Twenty facts on Literacy for Students Who Are Deaf and Hard of Hearing
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1. An estimated 20,000 children and adolescents with some degree of hearing loss live in Australia (Hogan, et al., 2011). The US has 73,000.

2. All children’s literacy skills improve when they access good teachers and good language models (Stronge, 2010; Van Staden, 2013).

3. A study compared the spoken language skills of two groups of children whose parents were Deaf and communicated with American Sign Language (ASL). The first group had cochlear implants and the second group was hearing. The researchers concluded that ASL input does not prevent spoken language development. Communicating through ASL may mitigate spoken language delays caused by early auditory deprivation (Davidson, Lillo-Martin, & Pichler, 2014).

4. Students with an above-grade reading level in Grade 3 are more likely to graduate from high school and to enroll in university than students who are at or below grade level. Approximately 75 per cent of high school graduates who read above grade level in Grade 3 attend university compared to 55 per cent in the on-grade-level group and 40 per cent in the below-grade-level group (Lesnick, et al., 2010). Therefore, reading ability significantly contributes to outcomes beyond high school.

5. University students who are deaf or hard of hearing (DHH) come from various communication backgrounds. They do, however, share one commonality. Students who are better readers have better college outcomes (Convertino, et al., 2009).

6. Children who are DHH do not achieve the same level of literacy competence as typically developing hearing children unless they receive sufficient support (Lederberg, Schick, & Spencer, 2013).

7. Deaf children of Deaf parents tend to have an early advantage over children who are DHH with hearing parents (Mitchell & Karchmer, 2004; Quittner, Leibach, & Marcil, 2004; Lederberg, Schick, & Spencer, 2013). However, this advantage lessens by middle school (Convertino, et al., 2009). Researchers speculate that this is because children who are DHH do not continue to receive the same high-level communication support as in their early years.

8. Language competence is a key contributor to acquiring reading skills (Easterbrooks et al, 2008; Mayberry, del Giudice, & Lieberman, 2011; Marschark, Schick, & Spencer, 2006; Marschark, Rhoten, & Fabich, 2007; Kyle & Harris, 2011).

9. Children who are DHH benefit from a language-competent parent regardless of the parent’s hearing status (Lederberg, Schick, & Spencer, 2013; Meadow-Orlans, Spencer, & Koester, 2004). Fluency in ASL is significantly correlated with later reading development, however, having a Deaf parent is not (DeLana, Gentry, & Andrews, 2007).

10. Foundations for Literacy (Lederberg, et al., 2014), is an evidenced-based early literacy intervention for pre-school students who are DHH. Language-rich
experiences foster alphabetical and phonological awareness, reading of decodable words and simple connected text, and knowledge of fundamental story elements.

11. Early literacy skills comprise two areas: (1) code-based skills, which “break the code” of written words (e.g., letter-sound correspondences); and (2) meaning-based skills, which understand the word, sentence, and connected text (e.g., sequential language, compound and complex grammar).

12. Expressive vocabulary skill in pre-school children who are DHH predicts their reading ability in Grade 1 and 2 (Kyle & Harris, 2006; 2010). Kindergarten gains on a Tier 2 word intervention predicted the reading vocabulary of children who are English language learners in Grade 1 (Nelson, Vadas, & Sanders, 2011).

13. Inflectional morphology refers to word endings that modify the verb in some manner, either via changing tense (e.g., runs, running) or changing noun-verb agreement. Inflectional morphology in Grade 2 predicts reading in Grade 4 and beyond (Gaustaud & Kelly, 2004). Therefore, teaching English morphology to children who are DHH should be a priority.

14. Children who are DHH may start kindergarten near par with their hearing peers on the Woodcock-Johnson Letter-Word and Passage Comprehension subtests. But this trend appears to cause over-confidence in placements as many children who are DHH fall to two standard deviations below the mean on the same tests by the end of Grade 2 (Center on Literacy and Deafness, 2013).

15. The Early Vocabulary Connections (Vadas, & Nelson, 2008) program has proven successful in improving vocabulary in hearing children whose second language is English and who also have language difficulties (Vandas, Nelson, & Sanders, 2011). No studies have investigated this program’s benefit for children who are DHH and use some form of signed communication. However, incorporating the Early Vocabulary Connections into a program using both Auslan and spoken English may support children’s phrase reading ability.

16. American students who are DHH tend to graduate at higher rates than do students with learning disabilities (LD) (Annual Report to Congress, 2014). Students with LD tend to drop out of specialised support during high school, whereas students who are DHH tend to continue receiving specialised support (Smith, Manuel, & Stokes, 2012). This trend may explain the greater likelihood of students who are DHH graduating from high school.

17. The ability to read phrases is a significant predictor of reading comprehension in struggling readers who are not DHH (Nomvete, 2014). Teachers of the deaf should focus their attention on reading at the phrase level to maximise their students’ reading fluency.

18. The Visualizing and Verbalizing program (Bell, 2007) has improved the reading comprehension of typically developing hearing children with poor reading comprehension (Truch, 2004). This program may be beneficial for children who are DHH but have functional hearing.

19. The skill of reading is a complex process (Scarborough, 2001).
20. For all children, there is a shift in the skills that predict literacy development near the end of Grade 3. Before Grade 3, decoding skills are better predictors of later reading in typically developing, hearing children. After 3rd grade, language skills are more predictive of reading ability (Gough, Hoover, & Peterson, 1996). Therefore, all children who are struggling language learners, whether deaf or hearing, need continued support in improving their language skills. This support needs to continue even after the elementary years because improved language leads to improved reading at all levels.

Center on Literacy and Deafness (2013). Institute of Education sciences Grant Number R24C120001, website: http://clad.education.gsu.edu


Vadasy, P., & Nelson, R. J. (2008). Early Vocabulary Connections: First Words to Know and