Social-Based Learning Approaches for Literacy Development for Students with Vision Impairments

Introduction

Literacy, according to Koenig (1992) is, "demonstrated when an individual is successful in communicating with a desired audience through the completion of meaningful tasks that require reading and writing...[and] at different levels throughout the life span....[A]n individual with a visual impairment must go beyond the basic level of literacy to gain access to materials in regular print independently." The development of literacy for vision impaired children is critical as it relates to their potential for success in their academic, professional and personal lives (Wolffe, 1998, p. 106), though the pre-literacy rates of vision impaired children are far below those of their sighted peers (Craig, 1996).

A range of factors, including the common presence of additional disabilities (Parker & Pogrund, 2009), developmental delays (Warren, 1984, p.129) and extra time required to receive and respond to information, and complete tasks (Chen, 1995) contribute to this statistic. The effects of such discrepancy impact on the future academic success, potential for employment and levels of independence of vision impaired children and adults (Wolffe, 1998). Therefore, improvement in the rates of literacy acquisition in vision impaired children is vital to mitigating these serious consequences.

A wide range of factors influence the rate at which sighted and vision impaired children acquire literacy, including socioeconomic status (Hay & Fielding-Barnsley, 2009), behaviour, emotional and social difficulties (Hartas, 2012), school experiences (Sacks, Kamei-Hannan, Erin, Barclay, & Sitar, 2009), additional disabilities (Parker & Pogrund, 2009), access to specialised instruction and support (Koenig, 1995; Koenig & Holbrook, 2000), instructional methods (Koenig & Holbrook, 2000), family support (Craig, 1996) and levels of social inclusion in school (Curry & Hatlen, 1988; Lewis, 2002). Unfortunately, many vision impaired children do not experience social inclusion (Curry & Hatlen, 1988; Lewis, 2002) or academic engagement (Bardin & Lewis, 2008) during their schooling in the same ways that

their sighted peers do which negatively impacts their academic success rates (Bardin, 2006) and in most cases their future prospects for employment (Wolffe, 1998, p. 19).

This paper will consider the impact of social-based learning on the literacy development of vision impaired children. Social-based learning is a critical component of a vision impaired child's education as it provides an environment in which social skills can be learnt and practiced within the context of academic learning, including literacy development. Social skills development is of great importance in a vision impaired child's education and a key factor in their "life success" (Wolffe, 2006, p. 406). The ways in which social-based learning approaches can be applied to literacy development and suggestions for further research will also be discussed.

1.   What is Social-based Learning?

For the purposes of this paper, social-based learning refers to methods for teaching and learning based on Albert Bandura's social learning theory (1977) and Vygotsky's social development theory (1978). Encompassing attention, memory, and motivation, Bandura's theory links behaviourist and cognitive learning theories. His theory underscores many of the teaching and learning methods that currently occur in school settings (Kumpulainen & Wray, 2012) , where students work with peer and master models to learn and reinforce knowledge, skills and behaviours. Learning occurs not only from watching and imitating, but also showing others how to perform a task, which reinforces already held knowledge and skills. Vygotsky's related theories of sociocultural learning and social development consider learning a social enterprise. He posited that development follows social interaction and therefore the natural products of socialisation and social behaviour are consciousness and cognition. Language, and therefore literacy, plays a central role in development, as Matthews and Kesner (2003) state, "Becoming literate is as much about the interactions one has with

others around oral and written language as it is about mastering the alphabetic system. Such a view is supported by sociocultural conceptions of learning".

In a literacy development context, social-based learning can occur in a range of environments to acquire and reinforce literacy knowledge, skills and behaviours. Identifying letters with a parent, playing a word-matching game at school or doing paired reading with a friend all constitute different types of social-based literacy development. This varies from individually-based literacy development, in which the student might complete a worksheet about a book or read alone silently.

2.   Levels of School Success for Students with Vision Impairments

An array of research exists on the social engagement, academic engagement and achievement levels of students with disabilities other than vision impairment in general education classrooms (Alves & Gottlieb, 1986; Conroy, Asmus, Ladwig, Sellers, & Valcante, 2004; Hollowood, Salisbury, Rainforth, & Palombaro, 1994; Junod, DuPaul, Jitendra, Volpe, & Cleary, 2006; Kastner, Gottlieb, Gottlieb, & Kastner, 1995; Parker, Gottlieb, Gottlieb, Davis, & Kunzweiller, 1989; Slate & Saudargas, 1987; Thompson & White, 1982; Wallace, Anderson, Bartholomay, & Hupp, 2002). Only two studies could be located regarding the academic engagement of students with vision impairments, both of which surveyed general education teachers of students with vision impairments and found they believed these students to be less engaged than their sighted peers (Bardin & Lewis, 2011) and only moderately engaged overall (Bardin & Lewis, 2008). There are a range of studies which demonstrate that students with vision impairments generally experience less academic success than their sighted peers. Data from the National Center on Severe and Sensory Disabilities (2006) states that only 42% of students with vision impairments graduate from high school, compared to 80% of sighted students.

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Students with vision impairments tend to socially engage with other children in a school setting less than sighted children (Gold, Shaw, & Wolffe, 2010) and often experience difficulties socialising with others in general (Sacks, Wolffe, & Tiemey, 1998). Fewer opportunities to socialise mean less practice to develop good social skills, and distinct social skills practice is required for students with vision impairments (Sacks & Reardon, 1992, p. 151). Vision impaired children tend to be less socially active (Gold et al., 2010) , feel more alienated at school (Lewis, 2002), participate less in school life (Sacks & Wolffe, 1998) experience less success in school (Bardin & Lewis, 2008) and have more difficulties securing future employment (Wolffe & Spungin, 2002).

3. Social-based Learning Versus Other Methods for Students with Vision Impairments

Social-based learning is now commonplace in schools (Kumpulainen & Wray, 2012, p. 10), and has been shown to be effective in improving social engagement, academic engagement and academic success (Kumpulainen & Wray, 2012, p. 147). Only one study could be located on the effects of social-based learning on students with vision impairments however, in which Fernandez-Vivo (2002) found very positive effects on the overall engagement levels of students with vision impairments in a physical education setting after receiving peer tutoring, a form of social-based learning. This study highlights the potential for social-based learning for these students and suggests further research in other settings, with other forms of social-based learning, and considering other benefits of social-based learning.

However, students with vision impairments in a mainstream setting often receive one-on-one lessons with a specialist teacher of the vision impaired (MacCuspie, 2002). While critical to help mitigate the impact of vision loss (Ferrell, 2000), one of the difficulties with this approach is the decreased amount of learning in a socially inclusive setting. While it is

critical for the student with vision impairments to learn different material at times from their sighted peers within the Expanded Core Curriculum (Wolffe & Kelly, 2011), using a social-based learning approach incorporating sighted peers could provide benefit to all involved.

Paraprofessionals are also regularly used to assist directly with the student with vision impairments in the classroom (Forster & Holbrook, 2005). Unfortunately, this extra assistance can often come at a steep social cost (Russotti & Shaw, 2001). Students with disabilities are much more likely to be physically separated from their classmates and have far less engagement with them when there is a paraprofessional present (Giangreco, Edelman, Luiselli, & MacFarland, 1997). Therefore the student with disabilities misses most of the incidental opportunities to develop social skills and relationships with their peers, and loses out on the benefits of social learning in academic contexts. Additionally, paraprofessionals deliver literacy instruction more often to students with vision impairments than more qualified professionals such as teachers (Forster & Holbrook, 2005). This raises the question as to whether undertaking literacy activities with peers would be more effective than receiving literacy instruction from a paraprofessional.

4. The Role of Social-based Learning in Literacy Development

Until a child begins school, the amount of exposure to literacy in the home, outside environment and the level of family involvement in literacy activities is an important factor in a child's readiness for reading (Craig, 1996). These socially-based activities are even more critical for a vision impaired child, who has far less access to print and other types of visual information, as these activities allow the information to not only be accessed through others, but scaffolded by the input and social interaction with a family member (Jacko, Mayros, Brady-Simmons, Chica, & Moore, 2013). The modelling of family members of reading behaviours and their attitudes towards reading has been shown to be critical in a vision

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impaired child's ability to develop similar habits. (Craig, 1996). According to Matthews and Kesner (2003),

> "A sociocultural perspective of learning focuses attention on the significance of one's interactions with others. When these interactions occur around literacy, children's understandings of literate processes are developed and their perceptions of who they are as literate people are created. These interactions also influence children's perceptions about themselves in relation to others and ultimately perceptions of who they are as literate people".

Within the school setting, literacy development-based social learning can occur in a range of activities and contexts. Peer reading and evaluation, small group literacy games and whole group reading activities are all examples which target literacy development by utilising the benefit of peer's abilities, peer teaching, a master model, and imitation- all tenets of Bandura's (1977) and Vygotsky's (1978) theories.

Research on social-based learning within a literacy development framework has indicated powerful results (Matthews & Kesner, 2003). Increased active learning (Wells, Chang, & Maher, 1990), increased motivation (Fisher & Hiebert, 1990; Sharan & Shaulov, 1990), and assistance with creating literacy products (Matthews, 1995) all occur when children interact with each other during literacy activities. Turner (1995) demonstrated that children who work with their peers are provided models who can assist them to expand the possibilities they have for their behaviour in relation to their literacy learning.

Hartup (1996) and Pellegrini (1998) indicated that there are cognitive benefits to completing literacy tasks with a friend, while Johnson, Johnson, and Maruyama (1983) and Sharan (1990) determined that there are gains in achievement and enhanced social development as a result of involvement in cooperative learning experiences. Such experiences also enable children to work cooperatively towards task completion (Kagan,

1992; Slavin, 1980). These types of benefits would be especially helpful to a student with vision impairments as many of these benefits relate to challenging areas for a student with vision impairments.

5. Suggestions for Further Research

Unfortunately, little research exists on the role that social-based learning plays in the literacy development of a student with vision impairment. No research could be located about how often social-based learning approaches are used with students with vision impairments in a mainstream school nor what the direct benefits might be of such an approach. Determining the ideal types of social-based learning approaches to use to develop social and literacy skills for a student with vision impairments could influence changes in teaching methods and improve the social and literacy skills of students with vision impairments.

6. Conclusion

Students with vision impairments generally lack the social skills of their sighted peers and therefore face significant challenges with making friends, engaging fully in school life and securing future employment. They also face more difficulty in developing literacy skills. Most students with vision impairments are taught literacy skills by a specialist, itinerant teacher of the vision impaired or a paraprofessional (Forster & Holbrook, 2005), and often in one-on-one scenarios which prevent the student from gaining the literacy and social benefits of social-based learning. Research into the benefits of such approaches for students with vision impairments are recommended, given the strength of the research on the social needs of students with vision impairments and the power of social-based learning for literacy development.

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