

The Potential Role of the Visual Arts
in the Lives of Children with Reading Disabilities

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Introduction

This thesis explores the central and beneficial role that the visual arts can play in the lives of children with reading disabilities. Involvement in the arts, especially when introduced during childhood, can positively contribute to these children's lives in a variety of ways, ultimately contributing to the development of high self-esteem. First, participation in the arts can lead to heightened competence in other domains, which may be because the arts allow children to access material in novel ways more suited to their abilities (Wilhelm, 1995). Accessing knowledge in a more comfortable and effective way may help children with reading disabilities develop positive associations with learning, feeling that they are as capable as their peers. Second, children with reading disabilities are able to use artistic and creative talents, which may be part of these children's inherent abilities, making it possible for these children to express themselves without being hindered by or reminded of their deficits (Wolff & Lundberg, 2002). Therefore, participation in the visual arts utilizes and underscores talents that may be natural and come easily to these children. As a result, involvement in visual arts can help enhance self-esteem among a population of children who are at particular risk of developing feelings of inferiority and inability (Harter, Whitesell & Junkin, 1998).

For these very reasons, an introduction to the visual arts to children with reading disabilities is important during the early school-age period. At a time in which children with reading disabilities first are confronted with their learning differences, the visual arts can uncover and expose the talents that these same children often have, helping them to develop self-esteem that they will carry with them throughout the remainder of their lives. Of course, not every child with a reading disability will become a famous artist; however, this thesis argues that, no matter

the scope of ability or talent that the child carries, the visual arts have the potential to change these children's lives for the better.

Defining Terms

Reading Disabilities

In order to explore the role that the arts play in the lives of children who struggle with reading disabilities, it is important to establish what constitutes a reading disability. The Individuals with Disabilities Education Act (IDEA) defines a specific learning disability as “a disorder in one or more basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, speak, read, write spell or do mathematical calculations” (Johns & Crowley, 2005). Reading disabilities are language-based learning disabilities that, as with many disorders, can exist along a spectrum of impairment from “garden-variety poor readers” to those who are severely dyslexic (Learning Disabilities [NICHD], 2010).

Although cases along this spectrum will be considered throughout this thesis, much of the literature and research reviewed in this paper deals with individuals with dyslexia, a neurobiological learning disability that is often characterized by difficulty in reading. Dyslexia is a difficult concept to define, in that there exists a great deal of variation in opinions on what constitutes dyslexia. For example, the phonological deficit hypothesis explains that individuals with dyslexia have difficulty “map[ping] letters to mental representations of the corresponding basic speech sounds (phonemes)” (Ramus, 2001, p. 393). Wolf's and Bower's (1999) double-deficit hypothesis explains that there are two deficits that help explain difficulty in reading: a phonological deficit, as previously explained, and a processing-speed deficit. These two deficits

“can exist both independent from and in combination” with each other, while the combination of the two explains “the most serious and pervasive impairments in reading” (Wolf & Bowers, 1999, p. 432).

Although the literature and research that is referenced throughout the chapter uses the terms “dyslexia” and “dyslexic,” many of these studies and articles do not specify which definition of dyslexia is used. Therefore, for the purposes of this chapter, I will explore the role of arts among children within the broad category of “reading disabilities,” which will include but not be exclusive to dyslexia. Reference to children with reading disabilities will include children whose disability manifests itself in a struggle to read effectively and efficiently due to neurobiological differences in the brain. This struggle may occur at any point in the reading process, whether it is while phonologically processing and decoding words, mastering reading fluency or comprehending texts at large. As will be seen, these children are often characterized as ‘dyslexic individuals’ in the research, but will sometimes be described differently, such as learning-disabled reluctant readers. In reviewing research, I will use each author’s naming of the disability.

The difficulty in settling on one comprehensive definition of a reading disability means that declaring a prevalence of individuals with such a disability is equally, if not more, challenging. The National Institute of Health and Human Development states that “about 15 percent to 20 percent of people in the United States have a language-based disability, and of those, most have dyslexia” (NICHD, 2010). This percentage of children who have been identified as “reading-disabled” face a range of difficulties in the traditional classroom setting. Although the symptoms and difficulties range in severity and in content depending on the individual, the most commonly experienced difficulties are seen in “word recognition and

reading fluency, spelling and writing” (International Dyslexia Association, 2007). These children may also have “trouble with handwriting and problems understanding what they read” (NICHD, 2010). As our culture and educational system rely heavily on literacy, these difficulties can have traumatizing and far-reaching implications on the children’s academic achievement in the classroom.

The Visual Arts

As this thesis will explore the role that the visual arts can play in the lives of children with reading disabilities, an understanding of what is meant when referring to the ‘arts’ is important to establish. The arts are creative processes that result in an expression that communicates a meaning, sentiment or idea. According to this definition, the arts encompass a variety of forms that include but are not limited to dance, drama, visual arts, creative writing and music. Anyone with experience in or exposure to the arts is well aware that each of these art forms is qualitatively unique and distinct from one another. For this very reason, it would be neither plausible nor logical to speak of the role that the arts, in the most general sense, play in the lives of children with reading disabilities. Although I will reference several art forms that are relevant or worthy of discussion, the focus of this thesis will be on the role of visual arts. Again, even ‘visual arts’ is a term that can be specified further, and may include collage, painting, drawing, installations, and photography. All of these artistic forms share one very important aspect, which is that they are “created primarily for visual perception” (Dictionary.com, n. d.).

Competence in Other Areas

The bulk of the research that draws connections between reading disabilities and involvement in the arts demonstrate a relationship between participation in the arts and competence in other areas. Although the majority of this thesis will explore the role of the visual arts in particular, the lack of research and literature on the visual arts as opposed to other art forms is evident. For this reason, the thesis will draw on studies of other forms of art, acknowledging their importance and how they may help us understand the potential role of the visual arts. Furthermore, the focus of research in this area, which explores the way that the arts affect and heighten competence in academic areas, is heavily placed on the effects of the performing arts, specifically of drama and music. Therefore, I will explore the impact of music, which has been well-researched, to demonstrate the role that the arts can play for these children. I will then conclude with one important study that explores the positive contributions that the visual arts in particular can bring to the academic performance of children with reading disabilities (Wilhelm, 1995).

The relationship between reading disabilities and music in particular has proved to be a complex one. Language and music have many elements in common. In this sense, there are elements of music that can be very challenging to a dyslexic learner or a reading-disabled child, evidenced by several lines of research. Overy (2000) explains that as children with dyslexia suffer from deficits in timing skills, they find many musical tasks that involve rhythm, for example, to be quite difficult in that timing skills are crucial. Further, music, which is often thought to be a right-brained activity, in fact has elements and components that predominantly use the left-hemisphere, such as the processing of rhythm, for example. This, of course, is also the hemisphere that dominates the processing of spoken and written language (Tarver, Ellsworth

& Rounds, 1980). In light of research that uncovers correlations “between rhythmic ability and reading ability (Douglas and Willatts, 1994), as well as general musical ability and verbal ability (Barwick, 1989; O’Conner and Hermelin, 1983; McMahon, 1982)” (as cited in Overy, 2000, p. 221), Overy (2000) suggests that “certain aspects of music and language processing may require similar cognitive skills” (p. 221).

Despite these challenges, music can have positive effects on the lives of children with reading disabilities. In his book, *Music and Dyslexia*, Tim Miles (2008) explores the positive and productive effects that music can have on the lives of these children. Miles reviews research that suggests that “music education can benefit young dyslexics as it helps them focus on auditory and motor timing skills and highlights the rhythms of language” (2008, p. 26). Although there is little empirical evidence to show that the benefits from learning a musical instrument carry over into academic settings, Miles draws attention to the understanding that “music can assist with the learning of the basics of the literary process by increasing awareness of sequential activity, by improving auditory perception (which helps with reading and spelling)” (Miles, 2008, p. 66) and by developing a positive sense of self, as reflected by the child case studies described in his book.

Several other research studies have further explored the potential of music to be used as a remedial tool for children with reading disabilities in particular. Douglas and Willatts (1994) showed that children with reading difficulties who had musical training scored better on reading tests than those who had no such training (p. 107), suggesting that “the ability to process melodic as well as rhythmic aspects of music analytically may help to stimulate a similar response to language” (p. 105), especially among children with reading difficulties. In addition, students with dyslexia who had participated in musical training lessons “improve[d] on phonemic

awareness and spelling tests, [although their] reading skills were not significantly affected” (Overy, Nicolson, Fawcett & Clarke, 2003, p. 503).

Although the research on the impact of the use of visual arts with children with learning disabilities is less extensive than the impact of music, a study conducted by Wilhelm (1995) demonstrated that integration of visual arts into a reading task had beneficial effects. In the study, Wilhelm (1995) integrated the use of visualization procedures into reading tasks for two learning-disabled readers. These two students were ‘reluctant readers’ in that they “read more slowly and less accurately than better readers...read[ing] in local, piecemeal ways” (Wilhelm, 1995, p. 468). The students were asked to adopt several visualization techniques, including but not limited to the illustration of material as they read, the depiction of ‘key details of particular texts...in the most efficient way possible” (Wilhelm, 1995, p. 481), and to complete a final collage expressing their response to a completed reading. Wilhelm (1995) found that the two students began to fully comprehend and even enjoy the material, as they created imaginary worlds of the story in their minds that engaged them more than the written word.

The summarized research uncovers a connection between the arts and academic and social performance in children with reading disabilities. The conclusions from these studies underscore the notion that involvement in the arts can be life-changing for these children, improving their performance in academic areas unrelated to the arts. Wilhelm’s study (1995) in particular demonstrates the way that these children were able to use a new medium to more readily access and make sense of material that they had found to be difficult. The challenges they faced as a result of their learning disability may have caused them to shy away from reading, developing negative associations with the task and also with their own ability to perform. In this sense, the study suggests more than an improvement in reading performance; instead, it also

suggests the potential for integration of visual arts to engage the children and enhance their academic self-esteem.

A Better Fit for Learning Styles

The review of research leads us to question what it is about involvement in the arts that leads to improved performance among these children in areas of academic study unrelated to the arts. That musical training is associated with enhanced competence in linguistic areas seems plausible considering “that certain aspects of musical and language processing may require similar cognitive areas skills” (Overy, 2000, p. 221), such as temporal processing, perhaps even utilizing similar areas of the brain (Patel, 2003). However, an intuitive or obvious explanation is harder to establish when considering the visual arts. What is it exactly about involvement in the visual arts that leads children to access or at least demonstrate knowledge better than before?

A possible explanation is that involvement in the arts allows children with reading disabilities to access knowledge and information through varied media that may be more consistent with their abilities and learning styles. In this way, the arts can provide scaffolding for learning in other domains.

The arts offer children a medium through which they can explore, as well as express, novel material. A paintbrush or a slab of clay, unlike written word and ruled paper, may be the materials with which these children feel more comfortable. In the sciences, for example, children with reading disabilities may feel overwhelmed by the thought of reading a textbook chapter on the water cycle. However, perhaps this same child would feel more stimulated by making sense of images and diagrams that represent the same information or creating a poster board-sized drawing of the same concept; what’s more, this child may come to a clearer understanding of the material through these means. Of course, this is just what the studies reviewed in the previous

section have begun to suggest. Wilhelm's (1995) research on reluctant readers previously reviewed, for example, shows us that two young children, who were reluctant to read likely due to their difficulties caused by learning disabilities, became engaged and effective readers after learning to use the visual arts to explore their understanding of the words they decoded and the sentences they processed throughout the course of their reading (Wilhelm, 1995).

There are several other ways in which the arts may be more suited to the learning styles of children with reading disabilities. The concept of right versus wrong answers in response to a task is less emphasized in education and learning that involves the arts. Children with reading disabilities may feel that they are constantly told that they are doing things incorrectly. If they are fortunate enough to be told more sensitively by their teachers, they might hear "Not quite. Try this way"; nonetheless, they know that they are doing something wrong and this feeling can be hard to shake. Since the neurological functioning of these children is different from other children, causing them to process information in ways unlike other children, they may struggle to find a way to change what they are doing so that they can be told that they are "right." When drawing a picture or creating a collage, however, there is rarely a way to do it wrong. The understanding that they will not be told that they are wrong is liberating for nearly every child, especially one who struggles academically. These children will feel more at ease knowing that they can explore and reach their own understanding without the fear of being judged by educators or peers.

Eisner (2004), who writes on aesthetic experience and the importance of arts education in *Arts and the Creation of Mind*, notes that "individuality is celebrated" (p. 238) in the arts – an element that is not necessarily valued when children are learning to read or spell. Explaining that "evaluation practices can undermine individuality" (Eisner, 2004, p. 238), Eisner emphasizes the

need for arts education to maintain this celebration. For children who feel that they are rapidly falling behind in their schoolwork, a focus on their own individual learning processes and approach is what they need. The technique with which a child approaches a collage or painting is an instance in which the child's differences that may normally bring him or her feelings of anxiety and incompetence will likely be celebrated. This reflects the idea that, unlike spelling and mathematics, the arts tend to be more process-oriented than product-oriented. It is the appreciation for the individual's process, no matter how different it is from others', that may in turn engage the learner in ways that will result in the demonstration of heightened competence across other domains.

We have seen that the research on the relationship between heightened competence and the visual arts is less extensive than the relationship with other forms of art. This may be because the relationship and impact is less strong than it is with music or drama, or is perhaps because studying the effects is simply more challenging. However, Wilhelm's (1995) study demonstrates the way that the arts can help children understand material and express themselves in ways that are more compatible with their own learning styles. For this reason, alone, we must not lose sight of the important role that the visual arts can play in the lives of these children. We should not overlook this potential solely because we cannot always justify the visual arts by improvements in other areas.

Focusing on Strengths: Natural Artistic Abilities Among Children with Reading Disabilities

By limiting ourselves to understanding the importance of the arts only by measuring its remedial effects, we overlook perhaps one of the most compelling arguments for the inclusion of

arts in the lives of children with reading disabilities. Involvement in the visual arts allows children to discover and use the natural talents that they *do* possess without being hindered by the deficits that hold them back in the other contexts of their lives.

A growing body of research exists that explores the possibility that individuals with reading disabilities such as dyslexia have an inherent and heightened ability in the arts. Wolff and Lundberg (2002) showed that there is in fact an association between dyslexia and artistic ability, comparing the prevalence of dyslexia in a population of art academy students with that of a population of non-art academy university students. The study used a series of measures, including a self-reported questionnaire, a word recognition test, and an author recognition text, to identify students' dyslexia. Interestingly, the study also chose art schools with extremely competitive admissions processes and requirements, so as to show that the attending students did not become involved in the arts solely as a result of looking for "opportunities for compensatory success" (Wolff & Lundberg, 2002, p. 42). The results of the study led to the conclusion that the prevalence of dyslexia was significantly higher in the population of art students. Although the relationship cannot be determined as causal from such a study, the findings shed light on the fact that there does indeed exist a correlation between individuals with dyslexia and the possession of exceptional creative ability that is utilized in the arts.

While studies such as this conjecture about the possibility of heightened creative talent and artistic ability among these individuals, recent neurological research has defended such a hypothesis, suggesting "that some forms of early brain development tend to produce verbal and other difficulties at the same time that they produce a variety of exceptional visual and spatial talents (Geschwind & Galaburda, 1985)" (as cited in West, 1992, p. 125). Through studying the

brain and the neurological wiring of such individuals, this research seeks to explain why these strengths might exist in such a population.

The idea that the each hemisphere of the brain is responsible for a distinct set of abilities has become well-known, especially as popular interest grows in whether certain individuals are 'left-' or 'right-brained.' This concept is based on the fact that left-hemisphere functions include "linguistic, logical-analytic functions" (Tarver *et al.*, 1980, p. 12), while the right hemisphere "specializes in visual-spatial perception, visual imagery and holistic processing" and is believed to be the seat of "some of the major components of creativity" (Tarver *et al.*, 1980, p. 12). Therefore, while those who excel in linguistic tasks, such as reading and writing, are sometimes labeled as being 'left-brained', artists who excel in creative tasks are 'right-brained.' According to this theory and generalization, then, one might speculate that individuals with reading disabilities are more 'right-brained', although it should be recognized and emphasized that both hemispheres of uninjured brains are co-dependent on each other.

In support of and further legitimizing this speculation, recent neurological studies using the fMRI and PET have concluded that the brains of individuals with reading disabilities are structurally different than brains of those who are not identified as dyslexic. Studies of these children's brains show "less intensive activation than controls in left temporo-parietal regions" (Cao, Bitan, Chou, Burman & Booth, 2006, p. 1041), which "may reflect deficits that patients with dyslexia have in phonological processing" (Cao *et al.*, 2006, p. 241), concluding that "children with dyslexia have a deficit in the left hemisphere network involved in reading" (Cao *et al.*, 2006, p. 1047).

Other neuroimaging studies have shown that brains with dyslexia are symmetric, while brains of individuals without reading disabilities have larger left, or dominant, hemispheres

(Chakravarty, 2009, p. 570). In a 1955 study analyzing the brain of Einstein, who had developmental dyslexia, the researchers found anatomical differences compared to the brains from a control group. Einstein's brain's "peculiar anatomical variation...resulted in a large undivided inferior parietal lobule...the seat of visual spatial cognition, mathematical ideation and imagery movement as also of artistic and literal creativity (Critchley, 1971; Miller, 2008)" (as cited in Chakravarty, 2009, p. 570). In this same vein, case studies have shown artistic abilities in patients whose dominant hemispheres have been injured (Chakravarty, 2009, p. 571), including those with "front-temporal dementia where dominant hemisphere affection with language disorder is well recognized" (Chakravarty, 2009, p. 571). These findings are used as further evidence that creative and artistic abilities are predominantly housed in the left hemisphere.

For all of these reasons, Chakravarty (2009) has hypothesized that the "unmasking or development of artistic talents observed in many dyslexic subjects ... may be linked to the developmental delay in language function localized in the dominant hemisphere (usually left hemisphere)" (p. 571). In the case of children with dyslexia, the "underfunctioning" manifests itself in reading and writing difficulties that seems ever-present in the classroom. If this hypothesis is true, this also means that an artistic ability may be unmasked and existent. It should be noted that the framing of this phenomenon as an "underfunctioning" or "dysfunction" (Chakravarty, 2009, p. 571) seems to reflect a cultural bias that is present in describing those who have strengths in specific skill areas, as opposed to viewing this difference in brain structure as simply different wiring and structure.

The visuo-spatial strengths that children with reading disabilities often possess are the characteristics that can make these children skilled artists (West, 1992). Creating a vivid and

detailed painting or a realistic sculpture may not require any use of verbal language competence, but will require a true understanding of objects in space that children with reading disabilities are just as likely, if not more likely, to possess than children without such difficulties. In *The Gift of Dyslexia*, Ronald Davis identifies some of the common characteristics seen in children with dyslexia that can be viewed as strengths (1994). Such strengths include the ability to “utilize the brain’s ability to alter and create perceptions,” to “think and perceive multi-dimensionally (using all the senses)” and to use “vivid imaginations” (Davis, 1994, p. 5). It is clear that these characteristics are ones that would give these children a natural ability when creating art.

Therefore, as many children with dyslexia and other forms of reading disabilities may have an artistic talent, there should be an attempt to capitalize on the strengths that these children possess. By encouraging these children to explore the arts, we redefine our approach and adjust our outlook, seeing what are often regarded as their ‘weaknesses’ as complemented by potential and noteworthy strengths. After all, the concept of talent that stems from individual strengths is a subjective one (West, 2005). A personal tendency, trait or characteristic that is a weakness in one field may be praised as a strength in another. This concept holds true especially for children with reading disabilities and the arts, who can often utilize the characteristics that set them apart in learning to read and write to excel in the arts. These individuals are often capable of “see[ing] patterns in noise, producing creative abstract ideas pulling out of what many people would look upon as mundane sensory environments (Cohn & Neumann, 1977)” (as cited in Chakravarty, 2009, p. 570). The focus that is placed on the deficits of children with reading disabilities, without recognition of the existence of such capabilities and strengths, however, can lead these children to develop low self-esteem.

The Visual Arts and Self-Esteem

The material reviewed and analyzed begins to shed light on the positive role that the visual arts can play in the lives of children with reading disabilities. Engagement in the visual arts allow these children to feel competent, to relate this competence to other areas, and to access materials in ways that are more consistent with the way they learn, while simultaneously taking control and ownership of their learning by making use of the skills that they possess. As a result, involvement in the visual arts can ultimately enhance the self-esteem of these children. The development of confident and positive perceptions of one's self, as we will see, is especially crucial for these children to develop during the early school-age years. This said, the next section of this thesis will show the way that the arts can play a crucial role in addressing issues of self-esteem in children with reading disabilities.

Defining Self-Esteem

The concept of self-esteem is often vaguely defined and, at times, even used interchangeably with other terms, such as self-concept, self-worth or self-confidence. The Culture-Free Self-Esteem Inventory (CFSEI), a test created by Battle (1982, 1992), explores self-esteem across four categories and dimensions: academic, social, parent-related and general. These categories are distinguishable from one another on the basis of the domain in which the self-esteem is evaluated or assessed. For example, academic self-esteem is an individual's evaluation of his or her abilities with regards to performance at school, while parental self-esteem is the way in which a child views his or her worthiness and value in the home setting.

The final type, general self-esteem, is defined by Battle (1992) as "individuals' overall perceptions of their self-worth" (p. 3) in which self-worth indicates how capable, competent and

worthy of success and achievement an individual is. The crucial aspect of this definition of self-esteem is the notion that self-esteem is a direct reflection of one's own feelings and appraisal of his or her overall competence and worthiness. In this sense, it seems that the preceding three categories contribute to or at least affect this general self-esteem, although Battle describes the four types as distinct and separate. For children with reading disabilities, although their academic self-esteem may be the lowest, it may not be the only area of self-esteem in which they would score lowly on the CFSEI. Therefore, to fully understand the interplay and relationship between reading disabilities, the arts and self-esteem, I will use Battle's definition of general self-esteem, while referring to and remaining aware of the remaining three dimensions or sub-types.

Self-Esteem and the Early Years

As children grow into adults, and develop personal identities and formulate their own set of values, they become critical not only of their own parents, peers and environment, but also of themselves. For school-aged children, it is natural to compare themselves to others by weighing their own strengths against those of their peers'. As traditional curriculum emphasizes the mastery of reading, writing and verbal language skills in the early elementary years, the easiest way for children to assess their own academic ability is through classroom achievement, grades and feedback from teachers.

Although it is important for any child to develop self-esteem, regardless of the ease at which he or she learns in a traditional classroom environment, the early school-age years can be particularly hard for children with reading disabilities. There are certainly those children with reading disabilities who are able, often with support from their environment and an internal positive attitude, to develop high self-esteem; however, these children are often at risk of

developing low self-esteem because of the challenges that confront them when they begin schooling (Burden, 2008, p.192).

For young children with reading disabilities, whether or not yet diagnosed, school can be an intimidating environment in which they feel it is impossible to succeed and live up to the standards set for them. The feelings of being inadequate, stupid or simply different that often accompany the school-related struggles these children, can undoubtedly hinder the process of developing positive self-esteem. An adult form of the CFSIE designed by Battle was used in a study of self-esteem in the educational histories of adults with dyslexia (Riddick, Sterling, Farmer & Morgan, 1999). This form (Form AD) explores general and social self-esteem, as well as personal self-esteem, the “individual’s most intimate perceptions of self-worth” (Battle, 1997, p. 71).

In this study, Riddick *et al.*, (1999) discovered that the control group’s scores on Form AD revealed higher self-esteem than those of the dyslexic participants, who “report[ed] themselves as feeling more anxious and less competent in their written work at school than the controls and rated themselves at university as less competent both in their written work and in their academic achievements” (Riddick *et al.*, 1999, p. 227). This study suggests that the sentiment, and often misconception, that students who are identified as dyslexic are not as able as their peers can produce high levels of anxiety in the classroom and result in low academic self-esteem. Such self-assessed failure may also lead these students to feel inferior, which, in turn, may affect their interactions with their peers. As a result, these children may blame themselves, developing low self-esteem when they may perceive that instances of failure mean that they are not only incapable, but also unworthy of happiness or success.

Harter's Perceived Competence Scale for Children (1982) is another scale with which the potential for the development of low competence among these children can be studied and often demonstrated. The scale measures four areas of perceived competence: cognitive, social, physical and general (Harter, 1982, p. 87), where general competence measured "judgments concerning one's overall self-worth" as related "to being sure of oneself, being happy with the way one is, feeling good about the way one acts, and thinking that one is a good person" (p. 88). Although the scale refers to competence and not self-esteem, one can see the clear connection between Harter's general perceived competence and Battle's general self-esteem. Figure 1 shows a sample item from the scale, in which the child must decide if and to what extent the phrase on the left or right is more in tune with their own belief.

Really True for me	Sort of True for me	<input type="checkbox"/>	<input type="checkbox"/>	Some kids feel that they are very good at their school work.	BUT	Other kids worry about whether they can do the school work assigned to them.	Sort of True for me	Really True for me	<input type="checkbox"/>	<input type="checkbox"/>
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Figure 1. An item from the Perceived Competence Scale for Children (Harter, 1982).

Figure 1. Harter's Perceived Competence Scale for Children Sample Item. From "Impact of Social Comparisons on the Developing Self-Perceptions of Learning Disabled Students," by S. Harter and M. J. Renick, 1989, *Journal of Educational Psychology*, 81(4), p. 634.

Using this scale to assess perceived competence among adolescents, the findings of Harter, Whitesell and Junkin (1998) further suggest that children with learning disabilities tend to be at risk of developing a sense of incompetence and low self-esteem. The study assessed the

competence of three groups of adolescents – normally-achieving, learning-disabled and behaviorally disordered students – along eight domains that included Cognitive Competence, Peer Likability and Job Competence. The learning-disabled children demonstrated a discrepancy between IQ and academic achievement and exhibited “specific impairments in at least one information processing skill” (Harter *et al.*, 1998, p. 660). The group likely included but was not exclusively comprised of children with reading disabilities. As predicted by the researchers, the learning-disabled subjects “felt worse about their general intellectual ability” (p. 664) and also showed “more negative perceptions of their job competence” (p. 665) as compared to the normally achieving participants. Finally, in contrast to an earlier study that maintained that general self-worth remained at a comparable level to normally-achieving peers (Kistner, Haskett, White & Robbins, 1987), Harter *et al.* (1998) reported that children with learning disabilities produced lower global self-worth scores than the normally achieving students. Such a finding suggests that perhaps children’s perceived cognitive and academic competence may be associated with a more overall negative sense of self or competence.

Although the previously reviewed studies show that children with dyslexia are at risk of developing low self-esteem, these studies do not explore the importance of the early school years which mark a crucial time period for developing positive sense self. The theory of development proposed by child psychologist, Erik Erikson, stresses the importance of these early school years in the development of feelings of self-worth.

In Erikson's theory, childhood is composed of eight qualitatively unique and age-specific psychosocial stages of development. In each of these eight stages, a conflict surfaces in the life of the individual, who must then resolve it in one way or another before moving on to the next stage to face the consequent crisis. The fourth stage occurs between the ages of six and twelve,

when a conflict referred to as ‘industry verses inferiority’ arises (Erikson, 1980). During this stage, if children are able to perform, maintain focus and accomplish tasks asked of them, they develop a healthy sense of self in which they feel that they are capable individuals. On the other hand, if children feel challenged, as many children with dyslexia will as the demands and the expectations within the classroom become increasingly difficult, they may begin to see themselves as failing and incapable (Erikson, 1980). All children, regardless of their learning habits and abilities, face this struggle and “to overcome these feelings of inferiority, the child needs to develop a sense of industry [and] a determination to succeed with what he is doing” (Burns, 1982, p. 37). They are harsh critics of themselves, deciding their worth and competence based on their own performance in comparison to their peers’ (Erikson, 1980). These feelings will likely be especially prevalent, however, to overcome for children who significant difficulties at the tasks that others may find less challenging.

The early school-aged years mark a pivotal time period in the lives of children with reading disabilities for two reasons. First, it is during the first few years of school that children are initially presented with the task of learning to read, a task which poses extreme difficulties for these children, especially in comparison to their same-age peers who are learning alongside them. As this is one of the first instances in which children can evaluate the ease with which they are able to learn, they may be quick to assume that they are generally less able than those around them, fearing the learning experiences that lie ahead.

Harter and Renick (1989) found in the study of children from grades 3 to 8 that “[learning-disabled] children’s perception of their scholastic competence in the regular classroom are more highly correlated with their feelings of global self-worth than are their perceptions of either their social acceptance or their athletic competence” (p. 637). Such

findings suggest that “extent to which LD students like themselves as persons may be intimately linked with their perceptions of their scholastic competence” (Harter *et al.*, 1989, p. 637), underscoring the importance they place on academic achievement as a representation of their overall worth during these years.

Second, children are commonly diagnosed with reading disabilities such as dyslexia during the early school-aged years. It has previously been established that these are the years in which “children have started to evaluate themselves ‘through the eyes of others’ and are very sensitive to being different” (Ingesson, 2007, p. 584). Although in some circumstances, a diagnosis can provide both families and children with a sense of relief (Riddick, 1996, p. 145), the diagnosis can also be very confusing and disheartening to a young child who wants nothing more than to be the same as his or her peers, only further exacerbating her own feelings of inferiority.

A study of teenagers with dyslexia in Sweden (Ingesson, 2007) illustrated the importance of these years, revealing that a majority of the teenage participants from Sweden who were identified with dyslexia felt “different, inferior and stupid” during their first few years in school, and believed that their dyslexia had a detrimental effect on their self-esteem (Ingesson, 2007, p. 583). For children like these, their success in the arts may be the catalyst to boost their confidence, converting their feelings of inferiority into feelings of success and aptitude and raising their self-esteem academically and even socially. Due to the fact that these children can be at a particularly high-risk of developing senses of inadequacy during these years, an introduction to and an emphasis on the arts in the school setting at this time could make a significant difference.

Future research might further explore the effects of engagement in the arts on the self-esteem of these children. Although several studies have explored the self-esteem in this population of children, a study that systematically explored the effects of arts, as opposed to other non-academic activities, on self-esteem of these same children is still needed. In a study, randomly selected early school-aged children with reading disabilities would attend either an afterschool sports program or an afterschool arts program. The children's self-esteem levels could be measured before participation in the program and three months after. The study might look at the level of increase of a given child's self-esteem rather than his or her score, to eliminate the misinterpretation of differences among children's self-esteem scores as direct effects of the program participation. The study would address the question of whether it is something about the arts in particular, an area that allows these children to use a set of skills that they often possess, or simply a non-academic outlet that leads to enhanced self-esteem among these children.

Educational Implications

A Disabled Curriculum

The research reviewed and the connections proposed in the previous sections of this thesis have significant implications for the classroom. Oftentimes, the nature of our educational system creates an environment in which children's "ability to understand may be far beyond their ability to perform in the classroom" (Burrows & Wolf, 1983, p. 273). Children with reading disabilities may be very capable of understanding material, but the mode through which they can express their comprehension is not accepted or offered as an option by most teachers and in most classrooms.

As a result, our current educational system and culture as a whole often leaves children with reading disabilities, for whom reading and sometimes verbal ability is their main challenge, feeling that they are not smart. Two studies, both measuring self-esteem among children with learning disabilities and the effects of specialized school, illustrate this notion. These studies, which utilize self-esteem scales to assess the levels among children with reading disabilities, will be explored to support the notion that the environment of a traditional classroom can be detrimental to these children's perception of their own self-worth and abilities.

The CFSEI was used in a study that examines the impact schooling and teaching can have on the given child with dyslexia. Thomson (1990) assessed the self-esteem of three groups of children with dyslexia, in which “the first group consisted of “children attending for interview for a place at a specialized school for dyslexics”, the second of children “who had attended the school for 6 months”, and the third of children “who had attended the school for 18 months” (Thomson, 1990, p. 24). Figure 2 provides stimulus items, organized by subtest, from Form A of the 2nd edition of the CFSEI.

General Self-Esteem Items

I spend a lot of time daydreaming.
I like to spend most of my time alone.
I wish I were younger.
I am happy most of the time.
I would change many things about myself if I could.

Social Self-Esteem Items

Boys and girls like to play with me.
I have only a few friends.
I can do things as well as other boys and girls.
Other boys and girls are mean to me.
I need more friends.

Academic Self-Esteem Items

I usually quit when my school work is too hard.
I am a failure at school.
Most boys and girls are smarter than I am.
I like to be called on by my teacher to answer questions.
I am proud of my school work.

Parental Self-Esteem Items

I have lots of fun with both of my parents.
My parents dislike me because I am not good enough.
There are many times when I would like to run away from home.
My parents understand how I feel.
My parents think I am a failure.
I often get upset at home.

Figure 2. Stimulus Items from Form A of the CFSEI-2. Adapted from *Culture-Free Self-Esteem Inventories* by J. Battle, 1992. Austin, Texas: Pro-Ed, p. 12.

The results of the study showed “a significant increase in self-esteem over this period of time which [Thomson] attributed to the benefits of specialist schooling” (Thomson, 1990, p. 25). Additionally, the results showed that the third group of students demonstrated higher levels of self-esteem in social, academic and general than the first and second groups, while their parental self-esteem score remained stable among the three tests. This would suggest that “in general the

longer the child is at school the greater his or her self-esteem” (Thomson, 1990, p. 25), perhaps because “the major source of low self-esteem for these children was the mainstream school environment and especially children’s sense of failure in comparison to their peers” (Riddick, 1996, p. 38).

Another study (Harter, 1989) produced similar findings. Using Harter’s Perceived Competence Scale, Renick and Harter (1989) studied the way that 86 children, with learning disabilities, ranging from third to eighth grade compared themselves to others when perceiving their own competence. The study supported the study’s hypothesis, showing that learning-disabled students “perceive themselves to be more academically competent” in a classroom with other students with learning disabilities than in a regular mainstream classroom (Renick & Harter, 1989, p. 635). The study showed another interesting trend, revealing that “the extent to which [learning-disabled] students like themselves as persons is ... highly related to their perceived academic competence in the regular classroom” (Renick & Harter, 1989, p. 635). Therefore, this study elucidates two important trends, which force us to consider the importance of classroom environments. First, children with learning difficulties tend to think less highly of themselves and their competence in a regular classroom compared to normally-achieving students. Second, these same children see their academic performance as more of a reflection of their general self-worth than any other area of performance or competence.

Studies such as these may signify that in some way, the teaching in a traditional classroom may be related to development of low self-esteem among a population of students. Such developments among these children, who may be in fact just as capable as others in different ways, are dangerous in that they can encourage learned helplessness and feelings of inferiority that will last throughout these children’s lives. Burns (1982) explains that “what an

individual thinks about himself is a vital part of internal consistency” in that he or she “will act in ways which he thinks are consistent with how he sees himself” (p. 9). Therefore, if children develop negative feelings toward their own learning and reading abilities, they may continue to underperform or even fail to perform when they are faced with circumstances that involve reading.

Alexander-Passe (2006) describes the way children might react to the classroom experience in which they feel incapable, explaining one common coping method, which is called avoidance-based coping. Children cope with their disabilities and the effects of their disabilities on their education system by exercising “extreme non-participation” (p. 259). Alexander-Passe also explains Thomson’s (1996) breakdown of the two ways in which these children react to the stress they experience in school. While one child may ‘under’-react by “withdraw[ing] and manifest[ing] extreme anxiety,” another child may ‘over’-react by “being the class clown, hiding their failure under a ‘couldn’t care less’ attitude and manifesting silly behavior” (Alexander-Passe, 2006, p. 257). Due to these reactions to stress and the coping-methods that may accompany them, under-reactors may be seen as lazy while the over-reactors might be interpreted as nuisances; either way, these two reactions present children who appear to be unreachable and seemingly disinterested.

With this in mind, we must question whether it is our curriculum that is disabled and not our children and students (Rose, 2006). Burns (1982) claims that our “schools have ... set up a system for generating negative self-concepts and low self-esteem – a system that virtually guarantees that a great many children will feel they are incapable and have not succeeded” (1982, p. 204). The curriculum is disabled in that it does not reach every child, and fails to help guide these students in finding their passion and their talents, which in these cases, very well

may be outside the realm of verbal or reading skills. These children, who struggle with the written word and the sounds of letters, do not struggle with everything. In fact, they may even excel in other areas, when asked to express themselves or their understandings through a different medium. Yet these children often feel that they are incapable and inadequate, solely because of the curriculum and its embedded values that are in place today.

The Integration of Arts

If studies such as Harter's (1989) and Thomson's (1990) indicate the significant impact the current school environment can have on the self-esteem of children with dyslexia, we may wonder if the use of the arts in other areas of the curriculum would have a significant and reversing effect. The feeling that they are unworthy or less able than others undoubtedly affects children's behaviors and attitudes towards themselves. We must search for a way to reach these children, helping them achieve and realize their potential, thereby ridding themselves of these negative feelings.

The discrepancy model, which is commonly used to define and understand the nature of dyslexia, claims that children with learning disabilities show a clear discrepancy between their IQ, which signifies their potential ability, and their academic performance in the classroom (Kavale, 2001). In this sense, individuals with dyslexia, even with proper schooling and sufficient resources, are characterized as unable to achieve all that they are capable of (Kavale, 2001). If we were able to integrate the arts into our classroom on a daily basis, providing children with the opportunity to use art to express themselves and obtain an understanding of the material presented to them, perhaps we could lessen this discrepancy. Of course, much of this discrepancy does in fact exist because of the differences in neurological wiring. Perhaps part of it

exists because, although children can perform at higher levels, they are not given the opportunities to express themselves in ways that allow them to demonstrate their knowledge and understanding.

As previously explained, these children, for reading and writing does not always come easily, often have an inherent talent in the arts. If art is treated as an important domain of learning within the classroom, as is reading, writing, and arithmetic, children who are able to create art may be able to develop a sense of adequacy through this means, avoiding the feeling of ultimate failure in the face of their peers and teachers. This is not to say that specialized schools are not extremely important to help remediate, while helping children foster positive feelings about themselves. Clearly, the style of instruction will have tremendous impact on a child's academic performance and self-esteem. However, it is likely that many of the reasons the children who participated in the first test of Thomson's study had such low academic self-esteem stemmed from their sense of inferiority and incapability in the classroom that developed in the first years of schooling. Perhaps an introduction to the arts, or the incorporation of arts as a mode of instruction and expression in more of the curriculum, would reduce the possibilities of such negative developments. The children, who shrink into their seats when the spelling workbooks are taken off the shelf, may come alive and lead a classroom with a paintbrush in their hand. Perhaps they will be able to explain a thought they earlier had in a discussion surrounding a book more thoroughly and clearly through a different medium, such as paint or clay.

Teachers as Integrators

Classrooms that provide these means and opportunities for children with reading disabilities will require teachers to help facilitate an introduction to and integration of the arts,

encouraging involvement if the child shows an interest or an ability. Children with reading disabilities may come into the classroom with low self-esteem; in these cases, “the teachers’ aim is to employ the academic and social learning experiences school provides to reteach the child a view of himself that includes competence, worth and belonging” (Burns, 1982, p. 201). Too often, teachers “have generally failed to teach children to recognize, use and value their other skills and abilities” (Burns, 1982, p. 204). Erikson notes that the problem of inferiority that can develop during the early school age period “calls for the type of teacher who knows how to emphasize what a child *can* do” (Erikson, 1980, p. 92). As we’ve seen in many instances, the arts are what a child with reading disabilities *can* do. A teacher can increase a student’s confidence not only by praising his or her success in the arts, but also by increasing the instances in which a child with some type of reading disability is presented with artistic tools for expression.

Perhaps one of the most important duties that the teacher must assume is to communicate an idea of intelligence and academic excellence that incorporates artistic ability and creativity. The Swedish study that interviewed teenagers with dyslexia with regards to the development of confidence in the first few years of school showed that “children with dyslexia, in contrast to a control group, believe that when one is good at reading, one can be considered intelligent, and vice-versa” (Ingesson, 2007, p. 584). This finding suggests how crucial it is for teachers to communicate a wider and more open-minded definition of intelligence. As individuals with dyslexia have average or above average intelligence by definition (Scott, Scherman, & Philips, 1992, p. 197), there is no reason that they should believe that being smart *exclusively* means reading well. Naturally, an ability to read and write is tremendously important and in no way should be underemphasized; however, in today’s society, an ability in the arts is becoming

increasingly important and should not be excluded from the argument of what it means to be intelligent (West, 2002). If a more comprehensive concept of intelligence were transferred to children, perhaps less of them would distinguish themselves as inferior when they face difficulty learning to read at the speed and with the ease of other students. We must not forget the profound effect that school methods and curricular attitudes can have on impressionable students. Again, we need to broaden the idea of intelligence that we communicate to our young students.

The Multisensory Classroom

So what must be changed? The research reviewed and the beneficial relationship that has been proposed in this thesis calls for a “multisensory classroom approach” (Burrows & Wolf, 1983) from the early school-age years that would largely improve the experience of children with reading disabilities within the classroom. Such an approach combines “the teaching of phonics, grammar, comprehension and subject matter areas such as science and social studies with creative media such as crayon, paint, chalk, cut or torn paper, stitchery and collage with a variety of materials” (Burrows & Wolf, 1983, p. 273). In the development of such an approach, we can create a classroom environment in which these children do feel that they have the potential for success and in which they are eager to learn and demonstrate their abilities. Children feel that they cannot engage themselves in a traditional grammar lesson, for example, will be encouraged to contribute in a way that makes them feel competent and capable among their peers (Burrows & Wolf, 1983, p. 273). An early introduction to the arts that is integrated with regular curriculum will potentially inhibit the development of “an ingrained negative attitude towards academic learning” that has developed so early on that “no amount of intensive instruction, however skilled, is likely to make much difference” (Burden, 2005, p. 17).

This approach would allow students with reading disabilities to excel in the classroom in novel ways, perhaps altering their entire attitude towards and approach to learning. Albert Bandura's self-efficacy theory asserts that "our behavior is seen as very much under the control of what we believe we are capable of achieving" (Burden, 2005, p. 20). The curriculum we have in place today pushes children with reading disabilities to a limit at which they do not believe they are capable of achieving as much as they can. If a multisensory classroom approach can instill in these children a sense of capability in achievement, then, according to this theory, achieving is just what these children will do. It is important that we help these children develop a positive outlook on schooling so that they can excel.

As parents, educators and researchers, we are concerned with helping these children. We want them to do well – to overcome their challenges and barriers. What we must now realize is that if these children "are to make substantial educational progress, they stand a much better chance of doing so if their attitude toward schooling in general...is a positive one...and if they have a strong sense that their future success is in their own hands" (Burden, 2005, p. 18). A classroom approach that integrates the arts more consistently not only channels and extracts each student's abilities, but can also help each student use these abilities to come to a comfortable and secure understanding of the material that, when presented linguistically, poses difficulties.

Finally, this classroom approach raises a very important point: children who struggle from reading disabilities should not be or feel forced into following a path in the arts because that is the only way in which they can use their abilities and escape the written word. After all, these children are likely talented in several areas completely unrelated to the arts. The multisensory classroom approach, however, allows children to make use of the arts as non-linguistic means to access other areas of study in ways more fit to their abilities. A child who

illustrates an understanding through different media does not show any less of an understanding than one who writes an essay on the same topic; for this reason, the option to use the arts should at least be provided. Similarly, new material should be explained and presented in ways other than solely in written words. Perhaps the use of the arts and the multisensory classroom approach in every day curriculum may allow teachers to reach the students that sometimes seem unreachable, or worse, even disinterested and unengaged.

Other art forms in the classroom. The case for a classroom that integrates the visual arts into its curriculum to reach and help children of all learning styles has been considered. A line of research and inquiry that emphasizes the importance of multi-arts integration merits greater investigation. In a study of the approach of one first-grade teacher, Ms. James, Souto-Manning and James (2008) develop the argument that multi-arts integration is more beneficial and meaningful than simple visual arts integration in a classroom. Ms. James used two different curricular approaches to “a five-lesson painting unit for her 1st-graders based on the art of Henri Matisse” (Souto-Manning & James, 2008, p. 90). She taught one class using strictly visual arts, in which the students were expected to not only paint but also speak and write about their understanding of artistic concepts, such as painting techniques. Ms. James taught the other class using an approach that utilized many different art forms, as the children created a variety of art forms, ranging from paintings to skits (Souto-Manning & James, 2008, p. 90).

In the study, the students from the multi-arts classroom “developed greater literacy skills, retained more knowledge and, and applied new knowledge and techniques to their artwork” (Souto-Manning & James, 2008, p. 91). A true understanding of “reading, writing and arithmetic[,] the essential tools that students need in order to learn and pursue deeper

understanding of the world” requires the application of novel information and knowledge. According to Souto-Manning and James, the creation of “art is one way of putting this understanding to work” (2008, p. 86). Therefore, the integration of different art forms into the curriculum will help children learn material in more meaningful ways, allowing “students to not only memorize facts, but also live a memorable learning experience that include[s] skills beyond recall, such as application” (Souto-Manning & James, 2008, p. 91).

The study of Ms. James’ classroom suggests the valuable effect of the integration on students’ learning. Although the students in the classroom were not learning-disabled, an approach that uses arts as another way of accessing and expressing knowledge would likely be valuable for these children. Somewhat similarly, another study explored the impact of drama lessons on the language and social skills of children with learning disabilities. Although this study did not present a classroom approach, the results further defend the claim that art forms other than visual arts can be valuable for children with learning disabilities in particular. Rey E. de la Cruz (1998) sought to confirm the hypothesis that a particular creative drama program would improve the language skills in children with learning disabilities. The study grew out of a concern that children with learning disabilities had compromised social skills that seem to be crucial in order to feel accepted by peers and which only led to further problems in the school environment (Rey e. de la Cruz, 1998, p. 89). The subjects of the study consisted of thirty-five children between the ages of six and eleven with learning disabilities, twenty-one of whom participated in the creative drama and fourteen of whom did not. The language skills of the children were assessed using portions of the Primary or Intermediate TOLD-2. An example of a drama lesson that was used in this study is described:

‘The objective of the drama lesson, Saying an Apology, was for students to learn to apologize when their actions have injured or infringed on another peer. During the first

session in this lesson, a picture of a child crying after playing with other children was shown ... Pantomime was explained and demonstrated when the class was divided into small groups. Students pantomimed what happened after the child in the picture cried. They later put words into their actions. (de la Cruz, 1998, p. 91).

The results of the study showed that the “mean differences in oral expressive language quotient scores (TOLD-2) indicated significant gains by the drama group” although the same did not hold true for receptive language scores (de la Cruz, 1998, p. 92). Children reported that the lessons helped them “listen and speak better” as well as “act [and] behave well” (de la Cruz, 1998, p. 92). These findings show that creative drama instruction in children with learning disabilities has the potential to improve ‘interpersonal communication skills’ which can be especially important to children who face difficulties in the classroom due to academic challenges.

An improvement in interpersonal skills, which likely leads to an improvement in the quality of relationships with peers, might often enhance their performance in the classroom due to increased levels of confidence. Children with reading disabilities in particular may feel embarrassed or even ostracized in the face of their peers when reading aloud, spelling a word, or telling a story. Confidence in their abilities to interact will give them the capacity to connect with their peers in another way, ultimately allowing them to feel good about themselves and their place in the larger social space. Therefore, the integration of an art form such as drama into daily school curriculum may both aid children in their language skills as well as help their confidence.

Although this thesis focuses on the important role that the visual arts in particular can play in the lives of children with reading disabilities, it should certainly be acknowledged that introduction to a variety of art forms, such as drama or creative writing, and the integration of these forms within an educational setting may be tremendously important.

Future research should explore this potential relationship. Studies that systematically explore the benefits that an involvement in the arts has on a child with reading disabilities, with

regard to their academic performance as well as their self-esteem, would be invaluable to the field and to the lives of these children. Today, art classes receive low priority in education and are even removed from school curriculums as program budgets are cut. Research in this area would not only allow us to help these children in their everyday lives, but may also lead to a change in attitude and approach in our education system. By denying children, particularly those with reading disabilities, the opportunity to explore the visual arts, we deny these children the opportunity to express and find themselves, while making use of their strengths and building self-esteem. Perhaps involvement in the arts will not improve the ability of these children to read or raise their achievement scores, but it may change the way that these children perceive themselves as thinkers, expressers, learners and people.

A Changing World

A widespread integration of the arts in the classroom requires the expulsion of certain notions and attitudes. Unfortunately, because many people do not see the lack of an artistic ability as a detrimental deficit, the ability to artistically create has often been seen as less of a significant talent than others. If an individual does in fact have an artistic ability, it is often seen as an 'extra' talent that is still less valuable and praiseworthy than, say, an ability in math or reading.

The approaches that integrate arts into curriculum in order to reach all children may, however, reflect a shift of values within our larger society, and with it, a new understanding that many people are reaching: There is no need for the arts to be viewed with this attitude, especially in the changing context of today's world in which visuospatial abilities are becoming increasingly valuable. The world in which we live, that in some senses is gradually moving away

from written word and towards “a world of moving images and visualized information,” results in a “gradual reawakening of interest in spatial abilities that were formerly thought to be relatively unimportant” (West, 1992, p. 156). A recent article in *The School Administrator* asserts that “imagination, innovation and creativity have been the foundation that catapulted the United States into a world leadership role” (Deasy, 2008, p. 13). The ability to imagine, create and innovate, which can be mastered through involvement in the arts, are skills that are becoming increasingly important in today’s world. As we’ve seen, these valuable abilities comprise a natural talent often seen in individuals with reading disabilities – a set of talents and abilities that in some ways we have overlooked and not cultivated. The developments and shifts in the appraisal of certain capacities calls for a recognition in our society “that many of the talents that many dyslexics exhibit are, in reality, strikingly appropriate for a new image-based technological culture whose prime is yet to come” (West, 2005, p. 156).

Even with this evolving attitude, however, a real shift in values and transformation in our educational system would likely meet significant resistance and challenges. A school curriculum that values the arts to the same extent as the written word may not be quite yet feasible. After all, we live in a literate society in which the ability to read is the main medium through which we access information and express our own thoughts. For this reason, it may take quite some time before an artistic ability is seen as comparable in value and importance to the ability to read and write.

The ever-increasing use of technology in society, however, could perhaps help make this change possible. The use of computers and visual media, for example, as a means of representing and communicating information could further aid the learning of children with reading disabilities on a day-to-day basis. Image-based technology that allows for interactive learning

might not only ease some of the difficulties that these children have with the written word, but also might tap into the use of their enhanced abilities to make sense of and create images. Theorist Howard Gardner defends this notion, claiming that computers can teach things in a variety of ways and with infinite patience (Gardner, 2002). An understanding of the role that technology could potentially begin to play in education may be key to reaching these children who have been said to “fall through the cracks” of our traditional educational system and our society at large.

As this thesis has shown, an early introduction to and consequent involvement in the arts can provide well-suited and highly capable children with reading disabilities with more than just a hobby or an outlet. Participation in the arts can help these children capitalize on their strengths, foster a positive sense of self that is not centered on their deficits, and prepare them to become future leaders.

Although this thesis has proposed several reasons to support involvement in the arts among children with reading disabilities, they may not all apply in the case of every child. For example, some children with reading disabilities may not be particularly artistically gifted. Similarly, involvement in the arts may not cause all children to perform dramatically better in other academic areas. Lastly, excelling in an area that does not emphasize children’s weakness, instead allowing them to express themselves or even access knowledge without the use of words, may not necessarily lead to enhanced self-esteem. However, one or a combination of any of these effects could be enough to make a significant and beneficial difference in one child’s life. Therefore, parents, teachers and educators must not only introduce but also encourage involvement in the arts among children with reading disabilities in hopes of making an individual difference that may one day lead to a larger, more systemic one.

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