

Tennessee Association for Childhood Education International

International Journal of the Whole Child

Volume 4, Number 1

April 2019- October 2019

ISSN 2474-297X



Editor: Kathleen G. Burriss

Middle Tennessee State University, Professor

Associate Editor: Sandra J. Stone

Northern Arizona University, Professor Emeritus

International Journal of the Whole Child

Editorial Team

Editors:

Kathleen G. Burriss- Editor, Department of Elementary and Special Education, Middle Tennessee State University

Sandra J. Stone- Associate Editor, Professor Emeritus, Northern Arizona University

Children's Literature Editors:

Patricia A. Crawford- Department of Instruction and Learning, University of Pittsburgh

Maria T. Genest- Department of Education, La Roche College

Katrina Bartow Jacobs- Department of Instruction and Learning, University of Pittsburgh

Carla K. Myers- Department of Instruction and Learning, Duquesne University

Michelle Sobolak- Department of Instruction and Learning, University of Pittsburgh

Health and Wellness for Children and Families Editors:

Barbara Whitman Lancaster- College of Nursing, Middle Tennessee State University

Katie Wetsell- College of Nursing, Middle Tennessee State University

Tiffany Wilson- Professional Counseling Program, Middle Tennessee State University

Tech Talk Editor:

Nancy Caukin- Department of Educational Leadership, Middle Tennessee State University

International Journal of the Whole Child

Editorial Team (cont.)

STEAM Editors:

Donald Snead- Department of Educational Leadership, Middle Tennessee State University

Brian Stone- College of Education, Northern Arizona University

International Editor:

James Hoot- Professor Emeritus, IJWC International Liaison, University of Buffalo

Early Childhood Editor:

Jane Lim- Department of Elementary and Special Education, Middle Tennessee State University

Elementary Grades Editor:

Kathleen Fite- College of Education, Texas State University

Special Education Editor:

Alicia Pence- Department of Elementary and Special Education, Middle Tennessee State University

International Journal of the Whole Child

Table of Contents

Volume 4 Number 1 2019

Articles:

Childhood Remembered: Reflections on the Role of Play
for Holistic Education in Armenia, Kuwait, Saudi Arabia,
the USA, and Wales 5-19

*James M. Ernest, Amy Nicholas, Shushan Vardanyan,
Fatimah Hafiz, Mohammad Alazemi, Dorielle Dixon*

Critically Reflective Leadership: Defining Successful Growth 20-32

Robert Reardon, Kathleen Fite, Mike Boone, Sierra Sullivan

Explorations on the Benefits of a Holistic Family Language
and Literacy Program in a Latino Community: Multiple Perspectives 33-43

Clarisse Halpern, Daisy Gonzalez, Debra Giambo, Tunde Szecsi

Pictures for Reflection:

I am 10 Years Old: Watch me Grow 44-46

Tech Talk:

SAMR: A Tool for Reflection for Ed Tech Integration 47-54

Nancy Caukin and Leslie Trail

International Journal of the Whole Child

Table of Contents (cont.)

Volume 4 Number 1 2019

ETC.:

A Book Review & Action Plan for Using Renata Galindo's
"My New Mom & Me" 55-59
Publisher: Schwarz & Wade

Pamela Kramer Ertel

Health and Wellness for Children and Families

ACEs and Healthcare: Creating a Positive Future 60-66

Barbara Lancaster, Tiffany Wilson, Katie Wetsell

STEAM

From Theory to Practice: Building Leadership Opportunities through
Virtual Reality Science Expeditions 67-74

Kaitlin Peterson, Brian Andrew Stone

Page Turners: Books for Children 75-81

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

IJWC Updates 82-83

Introduction



Kathleen G. Burriss, Editor

Continuing the IJWC mission to promote an understanding of holistic and integrative learning, the spring issue/ 2019 provides readers with important theoretical underpinnings, relevant best practice examples, and insightful reflections to enrich the daily lives of all children.

Articles

In the first article, "Childhood Remembered: Reflections on the Role of Play for Holistic Education in Armenia, Kuwait, Saudi Arabia, the USA, and Wales," authors, James M. Ernest, Amy Nicholas, Shushan Vardanyan, Fatimah Hafiz, Mohammad Alazemi, and Dorielle Dixon promote understanding of play beyond a developmental perspective and highlight the critical role of play as truly holistic. Using narrative data, wherein adults reminisce childhood play experiences, Ernest and colleagues underscore the integral influence of play in facilitating children's ability to mediate emotions, determine gender roles, and form cultural connections with the past. Toward creating legitimacy and establishing priority for children's play, authors argue for a change in language. This revised narrative prioritizes play by naturally integrating relevant content into play, rather than trying to fit play into the academic schedule. This wording is not mere semantics; the authors believe altering language supports teachers' ability to communicate the integral role of play in children's learning and development. In the current public school arena, underscored by academic and performance benchmarks, Ernest and colleagues caution how diminishing children's opportunities to play may evidence future costs society is not yet aware.

In the second article, "Critically reflective leadership: Defining successful growth," Robert F. Reardon, Kathleen Fite, Mike Boone, and Sierra Sullivan frame leadership practices within an understanding of critical reflection. Their purpose is to support potential leaders toward implementing most effective leadership practices. After providing several examples of leadership models, authors describe the role of reflection in determining which approach is most appropriate

for specific contexts and for particular followers. Effective leaders regard both the goals of the institution as well as the needs of the constituents. In addition to typical administrative roles, teachers, practitioners, and parents may also serve in a variety of leadership capacities. This article bridges the link between theory and practice and provides individuals with insight toward enhancing their own and others' leadership practices.

Drawing connections between holistic learning theory and real-world practice, the third article, "Explorations on the Benefits of a Holistic Family Language and Literacy Program in a Latino Community: Multiple Perspectives," authors, Clarisse Halpern, Daisy Gonzalez, Debra Giambo, and Tunde Szecsi, describe how an early childhood program supported children's and families' abilities to more effectively interact and engage in both the school and extended community. Authors collected data during informal conversations with administrators, teachers, and parents and, through their analysis, describe advantages of a Family Language and Literacy Program including academic gains, positive social and emotional learning, and overall improved inclusive community-related benefits for both children and their families. Clarisse and colleagues describe recommendations to support the challenges confronting newly immigrated Latino families into the school and community. Acknowledging the U.S. changing demographics, authors describe how, as well as diminishing children's and families' stress, this holistic literacy program indicates long-range positive benefits for the child, family, school, and broader community.

Pictures for Reflection

In "I am 10-years-old: Watch me grow," IJWC highlights the dramatic changes experienced by 10 year olds. With much research and media focus on early childhood and the middle school years, what is happening to children in-between as they transition into adolescence? Considering the rapid emotional and physical changes, this Picture for Reflection focuses on the 10 year old and challenges readers to support this extraordinary time in children's learning and development.

Tech Talk

In their article, "SAMR: A Tool for Reflection for Ed Tech Integration," authors Nancy Caukin and Leslie Trail, in addition to elucidating what the SAMR model is and how it can be used, provide practical ways to consider practice in light of this model with rich description to assist teachers to be intentional, strategic, and relevant. Toward integrating technology, authors guide educators to consider the "when, how, and why" of their tech choices.

ETC.

This ETC. component is responsible to directly evidence the link between current research and best practice. Pamela Kramer Ertel, in “A Book Review & Action Plan for using Renata Galindo’s *My New Mom & Me* (Schwarz & Wade)” provides readers with not only a book summary and overview of the relevant literature describing children who are adopted, but as well includes an action plan for using this particular book. Quality literature is an important resource for introducing and reinforcing sensitive and sometimes emotional issues for children. A read-aloud is an excellent beginning, but Kramer Ertel extends practitioners’ abilities to build upon the story and generate efforts to help children decentrate and consider the different circumstance of others in respectful and caring ways.

Health and Wellness for Children and Families

In “ACEs and Healthcare: Creating a Positive Future,” authors Barbara Whitman Lancaster, Tiffany Wilson, and Katie Wetsell discuss the severe and long-lasting implications of adverse childhood experiences (ACEs). These authors, in an effort to provide support and integration, describe seminal medical research linking experiences of abuse, neglect, and household dysfunction in childhood with future health outcomes. Childhood trauma and early experiences of crisis evidence life-long consequences. Sixty percent of the U.S. population indicate a prevalence of ACEs. In order to most positively support children’s holistic development, authors provide insight from the medical profession. Learning from one another, child advocates from a range of disciplines can more effectively collaborate and promote children’s and families’ health and wellness.

STEAM

In this STEAM feature, “From Theory to Practice: Building Leadership Opportunities through Virtual Reality Science Expeditions,” Kaitlin Peterson and Brian Andrew Stone provide the background, motivation, and plan to prepare for virtual reality learning and teaching. Significantly, authors ground their rationale for using new technologies within an understanding of children’s learning and development. Twenty-first century technologies are here; it remains the responsibility of informed educators to implement current technology within an understanding of holistic and integrative learning.

Page Turners: Books for Children

Patricia A. Crawford, Maria T. Genest, Katrina Bartow Jacobs, Carla K. Meyer, and Michelle J. Sobolak, Page Turner editors, provide insightful and descriptive book reviews for a variety of children's ages, stages, and interests. Among others, books include poetry, historical context, and issues associated with children growing and experiencing personal development.

IJWC Updates

This new feature provides readers with important journal announcements and other professional updates.



Childhood Remembered: Reflections on the Role of Play for Holistic Education in Armenia, Kuwait, Saudi Arabia, the USA, and Wales

James M. Ernest^a, Amy Nicholas^b, Shushan Vardanyan^c, Fatimah Hafiz^d, Mohammad Alazemi^e, Dorielle Dixon^f

^{a-f} University of Alabama Birmingham

Dr. James Ernest is a professor and program director for the PhD program in early childhood education at the University of Alabama at Birmingham. James has been able to help secure more than \$7.75 million in grants for a variety of projects and current research focuses on helping Alabama's state systems expand high quality pre-K education and expanding a reflective coaching model used throughout the state. He serves on the editorial board for several international journals. @ Bit.ly/jernest

Amy Nicholas is the CEO of Axon Industries. She has previously been working on her Ph.D. at the University of Alabama at Birmingham in Early Childhood. Over the decades, she has been a classroom teacher and a specialist in reading, mindfulness, learning styles and technology from K-Higher Education. Her passions are neuroscience and mindfulness in all aspects of the classroom.

Shushanik Vardanyan is a Ph.D. student in early childhood education at the University of Alabama at Birmingham. She worked as a kindergarten, first, and second grade teacher in Dubai, United Arab Emirates. She is an advocate for learning through play and whole-child approaches in early childhood education. Her goal is to facilitate outdoor and indoor play opportunities for young children through playground projects and professional developments for early childhood educators.

Mohammad Alazemi is a Ph.D. student in early childhood education at the University of Alabama at Birmingham and will move into a faculty position at Kuwait University after completion of his doctoral program. He is a believer of active learning that promotes logico-mathematical knowledge. His goal is to improve education in Kuwait.

Dr. Dixon is a 1st grade teacher at Pleasant Grove Elementary School. She earned her BS Degree in 2006 and her Master's degree in 2012 from the University of Alabama at Birmingham. In December 2018, she obtained her Ph.D. in Early Childhood Education at the University of Alabama at Birmingham. Dr. Dixon is interested in pursuing a position on the collegiate level in Early Childhood Education in Curriculum and Instruction.

Fatimah Hafiz is a Ph.D. student at the University of Alabama at Birmingham. She believes a quality early childhood education is fundamental for future successes. Her ultimate goal is to support developing early education in her country, Saudi Arabia.

Introduction

Play remains a topic for discussion, debate, and research within the education community. Zigler and Bishop-Josef (2004) provide an historical overview of early childhood; one of their main findings is play is under siege in many educational circles. The authors indicate, through time, there is a move away from play-oriented learning activities to a narrow focus on academics. Outside of the United States, and in many other countries, shifts occurred toward education focusing on academic skills that “deepen the damage and [make] more permanent the ‘achievement’ gap” between many children (Meier, 2009, p. 12). In opposition to this trend, advocates continue to call for more play-oriented and holistic approaches to learning, arguing the play vs. academics debate with academic support for and against the role of play in early childhood (Miller, 2008). Although this work provides important contributions to the field, prior research often gives little voice to teachers’ perceptions about play, especially from varied and diverse cultural backgrounds.

In this article, we argue for a broader view of education in line with Plato’s observation (gender not withstanding) that “The direction in which education starts a man will determine his future life” (Jowett, 1874, p. 249). The current approach draws on the recommendation that we move beyond the typical developmental research view to use an interpretivist analysis that considers history, culture, and context (Swadener & Kessler, 1991). We begin with a short overview of the potential and traditional developmental and academic benefits of play. Our argument then focuses on a less common consideration of the holistic benefit of play: We explore teachers’ cultural reflections about the nature and worth of play through the authors’ personal accounts of playful childhood in Armenia, Great Britain, Kuwait, Saudi Arabia, and the United States of America. Finally, we provide recommendations for the value of play as part of a whole child education.

Developmental and Academic Support for Play

The potential developmental benefits of play are well documented in the literature. Play evidences links to increases in memory, oral language, and school adjustment (Bodrova & Leong, 2005) and the development of children’s logico-mathematical knowledge, abstract thinking, and better social skills (Ridgers, Knowles, & Sayers, 2012). Studies indicate that less play is associated with increases in children’s obesity, decreases in active learning, and negative effects on emotional development and self-esteem (Stegelin, Fite, & Wisneski, 2015). When children are more active in play, we often see a change for the better with behavior problems (Al-Sahel, 2006). As we consider the work of Vygotsky (1930-1935/1978), there is a long

established connection between a child's play and learning to exercise self-control while developing empathy for others.

More recently, we see ample evidence of researchers examining more developmentally and psychologically oriented play-associated relationships. As one example, research shows the importance of a child's self-regulation to other developmental skills and abilities with children as young as six-months to three-years-old. The motivation for self-regulation can come from the brain signaling the dopamine system while the learning engagement comes from the norepinephrine systems. From studies (e.g., Wang & Aamodt, 2012), we see that play does not increase the stress hormone cortisol: play is associated with responses that promote increased opportunities for learning. With an increased understanding of the nature of the brain and its inherent need for play, we understand how the prefrontal cortex develops with the knowledge needed to function in the world. Children gain perceptual, cognitive, social and emotional practice through playing that leads to discovery and learning (Wang & Aamodt, 2012). Even with infants and toddlers, improvements in social emotional development generally, and self-regulation in particular, result in indirect and direct effects on language and cognitive development (Sharkins, Leger, & Ernest, 2016). Here, authors found self-regulation to have a mediating effect on cognition through language. Play exhibits a powerful vehicle through which children develop self-regulation. Decreasing play in early childhood can affect self-regulation that in turn affects language, cognition, and other developmental abilities that relate to later school success.

However, as many reconceptualists (Pinar, 1988, p. 3) of early childhood education argue (see the seminal collection of texts in Kessler & Swadener, 1991), the field of early childhood education reaches well beyond developmental confines. Broader analyses of play can move beyond the narrow developmental benefits. As noted by Swadener and Kessler (1991), researchers often choose narrow "parameters of inquiry" (p. 85) that have become almost an exclusive focus on development. The reconceptualists have advocated for a broader set of analyses that include historical, political, and social dimensions of early childhood, interpreted with respect to meaning within context (Swadener & Kessler, 1991). In essence, an educational analysis may encompass developmental and psychological aspects of play, but are never the sum of these aspects of play. Education is a larger concept.

Education: A Breeding, A Bringing Up, A Rearing

The word "Education" is derived from the Latin *Educātiō* meaning *A Breeding, A Bringing Up, A Rearing*. The object of education has been described as to love beauty (Plato), to create men and women who are capable of doing new things (Piaget), to entertain a thought without accepting it (Aristotle), and what remains after forgetting everything that was learned in school (Einstein). Regardless of how education is defined, it is clear that the intent of education lies far beyond the ability to recall or use academic information in a way that is easily tested in school settings. Although few argue that academics are unimportant as a formal part of education, there has been a worldwide shift to focus on testing and academic ability at the expense of allowing children to

develop more holistic abilities (Meyer et al, 2014). At academic's expense, there has been a dramatic shift in the time engaged in play with data indicating children playing eight hours less every week than their friends did two decades earlier (Elkind, 2008).

Meyer et al. (2014) and several dozen academics from around the world cosigned a letter to the director of the Organization for Economic Co-operation and Development PISA study. The signatories noted the response to global shifts to testing with concerns that this change "takes attention away from the less measurable or immeasurable educational objectives like physical, moral, civic and artistic development, thereby dangerously narrowing our collective imagination regarding what education is and ought to be about" (para. 5). With shifts across the world in how we have made education available to larger communities of children, corresponding questions about the health and wellness of our children continue to surface. Just looking at the United States of America, data from the National Health and Nutrition Examination Survey (Benjamin et al, 2018) estimates more than 10.5 million children (5-18) evidence elevated or high blood pressure. Beyond education, we acknowledge the value of play and its relationship to academics as discussed by the American Academy of Pediatrics (AAP). For example, in Ginsburg's (2007, p. 182) clinical report for the AAP, the author notes "an increased attention to academics and enrichment activities at the expense of recess or free child-centered play." However, young children tend to be more active during school days than weekend days, and more active during recess than during physical education classes (Frömel, Stelzer, Groffik, & Ernest, 2008). At the same time that play and recess decline in school settings, there is a corresponding increase in the proportion of overweight and obese children.

Critics of the decline of play also take a more holistic and existential viewpoint, noting how the shift to a more academic and testing culture is questionable to who we are as people. From this stance, play assumes a natural part of childhood for millennia and reducing play is likely to influence far-reaching consequences of which, at present, we possess limited understanding. For example, Spikins, Hitchens, Needham and Rutherford (2014) described the Neanderthal child as resilient and strong to live through tough climates and extreme situations. The authors described how artifacts that children used as toys doubled as elementary tools. If the benefits of play promote a lasting frame of mind not only for learning but for survival, how are we affecting society if we change a fundamental part of who we are? In early childhood education, with every ebb and flow of policy and practice between academics and play (Zigler & Bishop-Josef, 2006), researchers and advocates continue to document the academic and developmental benefits and challenges with play. A broader view of research is needed to provide a more holistic support for play.

Design and Methods

To add to the literature base for and about play, we explored perceptions of early childhood play from teachers that grew up in diverse cultural settings that included Armenia, Great Britain, Kuwait, Saudi Arabia, and the United States. We became participant observers as we considered our own perceptions of play using Brown and Vaughan (2009) suggestion that as teachers and

professionals that work with preservice and in-service teachers, we can learn much about ourselves when we look at our own play history. Participants in the study were asked to reflect in narrative form about their own early childhood play experiences and also write about cultural changes in their own countries through time as they consider their own personal development as early childhood teachers and professionals. Participants had at least a master's in early childhood education.

For data analyses and interpretation, we focused on emic or 'insider' knowledge (Merriam & Tisdell, 2016) of play reflections and employed a thematic narrative analysis to determine patterns in results. More specifically, we used intrinsic case studies in an instrumental way to "examine a particular case to provide insight into an issue" and with reference to varied cases "particularity and ordinariness" to help synthesize across cases (Onwuegbuzie, Leech, & Collins, 2012, p. 5). The narrative data were treated as stories to provide meaning to findings. The narratives were analyzed for initial codes that, when compared across stories, provided varying cultural childhood themes about play.

Results and Discussion

Across the collective cultural backgrounds, three main themes emerged from the codes: (a) deep and long-lasting emotional memories in the early years, (b) a perception of things learned through play that exist and help define who we are today, and (c) cultural connections that bind our personas to our lived experiences.

Emotions of Early School Experiences

Narrative reflections of play clearly evidenced strong and enduring emotions run hand-in-hand with recollections of early childhood. As is somewhat common, first days in school are tough for children and this was recalled by Hana from Saudi Arabia: "Because I was very attached to my mother, I attended kindergarten for [a] few days. I don't have good memories about it. I used to cry a lot and I did not feel comfortable." What was a somewhat surprising revelation were some of the long-term distressing experiences and negative connotations associated with school. For example, Emir from Kuwait said "I did not like school. In fact, I hated school. Both private and public. School was certainly not a place I look at fondly, but I do have a few good memories." Nare from Armenia shared that "I hated my school. First of all, I hated to wake up early morning to go to school. That is at 8 o'clock. When I taught in Dubai, I could feel the frustration of the kids who used to wake up at 5 a.m. to be at school at 7 a.m. (traffic jam)."

These types of reactions were still prevalent as we moved into higher grades. For example, Emir from Kuwait recalls:

When I was in the first grade, I hated to go to school. I feel that the school looked and felt like a jail even though it was not. Can you imagine that in my country, students in the

classroom were not allowed to speak, move, or do any things without permission from the teacher?

However, some of these perceptions of school changed as reflections shifted to the role of play in education. Contrary to the negative associations that were found when our recollections moved beyond the larger concept of ‘school’ to thinking about play experiences. Claire from the US shared positive memories:

The one thing I did like about the private elementary school I went to was the playground. They had some seriously high slides. They would just get hot when the sun was on them, and I had to wear dresses so it would burn all the way down if it was that time of day. The swings were great, too. I loved to play this twist game in the swings we played.

Even with the element of pain associated with the “burn,” it was clear that it was worth it for the “FUN!” Aniya from the US also mentioned emotions of pure joy while on the playground:

I can remember Preschool, being outside and playing with my friends. Learning how to swing, going down the slide, playing on the see-saw, and the playground activity list could go on and on, but ultimately after being given that time it was like our time to be free. No worries, no demands . . . just FUN!

Perhaps the most surprising finding was the recognition of so many people having so many negative associations with early schooling . . . and yet seeking a career in early childhood education. As Aniya asked, “Children should want to go to school, right? Was there hesitation in your answer? Did you want to go to school?” Similarly, Emir from Kuwait exclaimed, “Children should want to come to the school every day.” Rhys from the UK also recalled negative emotional memories from years ago involving a private school and how these changed when moving to a traditional British nursery school:

I went to a private school where they used the cane and a slipper on your backside when you didn’t do what you should. It’s tough to have a positive view of school when you know your sisters are playing outside in the evening and you have to do lots of homework because if you don’t, you’ll get popped with a slipper or cane as a punishment if you don’t do your work. I kept nagging my parents to send me to the public school where the kids seemed to be much happier with school. At the private school, it was all about academics. When I moved to the public school, they seemed to value the whole child, keeping children engaged and happy, being supportive socially and emotionally.

The Making of a Wo/Man: Holistic Support for Play

In addition to many of the emotional reactions about schooling, many reflections spoke to a broader value of play beyond the academic realm that corresponds with a whole child education. According to Griffin (1981), holistic education “aims at the integration of elements: self and world; mind and body; knowing and feeling; the personal and societal; the practical and

transcendent” (p. 111). To put it simply, play and holistic experiences help form us into the people we are going to be and are natural ways to develop coping mechanisms. Claire from the US recalled one harrowing experience:

When I was in Kindergarten, we all went to my teacher’s house to have a welcome back to school party where she had a family swing and several of us were pushing some other children in it. We were all laughing and playing, and they wanted to go higher, the swing set was popping out of the ground, we pushed harder and it flipped over. I was the only one left standing there with another child screaming pinned under the swing set; everyone else ran and the other children in the swing had managed to jump out. The adults came out and everyone circled around. I had to tell them what happened. Only to hear, “you should never push people in these kinds of swings.” It broke the boy’s leg and my heart, I never meant to hurt him. Because of that trying to find someone to play with was very hard when we went to school. They were afraid of me. I would go play by myself. Eventually, I made a friend.

Whether thinking about who is associating blame, considering high emotions when people get hurt, the formation of friendships, there are a myriad of thoughts that come together to help a child understand self in relation to the world. Play invariably involves some pain and unpredictability, and may “dampen their [a child’s] emotional weighting in order for that discomfort to be regarded as ‘background noise’” (Pellis & Pellis, 2006, p. 265). There are times when children are playing, they get injured. Either, they injure themselves or possibly get injured by a family member or friend or even unintentionally injure someone else. Claire from the USA describes:

When I was in the 3rd grade, one of my guy neighbors was attending the same school I was, and we decided to carry over one of our adventures during recess catch the others up on our mission after school. They were building a new baseball field at the edge of the playground (present day sports complex) and there were these big, huge, delightfully fun cement tunnels we had started rolling each other in. I had my hand on the outside of one these big guys while we were being rolled by some of our friends during our secret mission. Well, it crashed into another cement tunnel crushing my left hand. I say this only because children are going to have accidents playing. They kept telling my mom that they had told us NOT to go out there. I remember hearing my parents talk about how everyone needed to calm down. With everything we do there are risks and things are going to happen. How we handle things happening as adults is what is important. I learned valuable information from that experience.

Amiya from the US wrote about this idea as they note “Pain felt is real, but because children are playing, they will devalue the pain because they were ‘just messing around’ as compared to a situation when they were injured and it was not associated during a play experience.” Here we see how when children are engaged in play, we treat pain through a different lens, in a way ‘toughening us up’ to keep doing what we were doing and work through the pain. It is, as Wang and Aamodt (2012) noted, that through the developmental system of play, children are able to engage in social interactions combined with their physical environment to negotiate risk taking,

distinguish between safe and dangerous and test boundaries storing for later use in life. Therefore, and as Nare from Armenia shared, “decreasing these play opportunities, decreases the chances for preparedness.” Emir echoed these thoughts as “learning through play can promote children to grow in many respects.”

Another set of reflections noted the role of free play in offering, what Hurwitz (2002-2003) considers, children having control over the course of their own learning and this control helps promote the intangibles of motivation and desire leading to mastery and creativity. Again, Claire from the USA describes:

My favorite “girly things” to do were shows for our families, and I loved taking blankets and making “fashion” out of them. I’d make my friends stand on stools while I would tailor these outfits made out of blankets over their clothes. They were simply baby blankets tied, looped, or swayed in different ways covering the essential body parts that needed covering. It would then culminate with a runway show with them walking while I would talk about what a beautiful model they were describing the fashion. The shows we did for our families would be quite the production. We would practice dances, cheers, and gymnastics, come up with costumes, props, have snacks (the first time we forgot drinks, the second time we forgot food), read books, do magic tricks, charge admission (\$.10), create a theatre space in the backyard with seating on both sides of the fence, and pick special music. This event could sometimes last 10 minutes or an hour.

As Claire went on to note, “Talk about learning through play. Even though the landscape changed and the perimeter was limited there was still opportunity for me to continue to learn within my own interest.” This free play experience was full of creativity, innovation, business and service full of future skill sets and opportunities for allowing a young child to explore their interests not preset, prescribed curriculum. Research suggests these types of opportunities in learning, flourish with diverse forms of play (Cheng & Johnson, 2010) and becomes a springboard for problem solving, critical, and divergent thinking skills (Hirsh-Pasek & Golinkoff, 2003). In the context of play, children that are afforded choice tend to be more motivated and engaged (King & Howard, 2014). Russ and Kaugars (2001) recognized in their work that a child’s affect while playing related to a child’s divergence in thinking. When a child has a positive play mood they are more likely to create original responses to situations.

Another set of reflections can be described as children using play as a mechanism to develop important concepts of the mind and body, the knowing and feeling, the self and the world, as essential parts of being human. Hoffman and Russ (2016) remind us of the life skills that are associated with play that include organization and imagination. Also, children learn to manage their own risk (Ridgers, Knowles, & Sayers, 2012) and play helps children understand others’ points of view and build self-confidence (Smilansky & Shefaya, 1990; Wesley & Buysse, 2003). Other life-skills include those noted by Ginsberg (2007): Children forge connections, learn how to share, negotiate, and resolve conflicts and engage in existential thoughts of our relationship to the larger world. These ideas were consistent with several of our participants’ thoughts about play growing us. As Claire from the US shared:

Some of the best memories of my childhood were at home when I could go outside and play. The days were unending in our neighborhood. We started sometime after breakfast and didn't end until we heard the whistle of one of the moms which was on into dusk as the bats would be starting to eat the mosquitoes, and our imaginations were incorporating them into whatever Star Wars, mad scientists, cowboy saga, or game we were playing. We even thought we could chirp to the bats and get them to come eat out of our hands. Ah, to be a child.

The example is clearly one that develops deep and lasting memories that are created when children are free to play. Play becomes time-space for “everyday momentary forms of hopefulness” (Kraftl, 2008, p. 88). Here, as Kraftl explains, there is a joy and pleasure of playing--of doing things for the sake of them, rather than performing obligations for adults--that enable children to maintain an openness to the world. Children can create and take on the environment, work through toxic stressors taking actions that help to reduce the emotional pressures, and thereby enable children to cultivate resilience through play.

Hurwitz (2002-2003) explained the value in an activity where a child can enjoy the moment: Play can help children regulate stress responses and emotional systems by rerouting impulse-driven or under-receptive reactions to unfamiliarity. They are better able to ‘roll with the punches’ (Siviy, 1998) at a neural level negotiating their way through situations that present themselves during play. With our participants, play was felt to be particularly valuable for learning when negotiating social rules. For example, Nare from Armenia reminisced “My grandfather had sacks of wheats in the basement. I thought it would be even more pleasant to use wheats to throw on each other. The feeling of doing something novel and forbidden added more fun to our play.” This was also shared by Rhys from the UK:

My earliest recollection of school was standing in the corner! Three minutes earlier, my friend Neils and I were busy stomping on the Lego's, smashing the constructions, having a whale of a time as we played ‘destruction.’ Apparently, my teacher had other ideas about how Lego's should be treated.

As Berinstein and Magalhaes (2009) found when studying play in Tanzania, many cultures value a more eclectic view of education noting the roles of traditions, culture and standards of living and finding play associated with creativity, healing, and oneness. Engaging in play in these cultures will help a child internalize rules and customs particular to their way of life in a natural and meaningful way.

Cultural Connections to Our Past

A third theme from the narratives was related to helping us link our cultural nuances from past to present. As play is as old as any culture, using play is a natural and logical mechanism to help connect who we are to our ancestors. As French (1977) explains, there has been a shared cultural definition of play that dates at least as far back as ancient Egypt. Archeologists have found wall art depicting children playing with dolls, balls, and what looks like jumping rope. Although some

of these activities might be culturally specific, many transcend cultures. In the following, we see Hana from Saudi Arabia sharing an example of many activities that could be found around the world:

Before going to school, I remember that I loved to play with my mom's makeup and my favorite thing to do was playing with dolls. Despite the fact that I was living with six brothers, I did not like to play their kind of play such as soccer or basketball. I had a small kitchen and that was the best part for me. When I was in the elementary school, I started to join my brothers in their play. In our house, we had a big courtyard that my brother used to play soccer, basketball, volleyball and such. I played with them sometimes if their friends were not there, but if their friends were there, I watch them while they playing because they usually play real rough and tough games. Because our house was the 'boys' house', usually all my cousins (the boys) gather in our house. It was like their club.

Conversely, there was also a perception of culturally-specific nuances that help to define a culture. We see this reflected in Nare's conversation with her mother when living under the old soviet system:

My mom was a teacher during USSR and recently I asked my mom about punishments at school in old times. She told me that even then punishment by law was forbidden, but no student knew about their rights. So, teachers abused the fact that children have no clue about the 'hidden rules' and used their power on them. Culture makes a difference. Kids have no say in my culture, they should obey the adults (as in your culture I assume). Hence, even if kids knew about the law they would not have a say in anything.

Play helps children learn social structure with other people in their homes, school, and community (Wheeler & Swords, 2004). As Hana noted about their own play growing up in Saudi Arabia: "The relationship with my relatives has a lot to do in my childhood playing. We lived at the same neighborhood, very close to each other's, so we played together most of the days." Another reflection from Hana explained

During the weekdays, I go with my mother most the days to visit my grandma, and sometimes we play Domino together, my grandma was a very good Domino player. Another thing we used to do with my relatives was camping in the desert. We spend all the time playing cards, Domino, traditional games, play with the sand, climbing mountain, tag, hide and seek and so on. We play all the time.

Hana continued to mention:

I love games so much. I play with my kids and my nephews and nieces board games, cards, and even the traditional games; I think they love me so much because of that. I also like to play games (board games such as sequences, cards, traditional games) with my grown-up cousins and my sisters-in-law. Writing about play makes me realize something strange. I realize that the older I've gotten, the more I love and value play.

Conclusions and Recommendations

We all come from different backgrounds having experienced play in different forms, and as Brown and Vaughan (2009) suggest, there is much to learn from an exploration of your own play history. Our reflections on play at home, at school, and now as adults has helped us better understand where we are as we ‘play’ the role of educator. As teachers, interpreting our past experiences and how we feel about play today can help inform how we nurture our children’s development. The work of Piaget informs us that children learn and develop when interacting with their environment (Piaget, 1962) and Johan Huizinga has helped us understand the role of play as a necessary component in the development of culture and society (Huizinga, 1944). Children need more time playing, and they need opportunities to guide their play (Hurwitz, 2002-2003). Reflecting on our own experiences of being a child and valuing teacher research as a way of knowing (Rust, 2009), the choice to have children engage in play is more than the sum of academic gains. Also, from an access to education perspective, research shows that children’s social skills matter. Gilliam (2005) found preschoolers to be three times as likely to be expelled than children in kindergarten through 12th grade and their behavior was the primary reason for being expelled. The opportunity to play brings a greater opportunity for self-expression and opportunities to work through social interactions and understand and regulate emotional feelings.

As proponents of a more holistic view of education, it is important advocates remain mindful of the views of parents that we might collaborate with one another. Prior research indicates that in their urgency to have their children read and write, parents can marginalize or fail to appreciate the learning benefits of play (Garcia-Coll & Meyer, 1995). However, McCloskey (2011) notes that although parents often emphasize the fundamentals associated with reading, writing, arithmetic, there is an implicit recognition of the value of economics, arts, language, and other areas of learning so that “each student becomes academically, socially, and emotionally well-rounded” (p. 81). In our research, we found connections across cultures that coincide with emotional wellness and more holistic supports for child development. On the surface, parents are often concerned with academics, but not at the expense of the value of play for learning about navigating social circles. Also, there was a recognition that play helped us remember who we were in the past as people of today: remembering how we enjoyed ourselves while accepting some of the injuries that almost always go in hand with play is important as well as remembering how we interacted with others during play, at the child, parent, grandparent level. As Witten, Kearns, Carroll, Asiasiga, and Tava’e (2013) note, a decline of outdoor play has seen corresponding declines with the development of intergenerational relationships. It might be that conversations with parents about the function of play to help bridge generations might be a fruitful approach for play advocates.

As children, and as we navigate who we are as we mature to adolescence and adulthood, we can draw on the work of Gray (2016). His work shows that children in less academically-oriented schools also discover their interests and passions, develop specialized skills in those realms, and often go on to successful careers that make use of those skills. Gray noted that this curiosity and playfulness blooms in an environment rich in self-educational opportunities, children learn to read, write, and perform numerical calculations without deliberate training, in their own ways

and in their own time. Furthermore, Gray provided evidence from 37 case histories of literacy that did not receive formal reading instruction and 61 responses to an informal qualitative analysis on SAT preparation for math. Results indicated that when children are regularly exposed to literate and numerate environments, they learn these skills without coerced instruction. The skills that are acquired developmentally during play set the scene for social interactions in a child's life as they become mindful of the emotions, motivations, desires, and actions of others. Children learn to modify their own actions and reactions in response to these encounters. Play then becomes a "willful belief in acting out one's own capacity for the future" (Sutton-Smith, 1997, p. 198).

Recommendations from this work include working with principals and other administrators so that teachers can implement scheduling to safeguard flexibility throughout the day for play. Rather than advocating for having to fit play into an academic day, teachers can advocate for working our academics into our play: altering our language we use as teachers can be helpful here. As many reflections indicate, initial emotions to a first day/week of school are lasting memories that can shape our perceptions of school. If teachers use a play-based approach to introduce young children into a classroom that mirrors home life or a community play-based mothers' morning day out, some children may be less likely to develop the strong negative emotions that some people have toward schooling. As professional educators, we can better publicize the importance of play in the community, sharing moments of excitement and learning success that will be observed for others to benefit. Play is an integral part of our lived experience whether it is indoors or outdoors, structured or not, we play leaving us to hone in on the power of diversity and the importance of accountability. The challenge is how to capitalize on both in a demanding era. Educators can meet this challenge by making the development of the whole child their top priority (Nelson, 2009). Miller (2008) reminds us "The child is not merely a future citizen or employee in training, but an intricate and delicate web of vital forces and environmental influences" (p. 5). Said another way, a child is a child, and as the Office of the United Nations High Commissioner for Human Rights (1989) noted, play is a right of every child. It is important that as adults we remember the value of play as central to working through emotions, being aware of the developing who we are as women and men, and forging cultural connections to our past. Early childhood is a formative period of development and play is not just an integral mechanism for learning academics but the sine qua non of more holistic learning and development.

References

- Al-Sahel, R. (2006). Children's behavioral problems (BPs) in kindergarten: Impact of time of day and activity type. *Social Behavior & Personality: An International Journal*, 34(4), 399-412.
- Benjamin, E., Virani, S., Callaway, C., Chamberlain, A., Chang, A., Cheng, S., & Wong, S. (2018). Heart Disease and Stroke Statistics Update. *Circulation*, 137: e-67-e492. Available doi: 10.1161/CIR.0000000000000558
- Berinstein, S., & Magalhaes, L. (2009). A study of the essence of play experience to children living in Zanzibar, Tanzania. *Occupational Therapy International*, 16(2), 89-106.
- Bodrova, E., & Leong, D. J. (2005). Why children need play. *Early Childhood Today*, 20(1), 6-7.
- Brown, S., & Vaughan, C. (2009). *Play: How it shapes the brain, opens the imagination and invigorates the soul*. New York, NY: Penguin Group.
- Cheng, M. F., & Johnson, J. E. (2010). Research on children's play: Analysis of developmental and early education journals from 2005 to 2007. *Early Childhood Education Journal*, 37, 249-259.
- Elkind, D. (2008). The power of play: Learning what comes naturally. *American Journal of Play*, 1(1), 1-7.
- French, V. (1977). History of the child's influence: Ancient Mediterranean civilizations. In R. Q. Bell & L. V. Harper (Eds.), *Child effects on adults* (pp. 3-29). Hillsdale, NJ: Erlbaum.
- Frömel, K., Stelzer, J., Groffik, D., & Ernest, J.M. (2008). Physical activity of children aged 6-8: The beginning of school attendance. *Journal of Research in Childhood Education*, 28(1), 29-40.
- Garcia-Coll, C. T., & Meyer, E. (1993). The socio-cultural context of infant development. In C. H. Zeanah (Ed.), *Handbook of infant mental health* (pp. 56-69). New York, NY: Guilford.
- Gilliam, W. (2005). *Prekindergartners left behind: Expulsion rates in state prekindergarten systems*. Report. New Haven, CT: Yale University Child Study Center. Retrieved from www.fcd-us.org/sites/default/files/ExpulsionCompleteReport.pdf
- Ginsburg, K. R., (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191.
- Gray, P. (2016). Children's natural ways of educating themselves still work: Even for the three Rs. In D. C. Geary & D. B. Berch (Eds.), *Evolutionary perspectives on child development and education* (pp. 67-93). Cham, Switzerland: Springer.
- Griffin, R. (1981). Holistic education: One person's perception. In A. Harris (Ed.), *Holistic education for living: Holistic education series* (pp. 108-122). Del Mar, CA: Holistic Education Network.
- Hirsh-Pasek, K., & Golinkoff, R. (2003). *Einstein never used flashcards: How our children really learn and why they need to play more and memorize less*. Emmaus, PA: Rodale Press.
- Hoffmann, J. D., & Russ, S. W. (2016). Fostering pretend play skills and creativity in elementary school girls: A group play intervention. *Psychology of Aesthetics, Creativity, and the Arts*, 10(1), 114-125. Huizinga, J. (1944). *Homo ludens*. Switzerland: Routledge.

- Hurwitz, S. C. (2002-2003). To be successful—let them play! *Childhood Education*, 79(2), 101–102.
- Jowett, B. (1874). *The dialogues of Plato: Translated into English with analyses and introductions; Book IV, 425-B*. New York, NY: Scribner, Armstrong, and Co.
- Kessler, S., & Swadener, E. B. (Eds.) (1991). *Reconceptualizing the early childhood curriculum: Beginning the dialogue*. New York, NY: Teachers College Press.
- King, P., & Howard, J. (2014). Children's perceptions of choice in relation to their play at home, in the school playground and at the out-of-school club. *Children & Society*, 28, 116-127.
- Kraftl, P. (2008). Young people, hope, and childhood hope. *Space and Culture*, 11(2), 81-92.
- McCloskey, M. (2011). What does whole child education mean to parents? *Educational Leadership*, 68(8), 80-81
- Meier, D. (2009). What I've learned. In C. Glickman (Ed.), *Those who dared* (pp. 9-20). New York, NY: Teachers College Press.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: Jossey-Bass.
- Meyer, H., Lori, A., Ball, S. J., Barber, M., Beckett, L., Berardi, J., & Zhao, Y. (2014, May 6). *OECD and PISA tests are damaging education worldwide – academics*. The Guardian. Retrieved from <http://www.theguardian.com/education/2014/may/06/oecd-pisa-tests-damaging-education-academics>
- Miller, R. (2008). *The self-organizing revolution: Common principles of the educational alternatives movement*. Brandon, VT: Holistic Education Press.
- Nelson, H. (2009). Arts education and the whole child. *Principal*, 88(3), 14-17.
- Office of the United Nations High Commissioner for Human Rights. Convention on the Rights of the Child. General Assembly Resolution 44/25 of 20 November 1989. Available at: <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- Onwuegbuzie, A. J., Leech, N. L., & Collins, K. M. T. (2012). Qualitative analysis techniques for the review of the literature. *The Qualitative Report*, 17(28), 1-28. Retrieved from <http://nsuworks.nova.edu/tqr/vol17/iss28/2>
- Pellis, S., & Pellis, V. (2006). Play and the development of social engagement. In P. Marshall, and N. Fox, (Eds.) *The development of social engagement* (pp. 247-274). New York, NY: Oxford University Press.
- Piaget, J. (1962). *Play, dreams and imitation in childhood*. London: Routledge & Kegan Paul.
- Pinar, W. (Ed.) (1988). *Contemporary curriculum discourses*. Scottsdale, AZ: Gorsuch Scarisbrick.
- Ridgers, D. N., Knowles, R. Z., & Sayers, J. (2012). Encouraging play in the natural environment: a child-focused case study of Forest School. *Children's Geographies*, 10(1), 49-65.
- Russ, S. W., & Kaugars, A. S. (2001). Emotion in children's play and creative problem solving. *Creativity Research Journal*, 13(1), 211-219.
- Rust, F. O'C. (2009). Teacher research and the problem of practice. *Teachers College Record*, 111(8), 1882-1893.
- Sharkins, K. A., Leger, S. E., & Ernest, J. M. (2016). Examining effects of poverty, maternal depression, and children's self-regulation abilities on the development of language and

- cognition in early childhood: An early head start perspective. *Early Childhood Education Journal*, 45(4), 493-498.
- Siviy, S. (1998). Neurobiological substrates of play behavior. In M. Bekoff & J. Byers, J. (Eds.). *Animal play: Evolutionary, comparative and ecological perspectives* (pp. 221-242). Cambridge, MA: Cambridge University Press.
- Smilansky, S. & Shefatya, L. (1990). *Facilitating play: A medium for promoting cognitive, socioemotional and academic development in young children*. Gaithersburg, MD: Psychological and Educational Publications.
- Spikins, P., Hitchens, G., Needham, A., & Rutherford, H. (2014). The cradle of thought: Growth, learning, play and attachment in Neanderthal children. *Oxford Journal of Archaeology*, 33(2), 111-134.
- Stegelin, D. A., Fite, K., & Wisneski, D. (2015). The critical place of play in education. A collaboration between the US play coalition and the Association of Childhood Education International (ACEI). Retrieved from <https://usplaycoalition.org/wp-content/uploads/2015/08/PRTM-Play-Coalition-White-Paper.pdf>
- Sutton-Smith, B. (1997). *The ambiguity of play*. Cambridge, MA: Harvard University Press.
- Swadener, E. B., & Kessler, S. (1991). Introduction to the special issue. In Kessler, S., & Swadener, E. B. (Eds.). *Reconceptualizing the early childhood curriculum: Beginning the dialogue* (pp. 85-91). New York, NY: Teachers College Press.
- Vygotsky, L. S. (1930-35/1978). *Mind in society: The development of higher mental processes*. M. Cole, V. John-Steiner, S. Scribner, and E. Souberman (Eds. and trans.). Cambridge, MA: Harvard University Press.
- Wang, S., & Aamodt, S. (2012, September). Play, stress, and the learning brain. *Cerebrum*, 24(1), 1-12.
- Wesley, P. W., & Buysse, V. (2003). Making meaning of school readiness in schools and communities. *Early Childhood Research Quarterly*, 18, 351-375.
- Wheeler, R. S., & Swords, R. (2004). Codeswitching: Tools of language and culture transforms the dialectally diverse classroom. *Language Arts*, 81(6), 470.
- Witten, K., Kearns, R., Carroll, P., Asiasiga, L., & Tava'e, N. (2013). New Zealand parents' understandings of the intergenerational decline in children's independent outdoor play and active travel. *Children's Geographies*, 11(2), 215-229.
- Zigler, E. F., & Bishop-Josef, S. J. (2004). Play under siege: A historical overview. In E. F. Zigler, D. G. Singer, & S. J. Bishop-Josef (Eds.). *Children's play: The roots of reading* (pp. 1-13). Washington, D.C.: Zero to Three Press.
- Zigler, E. F., & Bishop-Josef, S. J. (2006). The cognitive child versus the whole child: Lessons from 40 years of Head Start. In D. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = Learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 15-35). New York, NY: Oxford University Press.



Critically Reflective Leadership: Defining Successful Growth

Robert Reardon^a, Kathleen Fite^b, Mike Boone^c, Sierra Sullivan^d

^{a-d}Texas State University

Dr. Reardon is an Associate Professor of Adult Education at Texas State University. His research focuses on Leadership, Organizational Learning, Quantitative Methods and STEM Education. He also works in manufacturing to develop leadership skills in risk assessment.

Dr. Kathleen Fite is a Professor in the Department of Curriculum and Instruction at Texas State University. Her research focuses on development and learning across the lifespan, spirituality, leadership and motivation.

Dr. Mike Boone is Professor Emeritus (Retired) in the Educational Leadership program at Texas State University. A former school superintendent and principal, his research interests include School Leadership Development, Servant Leadership, the Superintendency, and School Finance. He currently resides in San Marcos, Texas.

Sierra Sullivan serves as a Doctoral Research Assistant and is a second year doctoral student in the Adult, Professional, and Community Education program at Texas State University. Her research focuses on student veteran transition from war zones to higher education institutions, impact of faculty development methods for military sensitivity training, and the student veteran experience on the college campus.

Abstract

The purpose of this article is to propose a technique that can be used by emerging leaders when considering adopting the most appropriate leadership styles, behaviors or actions in a particular context. The authors review several different leadership models explored by scholars during the past six decades; not all of these models work for all leaders in all situations. In order to become effective leaders, authors propose the use of reflection-in-action to facilitate emerging leaders when faced with challenging situations. By considering a descriptive, yet brief informal checklist, the emerging leader can be supported in choosing from different models or approaches.

The practical application of this information is to assist those mentoring emerging leaders and leaders themselves to develop reflective practices and insightful dispositions necessary to navigate the complex situations encountered in today's daily interactive environments. This original work combines the literature of leadership with Schön's work on reflective practice. While it seems an obvious application of Schön, the concept of critically reflective leadership is not prevalent in the literature.

Keywords: Leadership; Critical self-reflection; Reflective practice

Critical self-reflection, considered the most important skill that educators can impart to an adult learner, is "a critique of a premise upon which the learner has defined a problem" (Mezirow, 1998, p. 186). This skill is a technique that facilitates an adult re-examining his or her basic beliefs in order to improve understanding. Compatible with critical reflection, Schön's (1983) concept of the reflective practitioner concludes that without critical reflection, the professional is bound to technical rationality. To further simplify, without critical reflection, professionals act as they are taught, or act based on experience. Schön (1983) asserts this is a limited form of practice; it is critical reflective practitioners think in action in order to be responsive, timely, and insightful. Using critical reflection, practitioners can think beyond their training and past experiences and explore, at least as a mental exercise, possibilities that have been beyond their experience. By mastering this skill set, this acquired tool will, presumably, lead to professional growth (Schön, 1983).

Critical self-reflection has applications beyond professional practice. Flores, Matkin, Burbach, Quinn, and Harding (2012) argue that critical thought is a key part of effective leadership and that college graduates have, for the most part, not developed the techniques necessary to reflect on their performance as leaders. In school, students learn models and frameworks that will be transferred to their lifeworld after leaving the academic environment. Schön (1983) refers to this as technical rationality. Comer (2016) found this practice does not work because of the unique and conflicting aspects of the dynamic work environment. Professionals reflect on practice and modify their mental models based on experience. This reflection may be tacit or thoughtful, and the practitioners fit their teaching to their experience. Schön (1983) and Comer (2016) assert that thoughtful and purposeful reflection leads to more accurate and robust mental models of practice.

Beyond the ability to master critical reflection to help an individual become a successful leader, it is important to examine the different qualifiers that individuals in effective leadership positions exhibit. Since the middle of the 20th century, scholars continue to define the attributes of successful leadership using several different models. After World War II, research focused on explaining how an entire country could follow the leadership of someone as evil as Hitler. The Authoritarian Model describes leaders that demanded absolute obedience from followers (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). Other models were developed to describe more socially acceptable practices of leadership. Charismatic Leadership emerged from the writing of Weber (2009) and continues to be cited in scholarly work since the 1940s (Conger

& Kanungo, 1987). Conger and Kanungo (1987) describe a Charismatic Leader as a likeable person whose power is based on expertise, respect, and admiration. The Path Goal Leadership model (Vroom, 1964; House, 1971) describes the function of leaders as providing a motivating environment for their subordinates. Another leadership model, Servant leadership (Greenleaf, 2002), presents a model wherein the leader works to satisfy the needs of those being led. Additionally, the Authentic Leadership model (Gardner & Schermerhorn, 2004) expects leaders to act in a manner consistent with their beliefs. It relies on a belief that all individuals in an organization are willing to act towards the goals of the organization. The Spiritual Leadership model (Fry, 2003) builds on intrinsic motivation of members and individuals and highlights working in service to the key stakeholders of the organization; altruistic love is regarded as integral within an understanding of leadership. Finally, Burns (1978) differentiates between Transactional Leadership, which relies on a system of quid pro quo exchanges between the leaders and followers and Transformational Leadership, a model which relies on motivating followers to identify with something—an organization or cause—larger than themselves.

Scholars wishing to isolate distinct practices of effective leaders developed numerous instruments to measure the characteristics or behaviors of leaders. Several leadership assessment instruments are currently in use. For example, scholars developed the F-scale (F stands for fascist) to measure characteristics associated with an Authoritarian Personality (Vroom & Mann, 1960). Another example, the Spiritual Assessment Scale, measures factors associated with Spiritual Leadership (Beazley, 1998). Additionally, the Leadership Practices Inventory (Posner & Kouzes, 1988) is widely used to measure leader performance on five distinct components of effective leadership. In sum, each of these instruments measure attributes associated with one or more models of leadership. Although these instruments are deemed effective in case-by-case research examples, none seem to apply to all the models of leadership.

While instruments that measure attributes are useful in academic settings, a practicing reflective leader would not be able to do a formal assessment to determine which model of leadership is more closely aligned with their personality and which leadership model might be most effective for a particular context. Instead, a reflective leader would examine his or her values, beliefs, behaviors, and impact on the organization as compared against some set of internal criteria. He or she then modifies those values, beliefs, and behaviors to become a “better” leader. What makes this reflective process so daunting a task is the decades of academic history describing the attributes of effective leadership. The resulting descriptions describe an assorted miscellany of occasionally incompatible leadership attributes.

The purpose of this discussion is to propose a means by which leaders, attempting to become critically reflective, can determine criteria that can be used to further his or her growth as an effective leader. First, several models of leadership will be described. Then using the existing leadership literature, characteristics of self-reflective assessment are described for each type of leadership.

Models of Leadership

Several models of leadership exist in both the scholarly and popular literature. Additionally, this discussion includes models that were considered important to particular fields of academic endeavors or research. This analysis does not attempt to describe all possible models; rather, this content identifies the more well-known models from which characteristics of effective leadership may be gleaned.

Table 1 displays nine models of leadership and the scholars whose work undergirds each model.

Table 1

Models of leadership with foundational authors

Model	Reference
Authentic Leadership	(Avolio, Walumbwa, & Weber, 2009)
Authoritarian Leadership	(Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Vroom & Mann, 1960)
Charismatic Leadership	(Weber, 2009)
Five Practices of Exemplary Leadership Model	(Kouzes & Posner, 2006)
Path Goal Leadership	(House, 1971)
Servant Leadership	(Greenleaf, 2002)
Spiritual Leadership	(Fry, 2003)
Transactional Leadership	(Burns, 1978)
Transformational Leadership	(Burns, 1978)

To further the reasoning essential for this analysis, it is important to begin with a brief overview of the models of leadership considered as important.

Authoritarian Leadership

Descriptions of Authoritarian Leadership emerged in the years immediately after World War II (Vroom & Mann, 1960). Scholars sought to understand how entire nations willingly conformed to the will of authoritarian leaders like Hitler, Mussolini, or Stalin who espoused dictatorial values and practices that were inconsistent with the norms of a democratic society (Adorno et al, 1950). Authoritarian leaders rely on their power relationships with followers to force compliance (Schuh, Zhang, & Tian, 2013). This model of leadership has been called “command and control,” and is associated with the Theory X (MacGregor, 1960) concept of leadership. Distance is maintained between leader and followers and most communication flows from the leader to

the followers (Hackman & Johnson, 2013). Authoritarian leaders work without regard for the well-being of followers (Schuh et al, 2013).

Charismatic Leadership

In this model of leadership, followers in the organization do not rally around the formal leader in fear of an external threat. Instead, they seek the leadership of an individual whom they believe exhibits the skill, values and goals congruent with their own worldview. Grabo and van Vugt (2016) assert that followers are attracted to the charismatic leader and use that attraction as a focus to orient their activities. Weber (2009) described charisma as a characteristic of leadership as early as 1947, and researchers continued to attribute worker motivation to external charisma well into the 1970s (Alschuler & Thompson, 1969; Juan, 1967; Vroom, 1964).

Path Goal Leadership

Path Goal Leadership also makes worker motivation a duty of the leader. In this model, personal charisma is not the motivator, instead the leader's role is to help link worker or follower effort with positive communities or organizational goals (House, 1971). The foundation for this model of leadership is found in the expectancy theory of motivation (Vroom, 1964). Other scholars examined motivating factors for workers with one of the most notable models of worker motivation, namely the 2-factor model of worker motivation (Herzberg, Mausner, & Snyderman, 2011). Presumably, leaders motivate followers. House (1971) describes a mathematical approach to Path Goal Leadership where worker motivators are related to actions.

Transactional Leadership

This model bears similarities to Path Goal Leadership. Leaders still work to provide external motivators to followers (or workers) (Burns, 1978). In this model of leadership, leaders depend on communications between the leader and the followers. Following is dependent on consent of the followers (Burns, 1978).

Transformational Leadership

Burns (1978) contrasted Transformational and Transactional Leadership, describing Transactional Leadership as a more traditional model and Transformational Leadership as a more holistic approach. Transformational Leaders raise followers' levels of awareness of the vision of the future and provide a set of morale and motivational factors that guide the actions of the organization. Burns also described alignment of follower skills with the tasks required to meet organizational goals. Bass (1985) argued that leaders could be transactional or transformational depending on the context. Schuh et al (2013) maintain that transformational leading is amoral and that leaders could use this model of leadership to motivate their followers for good or bad.

Five Practices of Exemplary Leadership Model

Kouzes and Posner (2006) proposed a model of leadership that is frequently cited. The model includes five practices of leadership:

- Model the Way

- Inspire a Shared Vision
- Challenge the Process
- Enable Others to Act
- Encourage the Heart (Kouzes & Posner, 2006; Posner & Kouzes, 1988).

The Leadership Practices Inventory (LPI) measures these five practices of leadership. This inventory is widely used and cited. This model, like several others, focuses on leaders' roles in providing external motivation to followers.

Servant Leadership

Greenleaf (2002) describes a model where one of the main roles of leadership is stewardship for the followers. Simply put, the leader acts as a servant/enabler in ways that support followers as they focus on achievement of the organizational goals. Greenleaf first put forth this model of leadership in the 1980s, and it is cited and implemented by numerous scholars throughout a number of research endeavors. There are several instruments that have been described to measure aspects of Servant Leadership (Barbuto & Wheeler, 2006; Dennis, Kinzler-Norheim, & Bocarnea, 2010; Laub, 1999; Liden, Wayne, Zhao, & Henderson, 2008; Sendjaya & Sarros, 2002; Van Dierendonck, 2011; Wong, Davey, & Church, 2007). While Servant Leadership indicates a strong intuitive appeal among practitioners and scholars, research on this model of leadership continues.

Spiritual Leadership

More than one model of leadership represents Spiritual Leadership (Beazley, 1998; Fry, 2003), but Fry's description predominates. The key characteristic described by Fry is altruistic love. Fry, Vetucci, and Cedillo (2005) provide an instrument to measure the characteristics of Spiritual Leadership.

Authentic Leadership

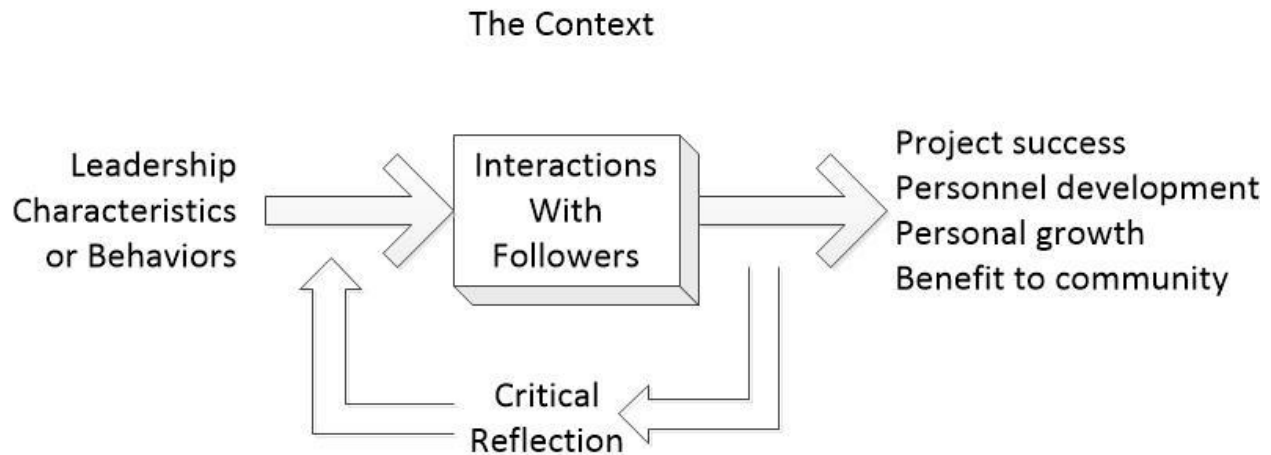
As the name implies, Authentic Leaders share their actual emotions, beliefs, and goals with their followers (Avolio et al, 2009). One of the main mechanisms of Authentic Leadership is the promotion of trust and belief in others among-and- between both the followers and the leaders. According to Gardner and Schermerhorn (2004), trust and belief in others lead to positive organizational behaviors and self-efficacy in the individual and the organization. Walumbwa et al. (2008) developed and validated an instrument to measure Authentic Leadership.

Leadership as an Open System

To conceptualize critical reflection in leadership, the process of leadership will be described using the lens of open systems theory (Scott & Davis, 2007). Open systems consist of inputs and outputs, the processes within the system boundaries and the context (or environment) in which the system operates. Feedback is a reflective process that allows adjustment to the system. Figure

1 is a representation of leadership when considered as an open system. Here, leader characteristics or attributes are the system inputs. Interactions of the leader with followers are the primary processes and actions of individuals or organizations, as outputs, become the outcomes. The context defines the resources, goals, and limitations.

Figure 1: Leadership as a system



Open systems are not inherently stable. The system is normally monitored and adjusted to compensate for perturbations or instability. Watch someone driving down a straight road. Ideally no steering would be required. However, in even this most unchanging situation, the driver will make small adjustments to the steering. In a generic open system, feedback can be based on observed attributes of the context, inputs, processes, or outputs. Feedback is then used to adjust the system. Depending on the system and the situation, adjustments can be made to the inputs, the processes or even the contexts.

For leadership, feedback is the process of critical reflection on the leader's style and practices. In other words, the critically reflective leader will be aware of personal goals, context, his or her own attributes, and actions and his or her impacts on the actions of individuals or the outcomes of organizations. The reflective analysis of the leader intends to contribute to individual growth and improvement. The intention of the current analysis is not to describe a new model of leadership, but to support emerging leaders by describing existing models of leadership to illustrate the potential of using critical reflection on their personal style of leadership.

Leader Characteristics

The scholars who have conceptualized the various models of leadership take pains to clearly identify the traits and behaviors of an ideal leader. For example, charismatic leaders are described as having excellent interpersonal skills (Grabo & van Vugt, 2016) while servant

leaders are depicted as serving the needs of their followers (Greenleaf, 2002). Here we describe four aspects of leadership common across various leadership models.

Interaction with followers

In many cases, leadership can be defined by the interactions or relationship between the leader and followers. Authentic leaders rely on trust to maintain motivation. Path Goal leaders carefully define organizational goals to provide external motivation for followers. In the Five Practices model, motivation is provided by the interactions of the leader with the followers (Kouzes & Posner, 2006).

Actions and development of followers

Most of the models describe steps by the leader to develop the followers or, at least to, monitor their performance. Advocates of the Servant and Spiritual Leadership models both focus on the primary need to care for, and support development of their followers.

Outcomes

Authoritarian, Path Goal, and Transactional models of leadership include a focus on outcomes in the traditional sense. That is, these models focus on motivating followers to meet organizational goals. Authentic, Transformational, Spiritual, and Servant leadership models acknowledge follower growth and satisfaction as valid goals.

Success, reward, and growth

Authoritarian Leadership is one of the theories that seems to acknowledge the leader as interested in the leadership process. Realistically, leaders can be motivated by altruistic or personal goals. In practice, most leaders tend to be motivated by a combination of both. Leaders want the same things that the followers want, such as wanting to do a good job, and recognition for accomplishments. Inevitably, leaders will want to grow in some way (personally or professionally). Any model of leadership that ignores these motivators is incomplete.

Critically Reflective Leadership

Most leadership models are prescriptive. They tell the reader what characteristics are found in leaders. These can be thought of as learning outcomes or competencies for someone learning to lead. Hopefully, these characteristics are transferred to practice and result in the effective implementation of leadership; however, the actions of leadership are similar to professional practice. It takes time and effort to successfully apply these skills or behaviors. Schön (1983) asserts that it is critical for practitioners to reflect-in-action to improve their practice. In fact, he argues it is essential that reflection-in-action be taught to potential leaders. This reflection-in-action is one form of critical self-reflection.

Adopting reflection-in-action is integral for nascent leaders to fully develop skills and dispositions. Leaders think through what they are doing and provide themselves with critique. At this point in their development and practice, the models of leadership begin to provide less

support. Just as in any professional practice, the learning objectives or competencies are a start, but now transfer to effective practice. In leadership, the context is unique and changing. Individuals change and grow; the goals, contexts, organizations, and problems remain as dynamic.

The critically reflective leader will want to individually assess the organization's or individual's progress towards goals and then, modify behaviors to meet those unique goals. Obviously, this implies the leader knows what the goals are which is not always clear. In some cases, the objectives of the organization are paramount; in other instances, the development of the team or individual team members become key goals. The success of the leader is a necessary goal if the leader wants to continue leading; effective leaders realize leadership is a complex balance of difficult goals.

The intellectual balance of potentially competing goals defines critically reflective leadership. Ideally, leaders would always seek development and job satisfaction for their followers, but many times resource limitations will force a choice between "getting the job done" or allowing individuals to develop their skills. In other situations, the goals of the organization may conflict with the values of the leader. In these cases, the leader chooses between being a "successful" leader or being true to his or her personal values. (In extreme cases, the leader may need to seek membership in other organizations). The practicing leader may draw on characteristics from different models of leadership depending on the contexts and the goals that are most important at the time. For example, when it comes to compliance with laws or regulations, the most authentic leader may adopt some authoritarian behaviors. When followers demonstrate personal issues that limit their effectiveness, a Path Goal leader may seek other paths to allow the individual to mediate their individual issues without sacrificing the goals of the organization.

This is not to say leaders can abandon all consistency and act completely differently based on the situation. Leaders evidence constraint as guided by their values, the ethical guidelines of the context, and applicable laws and regulations. Followers look to their leaders for well-defined and consistent behaviors and would be troubled by apparently random shifts in the behaviors of their leaders.

The critical leadership checklist

Schön (1983) and Mezirow (1998) believe that critical reflection should be taught to leaders. Assuming the beginning leader understands the process of reflection-in-action, the process might be described with the following checklist questions:

What are the goals here? Identify the organizational goals keeping in mind that there may be different categories of goals that are not obvious. For example, solving a labor issue will have an impact on the profit of the organization, compliance with federal or state labor laws, and/or community relations.

In academic settings, it is difficult to simulate the several diverse goals faced by leaders in real-world settings. There are often situations where the goals conflict to varying degrees. Goals are also not static. They change over time. New goals may emerge before existing goals are met.

Leaders set the priorities (to some extent) and set schedules, allocate resources, and communicate goals and strategies.

Do the goals of individuals need to be considered? As intimated in the last section, real-world settings involve multiple goals competing for limited resources. When setting priorities and leading organizations, leaders evaluate the needs of individuals as well as the needs of the organization(s). For example, there may be someone who will gain experience or knowledge (or grow in other ways) by working on a particular goal. The leader may need to seek the best balance among potentially incompatible goals.

For the current situations, what leadership skills or behaviors should be employed for the current situation? Multiple diverse goals call for diverse actions or behaviors. Even in the same time frame, the leader may need to vary his or her approach to particular goals. The leader will then call on skills or behaviors described in the various models of leadership. As noted previously, different contexts will call for different skills or behaviors and not all leadership models apply to every setting.

What constraints apply to the situation? Constraints apply to every issue a leader may encounter. Many of the constraints can be addressed through planning and communication. For example, obtaining enough people or resources is an activity that is done by leaders. However, some of the constraints are due to limits within the organization, personal values and ethics, or legal limits on activities. Leaders may find behaviors or skills for dealing with these constraints in one or more models of leadership. Authentic leadership may be more effective for working with followers to deal with difficult non-ideal situations than an authoritarian leader that leaves followers frustrated and constrained to failure.

How will I assess progress and success? Sometimes achieving the organizational goals is not the only measure of success. Leaders develop followers, and allowing them to gain experience is often a measure of success. In other cases, organizational goals can be clearly assessed. It may be that failure may possess pedagogical value that can be utilized by supportive leadership.

How will progress and success be documented? Outcomes do not speak for themselves. Others in the organization and independent of the organization need to know what progress is being made and what goals are being met. It is important to the followers and the leader that their work is documented and acknowledged.

This mental checklist can trigger critical reflection within developing leaders. Many times, leaders will find themselves completing this sort of checklist without formal thought. Formalizing this process allows leaders to consider other leadership skills or behaviors that may work more effectively in particular situations. By considering and using different behaviors or skills perhaps drawn from various models of leadership, the leader continues to develop.

Limitations to this process exist. Not all developing leaders will be adept in all the possible leadership skills and behaviors. Many organizations offer leadership development opportunities to their emerging leaders, but many do not. Individual leaders can work past this limitation by reading the popular academic writings on leadership. Not all leaders will be comfortable with all

the behaviors described in the models of leadership because leaders will have different opportunities, challenges, personalities, and cultural experiences. Although individual leaders can work past their personal preferences for a leadership style, these preferences can act as constraints for leaders.

Conclusion

Critically reflective leadership would be simple if the leader selects one model of leadership and consistently follows a single approach. Some models focus on organizational outcomes without regard to how the outcomes are achieved. Other models focus on treatment of followers with less attention to organizational outcomes. Perhaps effective leadership cannot be summarized in one model. For example, a leader may sometimes spend a substantial time mentoring individuals for them to be able to develop needed skills. However, critical circumstances may require a leader to forsake the long-term individual goals and focus on the organizational outcomes. Therefore, a reflective leader may have to apply different mental models of leadership to different situations.

The leadership literature provides numerous models of leadership that describe the characteristics of leaders. None of these models seem to prescribe a set of behaviors or characteristics that could be applied in all contexts. Like most prescriptive models of behavior, the practicing leader must transfer these characteristics to real-world applications. In order to develop, it is integral for the leader to learn to reflect-in-action and adapt their behaviors to the situation. This adaptation process can be called critically reflective leadership and provides a flexible, personal, and dynamic quality to support effective leadership. In effective practice, a critically reflective leader balances individual and organizational goals and modifies their behaviors to achieve the most important goals.

The practical application of critical reflection empowers emerging leaders to develop the skills and dispositions needed to address the new and reoccurring challenges of today's work environment and to become effective leaders. Critical reflection is the essential skill in effective leader development.

References

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. Oxford, UK: Harper.
- Alschuler, A., & Thompson, R. (1969). How to increase motivation. *Educational Opportunity Forum. Special Issue in Psychological Humanistic Education*, (1)4, 95-108.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421-449.
- Barbuto, J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. *Group & Organization Management*, 31, 300-326.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: The Free Press.
- Beazley, H. (1998). *Meaning and measurement of spirituality in organizational settings: Development of a spirituality assessment scale*. Ph.D. Dissertation, The George Washington University.
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper and Row Publishers.
- Comer, M. (2016). Rethinking reflection-in-action: What did Schön really mean? *Nurse Education Today*, 36, 4-6.
- Conger, J. A., & Kanungo, R. N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, 12, 637-647.
- Dennis, R. S., Kinzler-Norheim, L., & Bocarnea, M. (2010). Servant leadership theory: Development of the Servant Leadership Assessment Instrument. In Van Dierendonck, D. & Patterson, K. (Eds.) *Servant leadership: Developments in theory and research* (pp. 169-179). New York, NY: Palgrave Macmillan.
- Flores, K. L., Matkin, G. S., Burbach, M. E., Quinn, C. E. & Harding, H. (2012). Deficient critical thinking skills among college graduates: Implications for leadership. *Educational Philosophy and Theory*, 44, 212-230.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly*, 14, 693-727.
- Fry, L. W., Vitucci, S., & Cedillo, M. (2005). Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline. *The Leadership Quarterly*, 16, 835-862.
- Gardner, W. L., & Schermerhorn, J. R. (2004). Unleashing Individual Potential: Performance Gains Through Positive Organizational Behavior and Authentic Leadership. *Organizational Dynamics*, 33, 270-281.
- Grabo, A., & van Vugt, M. (2016). Charismatic leadership and the evolution of cooperation. *Evolution and Human Behavior*, 37, 399-406.
- Greenleaf, R. K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York, NY: Paulist Press.
- Hackman, M. Z., & Johnson, C. E. (2013). *Leadership: A communication perspective*. Long Grove, Ill: The Waveland Press.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (2011). *The motivation to work*. Piscataway, NJ: Transaction Publishers.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 321-339.
- Juan, E. S. (1967). Orientations of Max Weber's concept of charisma. *Centennial Review*, 270-285.

- Kouzes, J. M., & Posner, B. Z. (2006). *The leadership challenge*. New York, NY: John Wiley & Sons.
- Laub, J. A. (1999). *Assessing the servant organization*. Unpublished Ph.D. Dissertation, Florida Atlantic University.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, *19*, 161-177.
- MacGregor, D. (1960). *The human side of enterprise*. New York, NY: McGraw-Hill.
- Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly*, *48*, 185-198.
- Posner, B. Z., & Kouzes, J. M. (1988). Development and validation of the leadership practices inventory. *Educational and Psychological Measurement*, *48*, 483-496.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books, Inc.
- Schuh, S. C., Zhang, X., & Tian, P. (2013). For the good or the bad? Interactive effects of transformational leadership with moral and authoritarian leadership behaviors. *Journal of Business Ethics*, *116*, 629-640.
- Scott, W. R., & Davis, G. F. (2007). *Organizations and organizing: Rational, natural, and open system perspective*. New Jersey: Pearson Prentice Hall.
- Sendjaya, S., & Sarros, J. C. (2002). Servant leadership: Its origin, development, and application in organizations. *Journal of Leadership & Organizational Studies*, *9*, 57-64.
- Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, *37*, 1228-1261.
- Vroom, V. H. (1964). *Work and motivation*. New York, NY: John Wiley & Sons.
- Vroom, V. H., & Mann, F. C. (1960). Leader authoritarianism and employee attitudes. *Personnel Psychology*, *13*, 125-140.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, *34*, 89-126.
- Weber, M. (2009). *The theory of social and economic organization*. New York, NY: Simon and Schuster.
- Wong, P. T., Davey, D., & Church, F. B. (2007). Best practices in servant leadership. *Servant Leadership Research Roundtable, School of Global Leadership and Entrepreneurship*. Regent University.



Explorations on the Benefits of a Holistic Family Language and Literacy Program in a Latino Community: Multiple Perspectives

Clarisse Halpern^a, Daisy Gonzalez^b, Debra Giambo^c, Tunde Szecsi^d

^{a-d} Florida Gulf Coast University

Clarisse Halpern is a doctoral candidate in Curriculum and Instruction at Florida Gulf Coast University, Fort Myers, USA. Her research interests include culturally responsive pedagogy in teacher education programs, multicultural education, globalization in education, social justice, and comparative studies in education.

Daisy Gonzalez is a recent Graduate from Florida Gulf Coast University located in Fort Myers Florida, USA. Her research interests include school-based intervention programs, learning related classroom behaviors, and psychoeducational assessments.

Dr. Debra Giambo is a Professor of English for Speakers of Other Languages (ESOL) and literacy and is the coordinator for ESOL in the College of Education at Florida Gulf Coast University, Fort Myers, USA. She has taught courses on second language acquisition, teaching English to speakers of other language, globalization in education, early literacy, middle grades literacy, and advocacy. Her research interests include effective instruction for English learners, bilingualism and biliteracy, immigrant issues, and advocacy.

Dr. Tunde Szecsi is a professor of early childhood education and the coordinator for the elementary education program at Florida Gulf Coast University, Fort Myers, USA. She has taught courses on elementary and early childhood education, teaching English as a second language, and humane education. Her research interest is culturally responsive education teacher preparation, heritage language maintenance and humane education. Both her teaching and research target sustainable education for young children and minority students.

Abstract

Latino families face several challenges when they immigrate to the United States. School-based early childhood programs involving families with a holistic approach indicate effectiveness toward integrating both children and families into the school community.

This paper explores, through informal conversations with administrators, teachers, and parents, their beliefs regarding the benefits of a high-quality family program. In this paper, as a consequence of assuming a holistic perspective, the authors describe prospects for academic gains, positive progress regarding social–emotional benefits, and overall improved inclusive community-related benefits for both children and their families. Additionally, recommendations include strategies to support the challenges confronting newly immigrated Latino families.

Keywords: administrators; family literacy program; Latino children

Introduction

Diversity within the U.S. brings rich possibilities along with significant challenges for families, communities, and schools. Many immigrant families in the U.S. experience hardships integrating into the host culture that, when ignored by communities, can affect their children’s education and indicate potential for long-lasting effects. However, when these challenges are targeted early in effective ways within communities and family education programs, possible barriers toward undermining children’s ultimate success in the U.S. can be diminished.

The changing demographics in the U.S. point to the importance of schools and communities making such connections. Projections from the U.S. Census (2015, 2016) indicate that, by 2020, the aggregation of minority populations will form the majority of the population (i.e., a minority majority) of school-aged children, by 2044, in the U.S. population, a 95% increase in the percentage of minorities is expected, moving from 38% in 2014 to 56% by 2060 (U.S. Census, 2015, 2016). Changing demographics create both challenges and opportunities for communities, agencies, and schools.

For example, Latino families face several challenges when immigrating to the U.S.; this process effects integration into local communities, job acquisition, and involvement in their children’s education. Such ongoing challenges and the possible negative repercussions influencing their children’s education will continue without targeted investments in early childhood programs (Moinolmolki, Gaviria-Loaiza, & Han, 2017). Part of the challenge lies with understanding the cultural perceptions of the Latino family structure. For example, regarding involvement in children’s education, for some Latino families, the level of engagement remains contingent on many varied factors including parents’ employment, education level, English language resources, time of immigration to the U.S., family social support (McWayne & Melzi, 2014), poverty, parents’ inability/limited ability to communicate in English, acculturation stress, discrimination (Moinolmolki et al, 2017), cultural differences (Carroll, 2017), undocumented status and the resulting distrust of government programs, and a desire to maintain the heritage language and culture (Karloly & Gonzalez, 2011). Supporting children and their families is layered, complex, and holistic. It is critical toward effective educational programs to include involvement of the whole family with an incorporation of families’ heritage language as well as the commitment of the teaching staff. Programs that involve the whole family can affect family relationships, child development, sense of belonging, parent and child literacy, and parenting skills (Carroll, 2017).

Family literacy programs can help build stronger relationships to benefit the children's development as well as reducing mothers' sense of social isolation and increasing a parent's sense of belonging to a community (Carroll, 2017). Relatedly, educating the whole family can promote a sense of self-sufficiency, enhance parent literacy and parenting skills, and provide a foundation for young children's academic life. To that end, the early childhood education program also includes family support services, which comprise health, social support, and counseling (Swick, 2009). Programs that involve the whole family may also incorporate the families' heritage language into family literacy programs, which can lead to increased parent involvement as well as children's heritage language maintenance (Wessels, 2014). The commitment of the teaching staff to developing and implementing a long-term, systematic parent involvement plan is crucial to its success and can lead to significant improvements in children's literacy development, particularly in lower-income communities and for struggling readers (Crosby, Rasinski, Padak, & Yildirim, 2015).

Previous research indicates a paucity of studies on the effectiveness and sustainability of parental involvement in school-based literacy programs (Crosby et al, 2015; Wessels, 2014), particularly those programs related to early language and literacy development of Latino children (Jung et al, 2015). Therefore, an exploration of interested stakeholders' perceptions regarding implementation of an early childhood literacy program is warranted. Narrative data generated from informal conversations with administrators, teachers, and parents.

A Holistic Family Literacy Program (HFLP)

This program (HFLP) serves a community in Southwest Florida in which immigrant families experience various challenges. In this diverse community, 96% of elementary school-aged children are designated as economically disadvantaged, the per capita income is \$14,699, one third of the adult population has less than high school education and, in 72% of the homes, families speak a language other than English, predominantly Spanish and Haitian Creole (Personal communication, May 10, 2017). In order to target the educational, linguistic, and social-emotional needs of these families, HFLP was established in 2004 and, since then, an extensive range of programming such as early childhood education, after school for middle and high school students, college access, English-language and parenting classes, and a food pantry are used widely by families. The overall goal for HFLP is to create an educational bridge between the classroom and home, and to increase the confidence, capability, and literacy of parents. In this way, parents are able to more effectively support their children's early development; this family support is critical to prepare children for a successful transition to school. The literacy program includes the following four components: (1) early childhood education, (2) time to teach parents to positively guide children's learning, (3) adult education in English language, literacy, and parenting, and, (4) quality time for parents to interact with their children in literacy activities. These components emphasize the educational partnership between parents and children.

Administrators' views on program effects

Regarding HFLP, three major benefits emerged from conversations with four administrators (identified as A1, A2, A3, and A4). The category-advantages included 1) kindergarten readiness, (2) belonging to community, and (3) whole family dynamics, particularly on the mother-child relationship.

Kindergarten readiness

Administrators report this HFLP directly affected kindergarten readiness including children's ability to speak English, skills for learning, and additional skills associated with social-emotional development. At HFLP, children develop skills for becoming more independent and confident in kindergarten. As administrators explained,

Students that participate in the ... program are more ready (sic) to enter kindergarten. That's been reported from the school district in the form of those readiness assessments they take. Students that participated in [the program] scored higher than students that haven't had any type of program. (...) [They also] have a higher level of self-efficacy, have stronger social skills, and emotional skills, so they know how to navigate kindergarten in that sense (A1).

While A1 emphasized the local school district's recognition of HFLP in the form of achieving high scores on readiness assessments, A4 stressed the challenges the children face due to their diverse cultural and linguistic backgrounds. In addition, A4 described how students' success in kindergarten meets the expected behaviors and attitudes depicted by the kindergarten readiness screening:

To see that their social-emotional [skills] developed, how they are happy to be in the classroom, how they will be able to share with friends, how they are able to follow a routine (...) is one of the big goals that we have here. ...They're independent, they can learn the English language, [and] they are able to receive the quality of education that they need (A4).

Moreover, to increase the children's chances of successfully navigating kindergarten, the programs at HFLP aim to increase the children's confidence (A2). The local school district also recognized the effect of the program on kindergarteners' academic and social-emotional skills, reached out to the program, and referred underperforming children to the summer program to prepare them for kindergarten. Thus, the holistic early literacy program indicates the capacity to prepare minority students for the academic and social-emotional challenges of kindergarten.

Belonging to the community

According to the administrators, mothers who once felt isolated due to their lack of English skills and would not leave their homes or interact with the community, developed increased confidence after participating in the program. With the adult language program's emphasis on cooperative learning, the mothers made lifelong bonds with one another, creating a network for support and friendship that go beyond the classroom and the program itself. As one administrator noted,

The majority of the mothers (...) did not leave their apartments, and they didn't feel that they belonged. (...) They now feel that this is a place where they belong. (...) [The program] also helps them bond; they laugh, they play, they make new friends (A2).

Learning and improving the mothers' English skills contributed to their sense of belonging to the community. Their increased confidence in speaking English outside of the classroom has been demonstrated in their socialization with neighbors, reading the newspaper, and scheduling a doctor's appointment, as well as finding employment and receiving job promotions. A3 states, "[There's] a sense of confidence when you see our moms (...) report an increasing amount of situations where they're using English outside of the classroom (A3)."

In addition, administrators highlighted the effects of improving English skills on mothers' employment opportunities which ultimately impacts the whole family's life. A1 stated that, "[The mothers] have been able to gain employment, have promotions within their employment" (A1). Hence, this holistic literacy program has helped mothers become more integrated in the community.

Whole family dynamics

The administrators emphasized program impacts on whole family dynamics with husbands becoming more supportive of their wives taking part in the program. A3 noted, "There is literally a program for every single member of the family when they come here ... It's nice that we're not looking at students necessarily just as individual units, but as the entire family as well (A3)."

In addition, administrators discussed how, gradually, all family members grew to appreciate the program benefits. "With the husband seeing the growth in [their wives] and in the children, the husbands now are very supportive. In the beginning, we did have some [mothers] who'd say, 'my husband doesn't know I come here (A2).'"

Considering the population served at HFLP, a key contributor to the effectiveness of the program seems to be the availability to the whole family. The program offers opportunities to engage the mothers to participate in their children's learning activities, helping them to interact as their child's first teacher. As A3 pointed out, the mother-child bond is increased through the activities proposed in the parent-and-child-together component. Administrators' recognition of the far-reaching benefits of the program included children's academic and social kindergarten readiness, mothers' social and economic connections to the community, and the entire families' appreciation of the program. Responses indicated a perception that the program meets families' needs in significant ways in this diverse community.

Teachers' views on program effects

Conversations with five teachers (identified as T1 to T5) revealed their primary beliefs regarding the effects of HFLP: (1) children's increased confidence and English skills, (2) togetherness, (3) holistic continuing effects, and (4) striving relationship with the community at large. These benefits progress for the children, mother-child relationships, the entire family, and the community.

Children's increased confidence and English skills.

The teachers described how HFLP is crucial to increasing children's confidence regarding their social development as well as their English language skills. The teachers seemed to associate children's increased interpersonal interaction and participation in the classroom activities with improved English language skills. For example, T2 emphasized: "[The children's] attention span is growing... and increasingly they're more available to focus in on the story and participate, and they're interacting with each other longer. [Also, the children's] motor skills... and their manual dexterity is improving (T2)."

Another teacher noted, "The kids are happier and more confident. We've seen huge growth in several kids who came in very shy; now they're able to open up, and they're speaking English" (T5). Teachers' perceptions attribute children's academic and social development to participation in the HFLP.

Togetherness: Meaningful interactions between mother and child

Teachers noted that the program provided opportunities for meaningful interactions between the children and their mothers and associated this connection to mothers' learning more about their importance as their child's first teacher. Thus, through storybook and read aloud activities, games, interactive music and movement activities, and mother-child homework projects, the mothers engage in interaction with their children in ways that promote children's learning.

The mothers are more comfortable reading the children's books, so I think the children feel proud of their mothers for trying to learn English... and I think that our program has helped the mothers figure out skills, games, and activities that they can do with their child that is a new relationship in the way of playing together (T1).

By including mothers in classroom learning, as well as asking them to incorporate school content into home activities, the teachers promote opportunities for meaningful, educational, mother-child interactions. The teachers' narratives described the new quality of learning in the school environment by using words such as "skills," "games," "activities," "relationship," and "play together." The teachers' narratives clearly described how meaningful mother-child interactions developed as a consequence of the program.

The teachers also described how the program invites families to explore how to support children throughout their school life; yet, the families themselves become the children's apprentice by learning the essential and relevant skills pertaining to life in the American community and society. Thus, the mothers bring the remainder of the family to the program, as explained by T4. "[The mothers are] feeling better about their role [as a parent]..., gaining these new skills and sharing them with their partner... so that together [they] can have an impact on their child's growth and development (T4)."

In addition, according to most teachers, the program importantly benefits those mothers who are non-native English speakers, because they can learn and improve their English skills together with their children. Therefore, learning is extended beyond the formal content and clearly integrated play and family time.

Holistic continuing effects: From the program to the community

Teachers identified holistic continuing effects that comprise the benefits that the program had for the whole family, mostly for the mothers, including friendships that they make, the effects of their increased confidence speaking English associated with their life skills, and finally with issues related to their families' improved nutrition. The teachers noted how the program has helped the mothers make friends with others in the program, creating a critical support system for them in and outside of the classroom. "The students [mothers] themselves become friends here... a group of friends that [is] also interested in bettering their lives and the lives of their children and I think it gives them a lot of support between themselves (T1)."

Teachers recognized the significance of these connections for immigrant mothers. Another teacher added:

One of the mothers told me that she and her husband had each lost 20 pounds since last year [because they] had the nutrition sections and she learned that [they] should be eating more vegetables and fruits and less tortillas (T1).

The teachers also explained that English skills helped mothers gain confidence that affected other parts of their lives. As one teacher expressed, "[The most benefit is giving] the mothers confidence in trying to speak English and in navigating English for their life skills, [such as practicing] reading the newspaper for apartments ads... or going to the doctor and making an appointment... on the telephone (T1)."

Frequently, teachers expressed the families' program experiences can be expanded beyond its initial purpose, from the individual benefits to the family to the community-at-large. Concerning the community effects, the teachers explained that, by the end of the program, it is common that mothers offer to work as volunteers at HFLP to help others. "A lot of moms who started in the program... become volunteers. Some of them are actually getting ready to possibly work here next year, so that's huge that they've been able to start out not knowing any English to wanting to be here (T5)." In other words, the teachers recognized that the effects of the program reach a holistic level, affecting social and academic connections, family nutrition, and enhanced ability to engage with the wider community in support of the family.

Parents' views on program effects

When the six mothers, (coded as M1- M6), shared their thoughts about the program and the effects, the following three issues emerged: (1) nurturing children's academic and social skills, (2) opportunities for quality of life, and (3) enriched parenting experiences.

Nurturing children's academic and social skills

Most mothers noticed significant changes in their children's learning and personal growth including emerging language and social-emotional development. As M6 noted, her daughter's communication skills strengthened and she transformed into a more self-assured individual who was no longer timid to share her views and ideas. Also pleased with her child's personal development, M2 commented on how the opportunities to socialize with other children in the

early childhood program was helpful for her timid son in minimizing the pressure he felt when engaging with others. M5 described how the sense of community helped her daughter grow into an organized and ambitious student who entered kindergarten, academically prepared due to her experiences at HFLP. Another mother (M3) commented on her child's academic preparedness as a result of the programs stimulating environment. In addition to their children's academic growth, the mothers emphasized the ways they became a part of a community and could teach and learn important lifelong skills from one another. For example, M3 stated, "they [teachers and other parents at HFLP] help you become a better parent." They also mentioned an improved relationship between mother and child and the extended knowledge about childcare.

Opportunities for Quality of Life

Mothers noticed the growth within themselves ultimately improving their quality of life. The mothers discussed the benefits of the classes in which they are enrolled at HFLP. For example, the adult English courses are a significant component in the mothers' learning experiences. Though these English classes are set up to provide a formal learning experience, M2 added that the interactive environment allows the mothers to practice their conversational English skills with one another. These mother-to-mother relationships helped to establish a support system between the mothers and contributed a sense of belongingness within the group. In addition, with the increase in English proficiency, mothers felt they gained an overall sense of confidence.

Mothers seemed to be enthusiastic about applying these newly developed skills to their home life. M3 shared how she has applied the knowledge she gained from the nutritional course offered at HFLP into her everyday life to implement a healthier lifestyle. In addition, technology courses offered at HFLP further provided mothers with an opportunity to apply their abilities to their daily lives. For example, these technology skills aided M5 in completing a 45-hour early childhood training course on her own. HFLP also provided M5 the chance to grow with the program as a volunteer, eventually becoming a program employee and a member of the team. Overall, the mothers felt that the additional courses offered at HFLP further benefitted them through the development of important skills and opportunities.

Enriched parenting experiences

Most mothers reflected on enriched experiences and the mutual teaching and learning experience between parent and child. The mothers felt they gained an improved knowledge of childcare, a vested interest in being involved with their child's education, and an improved relationship between parent and child. The mothers described how throughout the program, they were encouraged to interact academically with their children, and to play an active role in their children's development. Engaging their child in academic activities such as "reading as drawing" were one of the ways M3 was able to contribute to her child's learning as well as further building her relationship with her daughter. Additionally, M5 noted she gained patience as a result of the program, mentioning that she has learned to be an understanding parent who effectively communicates with her child. This parental engagement is perceived to have led to quality time and bonding between parent and child, strengthening their relationship. As these mothers were spending more quality time with their children and playing an active role in their education and seeing their child progress, they felt closer to their child.

Discussion and Recommendations

The informal conversations with administrators, teachers, and parents provide data describing the numerous benefits of a holistic family literacy program. Findings describe young children participating in quality early childhood experiences, mothers interacting with their children to foster growth and development, and parents enrolling in classes in English language, nutrition, child development, and even swimming and water safety. Overall, these narrative data describe how stakeholders believe in the effectiveness of parental involvement in literacy programs; they perceive this programming crucial to the children's success in their academic life. Similarly to other community programs that build connections within families and relationships to the community (Crosby et al, 2015), this HFLP indicates the capacity to build bridges to successful educational experiences for children and career opportunities for parents in Southwest Florida. The administrators', teachers,' and parents' views describing the gains in children's cognitive, language, and social-emotional growth and development align with findings describing the effect of parental engagement on children's learning outcomes (Crosby et al, 2015). These gains are important for this immigrant Latino community because research suggests that there is an existing, direct, and observable relationship between poverty and the academic progress of students. Rooney, Palaich, Silverstein, and Piscatelli (2017) noted that students from lower socioeconomic status might have a significant language gap compared to their more affluent counterparts, which ultimately hinders their academic success. HFLP serves families which struggle with major social and financial challenges. Thus, the children in this community would risk being at an academic disadvantage prior to even beginning their formal education. Consequently, a holistic program, which focuses on early intervention, and targets the whole family, while promoting healthy development, is essential to enable a successful transition into formal schooling (Bekman & Kocak, 2013).

Overall, the described benefits that emerged in these conversations are aligned with Bronfenbrenner's (2005) bio-ecological model of development which highlights the influence of the family and community on children's development. Data clearly described the positive impact of a dynamic, two-way interaction between the children and the immediate and extended community. In particular, findings described how children showed an increase in academic and social growth, and, at the same time, the mothers' improved language and technology skills. In turn, mothers' self-confidence improved, which assisted their capacity to integrate into the community through work and engagement. This increased community participation, on the part of the mothers, builds a more proactive and inclusive community. The community, in large, and the immigrating families, in particular, grow in their physical and mental well-being.

Grounded in the belief in the importance of holistic learning and development, the following recommendations are made for programs targeting an immigrant community:

1. The development of a holistic family program is driven by a clear understanding of the needs of the family and the local community. In a low socio-economic immigrant community in which Spanish is the dominant language, the program is built upon the recognition of the importance of the native language and culture along with the purpose of acquiring English language skills. The holistic program includes components that

target additional specific needs (e.g., developing kindergarten readiness, learning a new language and culture, developing skills to find a job, and providing a food pantry for families in need).

2. Equal emphasis on academic and language skills and social-emotional competencies provide for both young children and parents. These skills and competencies foster one another.
3. Reaching out to the family, including mothers and fathers, and engaging them in experiences with their children is an essential component of early childhood programs. These activities build strong family dynamics.
4. Consider listening to other stakeholders' perspectives regarding goals and program implementation for continuous improvement in quality early childhood learning and development.

This list is not intended to be exhaustive. Generating from project data, these recommendations describe ways in which to support newly immigrated children and their families as they interact in the school and community.

References

- Bekman, S., & Kocak, A. (2013). Mothers' experiences with a mother–child education programme in five countries. *International Journal of Early Years Education*, 21(2-3), 223-243. doi:[10.1080/09669760.2013.832942](https://doi.org/10.1080/09669760.2013.832942)
- Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage Publications Ltd.
- Carroll, J. (2017). Literacy for families who are English language learners: The Florey Family Literacy Project. *Practical Literacy: The Early and Primary Years*, 22(2), 24-28. Retrieved from <https://search.informit.com.au/documentSummary;dn=810327730807795;res=IELHSS>
- Crosby, S. A., Rasinski, T., Padak, N., & Yildirim, K. (2015). A 3-year study of a school-based parental involvement program in early literacy. *The Journal of Educational Research*, 108(2), 165-172. doi:[10.1080/00220671.2013.867472](https://doi.org/10.1080/00220671.2013.867472)
- Jung, Y., Zuniga, S., Howes, C., Jeon, H., Parrish, D., Quick, H., Manship, K., & Hauser, A. (2015). Improving Latino children's early language and literacy development: Key features of early childhood education within family literacy programmes. *Early Child Development and Care*, 186(6), 845-862. <http://dx.doi.org/10.1080/03004430.2015.1062374>
- Karoly, L. A., & Gonzalez, G. C. (2011). Early care and education for children in immigrant families. *The Future of Children*, 21(1), 71-101.
- McWayne, C. M., & Melzi, G. (2014). Validation of a culture-contextualized measure of family engagement in the early learning of low-income Latino children. *Journal of Family Psychology*, 28(2), 260-266. doi:[10.1037/a0036167](https://doi.org/10.1037/a0036167)
- Moinolmolki, N., Gaviria-Loaiza, J., & Han, M. (2017). Immigrant families and early childhood programs: Addressing the new challenges of the 21st century. *Advances in Early Education and Day Care*, 20, 117-142. doi:[10.1108/S0270-402120160000020013](https://doi.org/10.1108/S0270-402120160000020013)
- Rooney, K., Palaich, B., Silverstein, J., & Piscatelli, J. (2017). The cost of preparing students for kindergarten in Southwest Florida. Fort Myers, FL: Florida Southwestern State College. Retrieved from <https://www.fsw.edu/assets/pdf/soe/dean/FloridaECECostingOutStudyReport.pdf>
- Swick, K. J. (2009). Promoting school and life success through early childhood family literacy. *Early Childhood Education Journal*, 36, 403-406. doi:[10.1007/s10643-009-0305-4](https://doi.org/10.1007/s10643-009-0305-4)
- U. S. Census (2015 March 3). Projections of the size and composition of the U.S. population: 2014-2060. Report number P25-1143. Retrieved from <https://www.census.gov/library/publications/2015/demo/p25-1143.html>
- U.S. Census (2016). Current population survey: Table 1.1. Population by sex, age, nativity, and U.S. citizenship status: 2016. Retrieved from <https://www.census.gov/data/tables/2016/demo/foreign-born/cps-2016.html>
- Wessels, S. (2014). Supporting English and Spanish literacy through a family literacy program. *School Community Journal*, 24(2), 147-163. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1048612.pdf>



Pictures for Reflection



I am 10 Years Old: Watch me Grow

As boys and girls grow beyond early childhood and prepare to become adolescents, they experience a wide range of emotional, social, cognitive, and physical transitions. Frequently, for the 10 year old, these rapid changes leave them critically questioning, reflectively wondering, and deeply feeling. They navigate different affiliations, test their competencies, and assume a variety of roles.

In order to most effectively support the emerging competencies of the 10 year old, in all instances, adults demonstrate sincere caring, responsive listening, and diligent observing. Most importantly, adults acknowledge each 10-year-old is a unique individual and consequently, recognize the reality of a varying developmental continuum. This means, as much as 10 year olds want to be just like their peers and fit into a group, each 10 year old follows their own individual growth changes. Ten year olds share some common characteristics.

I am competent.

I am knowledgeable.

I am a friend.

I design complex interactions.

I feel close to my family.

I cooperate with a group to share goals.

I assert and lead.

I sometimes evidence inappropriate behaviors (bullying, teasing, cruelty).

I, with friends, engage in elaborate social routines/rituals.

I negotiate, argue, and persuade.

I demonstrate advances in my language, thinking, and concentration.

I evidence physical changes.

I want my privacy.

I need to exert some control.

I want to “fit in.”

I seek independence.

I demonstrate strong emotions.

I am frequently hungry.

I need my sleep.

The 10 year-old is excited about entering the wider world and meeting different people. They ponder whether to become astronauts, ballerinas, or train engineers. Adults provide 10-year-olds with choice, wonder, and opportunity; it is only when the 10-year-old experiences novel and interesting events that they may practice, rehearse, and dream their futures.

References:

- Anthony, Michelle (n.d.). *The emotional lives of 8-10 year olds*. Retrieved from <https://www.scholastic.com/parents/family-life/social-emotional-learning/development-milestones/emotional-lives-8-10-year-olds.html>
- Morin, Amy (2019). *10-year-old-child development milestones*. Retrieved from <https://www.verywellfamily.com/10-year-old-developmental-milestones-620710>
- Morin, Amanda (n.d.). *Developmental milestones for typical fourth and fifth graders*. Retrieved from <https://www.understood.org/en/learning-attention-issues/signs-symptoms/developmental-milestones/developmental-milestones-for-typical-fourth-and-fifth-graders>



SAMR: A Tool for Reflection for Ed Tech Integration

Nancy Caukin^a, Leslie Trail^b

^aMiddle Tennessee State University, ^bEagleview High School and Middle Tennessee State University

Nancy Caukin, Ed.D. is an Assistant Professor and the Program Coordinator for the Ready2Teach Program in the Womack Family Education Leadership Department in the College of Education at Middle Tennessee State University. She began her career working in outdoor education before her fifteen-year tenure as a high school science teacher. Her research interests include teacher candidate beliefs and sense of self-efficacy. She is on a journey of being an edtech learner along with her teacher candidates.

Leslie Trail is a high school English Teacher at Eagleview School in Rutherford County, Tennessee and an Adjunct Professor in the Ready2Teach Program in the Womack Family Education Leadership Department in the College of Education at Middle Tennessee State University. She has been teaching High School English for 12 years after 7 years of business management experience. While constantly looking for ways to improve student engagement, student achievement, and student literacy, she continuously seeks to improve instruction through teaching strategies and effective use of edTech.

Introduction

Technology is a part of everyday life as digital tools and devices are ubiquitous. As schools begin to increase technology available in the classroom, it is important for teachers to consider when, how, and why technology fits into a lesson. Used properly, technology is a powerful tool that can transform teaching and learning. It can be a means for collaboration, accessibility, personalization, differentiation, engagement, and innovation ([US Department of Education, 2016](#)). Technology should never be considered the classroom “babysitter” or the busy workstation. Rather, technology is used intentionally and strategically as a tool to allow students to engage meaningfully in authentic learning experiences ([Herrington & Kervin, 2007](#)).

What is and How to Use the SAMR Model

One way to consider technology use in the classroom is by using the SAMR Model (Substitution, Augmentation, Modification, and Redefinition). Created by Dr. Ruben Puentedura, the SAMR model helps teachers think about how and why they use technology and how it can help them evolve pedagogically as they grow more comfortable integrating technology into their practice ([Puentedura, 2016](#)). In brief, Substitution occurs when technology acts as a simple substitution with no functional change in the assignment; Augmentation is a substitution that is also an improvement in function in the assignment; Modification involves a significant redesign of the assignment through technology; and Redefinition is when technology is used to create new tasks not possible without the technology. The SAMR Model can be compared to a ladder with Substitution on the lowest level and Redefinition on the highest level. When employing technology as a Substitution or an Augmentation, it is considered enhancing the learning experience, whereas when at the Modification or Redefinition levels, it is considered as transforming the learning experience.

As teachers begin thinking about technology integration into the classroom, they often have many questions about how they will effectively use technology. These questions build from the lower level of the SAMR Model upward. For example at the Substitution level, “What will I gain by replacing the task with the technology?” At the Augmentation level, “Does the technology add new features that improve the task?” At the Modification level, “Does the task significantly change with the use of technology?” At the Redefinition level, “Does the technology allow for creation of a new task previously inconceivable?” ([Brown, 2015](#)).

The levels of the SAMR Model can be compared to the levels of Bloom’s Taxonomy. As one proceeds upward, the complexity increases. Substitution and Augmentation within the SAMR Model align with Remember, Understand, and Apply in Bloom’s Taxonomy and Modification and Redefinition align with Analyze, Evaluate, and Create. Figure 1 is the authors’ illustration of the SAMR model and its alignment with Bloom’s Taxonomy based on [Puentedura \(2014\)](#) and questions based on [Brown \(2015\)](#).

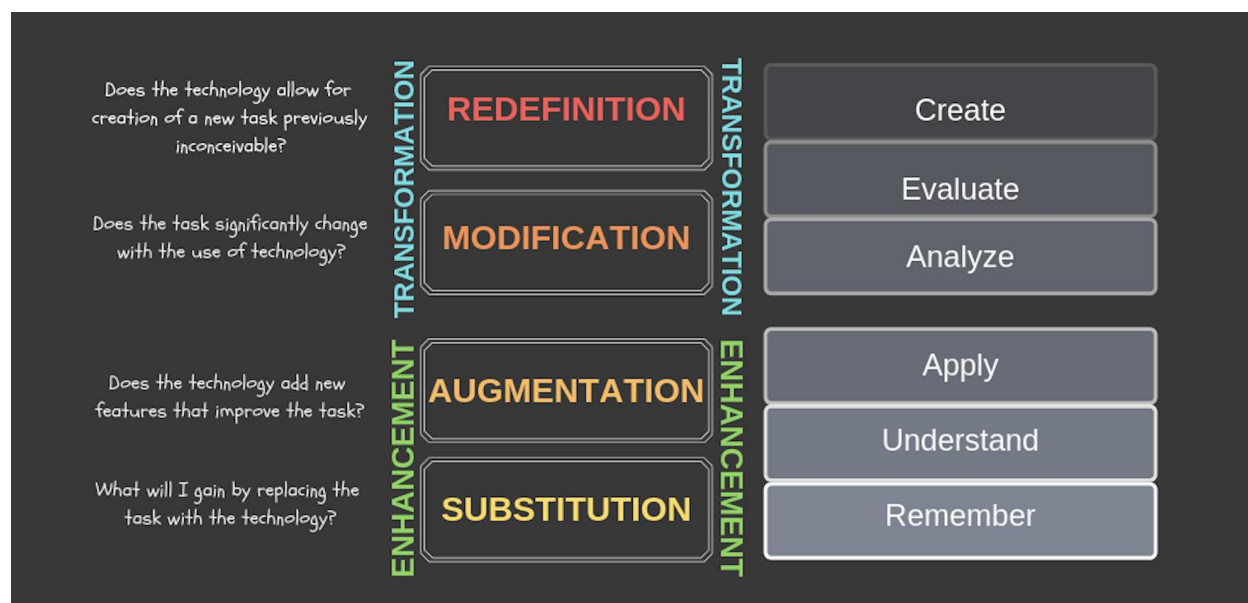


Figure 1: SAMR Model aligned with Bloom's Taxonomy (Puentedura, 2014) and questions to ask (Brown, 2015).

Substitution

When teachers first begin using technology in the classroom, Substitution typically is the easiest application, as it does not change the nature of teaching or learning. With Substitution, for example, students move from hand writing their papers to typing them in a Word document or they move from reading a printed text to reading the text online. While Substitution is considered the most basic form of technology integration in the classroom, it can be a valuable addition to the classroom when considered closely. The question we, as teachers, should ask is, "What will I gain by replacing the task with the technology?"

Consider this classroom: the teacher is instructing a group of English language arts students. The students are working in small groups to analyze the character in a text. Because students have technology, students have the opportunity to make a choice. They can either analyze the character on paper or they can substitute the paper and use an online tool such as Storyboardthat.com to analyze the character. Similarly, in the same classroom, the teacher could ask the students to write a paper. The students may start writing on actual paper or type it in Word. Regardless, the teacher can require the finished paper to be submitted via Word. Additionally, teachers may tell students to submit their work through an online tool rather than turning in a hard copy, which adds another dimension for analyzing student work. While substitution does not alter the nature of teaching or learning, it can make the process of digitally documenting learning and providing feedback easier than through the traditional method (Portnoy, 2018).

In one of the author's classrooms, she found that using the method of substituting technology for paper, thereby giving students some choice in their medium of work, proved empowering. Her

students acknowledge that having choice helps meet their needs and engages them more in the lesson. Students who struggle to get ideas down on pen and paper may feel more confident with a computer screen. However, when teachers move to solely using technology, students may begin to miss the use of pen and paper. Therefore, allowing students to choose which to use gives them agency, helps engage them more in their work, and is a natural way to differentiate instruction. This still allows the substitution to occur and there may be some assignments where the teacher solely wants to substitute technology for paper. It is important to recognize that when technology is simply used to accomplish the same goal that would be accomplished otherwise, it fits into the category of Substitution. We can now answer the question of “What was gained by replacing the task with technology?” in these examples? Choice, as a digital platform, differentiation in instruction and assessment, and ease in providing feedback were all gained from using Substitution.

Augmentation

Augmentation is substitution with an improvement in the task. In other words, the technology replaces the textbook and/or paper with abilities that a textbook and/or paper could not afford. Augmentation is focused on ways that technology can improve the learning experience for the student and the teacher because functionality is present where it may otherwise not exist. The question here is, “Does the technology add new features that improve the task?”

Consider the new features in these learning examples. Teachers may ask students to apply what has been learned using a digital tool. [Skitch](#) is a digital tool that allows students to take pictures with a device, mark them up, then send them. For instance, students can take pictures of objects in the environment and then they can mark or trace the geometric figures they see. Students can use Skitch to record observations and collect data, or pictures can be taken of an area on the school grounds that students would like to redesign and then create scale drawings from their markings on the picture. Skitch can be used to capture and annotate almost anything ([Bindel, 2013](#)).

Similarly, [Seesaw](#) is another tool that allows students to interact with paper texts through taking pictures and then marking them up. Students are able to respond to activities that teachers assign through drawing, annotating, recording, writing, and captioning through this tool. Teachers can use this tool to track learning progress and create a portfolio of a student’s work in a variety of mediums. This improves the learning experience because the student is able to respond to the same question in a variety of ways using one tool and the teacher is able to monitor the learning progress in one platform while seeing a variety of the student’s work.

[Flipgrid](#) is another digital tool that can be used to augment instruction. Flipgrid gives students voice in a video discussion platform. One way to use Flipgrid is to have students introduce themselves to their classmates or respond to a prompt. The teacher could do this in the classroom with all the students present, but by using technology, the teacher is able to use this classroom time in a variety of ways and students are able to express their learning with different alternatives as well. Another possibility is for students to video themselves reading aloud or video

themselves playing their musical instrument. The teacher can leave private video feedback to each student. This also helps the teacher see the student's growth through practice when practice occurs outside of the classroom environment.

When Augmentation is used by a teacher in a classroom, the product that is created changes form to give a different picture of the learning. Another example of a way that Augmentation could be used comes in the form of Exit Tickets, which are responses to a question that a student jots down on paper as they leave the room. Augmentation occurs when, instead of jotting the answer to a question on paper, students use a tool such as [Mentimeter.com](https://www.mentimeter.com) to respond to the question.

The teacher can use this tool to rearrange the responses with a setting change of the tool into a word cloud to see what the students have learned from the lesson. Exit tickets on paper would not allow the teacher to do this; therefore, technology is used to “offer functional improvement” because learning can be viewed differently through the tool. [Kahoot](https://www.kahoot.com) is another tool that can be used as an exit ticket. This platform is a fun and engaging way to formatively assess students that has many applications, including not only whole-class engagement, but individual practice as well. How did the technology add new features that improve the tasks? In these examples, a digital platform was substituted for an analog one and a new feature was added that provided new ways for students to engage with the content and each other.

Modification

Modification allows technology to be used for a significant task redesign. The question to be answered is, “Does the task significantly change with the use of technology?” Consider the example of Flipgrid given under Augmentation. Students' video responses to their peers' video posts can be used to foster dialog on a topic outside of class, this is an example of Modification. A learning experience of a single video post becomes modified when students reflect on a peer's comments and respond with their own. Students providing peer feedback on skills practice on Flipgrid is another example of Modification because students are now practicing not only for themselves or their teacher, but also for their peers and those peers will be using critical and analytical thinking to provide constructive feedback.

Students collaborating on multiple devices on a presentation in [Google Drive](https://drive.google.com) or [Office 365](https://www.office365.com) using Slides, Pages, Docs, Forms, or Sheets in real time or asynchronously can be a redesign of a task where students would have worked on a presentation individually or on a single device during class time. Students creating digital books using [bookcreator.com](https://www.bookcreator.com) to demonstrate and curate their learning allows for a significant task improvement as students move up the SAMR model and Bloom's Taxonomy as well. The creation of flyers or posters that demonstrate understanding using [Canva](https://www.canva.com) or [Adobe Spark](https://www.adobe.com/spark) can provide new features of creation not possible with poster board and markers. In fact, [Adobe products](https://www.adobe.com) have a whole suite of tools that can be utilized to creatively modify learning experiences. As we consider each of these examples, we can answer the question, “Does the task significantly change with the use of technology?” with a resounding yes!

Redefinition

Redefinition is the designing of learning experiences that can only happen with the integration of technology. The question is, “Does the technology allow for creation of a new task previously inconceivable?” At this level of the SAMR model, we are truly at the higher levels of Bloom’s taxonomy. Consider a multimedia project that incorporates music composed by students using [Garageband](#) and video captured and then edited using [iMovie](#), or for younger students (grades 3-8) [Green Screen by Do-Ink](#). These learning experiences are only possible using technology. What about virtual field trips? Common Sense Education offers a variety of reviews on [virtual field trips](#). Patricia Brown (2014) also has a list of even [more virtual field trips](#). When it is impossible to go on a field trip, virtual field trips can only occur using technology. A [Skype](#) session to a classroom on the other side of the world or a museum across the country or an interview with an author are opportunities that become available to students through Redefinition. Students can engage in online simulations using [PHET](#) (K-12 math and science simulations), [Geogebra](#) (6-12 - for creating math models and simulations), [Walden, a game](#) (grades 8-12-a simulation of Thoreau’s experience at Walden). Redefinition allows the teacher to provide opportunities and learning experiences to the student in ways that were never possible before in the confines of a classroom. In these examples we can certainly answer the question, “Does the technology allow for creation of a new task previously inconceivable?” in the affirmative.

Considerations

There are a few things to keep in mind as you consider the SAMR model. The SAMR Model is a reflective tool used to gauge the level of technology integration. It is not a magic bullet for learning. It is possible to have technology integration at the higher levels of the SAMR Model, but still be at lower cognitive levels. For example, [Google Maps](#) is a technology that can afford certain learning opportunities that are not possible without it; however, just having students explore Google Maps, without a clear learning target that challenges them at the upper levels of Bloom’s Taxonomy, is just using bell and whistles without the proper design to promote 21st century skills and higher order thinking.

Additionally, technology does not have to be used simultaneously by all students at the same time. In the instance where a teacher does not have one-to-one devices, teachers can utilize technology in small groups of student rotations or can utilize the functions of a lesson with one device to several students. Even without a full classroom of computers, the benefits of technology can be explored. The technology cannot replace the curriculum designer’s (you, the teacher) content and pedagogical expertise, it can only offer opportunities and options.

As you begin, remember, you don’t have to change everything all at once. Start with a learning experience that needs tweaking, a shot in the arm, if you will. Determine a way to substitute in technology or augment the lesson by adding technology that provides a functional improvement. Don’t be afraid to experiment. It is easy to get overwhelmed with the many options. Start somewhere and work to get better. Try one strategy, and when you feel comfortable with that strategy, add a new layer. Often, the same tech tool can be used for multiple levels on the

SAMR Model depending on how the teacher designs the instruction. Keep in mind that some learning experiences are best suited for the enhancement levels (Substitution and Augmentation) and do not need to be “improved” to the transformational levels (Modification and Redefinition). Have an open-mind to what could be when considering your curriculum options. Follow teachers on Twitter who are technology savvy. Go to [Commonsense.org/education](https://www.commonsense.org/education) and read the reviews and “how to’s” on their website. Be brave and have a growth mindset that allows you to constantly improve your practice through your own growth and learning. You and your students deserve it!

References

- Bindel, A. (2013). Skitch review. [Common Sense Education]. Retrieved from <https://www.commonsense.org/education/app/skitch-snap-mark-up-send>
- Brown, P. (2014, August 24). Awesome virtual online field trips (Blog post). Retrieved from <http://msedtechie.blogspot.com/2014/08/awesome-virtual-online-field-trips.html>
- Brown, P. (2015, February 6). A guide for bringing the SAMR model to iPads [Blog post]. Retrieved from <https://www.edsurge.com/news/2015-02-06-a-guide-for-bringing-the-samr-model-to-ipads>
- Herrington, J., & Kervin, L. (2007). Authentic learning supported by technology: Ten suggestions and cases of integration in classrooms. *Educational Media International*, 44(3), 219-236.
- Portnoy, L. (2018). How SAMR and tech can help teachers truly transform assessment. Edsurge. Retrieved from <https://www.edsurge.com/news/2018-02-01-how-samr-and-tech-can-help-teachers-truly-transform-assessment>
- Puentedura, R. (2014, September 24). SAMR and Bloom's taxonomy: Assembling the puzzle [Blog post]. Retrieved from <https://www.commonsense.org/education/blog/samr-and-blooms-taxonomy-assembling-the-puzzle/>
- Puentedura, R. (2016, July 12). *How to apply the SAMR model with Ruben Puentedura* [Video file]. Retrieved from <https://www.youtube.com/watch?v=ZQTx2UQQvbU&t=24s>
- US Department of Education (2016). Future ready learning: Reimagining the role of education in technology. 2016 national education technology plan. Retrieved from: <https://tech.ed.gov/files/2017/01/NETP17.pdf>



A Book Review & Action Plan for Using Renata Galindo's "My New Mom & Me"

Publisher: Schwarz & Wade

Pamela Kramer Ertel^a

^aMiddle Tennessee State University

Dr. Pamela Kramer Ertel is an Associate Professor of Early Childhood Education at Middle Tennessee State University. She served as the Dean of the College of Education at East Stroudsburg University of PA, in addition to working as a Professor of Education for 18 years in the Department of Early Childhood and Elementary Education. Dr. Kramer Ertel also served as President of Kappa Delta Pi, the International Honor Society in Education. Prior to working in higher education, Dr. Kramer Ertel was an elementary classroom teacher for nine years.

Book Review

It is challenging to find a children's book effectively dealing with the sensitive topic of adoption; "*My New Mom & Me*" by Renata Galindo provides an insightful description of the fears, challenges, and joys of a child and parent as they become a new family. The characters are portrayed as animals where-in the mom is a cat and the child is rendered as a puppy. The depiction of animals as the characters is an effective strategy helping to make this book more appealing to children, while also broaching a sensitive topic in a less traumatic way.

The story begins as the child arrives at a new home after being adopted. While the story includes minimal text, this book successfully illustrates the fears and concerns the child has about this new relationship. The book provides readers with a relevant portrayal of the child's nervousness and worries, as well as including the range of positive and negative emotions that may emerge as

the child transitions to a new life in this family. The story poignantly shows how the child deals with the concerns about looking different from the parent while the parent assures the child that their differences make them special. The story depicts the daily activities the parent and child do together as they learn to bond and become a family.

This book exhibits many positive elements. Adoption is represented in a straightforward, caring, and realistic manner as the story describes the typical emotions that may evolve during these types of transitions. The illustrations well exhibit the range of characters' emotions and as well tenderly capture their growing love and affection for one another.

Bibliotherapy Connections

This story may be sweet and simple, but the message is powerful and positive. Teachers, counselors, and social workers will find this book valuable for bibliotherapy where-in books are used in a therapeutic manner. Pardeck and Pardeck (1987) describe how bibliotherapy is especially useful for children that have been in foster or adoptive care.

Bibliotherapy is often described as a three-stage process (Dreyer, 1985; Iaquina & Hipsky, 2006). "Universalization or Identification" occurs in the first stage as children come to the realization that they are not alone as they meet characters in a story that are also facing similar problems. This is comforting to children going through a crisis as they often feel no one else has ever gone through what they are experiencing. The next stage is referred to as "catharsis." In this second stage, children make a connection with the characters that are finding a way to cope with similar problems. The third stage is identified as "Insight" where-by the child increases both their self-and world understanding. This means, the experience of reading this book with a caring adult supports children's perspective taking as well as nurtures their intrapersonal development.

Pardeck and Pardeck (1987) suggest as children discuss stories about sensitive topics with adults, they may find possible solutions to the problems they find in their lives. This book can serve as a conversation starter between adults and children as there are many valuable lessons to be learned from this uplifting story. However, it is important to do more than merely read the story; it is critical to provide children with opportunities to process what they are hearing. "What are the children actually learning from this story?"

Rozalski, Stewart, and Miller (2010) emphasize the importance of helping children apply what they have learned to their own lives in some way. In addition to the significance of rich discussions, a variety of follow-through activities can be helpful. An adult, conferencing with a single child, may further support his or her underlying thinking.

Action Plan

After introducing and reading the story, an effective strategy is to ask the child(ren) some key questions about the story. It is important that the conversations occur in a nonthreatening manner (Rozalski, Stewart, & Miller, 2010). Some suggested questions to use with this book might include:

- *Why do you think the puppy felt nervous when arriving at his new home?
- *Have you ever felt nervous when you did something new or different?
- *Do some children look differently from their parents? How? Is that okay?
- *What did the new mom do in the story to show she loved her puppy?
- *What do your parents do to show they love you?
- *What kinds of things happened in the story that made the puppy mad?
- *Do you ever feel mad at your parents?
- *In the story, what kinds of things made the puppy sad?
- *Do you ever feel sad?
- *What did the new mom do to help the puppy feel better?
- *What do your parents do for you to help you feel better?
- *What did the puppy learn about being a member of a family?

After thoughtful and sensitive discussion, it is suggested to follow up with related activities. Pardeck (1990) recommends that you allow children to express what they have learned in some type of authentic way. It is important children be able to honestly portray their feelings, whatever they may be. These are some suggested activities that might follow the discussion of this book.

Drawing: Have the children draw a before and after picture of how the puppy felt when he first arrived at his new home and then show how he felt after getting to know his new mom. Discuss how and why his feelings changed.

Finger paint: Have the children create pictures that show different emotions experienced by the puppy (fear, anger, sadness, joy). Discuss what each picture represents and be nonjudgmental about whatever feelings the child chooses to express.

Clay/Playdough: Have the children use the clay or playdough to show how they feel when they get angry or sad. Then have the children use the material to show how they feel when they are happy. Discuss what the children can do when they feel these strong emotions of anger or sadness.

Puppetry: Have the children act out scenes from the story using puppets. Make sure you include the ending scene when there is some resolution to the challenges the puppy faced.

Application Scenarios

This book would be an excellent resource for adoptive families as it provides honesty and assurance that while forming a family has its challenges, this is all part of the natural process of becoming a family. It is not unusual for adopted children to struggle with the reality they may not physically resemble their adoptive parents; Galindo masterfully navigates this concern.

Additionally, this book may be especially valuable for:

- 1) Single adoptive parents as the book only represents the child and the mom; yet, the book is also useful for describing other family structures and differences.
- 2) Families with racial differences as it effectively addresses differences in families in a simple, yet appropriate manner.
- 3) Children and parents from non-adoptive families to help reduce the negative stereotypes and misconceptions that sometimes exist regarding adoptive families.

Conclusion

Galindo captures the heart of the reader as she shares the journey of this newly formed forever family. It provides hope, comfort, and reassurance for all those who become families through adoption. This book clearly supports the sensitive discussion of adoption. It would be used most effectively with children from three-to-seven years of age.

References

- Dreyer, S. S. (1985). *The bookfinder: A guide to children's literature about the needs and problems of youth aged 2 and up*. Circle Pines, MN: American Guidance.
- Iaquinta, A., & Hipsky, S. (2006). Practical bibliotherapy strategies for the inclusive elementary classroom. *Early Childhood Education Journal*, 34(3), 209-213.
- Pardeck, J. T. (1990). Children's literature and child abuse. *Child Welfare*, 69(6), 83-88.
- Pardeck, J. T., & Pardeck, J. A. (1987). Bibliotherapy for children in foster care and adoption. *Child Welfare*, 66(3), 269-278.
- Rozalski, M., Stewart, A., & Miller, J. (2010). Bibliotherapy: Helping children cope with life's challenges. *Kappa Delta Pi Record*, 47(1), 33-37.



ACEs and Healthcare: Creating a Positive Future

Barbara Lancaster^a, Tiffany Wilson^b, Katie Wetsell^c

^{a-c}Middle Tennessee State University

Dr. Lancaster is women's health nurse practitioner and assistant professor at Middle Tennessee State University where she is delighted to teach in the undergraduate and graduate nursing programs. A registered nurse for 37 years she enjoys getting to partner with women to achieve their optimal health and well-being. Dr. Lancaster is a nationally certified menopause practitioner and has done research regarding the need for menopause workshops. Dr. Lancaster's call is mission work where she has served both nationally and internationally and has a love for Africa! Her greatest joy is being a wife, mother, and grandmother.

Dr. Wilson is an Assistant Professor at Middle Tennessee State University in the Professional Counseling Program. Prior to joining the MTSU faculty, Dr. Wilson worked as a licensed professional school counselor and licensed professional counselor in various clinical settings in North Carolina. Dr. Wilson is also a National Certified Counselor, Certified Clinical Trauma Professional, and a Board Certified Tele-mental Health Professional. With research interests in trauma and students with disabilities, Dr. Wilson's goal is to help individuals connect with their inner strength and live their best life.

Mrs. Wetsell is a pediatric nurse and primary care nurse practitioner with experience caring for children in hospital, school, and primary care settings. She is currently an assistant professor at Middle Tennessee State University where she teaches clinical courses in the undergraduate and graduate nursing programs. Her love for children, however, is most called upon in raising four amazing children with her husband in Nashville, Tennessee.

ACEs Defined

The adverse childhood experiences (ACEs) study represents a landmark in medical research which linked childhood experiences of abuse, neglect, and household dysfunction to future health outcomes. (Cronholm, Forke, Wade, Bair-Merritt, Davis, Harkins-Schwarz, Pachter & Fein, 2015). Felitti and colleagues (1998) conducted the original ACEs study in a primary care

setting between 1995-1997 at a Kaiser Permanente clinic where thousands of participants revealed they had adverse childhood experiences (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, Koss, & Marks, 1998). This original study found a strong dose response relationship between the extent of exposure to abuse or household dysfunction during childhood and multiple risk factors for several leading causes of death in adults. These conditions included: ischemic heart disease, cancer, chronic lung disease, fractures, liver disease as well as poor self-rated health (Felitti et al, 1998). Felitti et al, (1998) suggested ACEs and adult health status is strong and cumulative. They further asserted that abuse and other potentially damaging childhood experiences contribute to the development of risk factors leading to health behaviors and lifestyle factors that affect morbidity and mortality. These behaviors they allege are the “actual” cause of death (Felitti et al, 1998).

Purpose

We have combed recent research to explore what new evidence is available in understanding the nature of adversity that children face and the impact on future health. We also sought to discover the latest guidance available for practitioners who encounter children and adults. Integrating this concept into assessment will increase knowledge of trauma-informed care (TIC) with the intention of building resiliency in children and adults. Our goal is to keep the conversation about adverse childhood experiences current and ongoing by elevating the awareness of the impact of adversity in childhood, stressing the vitality and long-term consequences, and highlighting the possible positive outcomes when children and adults have adequate support for overcoming and coping with challenges.

Implications of ACEs

When individuals are exposed an adverse childhood experiences, they can be impacted in a variety of ways including health risks, threats to safety, and community-level adverse experiences.

Health Issues

How are ACEs linked to these health risk behaviors and adult disease? The original researchers felt this centered on behaviors such as smoking, alcohol/drug abuse, overeating or sexual behaviors. These may be consciously or unconsciously used because they have an immediate pharmacologic or psychological benefit as coping devices when stressors of abuse, domestic violence, and family/household dysfunction are experienced (Felitti et al, 1998). High levels of exposure to ACEs would expectedly produce anxiety, anger, and depression in children (Felitti et al, 1998). These authors used the example of nicotine which has beneficial psychoactive effects that regulate mood. Persons who are depressed may smoke and thus, persons exposed to ACEs may benefit from any ‘drug’ such as nicotine to regulate their mood (Felitti et al, 1998).

Perception of Safety

Recent research conducted by Duke (2019) sought to compare the associations between conventional ACEs, as defined in the original research and current guidance from the American Academy of Pediatrics, and the expanded measures for ACE with a positive Patient Health Questionnaire-2 (PHQ-2), a validated initial screener for depression in adults and adolescents. Conventional ACEs included questions addressing abuse, household dysfunction, food insecurity, and housing stability. Expanded measures focused questions on perceived threats to safety and past-month experiences of bullying and harassment. Survey respondents included students in 8th, 9th, and 11th grade participating in the 2016 Minnesota Student Survey. Of the 126, 868 participants, one in five had a positive PHQ-2 score with larger percentage of females meeting criteria than male students. All conventional measures as well as expanded measures of ACEs were associated with increase odds of a positive PHQ-2 score, with verbal/emotional abuse by a household adult being the most predictive among conventional measures and feeling unsafe at home as most predictive of the expanded measures and overall. Other notable links included food insecurity with 2 or more conventional experiences, feeling unsafe going to and from school, and bullying and harassment for identifying as or being perceived as gay or lesbian with 2 or more expanded types of experiences. These findings highlight the need to continue expanding our concepts of adverse events beyond the household. Children can encounter significant threats to their physical and psychological safety in their neighborhoods and schools as well.

Community-level Adverse Experiences and Racial Disparities

Thurston, Bell, and Induni (2018) aimed to identify the prevalence of community-level adverse experiences and intended to describe whether a difference could be noted based on racial identity. A cross sectional analysis of children aged six to 17 within a National Survey of Children's Health (NSCH, 2011-2012), data show non-Hispanic white children to have the lowest exposure to community adverse experiences, namely unfair treatment due to race/ethnicity and witnessed neighborhood violence, as well as household ACEs, such as poverty, loss of a caregiver through death or incarceration, or witnessed domestic violence.

The second question of the study sought to understand the relationship between these events, the demographics of those surveyed, and indicators of emotional regulation. The findings indicated racism has the strongest association on the reduced likelihood of emotional regulation when the child has experienced both community and household adverse experiences. A positive association with emotional regulation was found with the covariate measure of child/parent relationship and female gender. Ages under 15 years were also inversely related to emotional regulation. A statistically significant negative relationship was found with covariates two parent step parent family composition and Black non-Hispanic race/ethnicity.

Community level adverse events appear to impact minorities with greater frequency and to a great extent, especially when household adverse experiences are also present. Acknowledging the impact of racism on health risks and disparities is important for both prevention and effective intervention. Early and family-based interventions may be more effective in building positive

emotional regulation in children who experience adverse events in the community and household.

Positive Future

Trauma Informed Care Defined

In 2014, the Substance Abuse Mental Health Services Administration (SAMHSA) released Tip 57: Trauma Informed Care in Behavioral Health Services (Dube, 2018). This was a result from the original ACEs study and the science behind the findings. Within the trauma informed care (TIC) principles lie an understanding of the widespread problem of trauma, its symptoms, and how to respond without further escalation and re-traumatization (Dube, 2018).

For example, Mollard and Hudson (2016) proposed that nurses who work in correctional settings implement the trauma-informed 4 E's which aimed to: **educate** staff on the effects of trauma; **empathize** with the woman/situation; **explain** behaviors that can be traumatizing; and to **empower** women to become responsible and take control of their future health and recovery. With Dube (2018) purporting that there is currently a public health crisis for which there is no vaccine or medication and that problem is trauma and stress, implementing trauma informed care services has the potential to not only change correctional settings, but any setting in which healthcare is provided.

Trauma-Informed Care in Curriculum for Health Care Professionals

In order to implement, trauma-informed care practices, nurses should be educated on how to obtain a history that inquires about ACEs and to show sensitivity and empathy (Kalmakis & Chandler, 2015). To that end, Strait and Bolman (2017) set out to design a curriculum to help nursing students become comfortable addressing typically uncomfortable topics such as ACEs and to practice listening and collaboration skills. The authors sought to ultimately establish confidence in graduate health care practitioners and to increase their knowledge of ACEs and Trauma-Informed care in clinical practice.

Strait and Bolman's (2017) study had three objectives:

1. To implement a trauma-informed curriculum for multiple graduate programs.
2. To determine student understanding of, and willingness to address, ACEs.
3. Assess the relationship between students voluntarily evaluating their own individual ACE score and their own attitude toward ACE and trauma-informed care.

The authors hypothesized that the healthcare practitioner students would be more confident in understanding the clinical importance of ACEs and trauma-informed care as they assessed their

own score. They recruited 967 students from graduate health programs on two campuses: Pomona, California and Lebanon, Oregon. The professions included the following program: Doctor of Osteopathy, Doctor of Podiatry, Doctor of Optometry, Doctor of Dental Medicine, Doctor of Physical Therapy, Doctor of Veterinary Medicine, Doctor of Pharmacy, Masters of Science in Nursing, and a Masters of Physician Assistant. The participants attended three, two-hour sessions, conducted with a proctor and divided into groups of nine. The sessions were held every other week and on the off weeks, the participants were required to perform research regarding ACEs topics. The authors used a multi-question digital survey administered before and after the curriculum to assess the students understanding of ACEs and trauma-informed care. The participant's awareness of personal ACEs and willingness to incorporate trauma-informed care in practice was tantamount to the outcome of their study.

Strait and Bolman (2017) concluded that the future health care practitioner students who voluntarily assessed their own ACE score were significantly more likely to understand scientific and clinical findings to implement trauma-informed care in practice. Strait and Bolman proposed to formulate a method of instructing the next generation of health care providers on ways to prevent, recognize, and address unresolved childhood trauma (ACE's) and to inspire other training programs to do the same. Strait and Bolman (2017) challenged health care providers to see patients for who they really are – just like ourselves- a composite of several different circumstances.

Trauma-Informed Care in Primary Care Settings

As more nursing students and practicing nurses increase their knowledge about trauma-informed care practices, more implementation of these practices need to occur in primary care settings. Purkey, Patel, Beckett, and Mathieu (2018) set out to understand the primary care experience of women with a history of childhood trauma (ACEs) and chronic disease. Their design was a qualitative study using directed content analysis to study 26 women that were recruited from an Academic Family Health team in Ontario, Canada. The participants were > 21 years of age and had two or more non-psychiatric diagnoses. The 26 participants had an average ACE score of 7.2/10 and were high users of the health care system, seeing a provider on an average of 12 times a year (Purkey et al., 2018).

Six themes emerged as a result of this study that can be beneficial for the health care provider working with female patients with a high ACE score. Theme one was the importance of continuity of care as the participants shared it is hard to repeat their story over and over. Theme two was provider awareness of abuse as the participants thought the providers were too busy to listen to their experiences and therefore have an awareness of their trauma. Theme three revolved around the challenges of family medicine residents as the participants felt they were using them as practice patients. Theme four was central to the distress of triggering events as the participants may react to particular treatments or interventions such as pap smears or touching. Theme five described the characteristics of clinical staff and the office space as the participants were sensitive to the environment and whether it was welcoming or if, for example, the chairs were

too close together. The sixth theme highlighted engagement in care plans and the participants were somewhat divided regarding their active participation in care and their perceptions.

Purkey et al. (2018) concluded that understanding the effects of ACEs on women's health is vital. Incorporating trauma-informed care approaches by physicians can be beneficial and enrich the patient's experience and ultimately their future health. Esden (2018) sees the importance of identifying ACEs as an important step in providing primary care. She encouraged nurse practitioners (NP) to implement trauma-informed primary care as a way to illustrate the positive effects that are gained by administering the ACEs questionnaire to all patients.

Evidence linked ACEs to numerous health outcomes in a dose dependent relationship (Esden, 2018). Evidence revealed toxic stress during childhood disrupts the nervous system development and stunts growth in the brains regions responsible for problem solving, impulse control, mood regulation, learning, and memory (Esden, 2018).

Esden (2018) provided implications for practice. The first suggestion is interventions that focus on the primary prevention of ACEs are likely to have the greatest effect in reducing the detrimental effects of childhood trauma on families and communities. The second implication suggested that NPs who care for adults also have the opportunity to make a significant impact in mitigating the mental and physical health effects of ACEs. Lastly, NPs, who are trauma informed, should routinely screen patients for ACEs and recognize the role of the childhood trauma has in the development of health risk behaviors and illness and use a patient centered approach that empowers patients to reach health goals and achieve wellness. ACEs has lifelong ramifications that can be alleviated with proper treatment, trusting relationships, and by NPs utilizing the 4E's of trauma informed primary care (Esden, 2018).

Conclusion

Where do we in the health care community go from here? According to the 2010 Morbidity & Mortality Weekly Report by the Centers for Disease Control (CDC), the prevalence of ACEs in the United States is estimated to be 60% of the population. These statistics are alarming and challenging. Kalmakis and Chandler (2015) and Esden (2018) suggested that the lack of knowledge about how ACEs contributes many years later to disease represents a gap in knowledge that challenges researchers and practitioners. Kalmakis and Chandler (2015) discovered there are currently no guidelines for addressing ACEs in primary care; however, such guidelines would prove beneficial for nurse practitioners (and other healthcare providers) as a whole. Nurse practitioners that are aware of the consequences of ACEs should use this evidence in their practice to screen patients with a history of ACEs, incorporate trauma informed care practices, and create an individual plan of care to follow (Kalmakis & Chandler, 2015). Nurses are in a position to provide patients an opportunity to tell their story so they can partner with them and develop a plan of care that addresses the past so as to positively affect the patient's future (Kalmakis & Chandler, 2015).

References

- Centers for Disease Control (2010). Adverse childhood experiences reported by adults-Five states. *Morbidity and Mortality Weekly Report*, 59, 1609-1613.
- Cronholm, P., Forke, C., Wade, R., Bair-Merritt, M., Davis, M., Harkins-Schwarz, M., Pachtel, L., & Fein, J. (2015). Adverse childhood experiences: Expanding the concept of adversity. *American Journal of Preventive Medicine*, 49(3), 354-361.
- Dube, S. (2018). Continuing conversations about adverse childhood experiences (ACEs) Screening: A public health perspective. *Child Abuse and Neglect-The International Journal*, 85, 180-184. Doi.org/10.1010/j.chiabu.2018.03.007
- Duke, N. (2019). Expanding Concepts of Youth Adversity: Relationships with a Positive Patient Health Questionnaire-2. *Journal of Pediatric Health Care*, 33, 42-52.
- Esden, J. (2018). Adverse childhood experiences and implementing trauma-informed primary care. *The Nurse Practitioner*, 43(12), 10-21.
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., Koss, M., Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults – The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245-258.
- Kalmakis, K., & Chandler, G. (2015). Health consequences of adverse childhood experiences: A systematic review. *Journal of the American Association of Nurse Practitioners*, 27, 457-465.
- Mollard, E., & Hudson, D. (2016). Nurse led trauma-informed correctional care of women. *Perspectives in Psychiatric Care*, 52, 224-230.
- National Survey of Children's Health, 2011-12 (2014). Child and adolescent health measurement initiative, data resource center on child and adolescent health website. Retrieved March 1, 2019 from <http://childhealthdata.org/learn/NSCH>.
- Purkey, E., Patel, R., Beckett, T., Mathieu, F. (2018). Primary care experiences of women with a history of childhood trauma and chronic disease. *Canadian Family Physician*, 64, 204-211.
- Strait, J., & Bolman, T. (2017). Consideration of personal adverse childhood experiences during implementation of trauma-informed care curriculum in graduate health programs. *The Permanente Journal*, 21, 16-61. Doi:10.7812/TPP/16-061
- Thurston, H., Bell, J., & Induni, M. (2018). Community-level adverse experiences and emotional regulation in children and adolescents. *Journal of Pediatric Nursing*, 42, 25-33.



From Theory to Practice: Building Leadership Opportunities through Virtual Reality Science Expeditions

Kaitlin Peterson^a, Brian Andrew Stone^b

^{a-b}Northern Arizona University

Kaitlin Peterson is a practicing teacher at Mountain Charter School in Flagstaff, AZ. She was a dual certification student with a degree in elementary and special education. Kaitlin took a significant interest in the use of virtual reality in her methods courses at the university, used them in her student teaching, and has provided professional development training in the use of VR. Her interests include child-centered practice, technology integration, and child development.

Dr. Brian A. Stone is a Senior Lecturer at Northern Arizona University. He teaches elementary science and social studies methods courses for undergraduates. He is the Director for the Professional Development School program at NAU, and also runs faculty-led study abroad programs to Australia, New Zealand, Ireland, and the U.K. with a specific focus on integrated curriculum and multiage education. Dr. Stone's research interests include child-centered educational practices, inquiry-based learning, constructivism, and play.

Abstract

The authors of this paper discuss the use of Virtual Reality (VR) as a tool for building meaningful connections in science education across different grade levels. The authors elaborate on their experiences with using VR in teacher training programs, in practicum and student teaching experiences, and in providing a professional development workshop on how to use VR in science classrooms. With adequate preparation and training, teacher candidates can become leaders in their schools with regard for building more interactive STEAM-based programs that utilize cutting-edge technologies like VR and AR (Augmented Reality). Furthermore, the benefits of using VR in the classroom are discussed. These include whole-child benefits such as opportunities for meaningful social interaction, student-led inquiry, intrinsically motivated exploration and investigation, meaningful integration with other subjects, and substantial student engagement. VR expeditions provide a high level of cognitive, social, and physical activity that

can supplement any form of instruction, and help students make lasting connections to the material.

The use of Virtual Reality (VR) as an instructional tool is increasing across the globe. Teachers are just beginning to tap the potential of this constantly evolving resource, as cameras, hardware, software, and programs are continually improving. VR is defined as a “near reality,” computer-generated, three-dimensional environment (Virtual Reality Society, 2017). Often, it takes the form of a 360 degree picture that students can view through a headset with the practical effect of making people think they are really experiencing that view. Multiple companies have developed VR and AR (Augmented Reality) programs for educational use. Within this emerging market, the research, and subsequent training of teacher candidates has been scarce. Therefore, it is the purpose of this article to investigate and describe the use of VR in a teacher-training program, and the subsequent use of the technology in practicum classrooms, student teaching experiences, and even in a professional development workshop for a local school. Ultimately, the initial use of the technology has provided significant insight into its potential and multiple observed benefits are described. It is important to note that this paper describes the use and benefits of VR as it relates to science education, and STEAM integration. However, VR expeditions are not limited to science, as there are multiple connections with social studies and the arts.

Current Literature

The literature on the use of VR in the elementary classroom is still emerging, and the literature on its use in teacher training programs is scarce (Nussli & Oh, 2016; Guzzetti & Stockrocki, 2013). However, the potential for VR as an instructional tool is undeniable. Lisichenko (2016) states that the “adoption of VR has brought the promise of unique and effective methods of instruction” (p. 159). Furthermore, Hinrichs and Wankel (2011) suggest that virtual learning is transformational. Some studies have emphasized VR as an effective tool to build students’ content understandings (Fernandez, 2017; Zantua, 2017). VR is immersive, and helps students build abstract understandings (Curcio, Dipace, & Norlund, 2016; Hwang & Hu, 2013). Much of the research that has been done is through small-scale case studies. However, the research so far is promising. For example, in a case study conducted at an elementary school in Florida in connection with the ANGARI Foundation (a non-profit marine and environmental organization), students were able to learn about corals and reef ecosystems through VR. Based on the study, students were observed to be highly engaged, posed meaningful questions, made relevant connections, and acquired a strong command of content knowledge through their VR investigations (ClassVR, 2018). Students then went on a field trip to the Florida Keys and were readily able to make coral identifications from their prior VR work.

Virtual Reality is a rapidly emerging technology, and is on the cusp of widespread use in the American education system. Wankel and Blessinger (2012) suggest that advancements in this technology as well as other interactive interfaces are “transforming the way we teach and learn and those advancements are refining our views of what it means to learn” (p. 3). The use of VR has the potential to be such a transformative experience for children that a number of companies and developers are working on integrating this technology into the classroom as a mainstay of

educational practice (Immersive VR Education, Unimersiv, Google Expeditions, Alchemy VR, Discovery VR, zSpace, Curiscope, WoofbertVr, ClassVR, etc.). Hinrichs and Wankel (2011) suggest that this development is helping students navigate the learning experience by “building the physical world inside the virtual world, and bringing the virtual world outside to the physical world” (p. xiii). In other words, this technology can seamlessly integrate with teaching practices and content in the elementary classroom.

Hansman (2016) reports that VR “boosts student engagement” (para. 3), and that students can build content understandings through “visiting” the Great Barrier Reef, as an example (para. 1). Teachers can connect the experience to learning objectives and standards. The recommendation is to build immersive environments in which students can build their understanding, develop inquiry and collaboration, and learn across the affective, behavioral, and cognitive domains (Wankel & Blessinger, 2012). The VR platform can also be an important resource to teach children about environmental issues and social justice as it can “expose people, from school-aged kids on up, to large-scale, global issues that are hard to grasp if they can’t see them for themselves” (Hansman, 2016, para. 11).

From Theory: Teacher Training on VR in Science Methods Courses

Teacher candidates were introduced to VR in their science methods courses at the university, and had the opportunity to use the technology as an instructional tool in their practicum experiences. The training consisted of VR tours of several different places, including: the Taj Mahal, the International Space Station, and the Jordan River. During each tour, the levels of engagement, interest, and discovery became evident as the teachers in training were walking around the classroom with the VR goggles glued to their eyes, waiting for the next scene to be shown and asking to visit more places. Teacher candidates were first given the opportunity to experience VR through the eyes of students, and were then taught how to utilize the technology to take students on their own VR tours. This training consisted of the following: setting up a router and an internal network, connecting the student devices (phones) and the teacher device (tablet) to the router, downloading a VR expedition, and guiding the tour through the tablet. For the teacher candidates, this technology was inspiring and eye-opening. Many had never heard of VR or its use in the classroom. However, teacher candidates were intrigued and eager for opportunities to utilize this technology in a practicum setting. The first-hand experience that they received indicated how powerful these learning experiences could be.

To Practice: VR in Practicum and Student Teaching Experiences

Teacher candidates in science methods courses at the university were given the option of using VR as a tool to teach science content through their varied practicum experiences in K-8 classrooms. Students used the platform to teach content ranging from space to landfills (environmental education). All VR practicum activities were supervised, and the benefits of the instructional tool were immediately evident. It is important to note that the evidence gathered was only observational/anecdotal. However, the students were highly engaged with the content. Engagement was observed across cognitive, social, and physical realms. Students in K-8 classrooms became involved in interest-driven, student-directed inquiry, posing questions to

peers and to the teacher candidates leading the expeditions. Furthermore, students were highly social during VR activities, comparing observations with each other, and sharing VR headsets. Imaginary play was common, and students engaged socially in their play. They would make comments like, “Ahh, the shark is going to eat us, swim away!” This was in response to an ocean creatures VR expedition, as an example. Finally, students were moving around the classroom, “walking” through their digital, virtual environments. They would reach out and try to touch virtual objects in front of them. The cognitive, social, and physical engagement was evident across grade levels.

Teacher candidates became proficient with the technology, and mentioned they would feel comfortable using the technology in any setting going forward. Furthermore, most teacher candidates mentioned that they viewed VR as a necessary or helpful instructional tool. Mentor teachers across the local district where VR was used in practicum experiences mentioned how they would also like to have access to the technology, and how they would use it regularly as an instructional tool.

The following reflects the experiences of a female teacher candidate. Throughout the course of her student teaching, she led two VR tours with her first grade students. The first graders had expressed an interest in learning about the ocean and prior to the VR tour they had watched “Finding Nemo” in class. This interest sparked the first tour, which was “A Journey Along the Great Barrier Reef.” Among some of the pre-expedition questions and comments from the students were the following:

“I have virtual reality at home, will it be like the cardboard ones?”

“I’ve heard of virtual reality before!”

“Will we be able to see sharks in the ocean?”

“Will we see dolphins and turtles?”

The candidate prepared the students for VR use by telling them they need to use the goggles responsibly. She explained to the students that it is a privilege to use VR and that they should be treated with respect and care. The candidate practiced using goggles with the students by asking them to form circles with their hands and pretend that their hands were goggles. They practiced picking the goggles up with two hands and setting them down gently. They practiced taking turns, sharing with their table partners, and handing the goggles off to another student. The particular VR set that was utilized contained ten goggles, and the classroom had twenty-two students, so they were required to share. This meant that there were eight pairs of students sharing and two groups of three students sharing.

After initial preparations to use VR, the students' excitement level was encouraging to see. Their eyes lit up as they formed into groups and were given the goggles. The first grade students began their journey along the Great Barrier Reef, as the first scene appeared in their goggles with coral reefs and schools of fish, their excitement was evident through their apparent laughter and

jumping up and down. Exclamations such as: “woah,” “awesome,” and “this is so cool,” were heard throughout the classroom. The students began to walk around and attempt to touch objects as they were “swimming through the sea.” The next scene depicted Manta Rays, before telling the students the name of the animal shown, the teacher candidate allowed for the students to explore the scene and make predictions to one another about the animal. The teacher candidate did not have to prompt the students as it was a natural process for the students to make predictions, connections, and ask questions. After they had been given time to look around, make predictions of their own, and talk with their classmates, the teacher candidate answered their questions and told them that the animal they were viewing was a Manta Ray. The students repeatedly asked, “Are we going to see a shark?” Though they were very hopeful that they would see a shark, there were only dolphins, turtles, Potato Cod fish, and more Manta Rays. However, their interest in sharks represented an opportunity for future exploration and inquiry. After the expedition was over, one student asked the teacher candidate if she could, “Please do the next one on volcanoes?” Other students asked, “When will we get to use these again?” Their eager attitudes reflected the value of the learning experience that they were given.

Throughout the expedition, the students were fully engaged. There were no behavior issues and no students “off task.” The VR tour was truly centered on the whole-child. The first grade students were making predictions and speaking to one another about their explorations as well as the plants and animals that they were seeing. The discovery process was natural, exciting, and inspiring for them. They could not wait for the next scene to pop up and they excelled at sharing with their partners. Sharing is a fundamental skill that can be difficult for many children and even some adults, however, the first graders mastered this skill during the VR tour. They looked around and explored the current scene, and then allowed for their partner to do the same without being asked. Students even went home to tell their parents and siblings about their experiences, as the following day, the teacher candidate had siblings of students in her class coming up to her and asking, “When are we going to use the VR goggles in my class?” This experience allowed for students to be social with one another as they explored and learned about the Great Barrier Reef.

The VR experience also allowed for the students to inquire and discover. The students were excited to tell their friends in the class what they were seeing and to ask questions. Not only were students asking questions, but they were making connections, observing, and building meaningful understandings throughout their journey along the Great Barrier Reef.

This process and the observed benefits also occurred in the students' next tour. At the time, they were learning about penguins and Antarctica which catalyzed the expedition. Students were making predictions about what types of penguins and seals they were seeing. They were also trying to figure out whether people live in Antarctica or not. The tour included Port Lockroy, an outpost on Goudier Island in the Antarctic Peninsula, which is open to visitors during the summer. Due to the fact that the students saw boats, cruise ships, and a house, it was natural for them to inquire about people living in Antarctica. The tour also showed volcanic peaks, which catered to students' previous interest. One scene in the tour depicted Leopard Seals, and they were enthralled with the size of the animal. At the end of the day, students were still discussing

new things they learned from the VR expedition. A few students stated, “I never knew that they were called Leopard Seals, I thought they were called Lion Seals.” Students also stated that they had never heard of Gentoo Penguins (the penguins featured in one VR scene) before, because they had only learned about Rockhopper Penguins. These tours activated their prior knowledge, and allowed them to make predictions, connections, and discoveries, while encouraging intrinsically motivated inquiry.

Along with fostering social and cognitive activity, VR expeditions also emphasize physical movement. The students were actively engaged, moving around the classroom, and walking through their virtual worlds. VR tours allow for the students to be fully engaged in a topic. During VR, students learn, discover, and inquire about what they are seeing. They discuss what they are seeing with their peers and ask questions. They also walk around and even attempt to touch the objects that they are seeing. Students were excited to be using the technology and they felt like “big kids” because they were trusted with it. At least temporarily, they mastered the art of sharing and were very responsible. VR allowed the students to truly feel like they were on the Great Barrier Reef and in Antarctica.

Professional Development

Following the second VR tour, the teacher candidate was approached by the principal of the school and asked if she would be willing to give a demonstration on VR. The teacher candidate gave this demonstration to every teacher at the school during a staff meeting. She took them on the same tour to the Great Barrier Reef as the first grade students. The professional development workshop consisted of a brief demonstration on how to set up the VR expeditions. Then, the candidate took the teachers on the expedition, showing them first-hand how powerful the learning experience could be for all ages. They were almost as excited as the first graders, exclaiming how “their students would love to use this.” The teacher candidate went around to each of the teachers, and showed them what it looked like from the perspective of the expedition leader, using the guide tablet. They were able to see how to lead an expedition as well as experience the expedition through the VR goggles. During the demonstration, teachers asked questions about what types of tours they could take with their students. The candidate explained that VR expeditions consist of multiple genres. Even the Spanish teacher asked if there was anything she would be able to utilize, and the candidate showed her direct possibilities using the VR platform. The teachers were eager to utilize VR in their classrooms and asked the teacher candidate if she would be willing to help them find expeditions and teach them, individually, how to set up and guide a tour. The teachers recognized the benefits of the VR during the demonstration and were willing and eager to use them in their classrooms.

Whole-Child Benefits of VR

As mentioned in the literature and in the anecdotal/observational use of VR in practicum experiences, student teaching, and in professional development, the use of VR has several child-centered benefits in the classroom that foster engagement, concept development, and understanding of material. These benefits are evident across whole-child realms such as cognitive/academic, social, and physical. Students engaged in VR activities were observed to

inquire, play, interact with the content and with others in meaningful ways, and make personal connections. Classes were highly social, with students interacting with multiple peers as they experienced new places or content through their expeditions. VR also promoted physical movement and students were observed to be moving constantly, walking around the room, or trying to touch objects in virtual space.

Conclusions

As VR and AR continue to develop, entire virtual worlds will open for students to explore. The technology will soon be in mainstream use, and will develop to the point that students can fully interact with their virtual world through the use of haptic gloves, motion sensors, and eye-tracking cameras. The Virtual Reality Society (2017) explains that “we can expect to see many more innovative uses for the technology in the future and perhaps a fundamental way in which we communicate and work” (para. 15). Imagine if children could manipulate a cell in virtual space, or pull apart geologic layers. The potential for use in schools is endless. As the educational landscape shifts towards a more technologically-integrated classroom, teachers need to be prepared to use technologies like VR. So far, the benefits have been evident in pioneering classrooms, including whole-child benefits across cognitive, social, and physical realms. If teacher-training programs can utilize this technology in methods courses and prepare students for using the technology in their future classrooms, then teacher candidates can be at the forefront of a technological revolution in schools.

References

- ClassVR. (2018). Geography & science VR case study: Ocean: Coral reefs. Retrieved from <http://www.classvr.com/geography-science-generation-ocean-coral-reefs-student-age-11/>
- Curcio, I. D. D., Dipace, A., & Norlund, A. (2016). Virtual realities and education. *Research on Education and Media*, 8(2), 60-68.
- Fernandez, M. (2017). Augmented-virtual reality: How to improve education systems. *Higher Learning Research Communications*, 7(1).
- Guzzetti, B. J., & Stockrocki, M. (2013). Teaching and learning in a virtual world. *E-Learning and Digital Media*, 10(3), 242-259.
- Hansman, H. (2016). How can schools use virtual reality? *Smithsonian.com*. Retrieved from: <https://www.smithsonianmag.com/innovation/how-can-schools-use-virtual-reality-180957974/>
- Hinrichs, R., & Wankel, C. (Eds.). (2011). *Transforming virtual world learning: Cutting-Edge Technologies in Education* (Vol. 4). Bingley, UK: Emerald.
- Hwang, W. Y., & Hu, S. S. (2013). Analysis of peer learning behaviors using multiple representations in virtual reality and their impacts on geometry problem solving. *Computers & Education*, 62, 308– 319.
- Lisichenko, R. (2016). Issues surrounding the use of virtual reality in geographic education. *The Geography Teacher*, 12(4), 159-166.
- Nussli, N.C., & Oh, K. (2016). A systematic, inquiry-based 7-step virtual worlds teacher training. *E-Learning and Digital Media*, 12, 502-529.
- Virtual Reality Society. (2017). What is virtual reality? Retrieved from <https://www.vrs.org.uk/virtual-reality/what-is-virtual-reality.html>
- Wankel, C., & Blessinger, P. (2012). *Increasing student engagement and retention using immersive interfaces: Virtual worlds, gaming, and simulation: Cutting-Edge Technologies in Higher Education* (Vol. 6c), Bingley, UK: Emerald.
- Zantua, L.S. (2017). Utilization of virtual reality content in grade 6 social studies using affordable virtual reality technology. *Asia Pacific Journal of Multidisciplinary Research*, 5(2), 1-10.



Page Turners: Books for Children

Patricia A. Crawford^a, Maria T. Genest^b, Katrina Bartow Jacobs^c, Carla K. Meyer^d, Michelle J. Sobolak^e

^aUniversity of Pittsburgh, ^bLa Roche College, ^cUniversity of Pittsburgh, ^dDuquesne University, ^eUniversity of Pittsburgh

Picturebooks

Outside My Window

Written by **Linda Ashman**

Illustrated by **Jamey Christoph**

Eerdmans, 2018. Unpaginated. ISBN 978-0802854650.

A young girl gazes out her window and says, “Just outside my window/ stands an old magnolia tree/and hidden in its branches/ is the tree house built for me./ What’s outside your window?” In turn, children around the globe look outside and tell what they see: crowded buildings, skinny palm trees, narrow alleys, tumbling ocean waves, the family garden, and so much more. While windows allow us to look into our own world, this book gives readers a glimpse into the worlds of others. The rhyming text and captivating illustrations celebrate the dual elements of diversity and unity that are shared by people everywhere. This book is a potentially rich match for exploring geography, culture, and perspective taking. Ages 4-8. (PAC)

The Stuff of Stars

Written by **Marion Dane Bauer**

Illustrated by **Ekua Holmes**

Candlewick, 2018. ISBN 978-0-7636-7883-8

Ekua Holmes, winner of the 2019 Coretta Scott King Illustrator Award, innovatively pairs vibrant images with Marian Dane Bauer's poetic narrative to describe the origins of the universe. Together, author and illustrator, take readers on a scientific journey from the Big Bang, through the formation of stars and planets, to the emergence of life on Earth. The narrator speaks directly to the reader, enveloping the child into this narrative, highlighting that we are all "the stuff of stars." This unique book is a gorgeous and engaging combination of science and art, placing the reader within the fascinating history of the universe. Ages 4 and up. (MTG)

A Bike Like Sergio's

Written by **Maribeth Boelts**

Illustrated by **Noah Z. Jones**

Candlewick, 2016. Unpaginated. ISBN 978-1-5362-0295-3.

Ruben runs alongside as his friend Sergio rides his bike around the neighborhood. Out of breath, Ruben feels that he is the only kid without a bike to ride, and with a child's intuition, knows that this is unlikely to change anytime soon. Surprisingly, circumstances do change, and Ruben has to make an important decision. This gentle story is a window into that universal feeling of longing and belonging, as Ruben wrestles with ideas of right and wrong. With engaging dialogue and simple drawings that immerse readers in Ruben's neighborhood, friends, school, and family life, this text offers a powerful invitation for adults and children to discuss issues of family, honesty, and belonging. Ages 4-8. (MTG)

I Do Not Like Books Anymore!

Written and illustrated by **Daisy Hirst**

Candlewick, 2018. Unpaginated. ISBN 9781536203349.

Having books read to you is fun. But, as Natalie discovers, learning to read is not so easy. This charming book highlights the love that Natalie and her brother Alphonse share in having others read to them, and chronicles Natalie's path to becoming a reader. Beginning readers will see themselves in Natalie as she realizes that learning to read is challenging and that the books she can read are not the adventure-filled tales her adult family members read aloud to her. Bold and engaging cartoon illustrations fill the pages, as Natalie realizes she can be a reader and use her imagination to write and illustrate adventure-filled tales of her own. Ages 3-7. (MJS)

Night Job

Written by **Karen Hesse**

Illustrated by **G. Brian Karas**

Candlewick, 2018. Unpaginated. ISBN 9780763662387.

Zooming through the city on the back of dad's motorcycle, a father and son ride off in the evening, heading toward dad's night job as a school custodian. The text highlights the close relationship between father and son as they help each other with custodial tasks, while listening to a baseball game on the radio or shooting hoops in the school gym. Karas' illustrations surround the characters with variations of grays, complemented by pops of color in the purple lilacs and red mop bucket Dad wheels throughout each panel. *Night Job* is a wonderful book that positively highlights the very common experience for many children of having a parent who works on a night shift. Ages 4-8. (MTG)

Loving Hands

Written by **Tony Johnston**

Illustrated by **Amy June Bates**

Candlewick, 2018. Unpaginated. ISBN 9780763679934.

Hands do so many things. They touch, comfort, create, and hold...and sometimes, they connect generations. This tender picturebook chronicles the relationship between mother and son over the course of a lifetime, showing a host of daily interactions peppered with examples of loving touch. Each turn of the page moves the storyline forward, allowing readers to see a child grow into manhood and a young, expectant mother mature into old age. The poetic language and gentle watercolor images lure readers both young and old. While this book offers children, rhythm, rhyme, and an engaging storyline, it also provides adults a poignant opportunity to reflect on touchstone moments in the relationship between parent and child. Ages 4 and up. (PAC)

Storm

Written and illustrated by **Sam Usher**.

Penguin, 2018. Unpaginated. ISBN 9781536202823.

Storm is one of four books about Sam, who experiences adventures with his Granddad in various types of weather. A wind storm is brewing and Sam and his Granddad realize it is perfect weather to fly a kite. However, first they must find their kite, which leads them to reminisce

about many other adventures they have enjoyed together. Usher's watercolor and ink illustrations recount the pair's many adventures and capture them flying their kite in the park as well as their whimsical flight all the way home. Readers are reminded that it is not the specific adventure that matters, but rather that the adventure is shared with a loved one. Ages 3-7. (MJS)

I'm in Charge!

Written by **Jeanne Willis**

Illustrated by **Jarvis**

Candlewick, 2017. Unpaginated. ISBN 978-1-5362-0259-5

Like many young children, Little Rhino believes he should make all the rules. From the moment he was born, he felt he was in charge, much to the chagrin of his parents and the other animals of the savannah. He bullies animals big and small until he meets his match in a hungry pygmy mouse. Finally, someone stands up to Little Rhino. While the mouse is making a point about the value of sharing, a stampede of wildebeests helps Little Rhino see the error in his ways. This delightful text is told in rhyme and captures important life lessons: one person or animal is not the boss of others and sharing is the ultimate gift. Ages 2-5. (MJS)

What is Given from the Heart

Written by **Patricia C. McKissack**

Illustrated by **April Harrison**

Random House, 2019. Unpaginated. ISBN 978-0-375-83615-2

"What is given from the heart reaches the heart," Reverend Dennis tells his congregation, including young James Otis. This beautiful book tells the story of James Otis and his mother, after the death of his father. Although times are hard and the family has little, they keep a roof over their heads and support one another. For Valentine's Day, their church is putting together love boxes for families who are struggling - including Mrs. Temple and her daughter Sarah, who have lost everything in a fire. James Otis despairs of finding something that Sarah will want, but ultimately follows his heart and creates a beautiful book for her. This moving tale demonstrates the power of community and acts of love, especially during trying times. Harrison's illustrations capture the spirit and camaraderie of this African American community, and particularly of the love and faith James Otis and his Mama share. This book is also particularly poignant, as it is the last work of Patricia McKissack before her passing. Ages 5-10. (KBJ)

Chapter Books

Louisiana's Way Home

Written by **Kate DiCamillo**

Candlewick, 2018. 227 pages. ISBN 978076369463.

Louisiana Elefante is in crisis. Orphaned as a baby, she relies solely on her eccentric Granny for family support. Now, in the dark of night, Granny is driving her away from the comfort of her Florida home, beloved pets, and dearest friends--all in an effort to break a generational curse. This unwanted road trip leads Louisiana to a series of events that are at once both tragic and humorous, and which cause her to ask deep questions: *What is the truth about her past? What can she expect from the future? Where is home?* In the end, she must overcome her deepest fears and make life-changing choices. Set in the 1970's, this book is a powerful sequel to DiCamillo's *Raymie Nightingale*. Ages 9-12. (PAC)

You Don't Know Everything, Jilly P!

Written by **Alex Gino**

Scholastic, 2018. 234 pages. ISBN 978054595624.

Jilly P. is an observant, intelligent middle schooler from a diverse and loving family. Jilly's favorite pastime is reading and discussing fantasy novels with an online peer group. Jilly's world is turned upside down when her baby sister is born Deaf. Eager to understand and explore options for her baby sister, Jilly reaches out to her online friend, Derek, who in addition to being a Deaf, ASL user is also Black. Jilly learns that life does not always present easy solutions, especially when the world treats different communities disparately. Jilly learns the world will treat Emma and Derek differently; she learns how to advocate for others with whom she does not share a lived experience. Ages 8-12. (CKM)

Resistance

Written by **Jennifer A. Nielsen**

Scholastic, 2018. ISBN 9781338148473.

Based on actual events, author Jennifer Nielsen integrates a young protagonist Cheya Linder to tell the story of Jewish Resistance in Poland. Cheya, a Jewish, teenage girl, uses her fair features

to become a courier for the Jewish Resistance. She smuggles food, documents, and even people in and out of the Jewish Ghettos. As conditions worsen, Cheya finds herself volunteering for more perilous work until she finds herself involved in the uprising at the Warsaw Ghetto. This harrowing story provides a different perspective of the Holocaust and creates a world that intertwines history with fictional characters to the heroic story of the Jewish Resistance fighters. Ages 8-12. (CKM)

Poetry Books

I'll Root for You

Written by **Edward van de Vendel**

Illustrated by **Wolf Erlbruch**

Translated into English by **David Colmer**.

Eerdmans Books for Young Readers, 2019. ISBN 9780802855015

While we often cheer on children's athletic talents, we sometimes fail to recognize the patience, practice, and failure that lead to the successes. This book of lyrical, playful poetry - accompanied by whimsical illustrations of (more or less) athletic animals - reminds us to value the process as much as the goal. The book is a series of sports-oriented poems that celebrate learning from mistakes, trying one's best, playing fair, and working as a team. While some of the poems rhyme and others do not, they all have a lively tone and pace that is sure to engage even very young readers. Originally published in the Netherlands, this charming book of poetry is now available for English speaking audiences. Ages 5-10. (KBJ)

Martin Rising: Requiem for a King

Written by **Andrea Davis Pinkney**

Illustrated by **Brian Pinkney**

Scholastic, 2018. ISBN 9780545702539

The Pinkneys have again combined their lyrical and artistic talents to create a book that is simultaneously heartbreaking, uplifting, and memorable. In this collection of short poems, the author and illustrator chronicle the work and times of Martin Luther King, Jr. Beginning with an introductory poem about Martin's childhood, the book traces the fateful events of 1968, from the death of two Memphis sanitation workers in February to the days following Dr. King's assassination in April. The author provides a unique perspective on this historical period,

describing both Dr. King's mission of non-violent protest as well as identifying some of the terrible injustices and tragedies experienced by many people at this time. Combining history, non-fiction texts, and poetry, this book is an extraordinary way to engage students in understanding the incredible work and legacy of Dr. Martin Luther King, Jr. Ages 8-12. (KBJ)



IJWC Updates

IJWC is now a part of the extraordinary ERIC database.

Upcoming Issues

The editorial team remains committed to supporting readers' understanding of holistic, integrative, and equitable learning. In addition to primary and applied research, current technical information, and reflecting through photographs, look for continued information in children's and families' health and wellness, issues related to STEAM learning, and reviews of children's quality literature. IJWC is exploring the potential use of video. This use of video may be included in an article, serve as a reflection component, or illustrate learning and instruction.

New Editorial Members

It is only through the research, expertise, and commitment of our new board members that we are able to expand IJWC content. Each board member is a demonstrated scholar in their respective area.

New Editor

A professional welcome to Dr. Katherine Mangione who, as of the fall/2019 issue, will become the editor. She brings a wealth of experience, knowledge, and excitement to the IJWC editorial commitment.

Student Scholars

For the fall issue, Sandra J. Stone and Kathleen G. Burriss will continue to support the efforts of IJWC and, in particular, will edit a new section of the journal devoted specifically to student authors. Within an understanding of holistic and integrative learning, the editorial board assumes responsibility to nurture and support tomorrow's child advocates and educational leaders. In this new IJWC section "Student Scholars," masters and doctoral candidates are invited to submit papers for review and possible publication consideration.

Yearly Acknowledgement

Each year, the IJWC editorial board recognizes one article that, in particular, profoundly supports readers' ability to nurture children's holistic learning and development.

2018

Neuroeducation and Early Elementary Teaching: Retrospective Innovation for Promoting Growth with Students Living in Poverty by Karyn Allee-Herndon and Sherron Killingsworth Roberts

2017

Gender Equity in Diverse Curriculum Content: Views from Primary Teachers in Tanzania by Jessica Essary and James Hoot

2016

Are Korean Early Childhood Teachers Becoming More Responsive to Multicultural Children? An Analysis of Diversity Self-efficacy Data From the Korean Institute of Child Care and Education (KICCE) Survey by Sungok R. Park, James Hoot, and Hyejin Shin