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Introduction

This Spring issue provides readers with diverse and holistic perspectives on a variety of topics including the parent involvement in early childhood education and community in online early childhood programs. Moreover, this issue discusses face masks and student engagement, cyber safety, and the utilization of games in telemental health with children. The IJWC continues to be committed to promoting holistic learning and the development of the whole child.

Article #1:

Parent Involvement in Early Childhood Education: Exploring Cultural Beliefs and Practices Through the Figured Worlds Approach to Support Learning Success for All Children

Hyunjin Kim and Susan Trostle Brand

The authors of this article explore the impact of parent involvement in early childhood education in Korea. The work is grounded in the Figured Worlds Approach which states that people's worldview is impacted by their culture, values, and communities. Context is provided for deeper understanding of cultural practices and values, language and communication, and strategies for understanding diverse groups. The author identified many implications for educators such as incorporating traditions, eliminating bias, and supporting learning through a growth mindset. Finally, the findings suggest future research could explore intersectionality, innovative family engagement, as well as policy changes and community partnerships.

Article #2:

The Importance of Community in a Fully Online Program: Establishing Equity, Inclusion, and Access with Nontraditional Students in an Early Childhood Licensure Program

Maryam Sadat Sharifian, Chelsey Bollinger, Shin Ji Kang, Jordan Perlish, Madison Masters

This mixed method study examined nontraditional preservice teachers' perception of community in an online bachelors' program. Previous research supports the idea that nontraditional students face a variety of barriers in higher education including but not limited to feelings of comfortability and financial concerns. This study utilized the Community of Practice theory to best understand participants' experiences. The findings suggest that most of the participants in this online program felt they received support when transitioning into the program in addition to feeling connected to others while in the program. Finally, it is important that preservice teacher programs make meaningful efforts to create a sense of community and culture within the program, disseminate information that provides support to students transitioning, and continually establish opportunities for professional development for faculty.

Article #3:

Facial Masks and Student Engagement in Early Childhood and Exceptional Student Education Classrooms

Anna Frahm, Judit Szente, Sherron Killingsworth Roberts

The authors of this paper examine whether wearing masking affects student engagement in both early childhood education (ECE) and education of students with exceptionalities (ESE). COVID-19 greatly impacted education as schools moved to a virtual format and instruction was split between in person and virtual modes. The authors discuss the specific impacts on individuals with exceptionalities such as inability see visual language cues and social and emotional components of language. Additionally, the use of masks greatly impacted behavior and social and emotional engagement in the classroom as well as interfering with lipreading and literacy. The use of transparent masks and their reduction of barriers is discussed. Finally, the authors suggest opportunities for future research, such as the impacts of different face masks with or without a remote microphone.

Article #4:

The Representation of Differing Abilities in Children's Literature: A Local Analysis

Jaimee L. Hartenstein, Klaire Brumbaugh, Julianna Holguin, Adriatik Likcani

The authors explored representation of disability in one hundred children's books. In this study a content analysis methodology was used to identify the portrayal of medical conditions listed by the ADA in books that are most frequently checked out for ages 0 to 6 years old. The results suggest that library displays and communications better showcase and share books that are representative as well as, more books that have characters with disabilities in primary roles. Finally, the implications of the results suggest that representation is important as it increases the desire to read and contributes to the development of positive self-esteem.

Pictures for Reflection

The Office

Cris Lozon

The author describes how children used toys, collaboration, and play to create an office space.

Tech Talk

Cyber Safety Efforts for Children: Are They Working? What Can We Do?

Nancy Caukin

Cyber Safety is a serious issue. Children's internet usage has increased substantially as has those who would exploit them. Statistics demonstrate the need for awareness and action. Key legislation is discussed and the heightened need to be proactive in the education arena to better instruct children on the dangers that await them. Resources for teachers and families are provided.

Children & Families: Health and Wellness

Games in Telemental Health with Children and Adolescents

Jo Weaver, Jacqueline Swank, Shatoi Scott, Tonya Davis

The authors of this study explore the use of games in telemental health services with both children and adolescents, focusing specifically on how live video, telemental health interactions contribute to the reduction of barriers in terms of access to mental health services. Game play, the use of games in counseling to foster engagement and connection, may be done through a variety of ways including but not limited to, board games, card games, art games, and physical games. Modifications can be made to these games that allow them to be played virtually such as through the use of an online medium (website game, virtual or whiteboard). Additionally, the provider can incorporate talking points throughout the games, certain colors mean sharing about a specific emotion, or specific actions (sinking a ship) means sharing something about yourself. Finally, it is important to bear in mind the providers' technology abilities, HIPPA, privacy, and safety with using web-based platforms.

STEAM

Learning Doesn't STEM from Worksheets: Why STEM Learning Starts Beyond Paper and Pencils Tasks

Rebecca Horrace, Brian Stone

The authors of this article explore the use of worksheets in STEM classrooms. This is viewed through the specific lens of a whole-child, constructivist approach, which suggests that learning is an active process where learners are challenged, and problems are solved through exploration and play. Worksheets create an environment where learners are seeking the answers from the teacher as opposed to creating space where students initiate learning. The authors discuss The National Science Teaching Associations three-dimensional teaching which supports learning through real world applications, engagement that moves from curiosity to interest to reason, and exploration of science, driven by student interest. Furthermore, allowing learners to truly play will help develop a sense of ownership throughout their learning. Finally, the current educational practices that rely heavily on worksheets are doing a disservice to learners and the environment. Moving towards activities that support investigation, experience, and student driven learning will create learners who ask questions and seek answers all around them.

Education by the Numbers

Considering Retention in the Light of the Covid-19 Pandemic

Sandra Stone

The data provided by the author in "Education by the Numbers" discusses retention after the Covid-19 pandemic.

Page Turners: Books for Children

Katrina Bartow Jacobs, Carla K. Meyer, Michelle J. Sobolak, Patricia Crawford, Maria Genest

In this article, different children's books are listed with descriptive summaries on each one. The books include: *A Blue Kind of Day; Most Perfect You; The World's Best Class Plant; Yoshi: Sea*

Turtle Genius; The Hill We Climb: An Inaugural Poem for the Country; Mrs. Peanuckle's Earth Alphabet; A Spark in the Dark; School Trip: A Graphic Novel (The New Kid Book 3); Sharks: A Mighty Bite-y History; and Squished.

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Parent Involvement in Early Childhood Education: Exploring the Role of Korean American Cultural Beliefs and Practices Using the Figured Worlds Approach to Support Learning Success for All Children

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Dr. Hyunjin Kim is an experienced scholar in the field of early childhood education, holding the positions of associate professor and program coordinator of the Early Childhood Education program, as well as program director for Early Childhood Care and Education Pathways at the University of Rhode Island. With extensive experience in the field, she has actively participated in several funded projects, including Preschool Development, Registered Apprenticeship, ECCE Workforce Development, and Ready to Learn Grants. Dr. Kim has published numerous scholarly and peer-reviewed articles related to early childhood education.

Dr. Susan Trostle Brand is a full professor of Early Childhood Education at the University of Rhode Island. She was previously a preschool and primary grades classroom teacher and a reading specialist. She has served as a Co-PI or consultant on grants addressing inclusion, science learning among preschoolers, and recently the ECCE workforce project for adult learners. The author of four textbooks and numerous scholarly articles, Dr. Brand serves as the counselor for the Iota Sigma chapter of Kappa Delta Pi National Honor Society. She is also a United Nations representative for Kappa Delta Pi.

Abstract

This paper examines the significance of parental involvement in early childhood education, with a specific focus on the cultural practices and values of Korean American parents and children in schools in the United States (US). It discusses the critical issue of the learning gap among different ethnic and racial groups and how, through the recognition and integration of various cultural beliefs and values, educators can help parents to close this gap. The paper focuses specifically on Korean American children and their parental involvement in the US through the lens of the "figured worlds" approach, in order to better understand differences in educational practices and to support the success of all diverse groups of children in the learning process in American schools.

Keywords: parent involvement, early childhood education, cultural beliefs, Korean American children, figured worlds approach

Introduction

Parent involvement in early childhood education refers to the active participation of parents in their children's learning and development during the critical early childhood years. Numerous studies have shown that parental involvement in education is linked to better learning and developmental outcomes, social skills, and self-esteem for children (Castro et al., 2015; Chun & Devall, 2019; El Nokali et al., 2010; Fan & Chen, 2001; Lara & Saracostti, 2019; Ma et al., 2016). Understanding the importance of parental involvement in early childhood education is crucial for both parents and educators to appreciate. However, the role of cultural practices and values in shaping the experiences of children from diverse backgrounds is often overlooked.

The learning gap existing among different ethnic and racial groups in early childhood education is a significant issue with long-term implications for individuals and society as a whole. Parent involvement is a vital factor in understanding this gap, as cultural beliefs and values can shape how parents approach their children's education (Gonzalez-dehass et al., 2005; Hill & Tyson, 2009; Wilder, 2014). By utilizing the “figured worlds” approach, which acknowledges the cultural and social context in which individuals operate, educators can better understand how cultural beliefs and values affect parent involvement in early childhood education. Educators reaching out to promote parent involvement are able to gain insight and understanding of different cultural beliefs and values and then capitalize on integrating these themes/values into the schooling context on behalf of each child’s well-being and learning success.

This paper will examine the significance of parental involvement in early childhood education, with a specific focus on Korean American children and their parental involvement in the United States (US). The article will provide insights on Korean American parental involvement within the US context, utilizing the concept of “figured worlds” to frame the discussion for a better understanding of differences in educational practices.

The Figured Worlds Approach

The term "figured worlds" was first introduced by sociolinguist James Paul Gee in his book, "Social Linguistics and Literacies: Ideology in Discourses" (Gee, 1990). Gee developed the concept as a way of understanding the cultural practices and values that shape individuals' experiences in social and educational contexts (Gee, 2000). He argued that the ways in which people understand and make sense of their world are molded by the cultural practices and values of the communities in which they participate. Since then, “figured worlds” further developed as a theoretical approach in sociology, anthropology, and education fields. Scholars such as Holland et al. (1998) used the concept of “figured worlds” to understand the process individuals use to construct and negotiate their identities within social and cultural contexts. For example, Nasir (2011) used the concept to explore the experiences of African American youth in educational contexts in understanding how their racialized identities impact their academic achievement. Nasir employed the *figured word* “racialized identities*”* to elucidate the intricate and diverse experiences of African American children within educational settings, and to conduct a detailed examination of the influence of race on academic success. The use of this *figured word* facilitated a more nuanced and comprehensive analysis of the topic at hand.

In the field of education, the “figured worlds” approach helps educators to understand the cultural practices and values that shape children's experiences and expectations in the classroom. By understanding the "figured worlds" of children from different cultural backgrounds, educators can better understand and support children’s learning experience in educational settings. Using this approach, educators can comprehensively analyze the factors that contribute to the learning and development gap between children of different ethnic groups. For the purpose of the current discussion regarding parent involvement in early childhood education, Korean American parents and children are explored.

Early Childhood Education and Parent Involvement Among Korean Americans

Parental involvement in early childhood education remains critical for children's success in school. Research consistently demonstrates that parental involvement links to better learning outcomes, social skills, and self-esteem for children (Jeynes, 2005; Liu et al., 2020). However, the impact of parental involvement may vary across cultural contexts. For Korean American parents, involvement in their children's education is ever more critical due to cultural differences and language barriers (Lee & Bowen, 2006).

Korean American parents have been shown to be highly involved in their children's education, often setting high learning expectations and prioritizing a strong emphasis on the value of education (Lee, 2014; Paik, 2008). This high level of parental involvement has been linked to the strong learning performance of Korean American children, who have been found to have higher levels of learning success compared to their peers from other ethnic and racial groups. For example, studies show that Korean American children outperformed their peers from other ethnic and racial groups in early childhood education, and parental involvement was a significant predictor of their learning success (Kim et al., 2010; Kwon, 2017). Another study by Hahm and Lee (2017) showed that Korean American parents' high expectations and involvement in their children's education positively influenced their learning outcomes.

Understanding the cultural and social factors shaping parental involvement among Korean American families provides insights into effective strategies for promoting parental involvement. An examination of the unique cultural and social context of Korean American families through the lens of the “figured worlds” approach highlights the important role that parental involvement plays in promoting positive learning outcomes for Korean American children.

Cultural Practices and Values

Sok and Schwartz's (2021) study on Korean American families with successful heritage language maintenance supports the importance of understanding cultural practices and values in promoting positive educational outcomes for all children. The “figured worlds” approach is a helpful framework for educators to gain insight into the experiences of children from diverse ethnic backgrounds. Cultural practices and values, such as prioritizing learning success and placing high value on discipline and hard work, can significantly impact the learning success of children from different ethnic groups (Hahm & Lee, 2017; Otto, 2017; Sok & Schwartz, 2021; Villenas & Crespi, 2015).

For example, Korean American children often come from families that value working hard and succeeding in learning. According to Otto (2017), Korean American parents tend to be highly involved in their children's education and often provide a supportive home environment that fosters learning success. This high level of parental involvement can be attributed to the cultural value of education, which is seen as a pathway to upward mobility and social status.

However, Korean American children may also encounter cultural pressures to excel in learning (Park et al., 2018). Korean American children may experience cultural stress, which refers to the psychological distress arising from the conflict between the demands of the culture of origin and the culture of the mainstream society. The cultural value of learning success can lead to high levels of stress and anxiety among Korean American children, which may impact their learning outcomes.

In sum, knowing the cultural beliefs and practices of Korean American children is critical for teachers to create an inclusive and supportive learning environment that fosters learning success and well-being for all children. The “figured worlds” approach can be a helpful framework for educators to gain insight into the experiences of children from diverse ethnic backgrounds and promote positive educational outcomes.

Language and Communication

In addition to cultural pressures to succeed in school, Korean American children may have additional language expectations and communication differences. While Korean American children may speak English as their first language, they may also be fluent in Korean and as well may demonstrate a different communication style from their peers from other ethnic groups (Lee & Shin, 2008; Lim, 2012).

According to Park et al. (2014), Korean American children may value respect for authority and conformity, which can impact their interactions with teachers and peers in the classroom. An example of how the cultural value of respect for authority and conformity can impact Korean American children's interactions with teachers and peers in the classroom is illustrated in a study by Lee (2017). Lee found that Korean American children tend to prioritize their relationship with their teacher and may avoid challenging or questioning authority figures to maintain harmony and respect. This cultural trait can sometimes result in a lack of engagement or participation in classroom discussions, leading teachers to misinterpret the children's lack of contribution as a lack of interest or ability. Teachers can use this knowledge to create a classroom environment that values respectful communication and encourages all children, including Korean American children, to participate in discussions and express their ideas.

Additionally, parental language barriers can be a significant factor in the learning performance gap and in the development of a partnership with other stakeholders (Lim, 2012; Park & Kim, 2019). For example, Korean American children may struggle with learning English, which may impact their performance on standardized tests and in classroom tasks. Moreover, the lack of access to language resources and societal pressures to assimilate may hinder the efforts of Korean American parents in promoting their children's heritage language maintenance (Kim et al., 2016; Kwon, 2017). In addition, Yoo and Lee (2008) reported that Korean American children

(and their parents) may also experience negative effects on their psychological well-being due to cultural conflicts and discrimination, which can impact their learning process.
Despite facing these challenges, Korean American parents place a high value on education and often have high expectations for their children's learning success (Lee & Bowen, 2006). However, cultural differences may make it challenging for Korean American parents to navigate the United States'(US) educational system. Korean American parents may be unfamiliar with the expectations and norms of US schools, and language barriers may further complicate communication with teachers and other educators.

Strategies for Promoting Understanding of Diverse Backgrounds

To promote understanding and thoughtful consideration in educating every child, valuing each child's unique background, it is essential to recognize, comprehend, and appreciate the cultural practices and values that shape the experiences and learning outcomes of children from diverse backgrounds (King, 2012). Park and Jung (2019) recommend that educators use culturally responsive teaching practices, which incorporate culturally relevant materials and experiences into the curriculum to better engage and support children from diverse backgrounds.

According to Kim et al. (2017), Korean American parents believe in maintaining Korean cultural traditions and instilling Korean values in their children while, at the same time, balancing the demands of the US context. The authors discuss two strategies that Korean American parents use to achieve this balance between cultural maintenance and bicultural socialization. The first strategy is "cultural maintenance," which involves teaching children about Korean cultural practices, values, and beliefs. For example, Korean American parents may teach their children how to speak Korean, celebrate Korean holidays, and practice traditional Korean customs. The second strategy is "bicultural socialization," which involves preparing children to navigate the cultural differences between the Korean and American contexts. This strategy emphasizes the importance of understanding and appreciating both Korean and American cultural values, beliefs, and practices. For example, Korean American parents may encourage their children to participate in both Korean and American cultural activities, learn about both cultures, and develop communication and social skills that are relevant in both contexts. Their findings suggest that culturally sensitive interventions incorporating both Korean and American parenting strategies can be effective in promoting an understanding of differences.

Moreover, family engagement and language support are also additional strategies that can enhance the understanding and valuing of differences. For example, educators can foster strong relationships with families and provide language support and accommodations to children who are bilingual or struggling with learning English (Otto, 2017; Villenas & Crespi, 2015). By implementing these strategies, educators work towards promoting a more positive learning environment for all children.

Dantas-Whitney et al. (2020) maintain dual language education can promote learning outcomes and linguistic and cultural proficiency for both language minority and language majority children and, furthermore, it can also contribute to greater understanding of the rich language and cultural diversity of children, valuing diversity in the process. Lee and Hakuta (2018) emphasize the

importance of educators' awareness of the challenges that bilingual children face and also provide them with appropriate support and accommodations.

In summary, relevant literature emphasizes the importance of promoting an understanding and valuing of children's diverse languages and backgrounds and supporting the education of language-minority children through culturally sensitive approaches, implementing appropriate language frameworks and accommodations, and partnering with families (e.g., Hakuta, 2011; Lee & Hakuta, 2018; Otto, 2017; Villenas & Crespi, 2015). Educators who utilize these strategies can create a more positive and caring learning environment for all children. By partnering with parents on these issues, educators can provide not only learning advantages, but also support children's overall well-being.

Implications for Educators Working with Diverse Groups

This current discussion, which explores the educational experiences of Korean American children, illustrates several important implications for all educators working with children of different ethnic groups.

Learning Outcomes. Learning outcomes vary significantly among different ethnic groups; As noted, parental involvement remains as a critical factor in promoting children's learning and learning success. However, the role of cultural practices and values in shaping the experiences of children from diverse backgrounds is often overlooked. Parent involvement is the open door to understanding each child's cultural values and practices.

Figured Worlds. Through the lens of the "figured worlds" approach, educators can also better understand the cultural practices and values that impact the learning outcomes of children from different ethnic groups and develop strategies for promoting a deeper understanding of each child's diverse language and culture in order to support each child's learning success.

Incorporating Cultural Traditions. To effectively target the educational needs of children from diverse backgrounds, it is important for educators to recognize and appreciate cultural differences. For example, a teacher working with Korean American children might incorporate cultural traditions and practices into the classroom to make the curriculum more meaningful and relevant. An example of incorporating Korean cultural traditions and practices into the classroom could be including Korean literature, art, and music in the curriculum. Teachers can select texts by Korean authors or books that showcase Korean culture and history, providing children with an opportunity to explore their cultural heritage and identity.

Additionally, teachers can introduce Korean traditional art forms, such as calligraphy or painting, to teach children about Korean aesthetics and history. Another example of incorporating Korean cultural practices into the classroom is to celebrate Korean holidays, such as Lunar New Year or Chuseok, by organizing cultural events or activities. For instance, teachers can invite Korean American parents to share traditional Korean foods, songs, and dances with the class, providing children with an opportunity to learn about Korean culture and connect with their peers.

By incorporating diverse cultural practices and values into the children's learning process and experiences, all children can feel recognized and valued.

Eliminate Discrimination and Bias. With parental input and support, teachers can take steps to eliminate discrimination and bias, thus preventing actions that can result in a significant and deleterious impact on the learning success and well-being of children from diverse groups. Educators can promote a positive and inclusive environment for all children. These positive actions might also include engaging teachers in anti-bias training, implementing policies to prevent bullying and harassment, and promoting diversity and inclusion strategies in the curriculum.

Social Capital. Educators can also promote social capital which refers to the resources, networks, and connections that individuals can access through their relationships with others. Teachers promote social capital by providing opportunities for children to engage with their communities and build connections. For example, a teacher might invite community leaders and members to come to the classroom to speak about their careers or provide opportunities for children to engage in service-learning projects that focus on community needs.

For Korean American parents and children, social capital can take many forms. Korean American families often prioritize maintaining close ties with their community and culture, which can provide them with a strong source of social capital. This can include access to community organizations, religious institutions, and cultural events, which can provide opportunities for social networking, emotional support, and cultural enrichment (Kim et al., 2016). Korean American parents may draw on their social networks to provide learning support for their children. For example, they may enlist the help of family members or friends to provide tutoring or mentorship, or they may seek out connections with educators or community leaders who can offer guidance and advice on navigating the education system.

Growth Mindset. According to Dweck (2006), promoting a growth mindset emphasizes the belief that intelligence and ability can be developed through effort and hard work. A growth mindset can be a powerful strategy for building confidence and resilience in children, regardless of their background or ethnicity. Furthermore, promoting a love of learning can help children develop a lifelong passion for knowledge and personal growth (Martin & Marsh, 2018). By instilling a growth mindset and a love of learning into their teaching practices, educators can help children develop the skills, attitudes, and resources needed to succeed in school and beyond. With these measures in place, educators work towards promoting learning success for all children, regardless of their background or ethnicity.

Involve Families. Finally, as discussed in this article, family involvement remains a critical factor in promoting the learning and learning success not only for Korean American children, but for all children from different ethnic groups. Hopefully, educators will work to support and involve all families in their children's education. This might involve sponsoring family nights or parent-teacher conferences, providing resources and materials in multiple languages, and developing strategies for communicating with families from diverse backgrounds.

Summary. Overall, this article emphasizes the importance of recognizing and understanding cultural factors, eliminating discrimination and bias, fostering an understanding of the rich diversity of each child, supporting the learning process with a growth mindset, promoting social capital, providing an inclusive education for all children, partnering with parents, and encouraging family involvement. By taking these actions, educators can better support the learning success and well-being of young children from diverse backgrounds and promote a more positive and inclusive learning environment for all.

Future Directions

The implications of the studies exploring the educational experiences of Korean American children suggest several important future directions. The following future directions involve conducting additional research and related actions for all ethnic groups.

First, future research might explore the intersectional identities of Korean American children and other children from diverse groups to further understand the ways in which multiple aspects of a child's identity interacts to shape his or her experiences in educational settings.

Second, educators may continue to explore innovative ways to engage families from diverse backgrounds in their children's education. Engaging families might involve leveraging technology to improve communication with families, developing culturally responsive curricula, and providing resources and materials that are accessible and relevant to families from diverse backgrounds.

Third, teacher education can design programs to prepare educators to work effectively with children from diverse backgrounds. This might involve teacher candidates with training in culturally responsive pedagogy, anti-bias education, and the use of "figured worlds" and other theoretical frameworks to more deeply understand the experiences of children from different cultural backgrounds.

Fourth, policymakers may consider the impact of implementing policies on the educational experiences of Korean American children and children from other diverse groups. These policies have the potential to foster a comprehensive understanding of diversity and inclusion within the educational context, bolstering endeavors to mitigate discrimination and prejudice. Furthermore, these policies ensure the provision of sufficient resources, such as mentorship from experienced educators, providing teaching assistants, curricula, literature, technological tools, and tailored pacing strategies, all of which contribute to the learning success of every child.

Finally, schools and communities can work collaboratively to promote positive and inclusive education for all children. Schools can develop partnerships with community organizations, leverage the resources and expertise of families and community members, and promote community-based research and action to provide for the needs of diverse populations of children. By using culturally responsive teaching, providing language support, promoting diversity and inclusion, and fostering family engagement, educators can support the learning and learning success of all children, regardless of their cultural background or language ability. Children's

well-being in school is dependent upon a plethora of changing attitudes and practices including re-examining our current educational system.

Changing our Educational System

The restructuring of our educational system is recommended so that children no longer need to face discrimination or marginalization (Glaude, 2020). It is also important for educators and policymakers to consider eliminating policies and practices that contribute to inequality and discrimination within the education system. Some of these discriminatory policies and practices include tracking or streaming, unequal funding of schools, biased disciplinary practices, biased standardized testing, inadequate support for English language learners, and lack of diversity among educators and curriculum. On the contrary, recommended policies and practices should encompass those that promote equity and inclusion in education, support efforts to reduce discrimination and bias, and provide adequate resources for every child.

In conclusion, taking a more holistic and intersectional approach to understanding the educational experiences of diverse children, as well as partnering with parents, can lead to a more comprehensive understanding of the challenges children face and the strategies educators need to promote children's successes. By incorporating inclusive approaches and the "figured worlds" approach into research and practice, educators and policymakers can work towards creating a more equitable education system that supports the learning success of all children, regardless of their background or identity.

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The Importance of Community in a Fully Online Program: Establishing Equity, Inclusion, and Access with Nontraditional Students in an Early Childhood Licensure Program

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Abstract

The educational landscape requires an increased variety of teachers entering the field. The Early Childhood Education Bachelor of Individualized Studies program is a new online program within a teacher preparation institution located in a comprehensive university on the east coast of the United States. It is designed for students who have earned their Applied Associate of Science in Early Childhood Education (ECE) from a community college to pursue teacher licensure. This teacher education program was developed to respond to a statewide teacher shortage for teachers who already had earned an Early Childhood Associates degree from a state community college. This program advocates for non-traditional students and continues to be refined as we (the researchers) continue to work to find better ways to support our students. This online early

childhood program aims to increase access to students who have valuable attributes to contribute to the field of education (Kaplan & Bellwether Education Partners, 2018).

The purpose of this study was to understand the students' sense of community in the online educational environment. As a faculty community of practice, we, the researchers, created and sent out a qualitative survey to students (N=31) to gather participants' perspective of community and perceived barriers of an online licensure program in which 24 students completed the survey. To enhance our knowledge about the sense of community, we utilized Rovai's (2002a) Classroom Community Scale (CCS) to collect data from the most recent cohort of students (N=17). The data suggest that both senior and junior students perceive a relatively high level of Connectedness and Classroom Community, with mean scores above 40. The mean score for Learning was slightly lower, with both groups scoring below 23 on average. In addition, the following themes emerged from the result of the qualitative study followed by interviews:1) there is a transition period for non-traditional students from the community college to the University online setting, 2) it is important for faculty to be intentional in creating a culture of care and sense of community, 3) licensure assessments are a key barrier, and 4) coaching and mentorship are critical for students' success.

Purpose

The purpose of the study was to examine non-traditional students' perspective of community and their perceived barriers in an online 4-year bachelor's program preparing PK to 3rd grade teachers. This pilot teacher education program was recently developed to respond to the statewide teacher shortage and to grow future teachers who already earned an Early Childhood associate degree from a state community college. With limited knowledge and experience working with non-traditional students in an online space, the instructors of the program aimed to create a desirable learning environment where non-traditional students could make smooth transitions, felt like they belonged, and successfully met the academic requirements. While each course was thoughtfully designed and implemented to support the students' meaningful learning, it warrants a systematic study to identify and address barriers to continue to improve the program.

This study is significant for several reasons: The reviewed literature indicates a research gap in non-traditional preservice teachers' experiences and perspectives in the field of early childhood education (ECE) who had earned an associate degree at a community college. Most research has been conducted on post-baccalaureate teacher certification programs allowing non-traditional students to pursue teaching careers with a Graduate Diploma upon completion (Crosswell & Beutel, 2017; Walsh, Abi-Nader, & Poutiatine, 2005). Little research is documented on these students who were enrolled in an online teacher licensure program during the pandemic. It is imperative to better understand their experience so that we can theorize teacher development and quality teaching.

Background

This program started in 2019 to provide non-traditional students a flexible, online teacher licensure track that could be completed asynchronously. The variability offered provides students

the ability to achieve their degree alongside working full-time and, for many, family responsibilities. Upon completion of this program, students will earn a four-year degree and become eligible for a state license to teach students in grades Pre-Kindergarten to third grade. The program was developed due to the statewide teacher shortage as an initiative to qualify students that have earned an Early Childhood Associates Degree from a state community college who seek to earn a Bachelor of Individualized Study. This seamless pathway was initiated with a signed Memorandum of Understanding (MOU) between Virginia Community College Systems and a few four-year higher education institutions. Students who work at public or private early childhood centers receive funding for tuition to cover the cost of two courses per semester and textbooks. In order to continue partnership with community colleges, The Transfer Virginia established a collaboration among the State Council of Higher Education for Virginia (SCHEV), the Virginia Community College System (VCCS) and Virginia's colleges and universities to provide students with transparency in college transfer across the Commonwealth. There is a strong collaboration across the state between VCCS, Virginia's colleges and universities, and the Virginia Department of Education to support this pathway long-term and improve the quality and accessibility of the program.

The pilot program started as a small cohort of 7 students in the spring semester of 2019. Successful recruiting increased the number to 60 students in 2022. Continued growth is expected for future cohorts as internal procedures such as external marketing, building relationships with public schools across the state, and advocating for increasing the number of teaching assistants from private preschool providers are continually developed to support success. Classes are offered fully online to provide accessibility to students across the state. The program offers part-time and full-time options to students to follow the track that meets their schedule. This can take four to eight semesters depending on summer course load. The course load includes two practicum placements and a student teaching experience. The program offers flexibility for students to complete one of their two practicum placements in their own classrooms in order to support their financial stability. In addition, the University Education Support Center (ESC) works closely with the state’s school systems and private preschool providers to arrange student teaching opportunities in their own classroom. Since the program is fully online, students’ localities are distributed across the state. The ESC arranges student teaching placements based on student requests to either be placed in their own classroom or in a school near their residence.

The majority of the student population in this program include teaching assistants, substitute teachers, or those already working in early childhood centers in different capacities. Many of these students also have second or third jobs to be able to provide for their families. This is the reality for teachers with low salaries in the early childhood education field. Therefore, the program is designed as a fully online, asynchronous delivery method to support full-time, non-traditional adult learners. Through extensive reflection and discourse with students, the program started to offer one-hour, weekly synchronized sessions for each course during the evening time to build a sense of community and improve content learning opportunities. Each synchronous class is recorded and students who cannot participate have access to the recorded session.

Literature Review

Non-Traditional Students

A term for non-traditional college students has been used to describe students with diverse backgrounds in terms of age, enrollment patterns, financial and family status, and professional work experience. As the enrollment of the non-traditional students has increased in the US colleges, recruitment and retention of these students became a critical consideration for higher education innovation and the need for accurate understanding of non-traditional students grew (Chao & Good, 2004). Previous literature described that non-traditional college students were not only older in age but had other characteristics that were different from traditional college students: they tended to demonstrate financial independence, be the first generation of college goers, have dependents in their families, be racial/ethnic minorities, and/or have low-income status (Adams & Corbett, 2010; Brown, 2012; Chao & Good, 2004; Scott & Lewis, 2012; Wladis, Conway, & Hachey, 2015). These factors may connotate negative assumptions regarding non-traditional students' achievement and performance in higher education settings. In fact, Scott and Lewis (2012) found that some non-traditional students taking classes with traditional college student peers experienced hostile or uncomfortable learning environments that impede their learning. Minimal peer interactions between the non-traditional and traditional students resulted in feelings of separation and uneasiness.

Brown (2012) explored math teaching efficacy beliefs of 141 non-traditional preservice teachers working toward a bachelor's degree and teacher certification in community colleges in Florida. This particular program was created to address the state's teacher shortage by intentionally recruiting non-traditional students who had limited access to college education (Brown, 2012). Brown (2012) found that the math teaching efficacy scores were positively correlated with the age of the students, lower division math history, and math methods course performance. However, their failed attempts on high-stakes teacher certification exams were not correlated with the math teaching efficacy scores. The results of this study informed the newly created teacher education program of the non-traditional students' teaching efficacy beliefs and specific implications to support the non-traditional preservice teachers' learning and development.

The reviewed literature indicates a research gap in non-traditional preservice teachers' experiences and perspectives in the field of early childhood education who had earned an Associate degree in community colleges. Little knowledge was documented on these students who were enrolled in an online teacher licensure program during pandemic. It is imperative to understand these students in such programs so that we could theorize teacher development and quality teaching and recommend better avenues to address teacher shortage.

A major barrier for most non-traditional students seeking an Early Childhood Education degree is the financial burden of post-secondary education. Many do not qualify for federal funding and grants because of the limitations to the number and variety of classes they can take while working full-time and caring for a family. The formulas used to calculate financial aid awards do not take these considerations into account and ultimately impede these students from receiving the funding to cover the expense of their education (Kaplan & Bellwether Education Partners, 2018). In addition to not getting the financial aid necessary, there is no guarantee for increased pay, so "it makes little sense for students with financial insecurity to take on financial debt to fund higher education" (Kaplan & Bellwether Education Partners, 2018, p. 12).

Online Programs

There is concern surrounding the reportedly high rates of attrition in online classes compared to face-to-face classes (Bloemer, Swan, Day, & Bogle, 2018). Undergraduate students are poorly prepared and lack the student agency necessary for success in the online learning environment (Stephen & Rockinson-Szaokiw, 2021). To address the lack of persistence of undergraduate online students, universities must create and implement interventions that prepare students for the online learning environment and help them develop as autonomous learners.

Not all factors associated with online student persistence are within the institution's control. Rovai (2002b) emphasized that students must be skilled in time management, computer literacy, information literacy, and computer-based interaction before admission and that they have additional needs (i.e., goal commitment, learning preferences, study habits, interpersonal skills and relationships, self-esteem, accessibility to services) throughout an online class or program influencing their persistence. Yet, undergraduate online students continue to enroll in online classes despite lacking these necessary pre-admission student skills (Broadbent, 2017; Parkes, Stein, & Reading, 2015) and without developing the necessary student agency to persist (Kizilcec, Pérez-Sanagustín, & Maldonado, 2017; Schommer-Aikins & Easter, 2018; Song, Kalett, & Plass, 2016). Rovai (2002b) argued that if institutions are to promote persistence, they need to consider helping students develop student agency, so they can "seek to persist" (Tinto, 2017, p. 254). Hence, institutions must assume a key responsibility in helping online undergraduate students develop mechanisms of student agency to persist.

Online student orientation, regular advisement, technology training, and the use of self-assessments to determine student readiness for online learning are some of the strategies that institutions of higher education can employ to support students' agency, and thus, their persistence (Hart, 2012; Lee & Choi, 2011). For example, one institution's required orientation centered on the online class environment (i.e., navigation, tool use). An examination of the effectiveness of the orientation found a decrease in online student class withdrawals and an overall increase in student grades (Taylor, Dunn, & Winn, 2015). Another institution of higher education also experienced an increase in online student retention after implementing an online orientation focused on technology use, help-seeking, virtual communication, and tips for success as an online learner (Jones, 2013). While these studies are promising and support the positive impact of such interventions, they were primarily concerned with developing skill and self-efficacy with technology, and the literature surrounding the outcomes and impact of such interventions is sparse (Parkes et al., 2015). Interventions facilitating technology use may enhance technical skills, but students need to develop additional elements of student agency to persist in undergraduate online classes and programs. Those interventions intended to develop student agency need to be examined to determine their impact on online undergraduate student persistence. A study on undergraduate student preparedness for online learning found that students did not feel prepared to navigate an online class, manage their learning, engage with others online, interact with class content, and manage their time (Parkes et al., 2015).

Online Community Building

The convenience and accessibility of online courses have made this mode of learning increasingly popular. Students are able to participate via distance, using a schedule that works for them. However, this distance learning opportunity can cause feelings of isolation for both students and instructors. How can this concern of isolation be mitigated by building community?

When meeting face-to-face, creating a classroom community typically consists of ice-breaker activities, personal introductions, and reviewing the course syllabus. These activities set the stage for the semester and help create connections between students and instructors. These types of interactions are important and should be incorporated into online learning, as well. Some students and educators may have negative dispositions regarding online courses, believing that face-to-face learning is the only manner in which a course should be delivered (Phirangee & Malec, 2016). Drouin (2008) found that community building in the classroom can help students eliminate feelings of isolation.

According to McMillan and Chavis (1986), community is ‘‘a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together’’ (p. 9). Rovai (2002a) defines community in terms of four dimensions: spirit, trust, interaction and common expectations. Spirit is the “recognition of membership in a community and the feelings of friendship, cohesion, and bonding that develop among learners as they enjoy one another and look forward to time spent together” (Rovai, 2002a, p. 4). Trust shows a willingness of members in the community to rely on each other and have confidence in each other. Rovai (2002a) distinguishes between two types of interaction: task-driven interaction and socio-emotional driven interaction. The latter is more likely to strengthen the classroom community. The final dimension of community is common expectations. In the context of examining the sense of community in higher education, the common expectation would be learning.

Dawson (2006) surveyed 464 undergraduate and postgraduate education students using the CCS. The students that communicated more with classmates and instructors were found to have experienced a higher degree of sense of community. Rovai (2002a) studied a collection of literature on sense of community and found seven factors across his literature review that are positive correlates to sense of community: transactional distance, social presence, social equality, small group activities, group facilitation, teaching style and learning stage, and community size. Many of these patterns and factors that researchers have identified overlap and show a common theme that meaningful interactions among classmates and instructors correlates to a higher sense of community.

Low sense of community has been found to have negative impacts on students’ success in higher education. Rovai (2002b) collected 314 completed surveys from graduate students in education and leadership courses. The average age of the participants was 39.25 years old. Rovai used the CCS and found that “the common factor affecting both dropout rate and cognitive learning may be a sense of community in online courses and programs” (Rovai, 2002b, p. 328). Likewise, Rovai (2002b) found students who had a stronger sense of community to have greater satisfaction with their academic programs and therefore lower dropout rates.

Theoretical Framework: Communities of Practice

A social theory of learning defines that competence is historically and socially established by *Communities of Practice* (CoP), which shape experiences of their members (Lave & Wenger, 1991). Wenger (2000) notes that learning is an "interplay between social competence and personal experience" as well as a "two-way relationship between people and the social learning systems in which they participate" (p. 227). We situate our study in the framework of CoP and aim to better understand how students negotiate competence and experience as they participate in the online degree program as new members. The expected competence has been defined within the teacher education institution both explicitly and formally (e.g., course syllabi) as well as ambiguously and informally (e.g., communication styles), which is not always known to new students.

The nature of engagement of non-traditional students is presumably diverse since their histories, repertoires, and competences are different from the traditional 4-year, full-time, residential college experience. Their "non-traditional" ness as college students, thus, may create tensions and conflicts as soon as they begin their course work in the program. Wenger (2000) calls these spaces of conflict, *Boundaries*. Without shared practice in the new community, the non-traditional students might have experienced the boundaries as they navigate their belongingness. We aim to articulate how *boundaries are perceived* and processed by the students.

Our ultimate goal is to create bridges between identified boundaries to sustain the new teacher education program as a learning community where participants becoming competent in a deeper level at the center.

Participants

The majority of the students in this program are considered non-traditional students: All of them are situated in rural communities with uneasy access to a 4-year teacher education institution. The majority are the first going to college in their families, have school-aged children to take care of, have part- or full-time jobs in various educational settings, and often have second or third jobs to overcome financial struggles. The study consisted of two surveys: Alfred P. Rovai's Classroom Community Scale (CCS) and a qualitative survey created by the researchers to gather students' perspective of community and perceived barriers of an online licensure program. The total number of students in this study was 31 in which 24 students completed the qualitative survey and 17 students completed Rovai's CCS. Table 1. displays the demographic data from the qualitative survey for all participants who completed it.

Table 1

The Demographic Data

Factor	Number	Percentage
Ethnicity	24	

Caucasian	17	71%
African American	7	29%
First Generation College Student	24	
Yes	19	80%
No	5	20%
Number of Children	24	
None	9	37%
1	4	17%
2-4	9	37%
More than 4	2	9%
Annual Income	24	
Less than $25,000	5	21%
$25,000-$50,000	9	39%
$50,000-$100,000	9	39%
Prefer not to say	1	1%
Age	24	
18-28	8	33%
29-38	8	33%
39-48	5	21%
49-58	2	9%
59-68	1	4%

Methodology and Data Collection

The research question that guided our study is:

- How do students describe the sense of community in our fully online early childhood program?

This study is a mixed methods study. "Mixed methods research is a rapidly growing approach to inquiry that combines qualitative and quantitative methods in a single study to understand complex phenomena from multiple perspectives" (Creswell & Plano Clark, 2011, p. 4).

Data collection began in April 2022 with an email invitation to complete a 35-question survey that the researchers generated. The qualitative survey was sent to current students in the program (N=31) in which 24 students completed the survey. Questions included Likert scale and open-ended questions focused on various aspects of the two-year online Bachelor of Individualized Studies program. In June 2022 the researchers conducted 30-minute individual virtual interviews. The interview questions focused on deepening our understanding of responses to the survey questions.

The qualitative survey created by the researchers consisted of 5 categories: transition of non-traditional students to university, creating a culture of care and a sense of community, licensure assessments and barriers, coaching and mentorship, and transition from a teacher assistant position to a full-time licensed teacher. Each category contains 2-9 Likert scale questions followed by short response prompts. The Likert scale questions were scored as follows: 0 - strongly disagree to 4 - strongly agree. The maximum score for the survey is 72, and a higher score denotes a more positive experience in the online program. In addition, participants who agreed to follow-up interviews completed a 30-minute Zoom session with researchers as a focus group.

Then, the researchers reflected on their interest to increase our knowledge of sense of community through progressive investigation by adopting Rovai's Classroom Community Scale (CCS). The researchers acknowledge that the first cohort of participants already graduated from the program and were unavailable to complete the CCS. Therefore, there is a discrepancy between two cohorts of participants in data collection.

Many researchers (Dawson, 2006; Ouzts, 2006; Rovai, 2002b; Shackleford & Maxwell, 2012; Trespalacios & Perkins, 2016) have used Rovai's Classroom Community Scale (CCS) to measure perceptions of sense of community in higher education. The CCS uses 20 Likert-type scale questions to survey students' feelings of community. The survey generates a total score for classroom community by combining two sub-scores for connectedness and learning (Ouzts, 2006). The CCS has been evaluated for reliability and validity. Reliability for the CCS was .93 and reliability for the connectedness and learning subscales were .92 and .87, respectively (Rovai, 2002b).

The 20 Likert-type scale questions in the CCS are split into two subscales: connectedness and learning. The questions that fall into each subscale receive a score of 0-4. To find a participant's total classroom community score, the scores from the two subscales are combined. The maximum score for the connectedness subscale is 40, the maximum score for the learning subscale is 40 with the total score for the CCS being 80.

Data Analysis and Results

As a mixed method study, the researchers utilized two sets of data to create a comprehensive understanding of participants in this study. The first step of qualitative data analysis included numerous iterations of thematic coding. The analysis of the data included initial coding of participants' responses to both survey and interview questions. Then, the research team split in half. Each group employed descriptive coding (Miles & Huberman, 1994; Strauss & Corbin, 1998) by assigning phrases that summarized passages of participants' responses. Then, the two groups reconvened and employed pattern coding (Miles & Huberman, 1994). They examined the descriptive codes for commonalities and consolidated them into a smaller number of categories (Glaser & Strauss, 1967). This iterative, recursive process continued until the researchers reached a consensus on the themes to be discussed in the findings.

Through quantitative study a total of 17 study participants were measured using the Classroom Community Scale (CCS). Table 2 presents the descriptive statistics for the completed CCS survey for two groups, senior and junior students, disaggregated by academic year. The CCS survey measures two constructs: connectedness and learning. For the senior group, the mean score for connectedness was 22.11, with a minimum score of 18 and a maximum score of 28. The mean score for learning was 22.55, with a minimum score of 20 and a maximum score of 26. The mean score for the total Classroom Community Scale was 44.66, with a minimum score of 39 and a maximum score of 50.

For the junior group, the mean score for connectedness was 22.75, with a minimum score of 19 and a maximum score of 26. The mean score for learning was 21.12, with a minimum score of 16 and a maximum score of 25. The mean score for the total Classroom Community Scale was 43.87, with a minimum score of 41 and a maximum score of 51. The data suggest that both senior and junior students perceive a slightly high level of connectedness and learning with mean scores above 22 and 21, respectively. Overall, the descriptive statistics suggest that academic seniors and juniors had similar levels of connectedness and learning in the classroom community as indicated by similar mean scores for the CCS measures. However, the standard deviation indicates some variabilities among the two cohorts.

Table 2

Descriptive statistics for all who completed the CCS disaggregated by academic year as senior and junior.

	Min	**Max**	**Mean**	**S.D.**
Academic Senior (n=9)				
Connectedness	18	28	22.11	3.10
Learning	20	26	22.55	1.81

Total Score (Classroom Community Scale)	39	50	44.66	3.31
Academic Junior (n=8)				
Connectedness	19	26	22.75	2.37
Learning	16	25	21.12	2.74
Total Score (Classroom Community Scale)	41	51	43.87	3.31

The data from the qualitative survey created by the researchers indicated that the participants generally had a positive experience with the university ECED BIS program. The mean score for the total responses is 62.09 out of a possible 85, which indicates an overall positive experience. Participants' responses in each category are indicated below.

Transition of Non-traditional Students to University. Most respondents agreed that they received the same attention at the university as they did at their community college, indicating that the university provided an adequate level of attention and support. The majority of the respondents felt that the online modality helped them gain access to the program, suggesting that online learning can be an effective way to reach non-traditional students. Similarly, a vast majority of the respondents did not feel that the online modality hindered their learning, which is an encouraging sign for the continued use of online education.

Creating a Culture of Care and Sense of Community. Most respondents felt that they were able to build connections and relationships with professors and classmates in their online courses, which is crucial for developing a sense of community in an online environment. Participants generally felt a sense of belonging to their cohort community, which is another important factor in creating a supportive learning environment. Most respondents felt that their professors cared about their wellbeing and were fair and inclusive in their practices, indicating that the university provided an environment that was conducive to student success.

Licensure Assessments and Barriers. For licensure, the state requires students to take four assessments: a core math assessment, a core literacy assessment, an elementary subject test, and a reading assessment measuring their knowledge of elementary reading and writing skills and reading development. A majority of respondents felt that participating in the tutor program supported them in passing licensure exams, suggesting that the university's support programs are effective. Respondents were split on whether they had trouble scheduling licensure exams, which may indicate that there is a need for improvements to be made in this area.

Coaching and Mentorship. Most respondents received helpful and regular feedback from their clinical educators, tutors, and advisors indicating that the university provided strong support in the form of coaching and mentorship. The University's Education Support Center (ESC) matched students with clinical educators during their practicum and student teaching placement. Clinical educators provided support for student teachers and practicum students in the classroom during their required hours. Students observed the clinical educator, received feedback during meetings after teaching hours, and obtained mid-term and final evaluations from the clinical educator on their effectiveness in the classroom. In addition to traditional support from clinical educators, the program offered two tutors who were available to meet with students weekly in the evenings during the semester via Zoom. Both tutors were licensed teachers with experience in public and private settings. One of the tutors provided support in preparation for the core math assessment and elementary subject test. The second tutor provided support in preparation for the core literacy assessment and reading assessment. Both tutors provided mentorship in navigating the program throughout students' education to process the university's required general education courses, summer program, scholarships, and the program course sequence. Respondents were split on whether they saw their tutors as their mentors, which suggests that there may be some room for improvement in this area. Most respondents felt supported by their professors and advisors, which is another important factor in creating a supportive learning environment.

Transition From Teacher Assistant Position to Full-Time Licensed Teacher. Most respondents felt prepared for their first teaching position, which is an encouraging sign for the university's teacher education program.

Overall, the data show that the university program provided a positive experience for non-traditional students transitioning from community college, with strong support in the areas of online learning, community building, coaching and mentorship, and licensure exam preparation.

Twenty four out of 31 completed the survey and 14 agreed to participate in follow up interviews. The themes from the survey and follow up interviews included the importance of: 1) understanding the transition of non-traditional students to the University online setting, 2) creating a culture of care and sense of community, 3) guiding students through the licensure assessments and barriers, and 4) coaching and mentorship for students. Several students mentioned their transition from a non-traditional student to a university student. A student explained,

> *I'm so glad that this program exists because for the longest time it was just you can get your associates, but if you got your associates at a community college that never transferred over and so you'd have to start all over…that was like my predicament. I didn't go to a university right off the bat, where I could just do the whole thing in one spot. I mean to be honest like who, who can financially support themselves, I mean the income is very low especially for what we do, it's insane.*

We learned that, even though our program was fully online, students indeed felt a culture of care and a sense of community. For example, students mentioned that weekly virtual discussions,

while they seemed difficult to schedule, allowed students the opportunity to meet others in the program. Once these groups were created the students kept in touch with each other throughout the entirety of the program. A student explained, "*The University is quite different, because you love your Zoom meetings and those meetings give us a chance to meet each other. I have a couple of students' phone numbers and relationships grow from there. I've felt more included having these relationships."*

Students felt licensure assessments and other barriers felt complicated and this is something as teacher educators in a CoP want to examine more closely. A student shared, "*The science and the social studies exams have been difficult. I just got my test results back. I was like one or two points away. That's really hindered me like crazy."*

Coaching and mentorship was a common theme among study participants. One student mentioned that she "*learned through watching other teachers during my practicum experiences. I also got my CDA before I got my Associates, so that experience has helped as well*." Another student shared, "*The stability that our advisor provided has been helpful. She was right there to answer questions and to make sure that we understood what we were doing."*

With these themes in mind, we, the researchers and teacher educators were in pursuit of the truth and now that these barriers have been uncovered, we will now systematically decide how to make improvements to our program. We learned about non-traditional students' perceptions and experiences in an online program. In the future, it warrants comparing how students perceive a community in a face-to-face setting in a similar licensure program. It is critical to reflect on the lack of confidence in non-traditional students in preparation for licensure exams. This issue has been overlooked in teacher preparation programs and needs to be addressed to provide equitable measures for non-traditional students. Non-traditional students typically represent a diverse background in terms of ability, ethnicity, language, and age. Traditional licensure exams might have been developed without considering teacher candidates' cultural diversity in mind which leads to major success rate gaps between traditional and non-traditional students because of their backgrounds that serve as a disadvantage. This study guides us to take concrete steps toward advocacy for equitable licensure opportunities for non-traditional students through policy makers in state and national legislature.

Scholarly Significance

Creating a culture of care and sense of community as one of the main themes of this study and is supported by Ouzts (2006) study that identified five patterns in courses rated high in sense of community. The five patterns were "good teacher characteristics, strong student connection related to assignments, a change in personal perspective, quality learning, and satisfaction" (Ouzts, 2006, p. 291). Teachers in highly rated sense of community courses were described as interactive, present, open, honest, and human. Students in highly rated sense of community courses interacted frequently through discussion and group work and felt that they learned from each other. Similarly, Dawson (2006) found a "significant relationship between student frequency of communication and sense of community" (p. 160).

Researchers have provided recommendations of ways to increase sense of community and promote positive student outcomes. Shackleford and Maxwell (2012) suggest that instructors "provide sufficient direction and support to improve the chances that this teamwork will be positive and contribute to a sense of community" (p. 241). Shackleford and Maxwell (2012) also recommend allowing students the opportunity to work collaboratively, share stories of personal experiences, and interact in multiple ways. Rovai (2002a) recommends that instructors provide students with increased effective support by promoting a strong sense of community. This will help increase retention of students in higher education, reverse feelings of isolation, and provide students with a larger base of academic support.

In addition to the sense of community, creating measurable and achievable infrastructure to support the transition from community college to a four-year higher education institution is essential to improve the teacher education non-traditional pathway. For instance, dedicating a summer-long semester prior to starting the program would be a practical strategy to provide sufficient time for students to take one general education course at the university and learn about navigation of licensure requirements, course sequence, and degree requisites.

Since faculty are the key players to create sustainable, high-quality education and training for students, there must be continuous professional development to increase their understanding and knowledge about non-traditional students, their needs, strengths, and challenges. Non-traditional students carry a major burden of responsibilities that requires a significant understanding and care from faculty to support them throughout their education. The extra support would be essential to prevent social, emotional, and mental health challenges for students during their education.

There will inevitably continue to be barriers for these students, but by providing information on scholarship and financial aid opportunities, creating supportive communities between students, and flexibility for completion are of utmost importance to encourage success.

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Facial Masks and Student Engagement in Early Childhood and Exceptional Student Education Classrooms

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Abstract

During the advancement of COVID-19, many safety protocols, including facial masks, were incorporated into public settings. The Centers for Disease Control and Prevention (CDC) (2021), due to safety regulations, recommended wearing face masks when in close contact with other people in public environments, such as in a classroom, where social distancing was difficult. Many industries smoothly transitioned to daily use of traditional cloth masks, but other industries that served children sought masking alternatives. This study examined related research to explore whether wearing masks had any impact on student engagement, particularly in Early Childhood Education (ECE) and Education of Students with Exceptionalities (ESE) settings. The synthesis of research here suggested that masks influenced children's engagement, including intellectual, emotional, social, behavioral, and physical aspects, and recommended the use of transparent masks with young children and children with exceptionalities. The paper also provides recommendations for future research.

Keywords: early childhood education, COVID-19, exceptional students, face masks, student engagement

Introduction

Since Spring 2020, the influence of COVID-19 has been extensive for a variety of industries, but education was transformed in many ways. Education has been impacted far more than other industry due to the complex needs of its clientele: children (Asri et al., 2021). COVID-19 safety protocols were soon implemented that have modified people's lives and routines. For example, "stay-at-home mandates," remote work and instruction, and eventually in-person instruction with required face masks. Suddenly, children were not able to see facial expressions, including nonverbal contextual clues, such as the movement of lips and emotional expressions which are the core elements of the teaching/learning process. As Tremmel (2020) documented, young children, English as a Second Language (ESOL) students, academically at-risk children from low income areas, and children with developmental delays and exceptional needs were most affected by masks.

The Impact of COVID-19 on Education

COVID-19 impacted every element of education, from classes being instructed virtually to in-class instruction needing to be split with virtual modes which caused stress on teachers and students. Many of these elements were explored by Pressley (2021) with over 300 teachers to see the impact of COVID-19 on instruction based on all the new alternative methods of instruction created by school districts around the country. The results suggested that the highest instructional self-efficacy of the teachers regarding their own abilities in teaching was for in-person instruction, then hybrid instruction, and lastly fully online instruction. The study also illustrated some of the impacts that virtual instruction had on teachers' lack of confidence in implementing effective instruction. Many elements probably played a role in this, such as technical issues, high absences, and the difficulty of holding student engagement through the barrier of a screen in virtual instruction. Further, specific subjects were more difficult to teach with various COVID-19 restrictions (Tremmel et al., 2020). COVID-19 also greatly influenced teaching and learning in a variety of environments, including rural locations with limited resources and many places had to adapt to serve all their students effectively, including students with exceptionalities in Exceptional Student Education (ESE) programs. Tremmel et al. (2020) explored the impact that COVID-19 had on underprivileged ESE programs and compiled statistics and recommendations for advancing students to the next grade level.

Impact of COVID-19 on Individuals with Exceptionalities in Light of Face Masks

Lockdowns, increased use of virtual communication software, social distancing, and the use of face coverings kept people safe but also impacted their ability to connect, communicate, speak, and hear, especially for individuals with hearing impairments and other varied disabilities. Children with Specific Language Impairment (SLI) struggle with phonological perception that impacts literacy (McDowell, 2018). Students with SLI need access to the visual cue of their teacher's lips during the pronunciation of words (Ehri, 2020). The addition of visual language cues is a greater priority for those with SLI who need additional context clues to equate meaning

and understanding to a literacy lesson. This access to the additional visual language-based context clues can be blocked by the use of a traditional mask.

Children also need human engagement to develop effective language skills and to better learn and retain information. Adults may be inconvenienced by using masks in an educational or public setting, but children rely on the social and emotional components of language for the acquisition of proper language and literacy skills (Feldman, 2019). The social and emotional components of language are far more difficult to access for children with conditions related to social and emotional comprehension, such as children with Autism Spectrum Disorder (ASD). Children diagnosed with ASD may already have language and literacy acquisition challenges even without the additional barrier of face masks due to the impact on their perception of emotions (Matteson, 2014).

According to Atcherson et al. (2020), children and adults with hearing and language disabilities can experience visual barriers with traditional masks due to their dependence on nonverbal communication, such as facial cues. For educators, wearing a mask during instruction may potentially make it more difficult for children with exceptionalities to engage with lessons that include aspects of literacy. Relation to a high impact on engagement to literacy or literacy incorporated lessons could be linked to the added barriers of masks affecting the student's visual access to their teacher's mouth and lips articulating proper phonetic pronunciation of words (Ehri, 2020). Clearly, more research still needs to be done on the effects of masks on engagement in different environments with different communities. But a further understanding of what engagement is in practice is first needed before addressing the various types of masking.

Engagement

Many aspects of student engagement should be considered when developing an effective learning environment. Engagement is important to learning but may be difficult to gauge without understanding what categories are involved. For classroom environments, Great Schools Partnership (2016) defined engagement by focusing on separate constructs called Engagement Categories as indicated in Table 1.

Table 1

Engagement Categories

Engagement Categories:	Definition:	Examples:
Intellectual	Students' interest and desire to interact and problem solve within the coursework. Accuracy and dedication to pursuing accuracy during instruction.	Appropriately answering the questions in an effective way that shows their understanding of the material. Answering verbal questions, having questions of their own related to the topic, making time to focus on studying the material.

Emotional	Students react with positive emotions in a way that facilitates learning instead of distracting with negative behaviors.	Smiling, laughing when appropriate, providing positive verbal and non-verbal reactions to the topic.
Social	Social interaction and collaboration with other students and teachers related to the lesson.	Positive collaboration with instructors and peers using positive and productive conversations that facilitate instruction instead of distracting from it.
Behavioral	The use of consistent cues, routines, and reactions that foster behaviors more conducive to learning.	Students' willingness to participate in a classroom's set schedule, routine, rules, directions, expectations, and procedures, such as sitting in a designated location in a seat.
Physical	Participation in active physical movements, reactions, or routines to bring awareness to the lesson.	Eye contact with instructor or assignment, raising hand, dancing, playing, performing written assignments, manipulating related tools, objects, scissors, paper, calculators, etc.

Note. Table created was based on the Great Schools Partnership (2016).

Table 1 provides insights into these separate, positive constructs of the categories of engagement. However, engagement is not just simply positively represented or absent (not represented). Sometimes, engagement is negatively represented within an environment. In addition, diversity in engagement within a classroom could be linked to a set of environmental factors that can have a negative impact on a student's ability to engage behaviorally, emotionally, and socially (Hiver et al., 2021). With this new post-pandemic world in which we live, understanding that young students, especially students with exceptionalities, may harbor a great deal of life stressors which are brought into the classroom to demonstrate *negative engagement.* Examples of negative engagement within these Engagement Categories can be seen in Table 2.

Table 2

Examples of Negative Engagement

Engagements:	Negative Examples:
Physical	Infrequent, un-prolonged eye-contact Eye-contact and body positioned away from the instructor or lesson Not physically participating in lessons Not writing and following along

Emotional	Disruptive emotional outbursts (e.g., laughter, crying, whining, sighing loudly) Inappropriate facial reactions (e.g., frowns or pouting, making faces)
Social	Disruptive negative verbal reactions Talking out of turn Talking to other people besides the instructor when unprompted Talking off topic Asking questions unrelated to the lesson
Behavioral	Disruptive and distractible non-verbal behaviors Finger fidgeting, rocking, arm flapping, putting things in mouth, picking skin biting hands, etc. Not following routine and not using positive behaviors when expected, aka raising hand, etc.
Intellectual	Shown by lack of comprehension of the lesson Lack of dedication and focus on problem solving within the lesson Lack of accuracy and dedication to pursuing accuracy

Note. Answers will be looked at but engagement with questions will be the primary focus for testing Intellectual Engagement (Great Schools Partnership, 2016). Table created was based on the Great Schools Partnership (2016).

When looking at the Great Schools Partnership (2016) categories of engagement, it is important to understand the cues within the context of one's own classroom environment and the importance of conducting lessons that inspire a variety of engagement categories. However, not all engagement types hold equal representation within classroom lessons. Behavioral Engagement, Emotional Engagement and Social Engagement are more inclusive and present in Early Childhood Education (ECE) and Exceptional Student Education (ESE) classrooms than the other categories because of the learning characteristics of young children with special needs (Green et al., 2021).

Impact of Masks on Behavioral, Emotional, and Social Engagement in the Classroom

Some of the more salient categories of engagement for educators to consider are Behavioral Engagement, Emotional Engagement, and Social Engagement because children have a biological and neurological need to be exposed to an environment filled with effective behavioral, social, and emotional interactions (Great Schools Partnership, 2016). A young child's capacity to engage socially, emotionally, and behaviorally is heavily based on what they experience or observe when interacting with the adults around them in their learning environment. Within a socially supportive environment, children can start to form important social skills that will lead to competent engagement in future academics. Reading another's face is an important social skill for engaging with others because reading another's face helps the person to regulate their own social behavior (Green et al., 2021).

The reading of another's face and being aware of the other's emotions can help a child form an appropriate social response based on the other's emotional clues. From there, the child forms patterns of appropriate social skills performed as a task, some of which can be deemed specific behaviors (Gresham, 2000). Because of the needed social skills used in the forming of behaviors, such as reading emotions on another's face, Behavioral Engagement is an intersecting issue that correlates with Emotional Engagement and Social Engagement categories, all of which are learned through proper exposure to other people. To explain further, a child will only feel motivated to engage behaviorally in classroom routines, if they are also motivated to be socially and are emotionally engaged (Gresham, 2000).

A teacher can inspire students to be socially engaged with positive verbal interactions and motivate them to be emotionally engaged with positive facial expressions. These forms of motivation are why access to the instructor's face, mouth, and voice is so important when implementing engaging lessons. When looking for Emotional Engagement in a person, a teacher should start with looking for external identifiers and cues of emotions. Seeing as emotions are strictly internal factors, a teacher could look at any external visual or audible cues of a person's inner emotions and base any deductions off this (McCollow & Hoffman, 2019). These cues can be simply to identify if the student's face is not obscured by a mask. Identifying some of these cues includes looking at the person's audible emotional reactions unrelated to speech, such as sighing out loud; or a teacher can look at visual emotional reactions, such as facial expressions like frowning, and any emotional expressions unrelated to non-verbal communication, such as raising hands.

When looking to identify Social Engagement in students, teachers should look to primary language and communication-based interactions that show "positive" social interactions among student and teacher and student and classmates in relation to any academic lesson. When considering Social Engagement, a student's own interactions with a lesson can be directly influenced by any emotional disruptions or behavioral disruptions, too. All types of engagement are connected to each other, but also individually hold importance when being represented in a classroom setting. Facial masks can affect social interaction as facial masks can inhibit speech, audibility, and the visual cues of speech, such as perception of emotions and lipreading (Heikkilä, et al., 2017). These are directly related to Social Engagement and interaction, but also overlap with Physical Engagement due to the manual manipulation of one's face and voice. Behavioral Engagement relates to routine, Emotional Engagement relates to a person's internal emotions, and Social Engagement relates to interpersonal communication. All three engagement categories play large roles in the development of young children and their capacity to learn in a classroom environment. All these categories of engagement are impacted by the use of masks in the classroom and can directly impact young children's ability to engage with the content being taught to them.

Traditional face masks can directly impact a child's ability to learn in their environment and by extension affect the child's willingness and ability to engage in appropriate behaviors. Interacting with a teacher whose face is obscured has the potential for miscommunication and misunderstanding among students on what their behavioral expectations truly are. Masks can add a layer of misunderstanding to an environment that already has a plethora of distractions

impacting young students' engagement skills. Table 3 illustrates the various engagement skills as they relate to the Engagement Categories.

Table 3

Engagement Skills and Each Related Engagement Category

Engagement Skill Related to Masks:	Engagement Categories:
Comprehension	Behavioral, Emotional, Intellectual, Physical, Social
Lipreading	Intellectual, Physical
Perception of Emotions	Behavioral, Emotional, Social

Note. Table created was based on Heikkilä et al., (2017) and McCollow & Hoffman (2019).

When exploring these various categories of engagement in the ECE and ESE classroom, it is important to consider an added distraction which is environmental noise. Environmental noise can be a significant distraction due to its impact on auditory perception. Prior to the implementation of masks, students were able to fill in the gaps of their missing auditory information by observing their teacher's mouth and pronunciation. However, with the use of masks covering up those visual cues, students struggle even more in a disruptive classroom environment (Nobrega et al., 2020). These layers of distractions can cause a rise in stress for both the learner and the instructor and can inhibit a person's emotional wellbeing and motivation to engage. Schools also have additional regulations placed on the environment related to student and teacher goals and expectations, many of which correlate directly with Behavioral Engagement. During the pandemic, ECE and ESE teachers were expected to teach several content areas behind a mask, while giving instruction that is both educational and stimulating (McCollow & Hoffman, 2019). These regulations can cause stress among students and teachers during the enforcement of safety mask protocols and can interrupt a person's routine and extension of a student's ability to behaviorally engage and may even ignite Negative Behavioral Engagement (Great Schools Partnership, 2016).

In summary, children are still learning things like focus, self-control, self-motivation, comprehension, facial recognition, and social cues along with how, when, and in what ways they should react in different social settings (McCollow & Hoffman, 2019). These cues are not accessible to students when their instructors are wearing traditional cloth masks. Masks cover the instructor's mouth, so that a student cannot perceive specific facial cues and features of the mouth related to the instructor's expression of emotion that leads to engagement.

Impact of Masks on Engagement Skills in Lipreading and Literacy

To learn literacy and language, a child needs to focus on more than just sound but also how to properly pronounce these sounds with their own oral motor movements (Alcock, 2006). Oral motor movement is the functional movement of the different parts of the mouth, such as the tongue, jaw, cheeks, and lips, all of which play a large role in speech and other processes (Pedroza et al., 2015). Lipreading is the ability to pick up visual information from a speaker's mouth; lipreading is useful because watching a speaker's facial movements improves perception of speech. Lipreading could be a large contributing factor in obtaining necessary oral motor skills related to pronouncing certain words or understanding spoken language; these factors are concealed by traditional masks (Heikkilä et al., 2017).

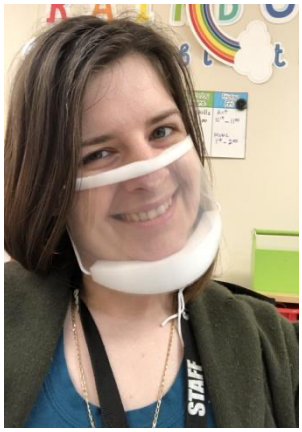
Lipreading is an important component for children developing language and other skills in relation to academic progress. Instructors wearing facial masks during and after the impact of COVID-19 and connections to lipreading could play an even bigger role than imagined, when it comes to student engagement and overall comprehension of any lesson, especially language and literacy. Students relying on reading lips is one additional route to obtaining information and comprehension. With masks, this visual information is not accessible to students. When instructing subjects such as literacy, teachers must consider how masks obscure lipreading and impede students' observation of the correlated oral-motor movements with their respective phonemes. Once effective pronunciation and students' discrimination of a sound is established, instructors can move on to connecting them to corresponding decoding and spelling skills (Ehri, 2020). Face masks may likely inhibit moving to these next steps.

Face Mask Alternatives

As an alternative, transparent face coverings include a variety of facial coverings such as shields and masks. Clear/transparent masks or cloths masks with a clear plastic panel were approved by the U.S. Food & Drug Administration (FDA) and considered to be helpful when interacting with people in special situations (CDC, 2022). They function in much the same way, but are instead made of transparent materials, such as plastic. Because of the concerns with engagement, transparent face masks and shields were introduced into the educational realm as indicated in Figure 1.

Figure 1

Three Types of Transparent Face Wear

		
(a.) Plastic face shield and cloth mask.	*(b.) Windowed mask.*	*(c.) ClearMask*

Note. Images taken by Lead Researcher.

As the figure indicates, these types of face coverings can be worn on the entire face or just around the mouth. Face shields can be worn at a distance, but during pandemic, the CDC recommended wearing a shield with a cloth mask for environments where people are closer than six feet apart. Other transparent masks are more similar to paper or cloth face masks, such as windowed masks, with fabric covering most of the nose, cheeks, and chin with a small transparent plastic portion in the middle revealing the mouth. Another transparent mask type includes fully transparent face masks that only cover the nose, mouth, and chin area, much like the traditional masks, but are made of different transparent plastics and materials.

Despite some transparent face masks becoming available to consumers, transparent face masks were and remain in limited supply, with only a few on the market (Atcherson et al., 2020). Some of these transparent or clear masks, however, may need to be paired with a personal Remote Microphone (RM) system to offset the impediment of sound that comes with clear plastics. Preliminary evidence suggested that RM systems helped alleviate some concerns regarding sound qualities when used with face coverings (Rudge et al., 2020). RM are wireless systems created to amplify sound and help listeners better hear and understand speech in different environments. Some RMs are used with hearing aids or ear buds, while others are used with speakers called “sound field systems.”

Conclusion and Implications

This piece explored how COVID-19 safety protocols impacted student engagement as identified by Great Schools Partnership (2016) by examining the various categories of engagement and how masks influence children’s engagement. As indicated above, traditional masks hindered children’s ability to observe and read teachers’ faces and lips, identify various social cues which influenced their intellectual, social, and emotional development. When the visual cues of communication are eliminated, intelligibility of speech can decrease to as low as 20% (Bankaitis, 2022). According to Hiver et al. (2021), the impact masks have on language and literacy

acquisition skills, such as the perception of emotions, lipreading, and comprehension is significant.

Since the use of transparent masks have shown to work during speech therapy sessions (Bankaitis, 2022), it is hoped that using transparent masks in ECE classrooms and/or with ESE students could also show similar benefits. Transparent masks, such as a face shield or windowed face masks paired with RM, implemented by an ESE instructor could break down any communication-related barriers related to the wearing of traditional cloth face masks. These barriers relate to the covering of the mouth affecting non vocal communication skills, like lipreading and interpreting emotions, and in extension comprehension. The other barrier caused by face masks includes impediment of vocal speech output. With the use of transparent face shields or windowed face masks paired with RMs these communication barriers are lessened, which gives way to students feeling more confident and competent when trying to engage with their classroom lessons (Rudge, et al., 2020).

Certainly, the young students who would benefit the most from the implementation of transparent face masks are those who either are still learning literacy, communication, and engagement skills, such as young children, or individuals who already struggle with literacy, communication, and engagement, such as children with learning disabilities or who are on the autism spectrum, along with other exceptionalities related to language skills (Feldman, 2019).

Recommendations for Future Research

Continuing to explore future research on the topics of masks and engagement would be highly beneficial, especially in relation to ESE and ECE programs, but also across disciplines, developmental and age levels, and diverse populations. When developing future research related to traditional and transparent masks' impact on student engagement, one might consider researching and measuring the engagement of children with specific language disorders. Furthermore, future researchers must consider the breadth of all safety measures and health risk factors of the population being studied. The field needs more research targeting transparent mask alternatives safely by having certified ECE and ESE instructors conduct language and literacy lessons while following CDC recommendations. Lessons could be conducted with four different conditions including instructors wearing two different types of masks with and without being paired with RM. Conditions are shown in Table 4.

Table 4

Possible Future Research Conditions Related to Face Mask and RM Pairing in a Classroom.

Conditions:	Instructor wears:	RM Pairing:
Condition 1: (mean norm) Cloth with no RM	Traditional cloth face mask	NO

Condition 2: Cloth with RM	Traditional cloth face mask	YES
Condition 3: Windowed with RM	Windowed face mask	YES
Condition 4: Windowed with no RM	Windowed face mask	NO

Note. Table was created based on Rudge et al. (2020).

To track engagement and engagement categories, future research might also consider the teacher or researcher recording the salient conditions and documenting behavior using a checklist of observable criteria exemplifying engagement based on Engagement Categories (Great Schools Partnership, 2016) as indicated in Figure 2.

Figure 2

Sample Engagement Category Checklist

Instructor: *Date:*		*Reading level:*
Group:	*ID#:* *Age:* *Init:* *Sex:*	*Exceptionality(s):*
	Examples:	
Engagements:	*Negative*	*Positive*
Physical		
Emotional		

Social		
Behavioral		
Intellectual		

Note. This framework was created based on the Engagement Categories (Great Schools Partnership (2016).

In addition, a study could take record of positive and negative examples of any engagement cues shown in observation, including language and literacy acquisition skills like perception of emotions, lipreading, and comprehension (see the example shown in Table 3). This suggestion for research would provide more solid, conclusive data on the effects masks have on ESE student engagement (Great Schools Partnership, 2016). Last, it becomes increasingly clear that the impact of masks on student engagement necessitates further investigation in future research and delve deeper into the broader factors influencing engagement in the classroom setting. Teachers' experiences, as highlighted by Li (2022) shed light on how COVID-19 safety measures such as mask-wearing and physical distancing have considerably affected their teaching methods, communication efficacy, and relationships with students. The discomfort from wearing traditional masks and the constant need for monitoring students' compliance with public health protocols were notable challenges that teachers faced, especially with younger students. These factors potentially act as a barrier to creating an engaging educational environment and may inadvertently impact students' overall learning experience. Furthermore, understanding the nuances of non-verbal cues, such as lip reading and emotion perception, can be significantly hampered by mask-wearing. These factors are particularly crucial in the context of students still developing literacy, communication, and engagement skills, or those who have learning disabilities or other language-related challenges. Future research must extend its scope to consider these aspects and the experiences of both students and educators. Only through a comprehensive understanding of these dynamics can we devise more effective strategies to enhance classroom engagement while upholding necessary health protocols. The exploration of

the impacts that masks and other COVID-19 safety protocols have on classroom engagement should continue to be a priority in educational research, with a focus on the benefit of all members of the educational environment.

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The Representation of Differing Abilities in Children's Literature: A Local Analysis

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Abstract

One hundred popular children's books for ages 0-6 were selected from a local metropolitan library system with data from 10 library branches. These frequently checked out books were then analyzed for how disabilities were represented in the books. This study found that only a few books checked out of the library represent children with differing abilities. Out of one hundred books, only thirty-six books show differing abilities with all of them depicting visual impairment (e.g., glasses) and four depicting a mobility impairment (e.g., wheelchair) in addition to the visual impairment. Understanding that children's literature influences children's attitudes, it is vital to find opportunities to engage children in books depicting children with disabilities as children begin to develop their understanding and attitudes at a young age.

Introduction

Books can become a powerful tool to teach children meaningful and relevant information, for example, in depicting children with differing abilities in a story setting. Children, including children with disabilities, seek representation of themselves in stories and appreciate when they are able to relate to the characters (Leary, 2016). Many different fields utilize children's books to explain higher-level constructs and concepts. For example, race, gender, (Adukia et al., 2021) and empathy (Kucirkova, 2019) are often constructs and concepts discussed in children's books. Illustrations depict the race of characters as well as the clothing, hair and other images of gender present. The storyline and depiction of characters provide insight into these concepts in addition to how to treat or engage with the characters. Book characters representing children with disabilities can add to all children understanding the concept of children with disabilities.

Disability (differing abilities) is defined as a person who has a physical or mental impairment that substantially limits one or more major life activities according to the Americans with Disabilities Act of 1990 (ADA). Within the definition of disabilities, differentiating invisible and visible disabilities is important to clarify. Invisible disabilities are categorized as debilitating pain, fatigue, dizziness, weakness, cognitive impairment, learning differences and mental disorders. Hearing and visual impairments also reside within this category. A visible depiction of differing abilities might include the use of an assisted device such as a wheelchair, cane or walker. An individual may live with both a visible and invisible disability or differing abilities.

Books often become a child's first exposure to children and adults with disabilities. Importantly, the representation of differing abilities in children's literature can provide a myriad of positive impacts for children with and without disabilities. Books focusing on this topic show an association with positive effects on children's interpersonal relationships and social behaviors with these books providing examples and prompts for children to consider how they relate to

children with differing abilities as well as to reflect on individual differences (Kurtts & Gavigan, 2008).

Children who have the opportunity to engage in reading on differing abilities inclusive literature creates space for children to see themselves and others represented visually and textually (Golos & Moses, 2013), while also helping to foster positive peer relationships in children of varying degrees of ability (Stelle, 1999). This exposure also provides an opportunity for children to learn about social norms and behaviors as well as to personally participate in developing their own social-emotional skills (Price et al., 2016).

Regarding children with disabilities, inclusive literature introduces them to books about themselves and depictions of their daily lives (Ayala, 1999). This can lead to improvement in self-efficacy and their perceptions of self-worth and accomplishment. Alternatively, as children without disabilities read books focused on inclusivity, it works to help them develop a sense of acceptance, empathy, and to better understand their potential impact when interacting with differently-abled others. Resultantly, these children may be more open to discussions about disabilities and their own feelings on the matter, supporting them to accept individuals with differences (Kurtts & Gavigan, 2008).

Historically, children's literature often portrays those with disabilities stereotypically, thus emphasizing differences rather than identifying how those of differing abilities can relate to others (Ayala, 1999). Research studies show the characterization of those with disabilities to be inaccurate and wide ranging in severity (Ayala, 1999). For example, some books often entail a miracle cure such as in the book, *Giraffes Can't Dance*. The giraffe's knees were crooked and his legs were thin. The giraffe has difficulty dancing and was laughed at by others. In the end the giraffe is able to dance and the other characters exclaim that it is a miracle (Andreae, 2000). Additionally, individuals with disabilities were rarely the main character (Price et al., 2016). While some books include inclusivity, the most commonly represented disabilities remain limited to either visual or orthopedic impairments, without a single book in the study depicting an emotional disability (Ayala, 1999). Importantly, children's literature can provide the opportunity to raise children's awareness and engage them in conversations on differing abilities (Emmerson et al., 2014).

Fairy tales are another example of stereotypically representing disabilities in children's literature. Previous research (Ayala, 1999; Beckett et al., 2010; & Hughes, 2006) the representation of differing abilities in children's fairy tales by depicting the differing ability with a character who has a difficult past and problematic present. In popular fairy tales such as *Beauty and the Beast* and *Rumpelstilskin,* the characters represent differing ability in the form of suffering or a burden to those around them as well as to society.

Fairy tales also often depict the evil villain as a disabled character. An example of this is Captain Hook in *Peter Pan*. Captain Hook does not have a hand and uses a hook instead. In some versions of *Peter Pan* it is stated that Peter fed Captain Hook's hand to an alligator based off of a dare from the Lost Boys. Captain Hook cannot control that he lost his hand, but is treated as an evil and violent character (Solis, 2007). Characters with a different physical appearance apart from the norm often categorize as weak or inferior. In *Snow White and the Seven Dwarfs,* the

dwarfs are weak, flawed, and ill. In one version of Snow White, the dwarfs are portrayed as lost souls that are sentenced to manual labor in the mines due to their differing abilities (Solis, 2007).

Additionally, a disabled character may become a source for humor (McGrail & Rieger, 2014). In some tales, characters without differing abilities laugh and mock the characters with disabilities (Hodkinson, 2017). Gashton laughs at the Beast in Beauty and the Beast. He also evokes fear in the townspeople by stating that the Beast will hunt their children at night. Lastly, the character with a differing ability may be portrayed as the super cripple, violent, sinister and evil. Examples of this would be Captain Hook or transformation of the evil queen into the elderly crippled woman in Snow White. This stereotype conveys a world view wherein characters with disabilities change themselves to become accepted and happy in their life (Harnett, 2000). Similar to this perception, Beckett et al., (2010) discuss the challenges of the happy ever after endings in children's books. This type of ending encourages children to believe that the differing abilities can be magically fixed or corrected. An example provided by Beckett et al., (2010) is *Adam and the Magic Marble.* Two of the boys have Tourette's Syndrome and one has cerebral palsy. When the boys find the magic marble, they are cured and the marble has fixed their ailments.

From the previous examples, one can see how children's literature can influence children's attitudes (Smith-D'Arezzo & Thomas, 2010). By providing age-appropriate abilities in safe ways, children gain positive interactions and acceptances. Books allow children to expand their knowledge and understanding beyond their own experiences. They are able to examine themselves as they learn to accept others who are different from them as well as may be difficult to understand (Taylor et al., 2020). Attitude development research finds that children as young as age four can identify pronounced physical disabilities such as cerebral palsy or hearing impairments (Diamond, 1993; Diamond & Hestenes, 1996; Dyson, 2005). As children grow older, they develop an awareness of less evident disabilities (intellectual disabilities and mental illness) (Price et al., 2016).

Beginning in the years from the 1990's to 2000's, children's literature demonstrates more positive and accurately representative characters with disabilities; these characters engage in typical activities, interact positively with peers, and portray themselves as doers, helpers, and persons with characteristics similar to those without disabilities (Price et al., 2016). When reviewing more current representative literature, physical, sensory and cognitive disabilities appear most commonly included, with less portrayal of learning disabilities (Prater et al., 2006). However, even today in libraries, utilized by teachers and families alike, it can be difficult to find quality inclusive literature on differing abilities (Price et al., 2016).

While improvements are being made in targeting more contemporary literature to portray varying levels of ability, this area continues to have room for growth; in addition, research has identified multiple considerations. For example, inclusive literature can serve to assist fully abled children in understanding and accepting those in their lives with differing levels of ability. Although, in order to do so, it is essential this representation is accurate and realistic. Toward this goal, it is important to highlight children with disabilities as believable people and avoid portraying them as props, only depicting associated behaviors (Ayala, 1999).

The positive impact of access to inclusive and representative literature is valuable in a wide range of settings including public libraries, schools, child care centers, healthcare facilities, as well as at home. Studies highlight the importance of this evaluation and selection process of this area of literature (Price et al., 2016). In examining this literature, five evaluative criteria include lack of stereotypes, confronting the disability, accuracy of information, literary quality and not "using" disabled characters inappropriately (Ayala, 1999). In this way, characters with disabilities become valued, portrayed appropriately and genuinely embraced both narratively and through illustrations (Price et al., 2016).

The goal for this current qualitative analysis is to find the frequency of representation of differing abilities within children's books most frequently checked out in a midwestern metropolitan city library.

Learning Theory

Social learning theory developed by Albert Bandura (Bandura, 1976) focuses on the aspects of observing, modeling and imitating behaviors. Using Bandura's theory, children have the opportunity through literature to *observe* the depiction of disabilities and visualize the *modeling* of appropriate responses. Thus, children have the opportunity to *imitate* the understanding, acceptance, and treatment of individuals with disabilities portrayed in the literature. Individuals who surround the child may either reinforce or correct the child as they imitate what they observed in a children's book. Therefore, it becomes critical children's literature provides their young readers with inclusive, accurate and responsive content.

Research Questions

In reviewing children's books that were most frequently checked out in a midwestern metropolitan city for ages 0-6, the research questions were:

1. What was the frequency of representation of differing abilities within the books?
2. What types of differing abilities were depicted?
3. Were the disabilities visually depicted through pictures or textually through the storyline?

Method

A content analysis methodology evaluated the representation of differing abilities in children's books. Content analysis requires a systematic analysis of communication (Mayring, 2004). In this study, children's popular books were analyzed. The storyline, primary and secondary characters were analyzed both in the text and illustrations for the depiction of differing abilities using the ADA definitions.

Terminology

For the purpose of this investigation, disability (differing abilities) was defined using the examples of medical conditions listed from ADA such as deafness, blindness, diabetes, cancer,

epilepsy, intellectual disabilities, partial or completely missing limbs, mobility impairments, autism, cerebral palsy, HIV infection, multiple sclerosis, muscular dystrophy, major depressive disorder, bipolar disorder, post-traumatic stress disorder, obsessive-compulsive disorder and schizophrenia (American with Disability Act, 1990). Operational definitions were derived from sources such as the Center for Disease Control, Mayo Clinic, U.S. National Library of Medicine and the Diagnostic and Statistical Manual-5th Edition.

Selection of Books

Books were selected through collaboration with a local, metropolitan library system with data from 10 library branches. The library system provided the most frequently checked out books from January 2019-December 2019 listed in order by frequency of selection. The inclusion criteria for the books were books that were targeted at the 0-6-year-old population and classified by the library as readers, picture books, or board books. Books were excluded if they contained more than one story (e.g., 5-Minute Marvel Spider-Man Stories).

Coding

Two graduate students provided the primary coding (one student, a graduate student in speech-language pathology and the other, a child and family development candidate). Provided with a list of qualities with associated operational definitions, the two coders used a binary + and – system to identify whether or not the construct was present. Students noted special features for the authors to revisit. By including this option, the coders were able to note potential differing abilities that were not originally provided by the authors. The coders first began rating 20 books to assess for reliability between coders; they achieved 85% agreement when assessing if differing abilities were present within the book. Then, the differing items were discussed to increase understanding of the concept and gain consensus. Intercoder agreement of 75-90% is considered an appropriate level of agreement (Bajpai et al., 2015). Therefore, when raters reached this level of agreement, the full sample was analyzed.

Intercoder reliability was assessed by comparing the results of 100% of the full sample. The percentage of agreement was calculated between the two coders. If a disagreement occurred between the two raters, the book was rated a second time for consensus. Overall agreement was 96%.

Results

The first 100 books that met the inclusion criteria were selected for analysis. Of the 100 books, 36 books depicted a difference in ability (Table 1). Sixteen of the books showing differing abilities were by the same author (Mo Willems). The differing ability was not in the storyline, but only in a visual representation of secondary characters. In all 32 of the books, vision (i.e., glasses or an eye patch) was the only observation of difference with four additional books depicting a mobility impairment such as a missing limb and a cane in addition to a visual impairment. In the book *The Day You Begin* the text hints at some type of differing ability “there will be times when the climbing bars are too high, the run is too fast and far, the game isn’t one

you can ever really play." (Woodson, 2018, p. 13). While this text alludes to a differing ability, there was no representation in the illustrations of the book.

The coders also evaluated if the representation of differing ability was depicted on a primary or secondary character. There was more variability in this measurement with 14 of the differing abilities occurred in primary, 18 in secondary, and the remaining four were inconclusive based on split responses or no response. The no responses were due to books without storylines or equal character involvement.

The raters were also asked to comment on if they felt the depiction was negative, neutral, or positive. All ratings were neutral or positive. However, the raters did not reach consensus on each book title. In 30 of the books, both raters indicated neutral. The raters agreed only one book was a positive representation which was for the representation of a visual impairment in the book *The Good Egg* by Jory John and Pete Oswald; the other five books split responses between neutral and positive.

Discussion

The current findings demonstrate there are few children's books checked out that depict differing abilities. However, children's literature can become a child's first exposure to individuals with developmental disabilities (Taylor et al., 2020).

Similar to previous research, the books examined in this study found differing abilities represented as characters in a supporting role (Aho & Alter, 2018). All of the books in this study that included differing abilities were of secondary characters and not in the storyline. For children with differing abilities, it is vital they feel represented in books they read, not just as secondary characters but as main characters as well. For children without differing abilities, it is important for them to observe children with differing abilities in order to develop empathy and understanding (Leary, 2016).

Thus, there is a need to find ways to encourage readers to seek and check out books on topics of differing abilities. Understandably, for young children, it can become overwhelming to know what book to check out when there are so many choices. Thus, this research indicates the need for libraries to display particular books, such as books on topics of differing abilities, in order to draw children's interest. In addition, highlighting books in a newsletter or bulletin board each month also encourages readers to check out books on various topics such as disabilities.

In addition, it is important for teachers to have a diverse library for their students to engage in reading. It would be helpful to have a class read aloud with books that depict differing abilities as well as discuss with the students after reading. The same is also true for parents. Children should be exposed to differing abilities in children's literature in a variety of contexts. It is also not only about reading the books, but also having open and meaningful discussion with the child where they feel they can ask questions and receive answers without judgment.

Implications for Research/Practice/Policy

There are many reasons why it is important to include the representation of differing abilities in children's literature. Research describes how attitudes regarding differing abilities become formed in the early childhood years (Favazza & Odom, 1997). Bibliotherapy, or the use of books in a therapeutic way, can be a critical asset to early childhood practitioners in order to develop a greater understanding of the world (Kurtts & Gavigan, 2008).

On the surface level, representation can lead to positive experiences with literacy and therefore, potentially increasing the desire to read. On a deeper level, the representation of self is important in developing positive self-esteem. Books capitalize on the interaction of both personal and behavioral factors of the social learning theory (Bandura as cited in Staddon, 1984). Through diverse and representative books, children may learn about differing abilities, how to discuss differing abilities, and how to show empathy to individuals of all abilities.

Over the years there has been an increase in inclusive children's literature. For example, *Every Child is Different* by Luna James, *Different - A Great Thing to Be* by Heather Avis, and *Just Ask!* by Sonia Sotomayor to name a few. There is a need to encourage reading and access to inclusive children's literature. Libraries in communities, schools and the classroom should have an array of books that are inclusive in terms of abilities, race, family structure, religion and many other areas. In addition, inclusive literature should be highlighted for children to read whether by the adult (i.e. parent, teacher, etc.) to read inclusive books aloud, feature the books on a bulletin board, newsletter or another avenue. Inclusive children's literature is present, however it is not being checked out from the library. It is a must and need that children have to have access to the literature and be able to read it. Along the same lines children will gain a greater understanding and knowledge if there is a discussion following the reading of the books. Children need to feel safe to discuss and ask questions regarding the story without judgment.

A useful resource is the Diverse and Inclusive Growth Checklist for Inclusive High-Quality Children's Media available through KIDMAP. The checklist examines the following areas: "Content: Story, Information, and Activity, Art, Audio, Audience, Purpose, Functionality & Navigation, Instruction, Guides, and Support Materials for Grown-Ups, and Creative Team" (Haines, n.d). While not all of the categories might fit for children's literature it is a start and could be adapted to fit the evaluation of children's literature. In addition, there are guidelines and suggestions for ensuring appropriate and accurate cultural representation in books (Harris, & Owen Van Horne, 2021). These guidelines could also be used as a starting point in developing guidelines for the representation of differing abilities in children's literature.

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Table 1. Rater Ratings

Title	Author	Disability Representation	Character Role	Positive, Negative, or Neutral
A big guy took my ball!	Willems	Visual Impairment	Primary	Neutral
That is not a good idea!	Willems	Visual Impairment	Secondary	Neutral
Listen to my trumpet!	Willems	Visual Impairment	Primary	Neutral
I'm a frog!	Willems	Visual Impairment	Primary	Neutral
The pigeon has to go to school!	Willems	Visual Impairment	Secondary	Neutral
Waiting is not easy!	Willems	Visual Impairment	Primary	Neutral
Should I share my ice cream?	Willems	Visual Impairment	Primary	Neutral
Hello hello	Wenzel	Visual Impairment	Secondary	Neutral
Happy pig day!	Willems	Visual Impairment	Primary	Neutral
A good day for A hat	Fuller	Visual Impairment	Secondary	Neutral
The day the crayons quit	Daywalt	Visual Impairment	Secondary	Neutral
Lion lessons	Agee	Visual Impairment	Secondary	Positive/Neutral
The good egg	John	Visual Impairment	Inconclusive	Positive
Hooray for hat	Won	Visual Impairment	Secondary	Positive/Neutral
Elephants cannot dance!	Willems	Visual Impairment	Primary	Neutral
Rex wrecks it!	Clanton	Visual Impairment	Inconclusive	Neutral
Mustache baby	Heos	Visual Impairment	Secondary	Neutral
Dad's first day	Wohnoutka	Visual Impairment	Primary	Positive/Neutral
The thank you book	Willems	Visual Impairment	Primary	Neutral
We are in a book	Willems	Visual Impairment	Primary	Neutral
My new friend is so fun!	Willems	Visual Impairment	Primary	Positive/Neutral
Another	Robinson	Visual Impairment Mobility Impairment (wheelchair)	Secondary	Neutral
Because	Willems	Visual Impairment	Secondary	Neutral
Brown bear, brown bear, what do you see?	Martin	Visual Impairment	Inconclusive	Neutral

Llama llama loves to read	Dewdney	Visual Impairment	Secondary	Neutral
Family is a superpower	Dahl	Visual Impairment Mobility Impairment (prosthetic)	Secondary	Positive/Neutral
I am human: A book of empathy	Verde	Visual Impairment Mobility Impairment (cane user)	Inconclusive	Neutral
I broke my trunk!	Willems	Visual Impairment	Primary	Neutral
There's a giraffe in my soup	Burach	Visual Impairment	Primary	Neutral
The Berenstain bears take off	Berenstain	Visual impairment	Secondary	Neutral
Dragon was terrible	DiPucchio	Visual Impairment	Secondary	Neutral
Eric Carle's book of many things.	Carle	Visual Impairment	Secondary	Neutral
There is a bird on your head!	Willems	Visual Impairment	Primary	Neutral
We don't eat our classmates	Higgins	Visual Impairment	Secondary	Neutral
Knuffle bunny: A cautionary tale	Willems	Visual Impairment, Mobility impairment (cane user)	Secondary	Neutral
How do dinosaurs learn to read?	Yolen	Visual Impairment	Secondary	Neutral

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Pictures for Reflection
The Office

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The other day I watched the children create an office with a wagon that was turned over, a bench from a nearby table, and the usual blocks and chairs nearby. On their own, the children found the resources that were necessary to sustain their play. Old computers, clip boards, wood sticks, and pieces of cloth filled a formerly empty space to what would be a completed office space. The children spent only a short time playing office, most of their time was spent planning, assigning roles, collaborating, negotiating with friends for needed objects, and balancing items to stand upright. Frustration from the falling blocks or tipping wagon, a sense of community through the collaboration of roles and items in the play, strength building from the pushing and pulling of large objects, and an understanding of space and purpose through the construction of the office were all part of the children's play. Learning does not only take place from simple paper and pencil tasks, but learning also happens when children are problem solving, creating, critically thinking, and collaborating. In the Early School, play and learning are part of our everyday!

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Tech Talk
Cyber Safety Efforts for Children: Are They Working? What Can We Do?

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Introduction

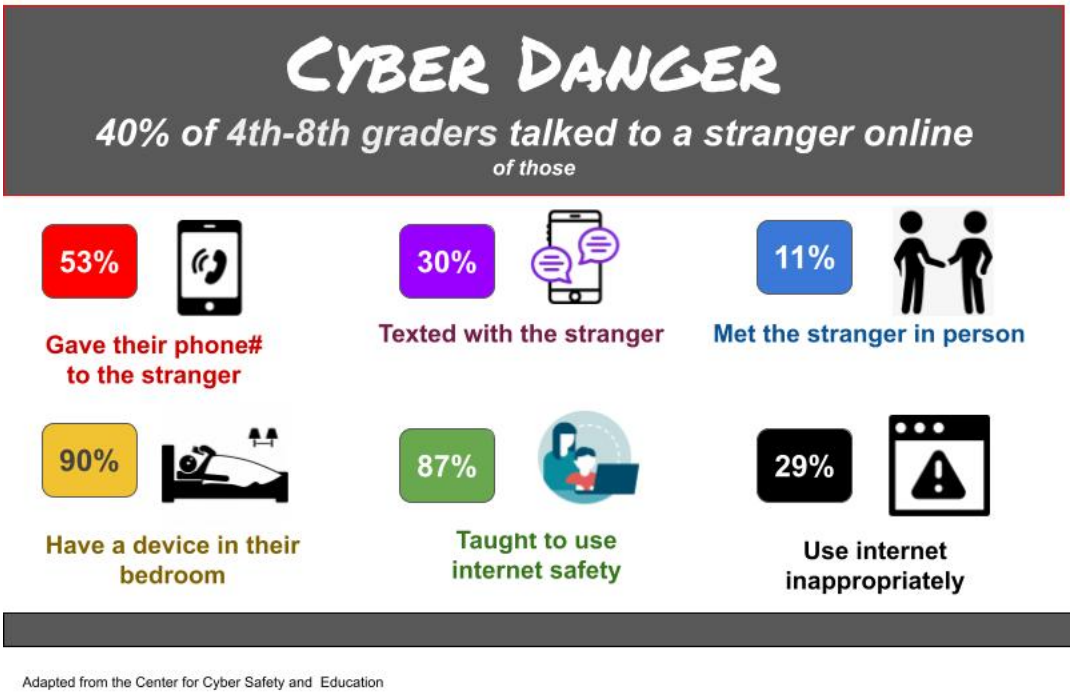
Connectivity, particularly in an online environment, is ubiquitous. Everywhere you look, you see people engaging with devices that are connected to the internet. Many children have access to the latest information and communication technologies, immersing themselves and connecting with others in a myriad of online sites, games, chats, etc., which make them vulnerable and at a high risk of exploitation (United Nations Office on Drugs and Crime, 2015). In 2018 there were more than 45 million instances of child sexual abuse material on tech companies' platforms (End Violence Against Children, 2022b; Turban, 2020).

What Do the Statics Indicate?

According to the U.S. Center for Cyber Safety and Education's pre-pandemic Children's Internet Usage Study (2019), 40% of 4th – 8th graders reported talking to a stranger online. 53% of those revealed their phone number; 11% met a stranger in their home, the stranger's home, park, mall, or restaurant; 21% spoke to the stranger by phone; 30% texted with the stranger; 15% tried to meet the stranger; and 6% revealed their home address. 87% of those students reported being taught to use the internet safely and 90% of those students have either a cell phone, tablet, or computer in their bedroom. 29% use the Internet in ways their parents would not approve of and 31% lied about their age to access adult websites. Kids are spending an average of two hours a day online for something other than homework and 33% are online after midnight on a school night. Disconcerting statistics indeed.

The Pew Research Center (Vogels, Gelles-Watnik, & Masserat, 2022) surveyed more than 1,300 American teens (13-17 years old) in 2022 and found that 95% of teens have a smartphone, 97% say they use the internet daily (with 46% indicating they are on it almost constantly), 95% use YouTube, 67% use Tik Tok, 60% use Snapchat and Instagram, and 32% use Facebook. 35% report being on one of those platforms nearly constantly. Of those, about 55% believe that they

are spending about the right amount of time on social media, about 36% believe that they are spending too much time on social media, and about 8% believe they are spending too little time on social media. When asked how hard it would be to give up social media, 54% said it would be hard and 46% said it would be at least somewhat easy.



Adapted from the Center for Cyber Safety and Education

In 2018, the Ohio Attorney General's Human Trafficking Commission requested a study on human trafficking be conducted by Dr. Celia Williamson and her team at the University of Toledo. They found that 58% of victims were trafficked after they met their traffickers face-to-face and 42% were trafficked having never met their traffickers face-to-race, rather having met them only online. Traffickers lurk on social media sites like Facebook, Instagram, and Snapchat, as well as dating sites like Tinder, Blendr, and Yellow, or webcam sites like Chatroulette and Monkey. The perpetrators study posts that indicate low self-esteem, posts like, "Nobody gets me", "I am so ugly", "I need to get out of here", etc. Traffickers begin to get involved and build trust with victims by saying things like, "I understand you", "I think you're beautiful. I'll encourage you to show your body. Use your body.", "I'll protect you", etc. (Billau, 2018). This is truly alarming.

In the European Union (EU), one in five digital users is a child and 62% of all child and sexual abuse materials were hosted in Europe. In 2021, 85 million pieces of child sexual abuse material were reported online, a 35% increase from 2020 (End Violence Against Children, 2022b; Turban, 2020).

What Are We Doing to Protect Children from Online Threats?

There are many more disturbing statistics and stories to be told. Suffice it to say that too many children are susceptible to devastating threats when connecting online in unhealthy, and unsafe ways. So, what are we doing to protect children from the dangers of being online? There are laws in the United States designed to protect children online dating back to 1998 and more recent bills struggling to gain traction.

In 1998, COPPA – Children's Online Privacy Protection Rule, was created to identify what information must be included in the privacy policy of United States website sources that are directed at children 13 years of age and younger, and when and how to seek consent from parents. This rule mandates that these website sources divulge that they are collecting information online from children 13 years of age and younger and provides parents control over what information is collected about their children online (Federal Trade Commission, 1998). COPPA was amended in 2013 to update definitions, for example, personal information now includes photographs, geolocation (street name, city), video or audio files, and persistent identifiers that can be used to recognize children over time and across platforms. Persistent identifiers include IP addresses, customer numbers held in a cookie, processor or in device serial numbers, and unique device identifiers (Hunton Andrews Kurth, 2013; Privacy and Information Security Law Blog, 2013).

Schools and libraries are subject to the Children's Internet Protection Act (CIPA) of 2000, which mandates that an internet safety policy be adopted and implemented, and the online activity of minors must be monitored. CIPA also mandates that minors be educated about appropriate online behaviors, including interacting with other individuals on social networking websites and in chat rooms, and cyberbullying awareness and response (cyberbullying is bullying that takes place over digital devices) (Federal Communications Commission, 2019). Of course, students don't necessarily use only school computers to access online content. As noted above in the Center of Cyber Safety and Education report (2019), 87% of the 4th – 8th graders surveyed reported as being taught how to use the internet safely; however, statistics demonstrate that many children still do not heed that instruction. Training on how to use the internet safely does not seem to be enough. While CIPA has protocols in place, it does not protect children from cyberbullying, inappropriate content (sexually explicit and/or unsolicited obscene materials), sexting (sharing or receiving sexually explicit emails or pictures via messages or apps), or sextortion/Ransomware (threats to distribute private and sensitive information if not provided with images of a sexual nature, sexual favors, or money) (Readiness and Emergency Management for Schools, n.d.).

In 2021, 85 million pieces of child sexual abuse materials were reported online

In 2020, the UK's Information Commissioner's Office, introduced the Age Appropriate Design Code, also known as the Children's Code, which took effect in 2021. This 15-point code focuses on privacy issues, inappropriate advertising, and tactics to keep children online for long periods of time (Wakefield, 2021). New legislation is proposed in the EU to make it mandatory to detect, report, and remove childhood sexual abuse and materials; use grooming detection and deterrence mechanisms that prevent childhood sexual exploitation and abuse; and establish a center devoted to fighting and preventing childhood sexual abuse (End Violence Against Children, 2022b). Currently the practice is voluntary and unfortunately, at the time of writing this article, the legislation in the EU is being held up amidst "legislative limbo" (Bertuzzi, 2022).

Some bills in the US that are struggling to gain traction are COPPA 2.0, Kids Online Safety Act (KOSA), and the American Data and Privacy Protection Act (ADPPA). The latter bill is more comprehensive, and some feel that it should take precedence over the two smaller bills focusing on children specifically (Osano Staff, 2022).

What More Can We Do to Protect Children?

In 2022, the World Health Organization published a report titled, "What Works to Prevent Online Violence Against Children." This report focuses specifically on two types of violence: child sexual abuse, including grooming and sexual image abuse; and cyber aggression and harassment in the form of cyberbullying, cyberstalking, hacking, and identity theft. The report delineates what works and what does not. The report indicates that prevention education works, but it must have multiple and varied learning modalities and tools to engage students in learning, for example, videos, games, infographics, readings, guided discussion, role play, and direct instruction. Prevention education is not effective as one-off sessions, but rather should be multiple engagements with numerous exposures to messages. Whole-school involvement as well as peer engagement and interaction has proven successful. The report also indicates that parent involvement through homework materials and activities is also important (World Health Organization, 2022).

In 2022 The Global Partnership to End Violence Against Children, a global collaborative of more than 700 organizations, including governments, UN agencies, NGOs, etc., invested $15 million through its Safe Online arm towards eighteen projects world-wide that will strengthen systems to protect children against online child exploitation and abuse. Since 2016, they have invested more than $68 million for 80 projects in 75 countries for this purpose (End Violence Against Children, 2022a).

What Resources are Available?

The National Center for Missing and Exploited Children has created NetSmartz (2023), an online platform of free resources for parents/guardians, educators and the community in English and Spanish. There are presentations, videos, tip sheets, informational slides, and classroom activities.

"Be Internet Awesome", is a free Google platform for children, parents, and educators with the purpose of teaching students the fundamentals of digital citizenship and safety. They promote

five tenets they call the Internet Code of Awesome. They are: Be Internet Smart - Share with Care (communicate responsibly); Be Internet Alert – Don't Fall for Fake; Be Internet Strong – Don't Share Your Secrets; Be Internet Kind – It's Cool to Be Kind; and Be Internet Brave - When in Doubt, Talk it Out.

For children, there is an ISTE endorsed (International Society for Technology in Education), free, interactive, online game called Interland which is designed to make learning about digital safety and citizenship fun. Players (internauts) practice skills they need to be good digital citizens as they combat hackers, phishers, over sharers and bullies.

For parents there is a free, easy-to-follow Be Internet Awesome Family Guide (in English and Spanish) that breaks down each of the five tenets into modules that provide goals, pre-information, explanations, vocabulary, scenarios, family activities, and guidance. Families are invited to practice the skills they are learning by engaging in Interland after each of the five modules. There are additional free resources including Family Tips and Activities, Exploring YouTube Confidently Guide and accompanying YouTube playlist, a downloadable Be Internet Awesome Coloring Book, a Digital Wellbeing Family Guide, and more.

For educators, the entire free Be Internet Awesome curriculum for teaching the five tenets with multiple, sequential lesson plans and instructions on how to approach the curriculum based on grade bands is provided. The lesson plans are aligned with ISTE standards for students and include interactive activities, vocabulary, scenarios, and discussion guides.

Another resource is Common Sense Digital Passport, (n.d.), an interactive learning tool that teaches digital citizenship, safety, and equity. It interfaces with Google Classroom and consists of a series of six interactive games: Password Protect - Security, Twalkers –Multitasking (media balance and well-being), Share Jumper -Privacy, E-volve – Upstander (cyberbullying, digital drama, and hate speech), Search Shark- Search (news and media literacy), Mix-n-Match – Creative Credit (news and media literacy). There is also an Educator Guide that provides a scope and sequence with detailed lesson plans.

Online dangers are here to stay, and children have access to the online world at a very early age. Knowing the choices that children can make to put them in harm's way, knowing that predators are lurking at every turn, and knowing that there are entities who may exploit children's privacy, cyber safety is of utmost importance. There are numerous resources for parents and educators to raise awareness of the potential dangers of online connectivity and we know that education is key for training children and adults how to engage online safely. Let's be proactive to protect our children and ourselves. Let's be intentional in our efforts to be cyber safe.

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Children and Families: Health and Wellness
Games in Telemental Health with Children and Adolescents

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Abstract

The COVID-19 pandemic resulted in an increase in telemental health sessions, including transitioning clients to this counseling format that were accustomed to having sessions in-person. In using telemental health, counselors may need to find new ways to connect and engage with clients or modify existing ways for the virtual setting. This article focuses on the use of games within a telemental health environment in counseling children and adolescents. We examine the literature related to the use of game play and telemental health with children, discuss strategies to integrate games within a virtual counseling environment, and present considerations to implementing games in a telemental health setting.

Keywords: games, telemental health, children, adolescents, counseling

Games in Telemental Health with Children and Adolescents

While telemental health is not a new concept or approach to providing counseling, the COVID-19 pandemic resulted in many counselors using telemental health for the first time due to lockdowns. This also required many clients who were comfortable with in-person counseling to transition to the virtual counseling setting. Counselors needed to consider how they could develop new strategies, as well as modify existing counseling interventions for the virtual environment. These include interventions commonly used in counseling, such as interactive games.

Telemental Health with Children and Adolescents

Telemental health can be provided in various ways, including live video, mobile apps, phone calls, and texting. For the purposes of this article, we are focusing on the live video medium of telehealth, which is synchronous audiovisual communication between the client and counselor via computer or mobile device.

Prior to the COVID-19 pandemic, researchers endorsed the telemental health as a medium to improve accessibility and equity with mental health care for children and adolescents (e.g., Comer & Myers, 2016). Telemental health can help bridge existing gaps by solving issues of transportation and time commitment, reducing stigma, and avoiding waitlists (Child Mind Institute, 2020). Researchers also suggested that telemental health can be just as effective as traditional in person treatment for children and adolescents (Gloff et al., 2015). However, at the onset of the pandemic, only 43% of outpatient mental health facilities (N=8860) offered telehealth services (Cantor et al., 2021). Now, researchers predict the telehealth market will reach $266.8 billion by 2026 from $49.8 billion in 2018 (Child Mind Institute, 2020).

In today's world, children and adolescents are often familiar with engaging with others in virtual environments. According to the *Children's and Parents' Media Literacy Tracker,* 55% of children ages five to 15 use social media apps, 65% use messaging apps, and 97% use video-sharing platforms (Of Com, 2021). Additionally, the majority of children and adolescents likely participated in virtual schooling since the onset of the pandemic. Yet, to date, there is a dearth of literature that explores children and adolescents' experiences and perspectives of telemental health services. However, a recent poll of parents (N=351) revealed 69% sought telehealth services for their child's mental health services and 80% reported that telemental health is more convenient than in-person appointments (Child Mind Institute, 2020). However, counselors should not assume that youth will be comfortable with telemental health.

Children and adolescents using telemental health services could be working with an existing or new counselor. Either situation requires acclimating to a new virtual environment. Researchers recommend adapting and using interactive activities to build rapport and keep the client actively engaged in session (Dueweke et al., 2020) such as therapeutic games.

Games in Counseling

Counselors may integrate games within the counseling process to connect and engage with children and adolescents, known as game play (Schaefer & Reid, 2001). Game play has five aspects: (a) a goal, (b) competition, (c) rules, (d) interactions with others, and (e) increased cognitive ability (Reid, 2001). There are three main types of games discussed by Sutton-Smith and Roberts (1971): (a) games of chance where the outcome happens by chance (e.g., Candyland), (b) strategy games that involve problem solving (e.g., chess), and (c) physical games that involve motor skills (e.g., tag). Counselors may use games specifically designed for counseling or ordinary games not designed for a therapeutic purpose (Swank, 2008). Clinicians may also incorporate video games within counseling. While games can be appealing to different age groups, structured games are particularly appealing and developmentally appropriate for latency age children (beginning around age 7), as they transition from an interest in dramatic play to play more focused on rules (Bellinson, 2002).

Some children and adolescents are reluctant to interact with a counselor, especially when they feel forced to go to counseling. Due to the appeal games have among children, counselors can use them to connect with youth. While therapeutic games may seem an obvious choice, children might be reluctant to play these games due to their obvious focus on therapy, such as games that emphasize talking, especially if they don't want to come to counseling (Swank & Weaver, 2021). In contrast, children are familiar with ordinary games, and they involve multiple aspects that might be the focus of counseling (e.g., social skills [sharing, taking turns], following directions/rules, emotion regulation; Bellinson, 2013).

Scholars have discussed multiple benefits of integrating games within counseling. Children often view games as fun; therefore, introducing games in counseling may help with developing a relationship with youth (Swank, 2008). The integration of games may also help reduce anxiety (Reid, 2001), and facilitate communication (Bellinson, 2002; Reid, 2001). Game play may challenge the idea that youth may have about counseling involving sitting with a counselor and being expected to answer questions by engaging them in an activity. Counselors can also observe children's behaviors during game play as part of the assessment and diagnosis process (Swank, 2008). Game play also provides an opportunity to develop social skills (Bay-Hinitz & Wilson, 2005; Reid, 2001; Serok & Blum, 1983; Swank, 2008) through interacting with the counselor, peers when used in group counseling, and family members during family sessions. Finally, children can develop insight by reflecting on how the game play relates to situations in their lives (Reid, 2001: Serok & Blum, 1979), as well as engage in reality testing (Bellinson, 2002; Reid, 2001). This provides opportunities for problem solving (Swank, 2008) and skills building, including coping skills and emotion regulation (Swank & Weaver, 2021). Thus, there are multiple benefits of integrating games within the counseling process when working with children and adolescents. In telemental health, game play can be a vehicle to build rapport and possible ease the transition to an online platform for therapy.

Game Play within Telemental Health

Adapting existing activities and games can aid in acclimating to telemental health (Dueweke et al., 2020). For those clients working with a new counselor game play can be a way to cultivate

the therapeutic alliance, especially playing familiar games that can be therapeutically modified. For existing clients, playing games can help transition from in person to telemental health. We identified four types of interactive games that can be conducted online: a). board games, b). card games, c). art games, d). physical games.

Board Games

Interactive board games include both chance and strategy type of games that can be therapeutically modified. Battleship can also be played on a virtual medium and be made therapeutic by having each player share a certain information about themselves when they get hit. For example, each time a player “hits” the other’s ships they share something they like about themselves. Clinicians can change the topic each game dependent on the client’s goals in counseling.

Other board games can be played both on a virtual medium or on a traditional set with the camera focused on the game set. For example, clinicians can prompt the client to share the classic board games they have at home and select from their existing collection. This could help the clinician tailor the activity to the client’s interest and promote engagement (Dueweke et al., 2020). Clients using games from home can be responsible for moving both the clinician and their own pieces as well as rolling the dice, if applicable. However, the client’s facial expressions may not be as visible. Clinicians may select from the client’s existing collection and modify the game to make it therapeutic (Swank 2008; Swank & Weaver, 2021). For example, for the game Sorry!, each player is prompted to say “Sorry!” when landing on the other player’s space making them return to the starting position. The player sending the other to the starting space must share a time they apologized or wish they had apologized. Clinicians can apply this same technique with other games, such as Trouble, where players can share an instance they got "in trouble” when sending the other player to the starting space.

Card Games

Interactive card games that can be played virtually may include shedding type card games (e.g., UNO) or matching card games (e.g., Go Fish). UNO can be made modified that each color represents an emotion (e.g., red is angry, blue is sad, yellow is happy, green is peaceful). Each time a player changes the color both players must share a time they felt the emotion associated with the color change. For example, players can share a time they felt angry when the color is being changed to red. For Go Fish, each time a player has to “go fish” they get to ask each other a question to build rapport. As therapy progresses, the clinician may wish to change this to specific topics that pertain to the client’s goals in counseling.

Art Games

For interactive art games, Pictionary is a game that can be played virtually and easily therapeutically modified. For the canvas, clinician may introduce the choice of using a virtual white board or a blank sheet of paper as a virtual white board may be difficult for some clients. Next, the clinician may use a virtual spinner populated with various feelings. The drawer will spin the spinner to determine the feeling then the player can be instructed to draw a). things that

represent the feeling, b). things that make them experience that feeling, c). the last or a time they felt that feeling, d). a coping skill related to that feeling. The clinician may select other prompts that relate to the client's goals in therapy. Other topics may be included on the spinner such as coping skills the client has learned in previous sessions. The client may have more autonomy in this process by selecting their own feeling from another source such as an emotion wheel or their own knowledge dependent on the developmental level of the client.

Physical Games

Interactive physical games may include a therapeutic scavenger hunt or charades. Researchers recommend utilizing physical things in a client's home environment (Dueweke et al., 2020). Hence, a therapeutic scavenger hunt can be an excellent means to build rapport and identify objects that can be coping skills. These scavenger hunts can have various themes. For example, a self-esteem scavenger hunt may include finding something the client feels proud of, or something that represents something they accomplished. For a mindfulness scavenger hunt, the client may identify for things that channels their senses such as five things the client sees, four things that make noise, etc. This scavenger hunt can be modified to the goals the client has in counseling. For charades, the clinician could use the spinner from the Pictionary activity, and have the client act out various feelings, coping skills, or past experiences.

Considerations

When conducting telemental health sessions, the clinician should also consider factors related to technology. Prior to the session, the clinician should be comfortable with accessing the virtual platform, including connecting to an internet source and troubleshooting basic technology issues that might arise (e.g., no audio). These platforms should be HIPPA compliant. For further guidance, clinicians should refer to their profession's code of ethics. For example, counselors may refer to the American Counseling Association's Code of Ethics (2014), specifically Section H: Distance Counseling, Technology and Social Media.

When applying online games, clinician should consider the safety of the website (i.e., privacy), (American Counseling Association [ACA], 2014, Section H.2.d) and attempt to find a source that has no or minimal advisements. Clinicians should try to use sites that one has to send the other user an invitation to play or share the experience (ACA, 2014, Section H.5.c). Clinicians should limit the sites that the client could connect with other users sans invitation for safety reasons. Clinicians may use the share screen function for certain games if the child is younger or has trouble staying on task (ACA, 2014, Section H.4.c). Clinicians may need to set limits with the types of games that can be played during session as some clients may desire to show the clinician other online games that might not be therapeutic.

Relationally, clinician should note these skills may differ digitally than in-person, particularly with children and adolescents (Orsolini et al., 2021). Clinicians should minimize any potential distractions in view of the camera, zoom in their camera so the client can see the clinician's facial expressions, and maintain continuous gaze into the camera (Segar van Dyk et al., 2020). Clinician should use energetic tone of voice, exaggerated hand gestures, and facial expressions when working with younger clients (Orsolini et al., 2021). Clinicians may wish to play with

various telehealth backgrounds as younger clients may find that amusing (Segar van Dyk et al., 2020). Clinicians may also want to plan their instructions for game use, especially if the game is a traditional board game the client uses from their collection.

In considering the counselor's response to the client's decision about whether to follow the rules of the game, Bellinson (2013) emphasizes the importance of remembering the purpose of integrating games within counseling. The purpose of using games differ by client; and therefore, counselors may address rule following differently for various clients. This may also differ based on the use of games in individual, group, and family sessions. Similarly, a client may cheat during a game for various reasons; therefore, the counselor may address it differently depending on the client's goals. Bellinson (2002) cautions counselors to be careful about becoming involved in power struggles with clients related to following the rules and cheating. The counselor must also be mindful about what they are experiencing in the moment, as countertransference may also arise when using games in counseling. Counselor should reflect on their experiences with various games and what feelings arise for them when they play the games (Reid, 2001; Swank, 2008). They may choose to not have some games available due to their own reactions related to the games (Bellinson, 2002; Bellinson, 2013). Counselors also make decisions about whether they let the client win, with Reid (2001) emphasizing the importance of balance related to winning. Furthermore, when it is the counselor's turn, it is important for the counselor to respond honestly, but for the response to also be relevant and appropriate for the client (Bellinson, 2002). When modifying board games, clinicians should be mindful of the amount of sharing required. In other words, if the players are required to share something with every turn, they may run out of responses, the game may become prolonged, and they may become disengaged (Swank 2008; Swank & Weaver, 2021).

Conclusion

Games are an easily transferrable tool from in person to virtual therapy. Interactive board games, card games, art games, and physical games can all be modified to be conducted virtually. Clinicians may wish to continue games played during in person sessions or introduce new games to keep virtual sessions interactive and engaging.

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Learning Doesn't STEM from Worksheets: Why STEM Learning Starts Beyond Paper and Pencil Tasks

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Abstract

The purpose of this article is to critically examine the use of worksheets in STEM classrooms from a whole-child, constructivist perspective. Teachers continue to rely on worksheets for STEM lessons, rather than engaging children in experiential learning practices. The authors argue that teachers must reexamine the role of worksheets in their classrooms and foster activities that deepen student understandings, cater to development, provide for differentiation, and provide engaging real-world/relevant experiences. With a focus on STEM education, the authors provide appropriate child-centered practices for educators to utilize as an alternative to worksheets. Some suggestions include inquiry-based activities that foster student interests, integrated real-world activities, authentic assessments, centers, projects, and play in STEM.

Keywords: STEM, play, worksheets

Introduction

Worksheets are commonly used in American classrooms to provide individual practice with specific skills, to supplement activities, and to assess student knowledge. Teachers often rely and depend on worksheets as an instructional tool, but rarely stop to question if the practice itself is a worthwhile endeavor. In other words, worksheets are a fully accepted practice and an expectation for most classrooms, but any critical analysis of worksheets and their dominant usage in education is rare. STEM environments are not immune to the overreliance on worksheets as children endlessly complete menial math and science tasks on paper. From a child-centered, whole-child, and constructivist perspective, this dominant practice needs to be critically reexamined. Worksheets often take the place of or reduce experiential learning activities, where children can build stronger, longer-lasting conceptual understandings. Worksheets also make differentiation across a variety of developmental levels and a range of understandings nearly impossible as they tend to push a singular objective in a standardized manner, not capturing the range and diversity of student interests and abilities. Furthermore, worksheets cater to obsolete societal skills that prioritize compliance, convergent thinking, superficial memorizations, and low-level mechanical skills. Therefore, it is the purpose of this paper to critically examine worksheets (especially in STEM environments), to provide a counter argument for their commonly accepted benefits, and to offer alternative suggestions for activities that cater to different student interests, developmental levels, and provide more meaningful/relevant experiences for children.

Yildirim (2011) explains, “worksheets are materials by which students are given transaction steps regarding what they are supposed to learn” (p. 45), where students fill in a box or answer a question based on specific evaluation criteria. Often, these steps are prescribed and standardized despite the plethora of evidence to suggest students have a substantial range of abilities and understandings. Many worksheets, perhaps most, fall into the busywork or “busy sheet” category where students complete “low-level recall, filling in blanks with words, choosing from multiple choice questions, labeling things - or work that has no educational value at all” (Gonzales, 2018,

para. 11). When evaluating STEM curriculum, educators need to place an emphasis on students' learning, inquiry, and application of knowledge, as well as their engagement, which are all supported by active involvement and exploration, rather than the passive compliance of filling out worksheets.

Educators should adopt a critical lens when considering worksheets as an instructional tool, and at the forefront, teachers need to account for the continuum of child development in their classrooms. The range of academic abilities in a typical public-school classroom can span five or more grade levels (Bondie et al., 2019; Hertberg-Davis & Brighton, 2006), yet a worksheet provides a one-size fits all approach (Latz et al., 2008), covering only the grade-level curriculum, and cannot accommodate all learners (Segar, 2021). Attempting to use a singular tool, such as a worksheet, to drive instruction and assess student understanding is inappropriate and often out of alignment with the range and diversity of human intelligence represented in the typical classroom. For example, using a multiplication worksheet after a lesson on multiplication can cause high levels of frustration for students who are still struggling to understand addition. Furthermore, students who have already mastered multiplication and who are ready to learn more advanced concepts need additional opportunities. Worksheets, along with their prescribed standardized expectations and learning outcomes, are inappropriate practices to support student learning and engagement, and do not represent authentic assessments of student learning.

Worksheet Usage in the Classroom

"*If they can do the worksheet, they don't need it. If they can't, it won't help them.*" –Marilyn Adams

The above quote from Marilyn Adams, a cognitive and developmental psychologist, presents a profound and substantial truth. If students can easily complete the worksheet, then it is indeed a "time-filler." Yet, for those children struggling to complete the worksheet, any length of time and effort ends up being in vain as the worksheet will not help with their understanding or knowledge retention in any way. A worksheet can be seen as a sheet in which students regurgitate a specific set of information, not a place where they showcase evidence of their understandings of a concept or a place where they build or apply critical thinking skills. Problem solving and critical thinking are pillars of the expertise needed to thrive in STEM classrooms and future careers.

Students learn best through active exploration as they engage in meaningful content that extends their knowledge and excites their desire to learn (Parker et al., 2022). Yet, Segar (2021) points out, "[worksheets] do not ignite a passion for learning" (para. 19). In fact, they often preclude interest-based explorations and limit intrinsic motivation as the only teaching method used is based on writing, lecturing, and filling out a corresponding sheet (Yildirim, 2011). Furthermore, "as worksheets tend to impose the theories on the students, this may affect the process of the students' knowledge construction" (Choo et al., 2011, p. 525), inhibiting students from critically thinking and engaging with content beyond surface level memorizations.

Within a "worksheet space" there is a continuum of possibilities, some more engaging than others. On one end of the spectrum, "busysheets" represent work that has little educational value

and accomplishes the goal of filling time. On the other end of the spectrum, more engaging possibilities include graphic organizers, data collection tools, and planning webs. These options can be viewed as “powersheets” which directly support learning and may support other tasks as well (Gonzales, 2018). These “powersheets" are often open-ended, supplement more robust activities like science experiments, and provide opportunities for differentiation and student inquiry. However, educators should use caution because the worksheet can be a hindrance to genuine learning, and typically there is a more engaging way to complete an activity than relying on any type of paper and pencil task, even if it is open-ended.

With an ever-changing and constantly challenging landscape in our society, children are often exposed to increased amounts of stressors (Gray et al., in press). Coupling life stress with school stress creates a very unhealthy imbalance for children, and these school stressors can occur when inappropriate teaching methods are practiced. As Burts et al. (1990) defined “examples of inappropriate practices are: rote-learning; abstract paper-and-pencil activities; and direct teaching of discrete skills, often presented to large groups of children” (p. 408). These practices can cause further stress regarding timely completion and accuracy as students focus heavily on “fitting in the box” as opposed to feeling confident in thinking divergently and operating through intrinsic motivation. Children need to have the opportunity to make their own decisions, feel valued and heard, and participate in their education as they develop agency. “If children are to grow up well-adjusted, they need ever-increasing opportunities for independent activity, including self-directed play and meaningful contributions to family and community life, which are signs that they are trusted, responsible, and capable” (Gray et al., in press). Worksheets, especially when they dominate classroom time and then go home as homework, create undue stress, push extrinsic motivators, and do not even lead to any sort of meaningful boost in achievement (Lee, 2014).

Reevaluating Worksheets as a STEM Instructional Tool

The consistent use of worksheets in STEM environments creates an effect where students feel they must conform to specific answers in order to be “right” where any other response is viewed as “wrong.” Furthermore, students often feel uncomfortable with more open-ended explorations in science, and “are often presented with highly detailed laboratory instructions that have been carefully designed and tested to produce a desired outcome” (Nunes et al., 2022). While these scripted procedures can have some value, they often do not represent true scientific exploration of unknown phenomena (Nunes et al., 2022). Worksheets contribute to this dominant culture of scripted procedures in STEM subjects, while conditioning children to adhere to the script and motivating them to conform for a grade. Students come to realize the ultimate goal–to provide the correct answer (Anderson, 1981; Slavin, 1983). If they have the right answer, students tend not to care “why and how the answers were generated” (Wu & Huang, 2007, p. 745), which is the exact opposite goal of STEM education, where innovators, thinkers, collaborators, creators, and inventors need to understand the “why” and “how” as they develop into future astrophysicists, coders, architects, and roller coaster designers.

In worksheet-heavy STEM environments, students become reliant on their teachers to provide scripted procedures and the answers at the end. This can, in turn, affect their ability to develop a personal identity as a scientist, mathematician, or engineer, for example (Stone, 2022). Instead, students view the teacher as the expert (e.g., the scientist) and they await their instructions, rather

than taking ownership of their learning and hindering their agency to take on the role of scientist. These types of scripted explorations that are aided by worksheets often put children in a box and are antithetical to real-world STEM explorations that require problem-solving skills, critical thinking, innovation, and a willingness to step into the unknown.

Instead, as teachers seek to inspire inventors and creators, children need to know that each trial or failure is part of the path to their success. By taking away the predetermined, correct answer sheet, educators make room for students to engage in conversation with one another, discuss outcomes, question each other, and self-assess to become "aware of their learning" (Wu & Huang, 2007, p. 740). Allowing for instructional flexibility apart from worksheets can open student-initiated dialogue that perhaps deviates from the main topic, but ventures into a whole new area of educational content, one that would not have been possible with a strict adherence to completing the worksheet. No longer should students be expected to passively fill out worksheets (Broadbent, 2021; Browne, 2020), but rather they can actively participate in experiential learning opportunities ignited by real-time interactions and hands-on engagement (Segar, 2021).

Hartini et al. (2020) used worksheets for STEM learning and activities as part of a study to train students' critical learning and identified eight critical thinking indicators including: giving explanations, formulating questions, formulating answers, reporting experiment results, analyzing experiment results, concluding investigation results, concluding calculation results, and deciding actions. The results concluded seven out of eight critical thinking indicators of students' evaluation were measured as only "sufficient." The goal is for students to be strong in the areas of critical thinking, creativity, and exploration, not just "sufficient" and able to pass a test or complete a worksheet; rather they should be capable of questioning, reasoning, and evaluating on their own.

When relying on pre-scripted worksheets, there is very minimal flexibility that can occur within teaching strategies and activities as "the implementation of lesson plans cannot be separated from the usage of the student worksheets" (Hartini et al, 2020, p. 4), which can lead to issues with student comprehension and concept development if there is no flexibility to deviate away from "the script." Considering the surface-level, memorized information worksheets foster (Stone, 2020), they bring little value for student assessment. It should be noted that worksheets are not a form of authentic assessment (Frey et al., 2012) due to their restrictive nature in predetermined response structure. When looking for authentic student assessments, it is vital to consider the experiential aspect and evaluate how students are involved in showcasing their understanding by analyzing key components such as the following questions:

- Are students able to "do" the subject?
- Are students replicating or operating in real-world contexts?
- Are students able to efficiently and effectively use a repertoire of knowledge and skills to negotiate complex tasks?
- Are students receiving ample feedback?
- Are students able to showcase their product/result with their peers or community members?

When designing authentic assessments for STEM, educators must rethink their usage of sterile, disconnected, inauthentic tools like worksheets. Instead, they must design meaningful, relevant, performance-based activities that are situated in real-world contexts where students must problem-solve, actively apply their knowledge, and embrace uncertainty. For example, imagine a student conducting an experiment on several plants to determine what environmental elements help them grow and thrive the best. Perhaps another student codes a new ending for their favorite video game. A budding engineer, who loves thrill rides, creates a roller coaster from a building system of interlocking rods, connectors, blocks, gears, and wheels, and then submits their idea to a theme park creativity submission contest. Another example is the mathematician who loves space and develops a safe path for a satellite to orbit, all as part of their STEM activities in the classroom. Rather than answering "true" or "false" on a worksheet, these students *experience* what is "true" and "false" as they interact with concepts and develop a deep understanding of their content matter, hyper-engaged in their learning.

Moving Toward a Constructivist Lens

STEM curriculum should align with a constructivist approach in which learners are engaged in and construct their own meaningful knowledge through play, inquiry, and exploration. The focus should be on the child (or learner); where once seen as passive, constructivism appreciates a child's "active application of ideas to problems" (Ertmer & Newby, 1993, p. 62). As Wilson (2018) explains, "a typical example of constructivist instruction presents a complex problem or challenge within a resource-rich environment, with learners working together and assuming responsibility for activities and decisions, and teachers in a support role" (p. 61) mentoring their learners as the students take charge and collaboratively work through real-world problems, as they naturally occur. Further supporting the move away from dry, teacher-centered instruction (i.e., classrooms that rely heavily on worksheets) to fostering actively engaged learners, the National Science Teaching Association (2018) recommends that teachers "[nurture] the wonder, enthusiasm, and curiosity of children by creating an environment" that fosters "exploration and discovery," and one that actively engages children in their own investigations (Declarations, para. 6). Furthermore, NSTA recommends "[considering] development and learning…while [providing] authentic formative… assessments" (Declarations, para. 2).

Drawing from Wilson's (2018) extensive look into specific attributes that constitute constructivist learning/teaching, three basic precepts include:

> - Learning is an *active process of meaning-making* gained in and through our experience and interactions with the world.
> - Learning opportunities arise as people encounter *cognitive conflict or challenge*, and through naturally occurring as well as planned *problem-solving* activities.
> - Learning is a *social activity* involving collaboration, negotiation, and participation in authentic practices of communities. (p. 61)

Considering the nature and possibilities of child-led STEM explorations, it is vital to align curriculum to the pillar of constructivism in order to enhance children's creative avenues as they draw on their previous knowledge to construct new knowledge because "to repress interest is to

substitute the adult for the child, and so to weaken intellectual curiosity and alertness, to suppress initiative, and to deaden interest" (Dewey, 1897, p. 79).

Methods for Teaching STEM

Considering "students learn best when they are actively engaged in their learning through direct experience, reflective thinking, and social interactions" (Mchenry et al., 2017, p. 60), it is evident worksheets do not support these learning goals since they are passive in nature, prescriptive, and do not accommodate diverse learners. The National Science Teaching Association (2018) recommends three-dimensional teaching that includes the following attributes:

- An educational environment that supports "creative and in-depth learning," and opportunities to engage in STEM through real-world, relevant applications that are driven by student interest.
- Students engage in science and engineering practices over time while developing conceptual understandings and move from curiosity to interest to reason (Moulding, Bybee, & Paulson, 2015). Students become scientists "as they plan and carry out investigations, solve problems, create models, analyze and interpret data, construct explanations, and design solutions."
- Adequate time for active science investigations that involve the processes of science. (paras. 6-9)

It is difficult to reconcile traditional, passive tasks like worksheets with the NSTA recommendations for dynamic, three-dimensional teaching methods. According to the Engineering in Education branch of the Museum of Science (2020), America's future workforce will be significantly impacted by a "pace of innovation [that] is so rapid that new technologies of today may be obsolete in just a few years," while "65 percent of the jobs that today's K-6 children will hold haven't even been invented yet" (para. 1). Their recommendation is for instruction to be rooted in the Engineering Design Process that encourages children to be "problem solvers, critical thinkers, communicators and collaborators" (EiE, 2020, para. 4).

Worksheets could certainly be used to supplement active practices and investigations, but too often they are used to replace those activities. Furthermore, the worksheet was designed to reinforce the skills of yesterday including rote memorizations, simple transfers of information, and encouraging isolated, discrete learning outcomes that are often disconnected from any meaningful contexts. As the EiE (2020) noted, the skills of tomorrow will require students to think beyond these simplistic time killing tasks. Students must learn to problem-solve and innovate in a complex, interconnected world. The worksheet often teaches the student that there is one right answer, that there is always a scripted procedure (designed by someone else), and that the goal/motivation is a grade rather than the actual learning process.

Even in the realm of mathematics, which overall has been a long-standing holdout in the move towards a more progressive, child-centered approach, researchers found that experiential learning as related to real-world, relevant topics positively impacted student attitudes towards math and boosted their academic achievement (Uyen et al., 2022). Larbi and Mavis (2016) suggest that "typical mathematics instruction… consists of listening to teacher explanations, watching him

solve problems on the chalkboard using a mathematics textbook, and working alone to solve problems on worksheets" (p. 54). However, in their study, they found that the use of manipulatives significantly improved students' mathematical thinking and performance (Larbi & Mavis, 2016). In addition, the National Council of Teachers of Mathematics (n.d.) suggests that educators of "STEM education within the mathematics program, look for opportunities to integrate science, technology, and engineering in meaningful ways as students tackle problems involving mathematics in relevant settings" (para. 16).

Therefore, when considering ways to teach experiential STEM activities, it is important to consider pedagogical practices that support inquiry, the whole-child, development, and relevant, active projects. Inquiry and interest-based explorations should be a guiding force in STEM investigations. Also, meaningfully integrated, real-world, relevant contexts should be used as the setting for STEM activities. Teachers should emphasize problem-solving skills, social interaction and collaboration, concrete representations to build conceptual understandings, critical thinking, and research skills. The authors' recommendation is for educators to move away from worksheets entirely to a dynamic, three-dimensional teaching approach. Strategies like choice-based centers, student-led projects (i.e., project approach), problem-based learning, and small group instruction can be very effective to accomplish these goals.

As Schmidt et al. (2011) agreed, "students [involved in these strategies] are more independent learners and take more personal responsibility for their learning" due to the nature of their open-ended, project-based learning opportunities. These strategies deemphasize obtaining the correct answer and focus on the students' learning process. Students are involved in the entirety of their learning from the beginning, as they "are required to come up with tentative theories to explain the phenomena presented in the problem" (Choo et al., 2011, p. 524), work through their theories, testing and analyzing, and then forming their conclusions.

Play in STEM–a Perfect Pairing

Just as children develop their literacy understanding from birth, children also form their understanding of STEM concepts from an early age (Kennedy & Tunnicliff, 2022), and since children's key mode for gathering knowledge is through exploration of their world, it is natural to incorporate play into STEM activities. Educators should encourage children to tinker with toys versus providing an endless parade of paper and pencil tasks. A recent fad that is catching on in education programs is to use "educational toys" that push learning (with specific objectives) through play. Educators might use terms such as "child's work" and "tools" rather than play and toys (Chudacoff, 2007). This practice is especially prevalent in STEM, but it is important that educators (and parents) hold on to the true value of play (authentic, self-chosen, self-directed) because this type of thinking is the exact opposite of what child-led play truly entails. As Almqvist (1994) noted,

> Children do not say "Now I'll improve my thinking by means of constructional play." Or "Now I'll play something that can develop my creativity." They just play, and usually they do not do one instead of the other. Rather, they say, "Let's take all the blocks and pretend we build the highest house in the world." (p. 65)

Children do not critically examine how they play; they *just play*. Furthermore, as Gray et al. (in press) and most parents and educators can agree, "play is a direct source of children's happiness," so it makes sense to pair their favorite pastime with the very hands-on, engaging curricula of STEM.

As opposed to utilizing worksheets for STEM instruction, educators can prioritize authentic play as a mode for student learning because "through constructive play, children explore science in action, use mathematics through counting and comparing sizes and shapes, apply their imagination and curiosity by creatively exploring the world around them, and cooperate and communicate their understandings of their own environment" (Kennedy and Tunnicliffe, 2022, p. 6). For example, students demonstrate their understanding as they play with magnetism, understanding when and how to apply their knowledge to construct bridges using magnetic tiles to hold specific weights, calculating measurements along the way. Ample exploratory activities and play opportunities are important for children as "they have chosen to pursue an activity for a reason, and typically the experience is interesting or pleasurable" (Stone, 2016, p. 6). These experiences create meaning for the child to continue exploring and analyzing, as opposed to filling in pre-scripted worksheets that bear little importance for the child. Furthermore, children's play is their way to work through their problems and negotiate their feelings and surroundings. Therefore, pairing play and STEM not only "promotes comprehension, but it also provides opportunities for children to become socially, physically, emotionally, and even culturally involved" (Stone, 2016, p. 1).

Play in STEM curriculum allows children to construct and interact as they naturally "learn by *making sense out of the world*" (Wilson, 2018, p. 61). When children engage in playful learning, they play what they know as they "draw upon their imaginations and their lived experiences and to tap into their passions and expertise" (Wohlwend, 2011, pp. 2-3). A child who loves airplanes may want to learn about forces and tinker with the aerodynamics of paper airplane construction, while a child fascinated by chemistry may want to develop their own unique slime concoction. In both examples, the educator does not need to force their knowledge onto a pre-scripted sheet of paper, but rather foster the organic, natural process of inquiry through experimentation. As Stone (2016) agrees, "play in science is a necessary and beneficial element of childhood, and it should be treated as such" (p. 9), which is why educators should consider play over worksheets for authentic, engaging, experiential STEM teaching practices.

Granting students the freedom and independence to follow their inquiries and choose their activities (at least to some extent), which includes how they will play their way through their learning, is a vital benefit to our children's whole-self and well-being. Children need to know they have ownership in *what* they learn and *how* they learn because "a primary cause of the rise in mental disorders is a decline over decades in opportunities for children and teens to play, roam, and engage in other activities independent of direct oversight and control by adults" (Gray et al., in press). Allowing our students to propose a STEM interest and then providing them the reins to follow through with corresponding activities or experiments, as opposed to teacher-driven worksheets, not only promotes their STEM education foundation, but also their self-worth and agency. All the key components and "elements for developing STEM capital and promoting active citizenship, and a scientifically literate workforce, begin with young children and revolve around play" (Kennedy & Tunnicliff, 2022, p. 23). With continued support from parents and

educators, when children are encouraged to imaginatively play, they can build a solid STEM foundation (Horrace, 2021).

Conclusion

Worksheets have, over the decades, become a dominant instructional practice in American schools. A typical public school uses on average about 2,000 sheets of paper per day, and with over 100,000 schools in the United States, it is estimated that schools are consuming about 32 billion sheets of paper per year (McHugh, 2022). Not only does this represent an environmental catastrophe, but educators must re-examine whether worksheets are worth the time and material resources. As STEM education continues to move in the direction of an integrated, context-rich, child-centered, inquiry-based, and three-dimensional direction, classroom practice needs to evolve as well. Educators need to reconsider their usage of worksheets and move toward well-planned activities that foster student interest, active investigations, and relevant experience. The drawbacks of worksheets are evident, but educators rarely critique the practice. Children cannot afford to waste significant time on empty instructional tools that support passive learning. Rather, teachers should focus on strategies that engage and foster insightful, creative learners who question big ideas and want to know more about the world around them.

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Education by the Numbers: Considering Retention in Light of the Covid-19 Pandemic

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Retention Considered

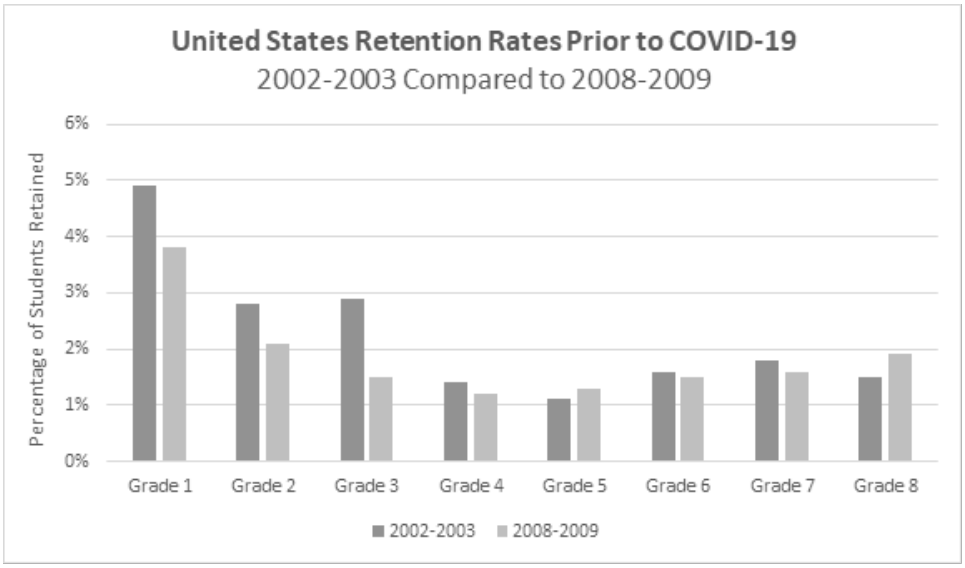
The issue of retention has been researched and discussed over many years in the United States. According to Kamin and Lamb (2021) "Grade retention is not an educationally advantageous or cost effective solution for supporting struggling students, and may in fact cause more harm in the long run both to individual students and to their districts" (para. 3).

For example, the impact of retaining children in grade has negative impacts on children's abilities to achieve in school (Kamin & Lamb, 2021). Research also indicates that retained children have an increase in school absences, experience behavioral difficulties, and undergo a decrease in self-esteem (AECF, 2018; Sitrin, 2021). In addition, children retained in the early years of schooling are more apt to drop out of high school, particularly if the students have disabilities, are Black or Hispanic, or English language learners (French & Mauriello, 2021; Hughes et al., 2018; Jacob & Lefgren, 2009; Loughlin, 2022; NASP, 2021). Let's look at the numbers.

Retention Rates

Consider the retention rates during 2008-2009 for first through eighth grade public schools in the United States. Warren and Saliba (2012) report that the highest retention rates are for first graders at 3.5% in 2008-2009. The lowest retention rates are in grades four through six, although higher in grades two, three, seven and eight. During this time, almost a half-million public school students (447,000) were retained in the 2008-2009 school year. Three out of 10 children were retained in first grade, about 130,000 children.

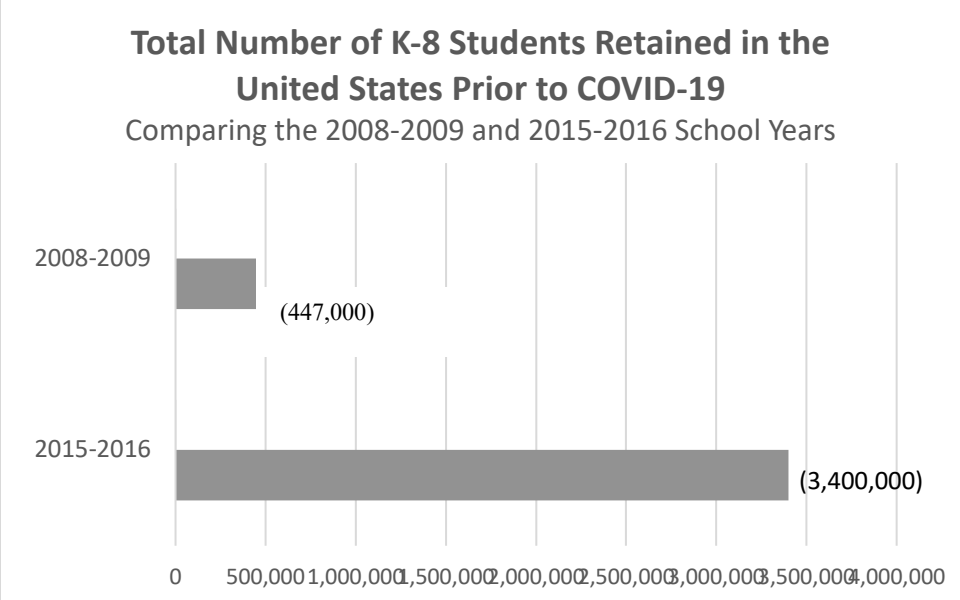
Figure 1



Note: Based on educational research: Warren & Saliba (2012)

During the 2015-2016 school year, 3.4 million children in the United States repeated one or more grades beginning with kindergarten. See the following chart comparing 2008-2009 to the 2015-2016 retention rates in the United States. The numbers are alarming. The question becomes, "What impact has COVID had on current retention rates?"

Figure 2

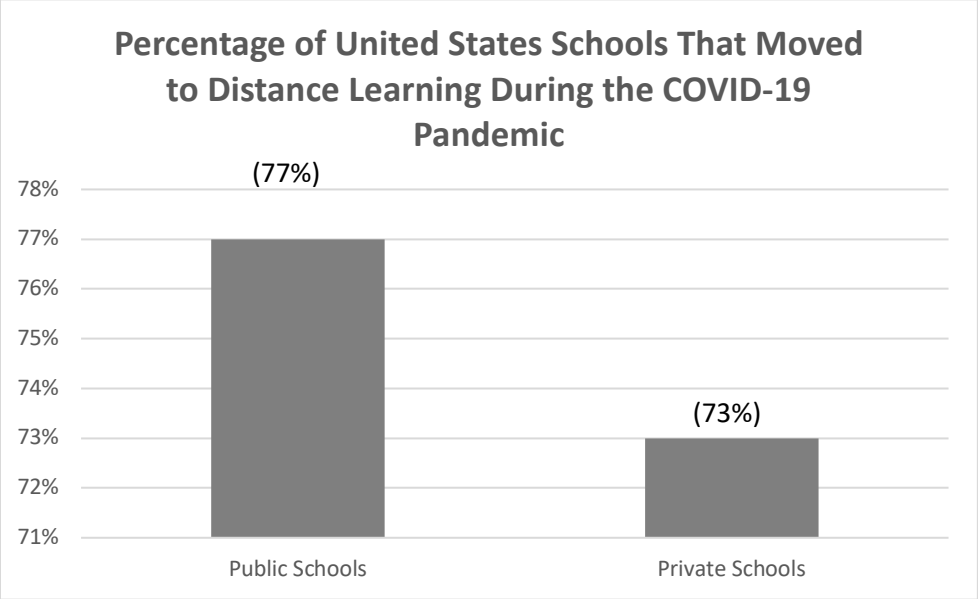


Note: Based on educational research: Loughlin (2022); Warren & Saliba (2012)

COVID-19 Pandemic

At the beginning of the COVID pandemic, spring 2020, most schools in the United States moved to distance education, mostly online learning models: 77% public schools and 73% private schools (NCES, 2022).

Figure 3



Note: National Center for Education Statistics (*NCES) (2022)*

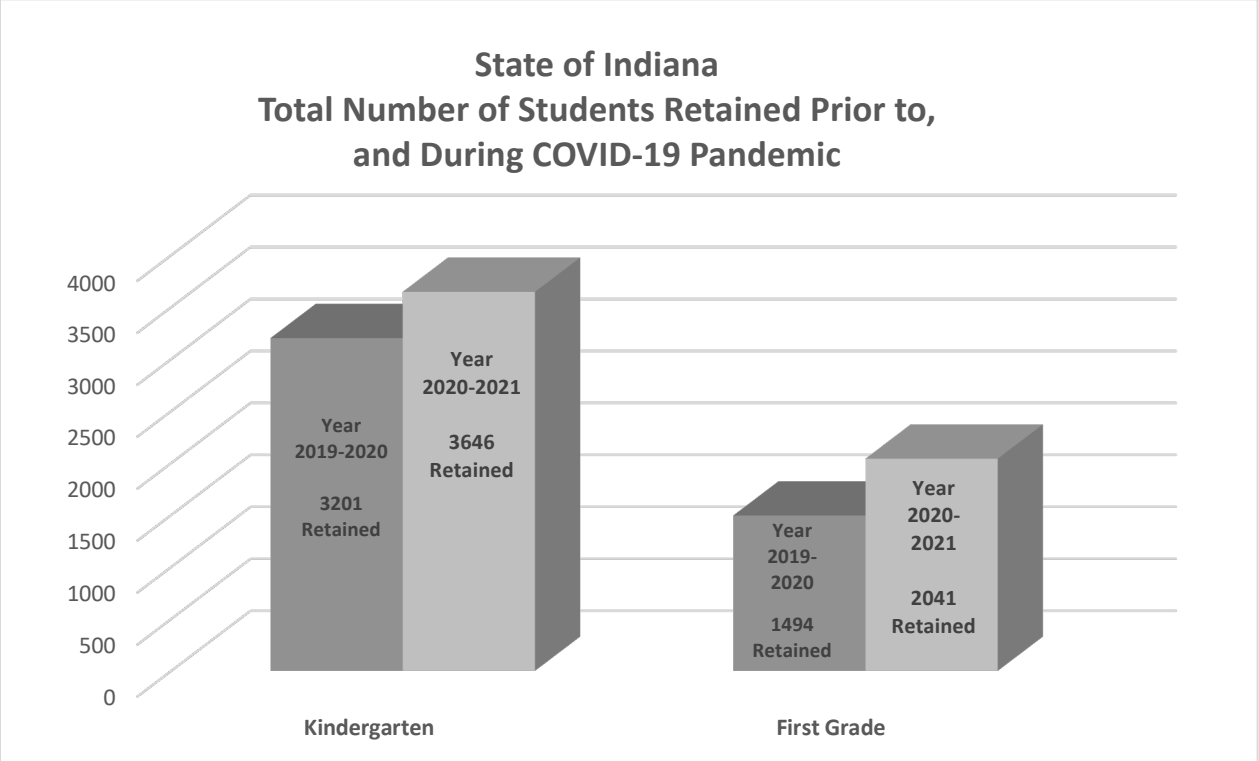
Loss of learning during COVID has amplified the retention issue for some states. According to Loughlin (2022), 22 of 26 states that released their data increased their number of retained children. In South Carolina, West Virginia and Delaware, retention numbers more than doubled; in Pennsylvania, the number of retained students increased from 20,000 to over 45,000 (Schultz & Hollingsworth, 2022). Statistics regarding retention for the entire United States were not available for 2020-2021 or 2021-2022; however, some states did submit their retention figures.

For example, in the state of Indiana, the number of children held back in grade increased during the 2020-2021 school year. Most retentions were in kindergarten and first grade: 3,646 kindergarteners (4.8% of the total statewide) and 2,041 first-graders (2.6% of the total statewide) (Loughlin, 2022). These numbers were a little higher than the 2019-2020 numbers of retained kindergarteners and first-graders, indicating an increase of retention numbers during COVID.

Compared to the previous 2019-2020 school year in Indiana, 3,201 kindergarteners were retained (4% of the total) and 1,494 first graders were retained (1.9% of the total) (Loughlin, 2022). Using actual student numbers, Loughlin (2022) reports that children retained in first grade were up 547 children, or an increase of 36% in 2021-2022, and children retained in kindergarten were up 445 children, an increase of 13.9%.

According to Loughlin (2022), overall, out of 6,771 students during the 2019-2020 school year, 229 children were held back, 3.38% of K-5 children. In 2020-2021, 439 children were retained (6.9%) out of the 6,400 Indiana K-5 enrollment. The COVID pandemic was deemed the most likely factor for the increased retentions. The numbers of retentions started to drop during the 2021-2022 year where 332 children were retained (5.2% of the K-5 enrollment).

Figure 4



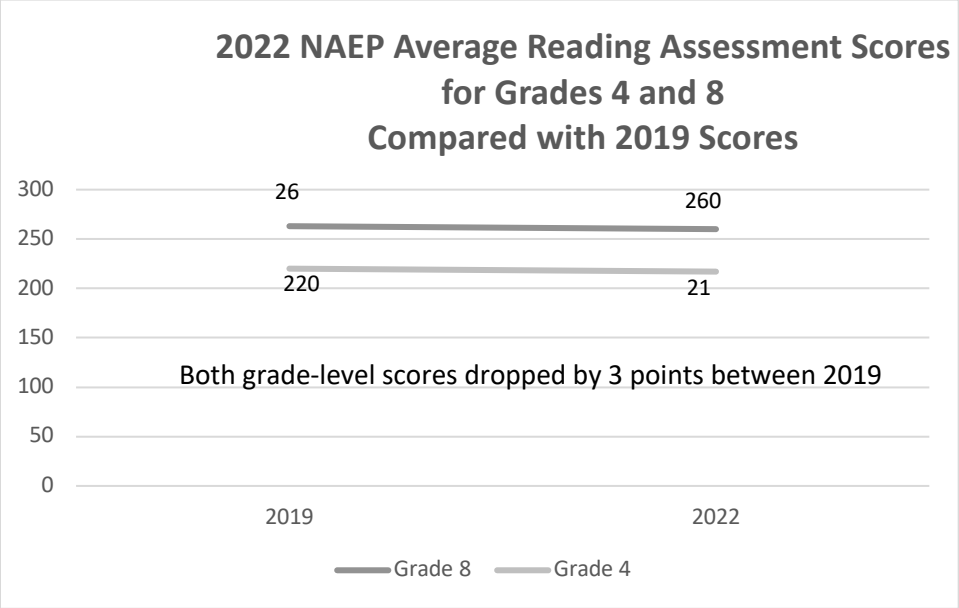
Note: Loughlin (2022)

Declines in Reading and Math Scores Since COVID

During 2019 and 2022, reading and math proficiency also fell more than any other period of time in the United States (USA Facts, 2023). According to Sitrin (2021), some estimates suggest that nearly all students in the United States are behind in their reading and math by probably a year or more because of the COVID pandemic.

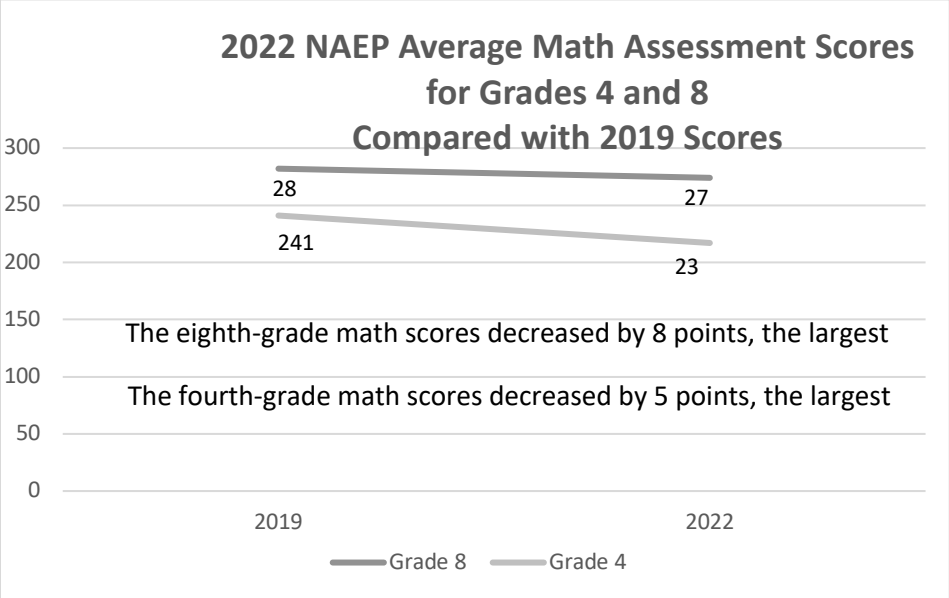
An automatic retention law, passed in a number of states, requires that children who cannot pass a third-grade reading test be retained. The automatic retention law in Tennessee would retain nearly 66% of third graders if the law is applied. If other states applied similar laws, hundreds of thousands of United States children would be retained (Sitrin, 2021). As one Michigan state senator exclaimed, “It’s a misguided law that was onerous before the pandemic. Now it’s just plain cruel” (Sitrin, 2021, para. 10). During the height of the pandemic, some states suspended the third-grade reading law that used standardized tests to determine who is retained and who is not.

Figure 5



Note: National Assessment of Educational Progress (NAEP) (2022a)

Figure 6



Note: National Assessment of Educational Progress (NAEP) (2022b)

Recommendations: Retention or No Retention

While a few retained children experience short-term positive results, the results are short-lived and not sustainable (Jimerson et al., 1997). In general, the consensus, even with pandemic circumstances such as COVID, is that retaining children is neither educationally advantageous,

nor socially or emotionally supportive for children's healthy growth and development (Kamin & Lamb, 2021; NASP, 2021). In fact, the National Association of School Psychologists (NASP) does not support the use of retention as an intervention strategy for the loss of instruction during COVID-19 (NASP, 2021).

Instead of retention, whether COVID-related or not, educators and researchers recommend various alternatives to retaining children such as tutoring programs (Kraft & Goldstein, 2020; Loughlin, 2022; NASP, 2021), out-of-school support models (Bowden & Wasser Gish, 2021), guidance and family programs (Lapan et al., 2007), community partnerships (Sheldon, 2003), enhanced teacher education programs (Darling-Hammond & Richardson, 2009; Loughlin, 2022), and alternative educational opportunities such as mixed-age instead of graded school programs (Stone & Burriss, 2019).

In addition, forced retention based on third grade standardized test reading scores, such as implemented in some states, is not recommended (French & Mauriello, 2021; NASP, 2021; Schwartz, 2022). The better option is not retention, but offering children more support to help them in their learning endeavors (AECF, 2018). Collins (2022) concludes," It feels unfair to retain a child who, through no fault of their own, has been failed by adults. But it's also unfair to fail millions of children, year after year, by not doing what's needed to change how the system works" (para. 18). A world pandemic which impacts the schooling of children should also be considered when choosing between retention and offering children support for educational losses created by a pandemic.

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Page Turners: Books for Children

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A Blue Kind of Day
Written by **Rachel Tomlinson**
Illustrated by **Tori-Jay Mordey**
Kokila, 2022
ISBN 9780593324011

Tomlinson, a registered psychologist, provides readers with a timely story about how a family comes together to help their son deal with a day when he is feeling very blue. The story follows the main character, Coen, who wakes up feeling very down. Coen describes all the ways that his body is impacted by his emotions, as he pulls away from his family who are trying to cheer him up. Soon his family realizes that simply being there for him is the best way to show support. Their closeness and love finally help him to feel better. This text supports readers in learning about emotions, understanding sensory cues, accepting inevitable times when we all feel down and provides supportive guidance. The text would serve classrooms and families well as we all learn to better support mental health. Ages 4-8.

Most Perfect You
Written by **Jazmyn Simon**
Illustrated by **Tamisha Anthony**
Random House, 2022
ISBN 9780593426944

Growing up can be challenging as children work to build their self-esteem and identity. This enchanting story takes the reader on the journey of a loving mother helping her daughter realize that each aspect of her inside and out is both unique and perfect. The love shared between mother and daughter overflows the pages, as the mother enthralls her daughter with a tale of how she chose all of her daughter's unique characteristics before she was born. The beautiful, whimsical illustrations complement the text with both soft pastel and bold colors to make the words come alive. Ages 3-10.

The World's Best Class Plant
Written by **Liz Garton Scanlon** and **Audrey Vernick**
Illustrated by **Lynnor Bontigao**
Putnam, 2023
ISBN 9780525516354

The kids in Room 109 have had it. While other classes have exciting class pets, Room 109 only has a class plant; a boring, green, potted plant that hardly ever grows. What a letdown! Things begin to change when their teacher suggests they name the plant. The newly christened "Jerry" becomes a class plant like no other. Class members begin to give Jerry the tender loving care needed to grow into a thriving spider plant. In turn, Jerry shines and begins to produce baby spiderette plants for all the children to enjoy. This droll, engaging picture book imparts the gentle, yet joyful, lesson that a little care, attention, and appreciation can make a world of difference in life's circumstances. An afterword includes tips for caring for plants. While the winsome end pages offer a "before and after" take on the lives of both the plant and children of Room 109. Ages 4-8.

Yoshi: Sea Turtle Genius
Written by **Lynn Cox**
Illustrated by **Richard Jones**
Anne Schwartz Books, 2023
ISBN 9780593425688

"Inside the egg was genius." This well-researched and beautifully designed picture book celebrates the amazing ability of loggerhead turtles to travel vast distances in order to return to the place in which they were born. Readers will follow Yoshi's life as a sea turtle, from egg to hatchling through adulthood, as she travels across time and over more than 23,000 miles of sea, in order to lay her own eggs on the beach where she first hatched. The storyline strikes the chord of being at once heartwarming, engaging, and filled with fascinating information about sea life. Yoshi's journey has been well-documented by scientists and followed by children and adults from around the world. Now, the story is told with passion by Lynn Cox, herself a long distance swimmer, and brought to life with Richard Jones' mesmerizing illustrations. Ages 4-8.

The Hill We Climb: An Inaugural Poem for the Country
Written by **Amanda Gorman**
Viking Press, 2021
ISBN 9780593465271
First shared on the national stage during the inauguration of U.S. president Joseph Biden, Amanda's Gorman's heartfelt and lyrical poem marked a significant moment in national discourse. This slim book with a foreword by Oprah Winfrey offers the entire text in simple, elegant style. Pages are left intentionally minimal, with nothing to distract from Gorman's powerful words and seemingly effortless play with language. Readers will appreciate the importance of this text for both its historical significance and its recognition of the power of spoken word poetry as an artform. Young readers will appreciate learning from her words, thinking about her thoughtful - and ever hopeful - perspective on the history and future of the United States of America. Ages 8-18.

Mrs. Peanuckle's Earth Alphabet
Written by **Mrs. Peanuckle**
Illustrated by **Jessie Ford**
Rodale Kids, 2023
ISBN 9780593486641

Mrs. Peanuckle is back with another charming alphabet book sure to get the youngest readers interested in thinking about letters, sounds, and the earth we all share. With vivid illustrations, this board book offers children a chance to practice learning letters and sounds while also learning about the world around us. Each page blends basic scientific and geological information with the corresponding letter. The book manages to help children understand the basics of environment and climate and the importance of caring for the earth without being frightening or focusing on issues that we currently face with climate change. Instead, this book is a gentle and loving reminder of how magical the earth and life are - and how important it is for us as humans not to take it for granted. Because of the thoughtful information, this book would be an excellent one for preschool or kindergarten students as they blend early literacy skills with growing awareness of the planet and its needs. Ages 2-5.

A Spark in the Dark
Written and Illustrated by **Pam Fong**
Greenwillow Books, 2022
ISBN 9780063136533

"There is light and there is dark." And so begins this gentle picture book about the times when we all may find ourselves searching for the light in the darkness. Fong uses imagery of a fish in the deep ocean, navigating the space between the warm sun-filled waves above and the cold, dark, and deep ocean below to explore feelings around this theme. This is a beautiful, straightforward text that lends itself to a powerful read-aloud about the feelings we may have when we are in a dark and unknown place. The text encourages the reader to keep searching for the spark, even if you take a wrong turn and are angry or scared. This is an excellent book for launching discussions with young readers about emotions and perseverance in difficult moments. Ages 4-8.

School Trip: A Graphic Novel (The New Kid Book 3)
Written and illustrated by **Jerry Craft**
Quill Tree Books, 2023
In this hilarious new graphic novel Jerry Craft, brings the readers along with Jordan, Drew, Liam, Maury, and their friends from Riverdale Academy Day School, on their school trip to Paris. Not only are the friends challenged with the navigating of a new city and culture, but the trip will challenge the characters to navigate the challenges of true friendship. As with the other books in the New Kid series, Jerry Craft masterfully balances humor with the relevant and important topics. The story offers a safe entry point for middle schoolers and beyond to engage in crucial discussions about race and multiculturism, which is of great value in today's charged political context. Ages 8+.

Sharks: A Mighty Bite-y History
Written by **Miriam Forster**
Illustrated by **Gordy Wright**
Abrams Books, 2022
ISBN 9781419747731

The magnificent shark is well-deserving of this epic oversized picture book detailing how various species of this sea creature have changed over millions of years. Each two-page spread in this informational text highlights an era in which a specific shark lived, with the author focusing on the fossil record and the illustrator bringing these facts to life in colorful and intricate images. Children will enjoy the "toolbox" feature pages which emphasize the tools that sharks use to adapt and thrive in their environments. For example, some sharks have skin which is actually sharp because it is covered in jagged *dental dentricles*, which are "skin teeth!" This engaging book is filled with the latest science and would be an excellent resource for shark lovers in the intermediate grades. Ages 8-12.

Squished
Written by **Megan Wagner Lloyd**
Illustrated by Michelle Mee Nutter
Graphix, 2023
ISBN: 9781338568936

The author/illustrator team that brought readers the best-selling graphic novel, *Allergic,* takes readers on a secondary literary journey in their new graphic novel, *Squished*. Megan Wagner Lloyd (author) and Michelle Mee Nutter (illustrator) introduce readers to eleven-year-old Avery Lee who is the second oldest child (and oldest girl) in a family with seven children. As a young adolescent, Avery finds her family chaotic and irritating. All she wants is her own room; however, her life is turned upside down when she learns her parents may uproot the family from Avery's beloved hometown to move across the country. This delightful and artistically appealing graphic novel will appeal to upper elementary and middle school readers. The graphic novel provides readers from large families someone with whom they can relate and offers readers from small families insights of what it is like to grow up in a large family. Ages 8-13.

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Updates

Thank you for your continued support of the International Journal of the Whole Child and our commitment to holistic learning and to the development of the whole child. We are excited to announce coming in the fall, a new IJWC column titled “Education: Words and Meanings” will provide readers with clarification associated with terms and words used in educational practice and writing. Frequently, words may be used interchangeably when, in fact, the meanings are dissimilar. In other instances, terms may not be as familiar with readers and require further description in order to enhance understanding. Finally, this new column supports readers with additional references to extend their knowledge regarding concepts, practices, and theories. Words and terms represent meaning. It is important we, as educators, use the educational language with accuracy, intentionality, and as well with an understanding of a term’s origin.

The submission deadline for the Fall 2023 issue is September 30th and the Spring 2024 submission deadline is February 28th. The Fall 2023 will be published in December 2023 and the Spring 2024 issue will be published in May 2024. Thank you again for your continued support. We look forward to seeing you in Fall 2023.