012). "I was born full deaf." Written language outcomes after 1 year of strategic and interactive writing instruction. *Journal of Deaf Studies and Deaf Education*, 17(1), 19-38.
- Yasamsal, A., Yucel, E., & Sennaroglu, G. (2013). Relationship between age of cochlear implantation with written language skills in children. *The Journal of International Advanced Otology*, 9(1), 38–45.
- Yoshinago-Itano, C., & Snyder, L. (1985). Form and Meaning in the Written Language of Hearing Impaired Children. *The Volta Review*, 87(5), 75-90.

Yoshinaga-Itano, C., Snyder, L. E., & Mayberry, R. I. (1996). How Deaf and Normally Hearing Students Convey Meaning within and between Written Sentences. *The Volta Review* 98(1) 9-35.

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