

## CHAPTER 10

# FACTORS AFFECTING READING COMPREHENSION SKILLS OF STUDENTS WITH HEARING IMPAIRMENT AND SUGGESTIONS ON EFFECTIVE TEACHING PROCESSES FOR TEACHERS

Necla IŞIKDOĞAN UĞURLU<sup>1</sup>

### INTRODUCTION

Children with special needs face difficulties in showing the same performance in educational curriculum depending on their disability, environmental and biological risk conditions, and learning performance compared to their peers. Physical, cognitive, social, and emotional adaptations of programs based on individual characteristics of these children should be made, and support and education services should be provided within specially prepared programs. (Bryant, Smith & Bryant, 2008).

Although children with hearing impairment in the group of children with special needs are defined in the Special Services Regulation of the Ministry of Education (MEB, 2006) as “Individuals who need special education and support services due to difficulties in speaking, using language, and communicating due to partial or total hearing loss,” they appear to be divided into classes in different ways. Based on the definition, it appears that the hearing impairment tends to be from mild to severe. In the definition, the hard-hearing individual is the one who can successfully acquire information about the language through hearing aids and the deaf individual is defined as individuals who are not able to successfully obtain information about the language using their power of hearing, regardless of having a hearing aid. (Akçamete & Gürgür, 2008).

Congenital or subsequent hearing impairment is caused by damage to the hearing senses or nerves. For children affected by hearing impairment, many factors, such as the type and degree of impairment, age of diagnosis, family approach, and level of access to early education services are effective in reading and reading comprehension skills. These children follow the same stages as their hear-

---

<sup>1</sup> Dr, necla\_idogan@hotmail.com

16. Use maps and diagrams suitable for the text type (story, informative, comparison, etc.) to improve the comprehension skills of the hearing impaired students. Further, concentrate on a single theme instead of combining multiple themes. Describe all items in the maps, model them, and then complete them with students.
17. Explain that textbooks and literary texts are structurally different from each other. Give students the purpose of writing each text type and the characteristics that should be found, stating that each text type has different characteristics.

## REFERENCES

- Akçamete, G. & Gürgür, H. (2008). İşitme yetersizliği olan çocuklar. Akçamete, G. (Edt.), Özel eğitim. (245-282). Ankara Kök Yayınları.
- Atabay, N., Özel, S. & Kutluk, İ. (2003). Sözcük türleri. Ankara: Papatya Yayıncılık.
- Baddeley, A. D. (2003). Working memory and language: An Overview. *Journal of Communication Disorders*, 36, 189-208.
- Benedict, K. M., Rivera, M. C., & Antia, S. D. (2015). Instruction in metacognitive strategies to increase deaf and hard-of-hearing students' reading comprehension. *Journal of Deaf Studies and Deaf Education*, 20(1), 1-15.
- Bernhardt, E. (1991). Reading development in a second language. Norwood, NJ: Ablex.
- Bos, C.S., & S. Vaughn. (2006). Strategies for teaching students with learning and behavior problems. Boston, MA: Pearson, Allyn, and Bacon.
- Bryant, D. P., Smith, D.D., & Bryant, B. R. (2008). Teaching students with special needs in inclusive classrooms. New York, NY: Pearson Education, Inc.
- Dyer, A., MacSweeney, M., Szczerbinski, M., & Campbell, R. (2003). Predictors of reading delay in deaf adolescents: The relative contributions of rapid automatized naming speed and phonemic awareness and decoding. *Journal of Deaf Studies and Deaf Education*, 8, 215-229.
- Easterbrooks, S. R., & Estes, E. L. (2007). Helping deaf and hard of hearing students to us spoken language: A guide for educators and families. Corwin Press.
- Englert, C.S., Raphael, T. E., Anderson, L.M., Gregg, S.L. & Anthony, H.M. (1989). Exposition: Reading, writing, and the metacognitive of learning disabled students. *Learning Disabilities Research*, 5(1), 5-24.
- Gambrell, L.B. (1996). Creating classroom cultures that foster reading motivation. *Reading Teacher*. 50: 14-25.
- Girgin, Ü. (1999). Eskişehir ili ilkokulları 4. ve 5. sınıf işitme engelli öğrencilerin okumayı öğrenme durumlarının çözümleme ve anlama düzeylerine göre değerlendirilmesi. Eskişehir: Anadolu Üniversitesi Eğitim Fakültesi Yayınları. No: 62.
- Girgin, Ü. (2006). Evaluation of Turkish hearing impaired students' reading comprehension with the Miscue Analysis Inventory. *International Journal of Special Education*, 21(3), 68-84.
- Guardino, C., Selznick, D.N., & Syverud, S. M. (2009). Teaching phonological skills to a deaf first grader: a promising strategy. *American Annals of the Deaf*, 154(4), 382-388.
- Harris, M. & Moreno, C. (2004). Deaf children's use of phonological coding: Evidence from reading, spelling and working memory. *Journal of Deaf Studies and Deaf Education*, 9, 253-268.
- Hoffman, M. & Wang, Y. (2010). The use of graphic representations of sign language in leveled texts to support deaf readers. *American Annals of the Deaf*, 155(2), 131-136.

Hoover, W.A. & Gough, P.B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2, 127-160.

Irak, M. (2009). Duyumdan bilgiye: bilgi işleme süreçlerinin temel öğeleri ve işleyişine yönelik nörobiyolojik, nöropsikolojik ve davranışsal yaklaşımlar. Irak M. (Ed.). *Psikopatolojilerde bilgi işleme süreçleri, Kuramdan uygulamaya*. Ankara: HYB Yayıncılık.

Kayhan, N. & Piştav Akmeşe, P. (2020). An Examination of Turkish sign language education in special education teaching programs, (Eds. Ahmet Doğanay, Oğuz Kutlu). *Current researches in educational sciences*. (Chapter 12). (s. 167-179). Ankara. Akademisyen Publishing House.

Kyle, F. E., & Harris, M. (2006). Concurrent correlates and predictors of reading and spelling achievement in deaf and hearing school children. *Journal of Deaf Studies and Deaf Education*, 11, 273-288.

Lederberg, A. R., Miller, E. M., Easterbrooks, S. R. & Connor, C. M. (2014). Foundations for literacy: An early literacy intervention for deaf and hard-of-hearing children. *Journal of Deaf Studies and Deaf Education*, 19(4), 438-455.

Luckner, J. L. & Handley, C. M. (2008). A summary of the reading comprehension research undertaken with students who are deaf or hard of hearing. *American Annals of the Deaf*, 153(1), 6-35.

Marschark, M. & Spencer, P.E. (2006). Spoken language development of deaf and hard-of-hearing children: Historical and Theoretical perspectives. In P. E. Spencer & M. Marschark (Eds.) *Advanced in the spoken language development of deaf and hard-of-hearing children* (pp.3-21). New York: Oxford University Press.

McEwan, E. (2001). *Raising reading achievement in middle and high schools*. Thousand Oaks, CA: Corvin Press.

MEB, (2006). *Özel eğitim hizmetleri yönetmeliği*. Ankara: MEB Yayınları.

Mich, O., Pianta, E., & Mana, N. (2013). Interactive stories and exercises with dynamic feedback for improving reading comprehension skills in deaf children. *Computers & Education*, 65, 34-44.

Miller, P. (2010). Phonological, orthographic, and syntactic awareness and their relation to reading comprehension in prelingually deaf individuals: What can we learn from skilled readers? *Journal of Development and Physical Disabilities*, 22, 549-561.

Moats, L.C. (2005). *Language essentials for teachers of reading and spelling Module 6: Digging for meaning: Teaching text comprehension*. Boston: Sopris West.

Musselman, C. (2000). How do children who can't hear learn to read an alphabetic script? A review of the literature on reading and deafness. *Journal of Deaf Studies and Deaf Education*, 5, 9-31.

Oakhill, J. & Cain, K. (2000). Children's difficulties in text comprehension: Assessing causal issues. *Journal of Deaf Studies and Deaf Education*, 5, 51-59. <https://doi.org/10.1093/deafed/5.1.51>

Öztürk, A., Elmastaş Dikeç, B. & Tekok Kılıç, A. (2009). Dikkat ve çalışma belleğine gelişimsel nöropsikolojik bakış. Irak, M. (Ed.), *Psikopatolojilerde bilgi işleme süreçleri, kuramdan uygulamaya*. Ankara: HYB Yayıncılık.

Padden, C., & Hanson, V. L. (2000). Search for the missing link: The development of skilled reading in deaf children. In K. Emmorey & H. Lane (Eds.), *The signs of language revisited* (pp. 435-447). Mahwah, NJ: Erlbaum.

Paul, P. (1998). *Literacy and deafness: The development of reading, writing, and literate thought*. Needham Heights, MA: Allyn & Bacon.

Paul, P. V. (2003). Processes and components of reading. In M. Marschark & P.E. Spencer, *Oxford handbook of deaf studies, language, and education* (pp.97-109). New York: Oxford University Press.

Perfetti, C. & Sandak, R. (2000). Reading optimally builds on spoken language: Implications for deaf readers. *Journal of Deaf Studies and Deaf Education*, 5, 32- 50.

Pistav Akmeşe, P. & Kayhan, N. (2016). Opinions of teachers about the communication modes/approaches used in the education period of the hearing impaired children who are educated at pre-school level. *Ege Journal of Education*, 17(2), 296-332. <https://doi.org/10.12984/egeefd.280747>

- Pistav Akmes, P. (2020). Developmental characteristics and communication approaches of children with hearing impairment. In. P. Pistav Akmes, P. & B. Altunay (Eds.), *Children with Hearing Impairment and Visual Impairment and Their Education* (pp.47-68). Ankara: Nobel Publishing.
- Qi, S., & Mitchell, R. E. (2012). Large-scale academic achievement testing of deaf and hard-of-hearing students: Past, present, and future. *Journal of Deaf Studies and Deaf Education*, 17(1), 1-18. <http://dx.doi.org/10.1093/deafed/enr028>
- Rego, A. M. P. (2006). The alphabetic principle, phonics, and spelling. J. S. Schumm (Ed.). *Reading assessment and instruction for all learners* (ss. 118-162). New York: The Guilford Press.
- Robertson L. & Flexer, C. (1993). Reading development: a parents of children with hearing impairment who developed speech and language through the auditory- verbal method. *The Volta Review*, 95, 253-261.
- Schirmer, B.R. & Mc Gough, S.M. (2005). Teaching reading to children who are deaf: do the conclusions of the national reading panel apply. *Review of Educational Research*, 75(1), 83-117.
- Schirmer, B. & Woolsey, M.L. (1997). Effect of teacher questions on the reading comprehension of deaf children. *Journal of Deaf Studies and Deaf Education*, 2, 47-56.
- Snow, C., Burns, S. & Griffin, P. (Eds) (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press
- Stanovich, K. E. (1992). Speculations on the causes and consequences of individual differences in early reading acquisition. In P. B. Gough, L. C. Ehri, & R. Treiman (Eds.), *Reading Acquisition* (pp. 307-342). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Strassman, B. (1997). Metacognition and reading reading in children who are deaf: A review of the research. *Journal of Deaf Studies and Deaf Education*, 2, 140-149.
- Traxler, C. (2000). The Stanford Achievement Test (9th ed.): National norming and performance standards for deaf and hard-of-hearing students. *Journal of Deaf Study and Deaf Education*, 5, 337-345.
- Treiman, R., Clifton, C. Jr., Meyer, A.S. & Wurm, L. H. (2003). Language comprehension and production. *Comprehensive Handbook of Psychology, Volume 4: Experimental Psychology*. New York: John Wiley & Sons, Inc.
- Topbaş, S.S. (2005). *Dilin bileşenleri.*, Topbaş, S. (Editör). Dil ve kavram gelişimi. Ankara: Kök Yayıncılık.
- Tüfekçioğlu, U. (2003). Çocuklarda işitme kaybının etkileri. U. Tüfekçioğlu (Ed.). *İşitme, konuşma ve görme sorunu olan çocukların eğitimi* (ss. 1-45). Eskişehir: Anadolu Üniversitesi Yayınları.
- Uğur, N. (2003). *Anlambilim /sözcüğün anlam açılımı*, İstanbul: Doruk Yayıncılık.
- Uzuner, Y., Kircaali-Iftar, G. & Karasu, H.P. (2005). Comparing the effect of various procedures on reconstruction of narratives according to story grammar of a youth with hearing loss. *The Reading Matrix*, 5(2).