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Autism Spectrum Disorder (ASD) is a term used to describe a set of closely related exceptionalities along the developmental disability continuum. Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), Rett's Syndrome, Asperger Syndrome, Childhood Disintegrative Disorder, and Autism are generally associated with ASD (Dunlap & Bunton-Pierce, 1999). While a broad range of academic, social, and behavioral functioning exists within this population, the core features of ASD often include repetitive patterns of behavior, delays in verbal and nonverbal communication, and difficulty with social interactions and relationships (American Psychiatric Association, 2000).

Autism diagnosis has increased sharply over the past fifty years. Recent prevalence rate estimates indicate that one in every 150 children born in the United States has Autism (Dunlap & Bunton-Pierce, 1999; Fombonne, 2003). In Europe, research efforts continue to address challenges associated with the diagnosis, treatment, and education of students in this population. Williams, Mellis, and Peat (2005) explain, "In recent

#### **Abstract**

*The goal of this investigation was to determine how Digital Storytelling impacted the academic performance and social interactions of a sixth grade female student with high-functioning Autism. This study was conducted over a three-week period in the Gulf Coast region of the United States. Qualitative methodology, using an inductive approach informed by grounded theory, was employed throughout this exploratory case study. This paper concentrates on academic learning, literacy acquisition, and social skills associated with this holistic intervention. Active participation, increased engagement, and critical reflection were identified as the most important factors that contributed to the success of Digital Storytelling within the context of this investigation. Guidelines for classroom implementation are considered, with recommendations offered for future research and practice.*

#### **Keywords:**

*Digital Storytelling, Literacy, Autism, Social Interactions*

years there has been greater interest in emotional, social and psychological health issues in countries like the UK, US, Australia and Europe, which may have increased identification of affected children" (p. 38).

Ongoing research efforts seek to enhance our knowledge of ASD; however, the reason for this increase remains controversial and unresolved. Competing theories on the rise of ASD relate to the expanded diagnostic criteria for identification (Wing & Potter, 2002) and a better understanding of biological factors associated with this group of developmental disorders (Ozonoff, Rogers, & Hendren, 2003). While agreement may not yet exist to provide satisfactory reasons for this increase, there is little dispute that the academic, social, and emotional needs of this population remain ongoing and critical. The number of students today identified with ASD underscores the urgency for effective instructional approaches for this population.

#### **Literacy**

A significant number of individuals with Autism do not possess the literacy or communication skills needed to

function on an independent level (Foley & Staples, 2003). Nation, Clarke, Wright, and Williams (2006) argue that a pervasive struggle with language and communication skills places this group at risk for ongoing failure in literacy related areas. The effectiveness of literacy interventions have been difficult to assess because of the variability in academic, social, and behavioral functioning of this student population (Nation, Clarke, Wright, & Williams, 2006).

The tremendous challenge with assessment and identification of literacy rates is an ongoing and evolving struggle. Mirenda (2003) emphasizes the pressing need to identify literacy-based strategies, interventions, and practices that contribute to positive outcomes for this population. Too often, "those who prove themselves to be unable to master the 'necessary' prerequisite skills are thus considered ineligible for further literacy instruction" (p. 272).

Literacy development for this population remains a core priority. Lanter and Watson (2008) advocate literacy approaches that are student-centered and contextual. However, this vision remains a distant goal. Teachers, however, may not have had formal education specific to the language abilities of their students with autism spectrum disorder (ASD)...The differing areas of expertise may help explain why the literacy needs of students with ASD are underserved; teachers and administrators around the United States have concerns about the adequacy of their literacy instruction for students with ASD. (p. 33)

To fully address these needs, literacy-based instructional practices should reflect the diversity of ability levels within the ASD category. As Maugham and Carroll (2006) note, "effective treatments in one domain will not necessarily result in improvements in the other; as a result, each disorder needs separate treatment" (p. 353).

The widening disparity of research-based literacy interventions between individuals in the general and special population serves to underscore the necessity of literacy strategies that target the fundamental needs of students who struggle with reading development, writing skills, and language acquisition. O'Connor and Klein (2004) contend that existing reading strategies used with students in the general population may be ineffective, and ultimately fail to adequately meet the needs of individuals with ASD. In fact, reading strategies designed to improve the outcomes of students in the general population may have a negative effect for some students with ASD. For example, the use of pre-reading questions appear to

lead some children with ASD to a set of responses that do not promote comprehension (Chiang & Lin, 2007).

Sencibaugh (2005) echoes the need for more differentiated instruction, pedagogy, and curricular practices that reflect the unique learning styles of students with special education needs. While individuals with learning disabilities may respond best to literacy instruction that is grounded in explicit instruction, the parity of these benefits are not necessarily cross-categorical to all children with special education needs (Sencibaugh, 2005). Students with ASD seem to respond better to literacy instruction that is systematic and augmented with strong visual supports (Dunlap & Bunton-Pierce, 1999).

Additional research is needed to promote broader literacy skills for the ASD population. While traditional methods of literacy instruction remain effective in some areas, the semantic and linguistic aspects of literacy require more innovative and specialized approaches for this group of students (Nation, Clarke, Wright, & Williams, 2006). Academic interventions for this population should integrate more options and flexibility than what is possible in the general population. In their study of reading ability for students with ASD, Nation, Clarke, Wright, and Williams (2006) found "... considerable variability across the sample with performance on most tests ranging from floor to ceiling levels" (p. 911). More focused and potentially qualitative investigations are needed to better explore, analyze, and develop research-based strategies that target the literacy outcomes of students with ASD.

### **Current interventions**

The range of ASD-related social, behavioral, and academic interventions is expansive. Although some interventions gain widespread popular acceptance by the public (sometimes referred to as fad treatments), many do not have a sound pedagogical foundation to substantiate their claims (Machalicek, O'Reilly, Beretvas, Sigafoos, & Lancioni, 2007). Perhaps the unknown etiology of Autism contributes to the popularity of remedies without empirical support (Levy & Hyman, 2005). Seroussi (2000) contributes the proliferation and perceived success of these treatments to the testimonials and anecdotal evidence often reported by participants of these programs. Using an economic and social status paradigm, Metz, Mulick, and Butter (2004) theorize, "In a number of instances, monetary gains or gains in status may also make professionals prone to unproven fad treatments" (p. 240). While the need for research-based practice is widely accepted, its implementation has been a key challenge for researchers and practitioners alike.

Until recently, educational research, policy, and practice that addressed the needs of students with ASD placed a greater emphasis on interventions designed to reduce the negative behavior and social interactions typically associated with these developmental disorders. Behaviorist learning theory has become a foundational philosophy of Autism therapy and intervention. Contributions from this field, particularly in the area of Applied Behavior Analysis (ABA), have made a profound impact on the behavioral and social outcomes of individuals with ASD. The acute focus on ameliorating the functional and behavioral deficits that characterize this population may explain the lack of interventions that target specific academic areas of weakness. Academic strategies and methods that exist for students with ASD are seldom without a component for behavioral or social skills improvement. Roberts (2004) asserts, "It is clear that there is insufficient empirically sound research evaluating outcomes of programs for children with autism, despite the range of treatments available to parents and the claims made by the exponents of some of these programs" (p. 7).

### **Digital Storytelling as a literacy intervention**

Individuals with ASD often demonstrate an enhanced response to visual and sensory stimulation (Deruelle, Rondan, Gepner, & Fagot, 2006). Digital Storytelling is one approach that may improve the academic and social outcomes of students with ASD. Digital Storytelling is actuated through the use of emerging digital and information technologies. Garrety and Schmidt (2008) contend, "As technologies have evolved storytelling has changed and morphed with the times to include digital technologies, images and audio that enable a new generation to tell its story" (p.16). This approach to literacy development and social interactions makes use of multimedia platforms that integrate audio, video, and text-based technologies to create a narrative that is personal, unique, and meaningful. This intervention may benefit students with ASD because it promotes multi-sensory experiences through the use of innovative technology and distinctive visual cues.

Well crafted Digital Stories include the following literary characteristics; point of view, dramatic question, emotional content, voice, soundtrack, economy, and pacing (Lambert, 2002). Each story is personal in nature and reflects the background and life experiences of each writer. The content and structure of each narrative is unique and original as it attempts to share a particular problem, need, desire, or experience.

A central dramatic question is ultimately resolved within this heuristic process. Bull and Kajder (2004) emphasize the critical importance of the dramatic question, as it relates to the authenticity and uniqueness of each story. This literary characteristic transforms the story from one of simple documentation to a sophisticated and elaborate platform for imaginative writing and storytelling. A Digital Story is unique because of its individualized treatment and capacity for emotional, social, and intellectual development.

Emotional content forces the audience to identify, empathize, and relate to the shared experiences within each story. This literary tool helps develop and strengthen the story, and in turn provides a subject matter and content that may demonstrate mass appeal. Laughter, tears, anger, and compassion are possible responses to a well-written story that makes effective use of emotional content. Emotions are deeply rooted in the human experience. While vivid descriptions and supporting facts tell the story, the emotional content provides an immediate and visceral appeal to the audience. The emotional content within a Digital Story is one characteristic that differentiates this intervention from other technology-based instructional approaches. A digital story, "...works to pursue, discover, and communicate new understanding that is rooted in who we are as humans" (Bull & Kadjer, 2004, p. 47).



Digital Stories celebrate the unique voice of each writer. Linaza, Eskudero, Lamsfus, and Marcos (2004) describe this as an essential and unique quality because it, "narrates the content of a story in a natural way, expressing the proper emotional state adapted to the progress of the story" (p. 1). The writer's voice invites the audience to identify with the author through a shared and meaningful experience. Alvarez (2005) further clarifies the bifunctional role of this writing technique; "But it is a two-way pact: the writer makes himself heard and the reader listens in - or, more accurately, the writer works to find or create a voice that will stretch out to the reader, make him prick his ears and attend" (p.18).

Image transitions and background music help symbolically reinforce the theme and mood of the story. The final version integrates storytelling with technology to present an entertaining, dynamic, and compelling narrative. Digital Storytelling relies on multisensory instructional approaches to encourage student involvement, creativity, and overall academic success.

The overall structure and sequence of a Digital Story adheres to a predictable and consistent format. Written content for each story should be concise and informative, usually containing less than 250 words (Watkins & Russo, 2005). Image choice and use should provide focus to the theme of the story, generally 25 images or less will suffice. A complete Digital Story is approximately three minutes in length.

### **Empirical basis of Digital Storytelling**

Recent scholarship expands the focus of literacy development to encompass skills that are essential in the current era of rapid technological innovation and advancement. Increased use and reliance on digital communication underscores the critical need for instructional approaches that integrate literacy skills in a way that addresses the challenges and opportunities of this evolving paradigm (Armstrong & Warlick, 2004). Digital Storytelling integrates the traditional goals of literacy with the increasing demands of an information-based society (Barrett, 2006). Digital Storytelling uses collaboration to promote student engagement, reflection for deep learning, technology integration, and project-based learning (Barrett, 2006).

### **Digital Storytelling with secondary school students**

Maier and Fisher (2007) find Digital Storytelling to be an effective tool for literacy development with secondary age students in general classroom settings. This intervention seems to improve social interactions and language outcomes. Advance organization,

preferably with visual cues and writing prompts, is a practical approach to introduce this concept to students. Maier and Fisher (2007) suggest that, "Showing student examples helps them visually conceptualize what their end goal will be" (p.189).

### **Digital Storytelling and English as a second language**

Verdugo and Belmonte (2007) report the benefit of Digital Storytelling as an intervention to target the listening comprehension skills of Spanish students learning English as a second or other language. Digital Storytelling with this group led to improved outcomes in the area of listening comprehension and word recognition. Verdugo and Belmonte (2007) explain: "It is believed in this study that digital stories, if appropriately selected, can prove to be very useful in developing children's listening skills. They tend to be visual, interactive and reiterative" (p. 88).

### **Purpose of study**

The few studies that examine Digital Storytelling with special needs populations document its benefit as an instructional tool for literacy and communication improvement (Ohler, 2007). Technologies required for this intervention are widely available in current classroom settings (Becker, 2000), thus allowing for a seamless integration in these settings. Myers (2006) explains, "It is not a choice we have as teachers of English to decide whether these symbolic tools have value in our classrooms, because they are already integrated into the production of our own as well as students' consciousness" (p. 64).

Digital Storytelling is consistent with the unique learning style of individuals with ASD. This instructional approach encourages choice (Kern, Mantegna, Vorndran, Bailin, & Hilt 2001), video modeling (Neumann, 2004), and computer use (Stromer, Kimball, Kinney, & Taylor, 2006) to reinforce skills that lead to higher academic, social, and behavioral outcomes for this population (Kimball, Kinney, Taylor, & Stromer, 2003).

This investigation attempts to reconcile the lack of empirical data on Digital Storytelling for students in the ASD population. Using an exploratory case study design, this study examined the impact of Digital Storytelling on the academic performance and social functioning outcomes of a thirteen-year-old female student with high-functioning Autism. A qualitative approach with grounded theory data analysis provided the methodological framework to assess the viability and potential use of this intervention for a high-functioning individual with ASD.

## Methodology

Protective measures ensured the anonymity and confidentiality of family members, educators, and key informants throughout this investigation. Additional coding steps were necessary to further preserve the privacy of sensitive documents related to psychological, medical, and educational history. The subject of this investigation is known exclusively by the pseudonym "Jessica."

Jessica is a thirteen-year-old female identified with a high level of Autism functioning. Her response to multisensory instructional techniques is generally receptive and positive. Likewise, she exhibits a wide range of social, behavioral, and academic skills. For example, mathematical aptitude and conceptual pattern recognition are two areas of relative strength for her. Jessica continues to struggle with age-appropriate behaviors and use of appropriate social interaction skills.

Participant selection in this case study was based on the determinants of program access, adequate representation of the larger population, familiarity with computer-based technologies, and the potential to construct meaning through deep analysis. Cuadraz and Uttal (1999) explain that, "it is the quality of the analysis and the extent to which we uncover meanings and processes germane to the qualitative endeavor, not the size of the sample or the presence of comparative categories, that produces theoretically relevant issues and explanations" (p. 166). Patton (1990) adds that the "logic and power behind purposeful selection of information of informants is that the sample should above all be information rich" (p. 169). Jessica represents a desirable case for the purpose of this exploratory investigation. She possesses the necessary computer skills to provide more insight, descriptions, and information on the potential effectiveness of Digital Storytelling as a literacy intervention.

## Site location

This study took place in a public library that is centrally located in the community where Jessica lives and attends school. This location was chosen, in part, because (a) the parents did not want the study to interfere with her current class schedule or instructional day, and (b) Jessica was familiar with this library as the location of previous after-school and summer tutoring sessions, important to her regarding acclimation to new settings and situations.

Meaningful interactions between the participant and the investigator are essential components to well

designed case study investigations. Lincoln and Guba (1985) note, "in order for the human instrument to use all of [his or her] abilities to the fullest extent possible, there must be frequent, continuing, and meaningful interaction between the investigator and the respondents" (p. 107). The framework of this inquiry relied on the iterative processes of flexibility, individualized instruction, and dynamic interactions with key informant groups.

## Methods of data collection

Eisenhardt (1989) describes grounded theory as a paradigm that consists of multiple data sources to build, shape, and extend the knowledge base of a phenomenon or concept. Creswell, Hanson, Clark, and Morales (2007) identify participant observation, key informant interviews, and document analysis as common data collection methods within qualitative research. This study utilized the aforementioned procedures to gain descriptive insight into Digital Storytelling as a educational practice for a student with high functioning Autism.

This study employed a single-case design to investigate the use of Digital Storytelling as a literacy-based intervention for Jessica. Qualitative methods were chosen to evaluate the impact of this intervention on social and academic functioning. Jessica appeared to meet the standard outlined by Patton (1990) as a participant who can provide insight and detailed information to a particular research area. Jessica represented an ideal case for this study as an "information-rich" source for continuous data and insight (Patton, 1990, p. 169).

Creswell (2002) explains that a researcher may carry out the role of participant observer, non-participant observer, or a combination of both. In this study, participant observation was an essential part of the data collection methodology. This approach allowed me to consider each interaction, challenge, and aspect of Digital Storytelling as a potential intervention to impact Jessica's social and academic outcomes. As questions arose, and then were resolved, new ones emerged. This iterative process of observation transpired until each question, issue, and theme reached saturation (Sternik et al., 2006).

## Participant observation

Participant observation in this investigation was used to catalogue the continuous waves of incoming data for systematic reflection and critical analysis. Adler and Clark (2003) advocate the use of participant observation when the research area is an emerging phenomenon or when the environmental or social

situation changes at a rapid pace. The time spent on this intervention each day lent itself to participant-observation as a valid instrument for documenting the Digital Storytelling intervention as it pertained to Jessica.

### **Interviews**

Semi-structured interviews were conducted with family members, caregivers, and teachers to provide critical insight into the struggles, frustrations, and dedication associated with caring for a family member with ASD. Additional interviews were carried out with Jessica's former and current speech therapist, school counsellor, and former teachers. Each interviewee provided a better understanding and fuller knowledge of their personal knowledge and interactions with Jessica. The cumulative data from these interviews generated new insight, perspectives, and ideas related to the implementation of Digital Storytelling with Jessica.

### **Documents**

Subjective meaning and interpretation is central to qualitative epistemologies and methods. For this reason, data collection instruments and must be purposeful, relevant, and deliberate. Documents can provide a source of guidance to determine meaning and build knowledge. Patton (2002) acknowledges the value of documents in a qualitative study, as they "constitute a particularly rich source of information" (p. 293). Broad access was given by the family to review the personal, general, and organizational files regarding Jessica's background as a way gain insight into the implementation and feasibility of this intervention.

### **Coding**

Coding was essential to theory building within this study. Adler and Clark (2003) define coding as, "associating words or labels with passages in one's field notes or transcripts" (p. 503). O'Rourke (2000) explains that coding facilitates with the organization and analysis of the data that is collected. The data analysis used in this study is an adaptation of the three iterative stages suggested by Anfara, Brown, and Mangione (2002): coding, trends, and theory building.

During the initial stage, codes were assigned to the concurrent themes, patterns, and insights that developed during the study. The second stage of data analysis attempted to explore the themes and trends from the assigned codes. Attempts were made to integrate codes with similar themes, characteristics, and responses. The third stage of analysis attempted to reconcile the meaning from this data as a basis for theory building and extension. Anfara, Brown, and Mangione (2002) suggest that transparency and

openness are study design features that are likely to promote trustworthiness, reliability, and integrity.

### **Findings and discussion**

Walton (1992) suggests that, "case studies are likely to produce the best theory" (p. 129). While the goal of this case study was to extend and build upon the existing theoretical foundation of Digital Storytelling as a multidisciplinary approach to impact the literacy and social outcomes of a student with ASD, the reader should remain aware of the scope and generalizability from these findings. Jessica represented an ideal case for this investigation. The questions I examined represented an attempt to contribute to the limited research on Digital Storytelling for students with ASD. The research findings, therefore, lend themselves to a specific application of Digital Storytelling as a literacy intervention for a high functioning student with documented ASD. Interpretations and future applications from this case study should be understood within the parameters of moderate generalization (Bryman, 2004). Future studies designed to replicate these findings should include methodological parity with regard to data collection, qualitative analysis, and participant selection. The interpretive nature of this effort does not attempt, "to produce sweeping sociological statements that hold good over long periods of time" (Payne & Williams, 2005, p. 297), but instead provides the framework for future research to either refute or confirm these results, "through further evidence" (p. 297).

Analysis of data revealed three overarching themes related to the academic and social impact of Digital Storytelling with Jessica. Active participation, increased engagement, and critical reflection were found to be the most salient features of this intervention. These interactions were possible because the framework of Digital Storytelling lent itself to Jessica's learning preference for tactile support, strong visual aids, and use of interactive technology. Her kinesthetic, visual, and task-oriented approach to learning represented a characteristic learning style for many students with ASD.

### **Active participation**

The story Jessica selected was carefully chosen and thought out. Her first reaction to Digital Storytelling was reticent and apprehensive. Initially, I explained to her the concept of Digital Storytelling, provided examples of this process, and reiterated that the story choice is hers to make. The second session was similar to the first, her unease and unfamiliarity with Digital Storytelling still continued to prevent her from full participation. She came to the third session with a

change in demeanor and excitement to share with me the following:

*[Jessica]: Mr. Daigle, I know what I want to make a movie about.*

*[Brent]: You do? So, what do you want to write about?*

*[Jessica]: The fire and my animals.*

*[Brent]: Why?*

*[Jessica]: Because I want to show about everything I've been through and everything I have and stuff like that.*

She chose to write about the fire that destroyed her home in the summer of 2007. Her family escaped the home; her mother was hospitalized for several days due to smoke inhalation. Unfortunately, none of her animals survived the fire.

Once she chose her story, Jessica was no longer uninterested and passive. Active participation was central to the Digital Storytelling process. This energy and dedication to her story impacted multiple areas of social functioning. Decision making and problem solving, patience with technology, and seeing outside of self are examples of the range of social skills Jessica exhibited through the Digital Storytelling process.

Jessica actively participated throughout each level of the Digital Storytelling process. This intervention functioned in a unique way to accentuate her strengths in a way that helped create a story that was both compelling and aesthetically pleasing. The final version of her story revealed this dynamic interchange of systematic problem solving, decision-making, and revision.

### **Engaged learning**

I observed a deep level of engagement and commitment to the writing process throughout this intervention. Student choice of both the topic and subject matter was a crucial determinant to the success of this intervention. Jessica showed a high level of engagement because the perceived outcome was clear and valuable.

Her story recounted a very emotional and intensely personal event from her life experience. Providing wide parameters for topic choice ultimately led to increased ownership and commitment. The genre she chose, an autobiographical nonfictional account, was particularly insightful, as it confirms observations made by Snow, Burns, and Griffin (1998) that students who struggle with literacy development seem to prefer literacy interactions from authentic and informational texts.

### **Critical reflection**

The iterative nature of Digital Storytelling emphasized ongoing review and critical reflection. The collaborative and informal aspect of this intervention was ideally suited to address Jessica's academic, social, and behavioral needs. Jessica took an active role in the construction of her own knowledge because her narrative was personal and genuinely heartfelt. The final version of her story demonstrated the reflective and introspective nature of this intervention.

Additionally, this intervention enhanced Jessica's overall literacy development because it allowed her to use an alternative visual and audio format to tell an authentic story that was significant and meaningful to her own life experience. Throughout this study, I observed deep levels of motivation, commitment, and pride associated with the creation of her Digital Story. Literacy outcomes improved for Jessica because this intervention reinforced higher levels of communicative interaction within this responsive and adaptable framework.

### **Conclusion**

Current research efforts on the educational use of Digital Storytelling are primarily limited to the general population of students (Robin, 2008). Prior to this study, there was no direct empirical evidence to support the benefit and use of Digital Storytelling as an instructional approach for high functioning students with ASD. This study extended the literature on Digital Storytelling as an authentic learning experience for an individual in this population as an additional and viable strategy to address literacy efforts in reading, writing, listening, and speaking. This study both explored and evaluated the effect of Digital Storytelling in other areas of functioning, such as social and behavioral interactions.

This case study provides exploratory evidence of increased outcomes in literacy, engaged learning, and social skills associated with Digital Storytelling for a high-functioning student with ASD. Jessica and I met over a three-week period at a local public library to write, design, and create a Digital Story. Each session was approximately 45 minutes, or a total of 11.25 hours. This is an important consideration for classroom instruction, as students with ASD demonstrate varying levels of functioning and ability. Also, this intervention can be quickly and easily integrated into existing classroom practices.

This study yielded three significant conclusions. First, Digital Storytelling led to improved outcomes in the areas of social, behavioral, and literacy development. Second, Digital Storytelling demonstrated promise as



an instructional strategy for ongoing literacy development and support. Third, prior knowledge of basic multimedia and computer related skills added to the implementation and overall contribution of Digital Storytelling as a meaningful and shared learning experience.

### Future studies

This case study is an initial step towards understanding and describing the potential impact of a Digital Storytelling experience for a sixth grade student with high-functioning ASD. The first recommendation calls for ongoing efforts to critically evaluate and contextualize the findings of this case study to the larger population of individuals with ASD. Consideration to replicate and extend this study may include its use in a classroom setting, increasing the sample size, or examining the sustainability of this intervention over longer periods.

Future studies may also benefit from longitudinal designs that clearly trace the relationship between Digital Storytelling and literacy gains, social skills improvement, and language acquisition for students with ASD. Within the framework of a longitudinal study, the dynamic and interrelated processes of literacy, collaboration, and educational technology could be examined more extensively. This approach may provide more support to the results of this particular exploratory study.

The alarming rate of Autism reported in children has lead to a call for meaningful academic and behavioral interventions that address the complex needs of this population. According to Hyman, Rodier, and Davidson (2001), "there is increasing evidence that behavioral and educational intervention with young children may significantly improve developmental and behavioral outcomes and that basic deficits in play and communication may be therapeutically modified" (p. 3141). Exploring Digital Storytelling as a platform for more inclusive opportunities with the general population may provide insight into the factors that influence successful experiences in a regular classroom setting.

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