

# **YOUNG CHILDREN IN THE DIGITAL AGE: A PARENT'S GUIDE**

**Nancy Carlsson-Paige, Ed. D.**



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*When I talk with parents these days, they often say that their children's lives are very different from what their own childhoods were like. Frequently, they name technology as the single biggest change in their kids' lives—and in their own lives too. Many parents go on to say that their children are on screens more than they want them to be, and that screen use is often a source of conflict with their children. Many express uncertainty about how they are letting their kids use screens, and a sense that they might be doing it "wrong." I'm hoping that the ideas in this report will resonate in a positive way for readers by providing some helpful new information and support on this challenging topic—that's my goal in writing this.*

Technology cascaded into all of our lives in a very short period of time. Many of us are struggling to make sense of it, to figure out how we can use technology well. It has been a challenge for every age group. Some of the concerns we read about are serious—the psychological effects of social media, the breeches on privacy, health issues like sleep disturbance, eye strain, and perhaps other effects waiting to emerge.<sup>1</sup> Many of these risks have their biggest impact on young children because their bodies and minds are still forming.

Many parents find it hard to make decisions about screen time for their kids because advice comes from different directions and often conflicts. In the field of child development, we have decades of theory and research that can be very helpful as a guide for screen and digital device use with young kids. These ideas can

be a resource for you to depend on when you are trying to figure out about any screen, app, or digital device your child might want to use.

From child development theory and research, we know a great deal about how children learn and develop and what they need in order to grow to their full potential. In this report, I'll offer you six core ideas that come from the field of child development that can be helpful in evaluating screen and technology use with young children. We can use these ideas, not as a rigid rulebook of "shoulds" and "should nots," but more as a guide to help us make decisions and support kids in this tech-saturated world of ours.

## SIX CORE IDEAS FROM THE FIELD OF CHILD DEVELOPMENT:

### **#1. YOUNG CHILDREN USE THEIR WHOLE BODIES AND ALL OF THEIR SENSES TO LEARN ABOUT THE WORLD.**

Babies and young children are always moving. They have to move. It's the movements and use of all of their senses that drives their development. A lot of us in the child development field were delighted in the 1990's when advances in neuroscience began crossing over into child development. The brain scientists were confirming that play and active learning are critical to optimal brain development. Neurons in the brain strengthen and connect as children move, explore, and interact in the world. Everything we knew from child development theory was supported by this new brain research.

The brain of a newborn is a little more than one quarter of the volume and weight of the adult brain. By the age of three, it has reached 80 percent of its adult size and, by age five, 90 percent. Neurons are strengthening and synapses

are forming in the brain at a faster rate during these early years than at any other time in life.

Neurons in the brain strengthen and connect as children move, explore, interact in the world.

Unfortunately, there is a dearth of specific research about how media use affects brain development. But what we do know is that the experiences a child has shape brain development. As the child moves, interacts, and uses her senses, neural activity in the brain is stimulated. One neuroscientist wrote, “You hold him on your lap and talk...and neurons from his ears start hard-wiring connections to the auditory cortex. And you thought you were just playing with your kid.”<sup>3</sup> A child’s whole development, brain development included, is best supported when young kids have full-on opportunities to use their whole bodies and senses for activity, play, and social interaction.



Photo #1  
Fisher-Price Newborn-to-Toddler Apptivity Seat

When we watch young children who are engaging with screens, like the child in photo #1, one of the first things we notice is that they are not moving or using their whole bodies. Their bodies are more passive as their attention is absorbed by the screen. The focus shifts from moving to looking. From acting on the world to re-acting to what’s on the screen. This is a very significant shift in energy and attention for a child. Further, there is something even more significant. When a child propels herself forward physically—to grab a toy, to crawl, to stand—she is taking initiative to act in and on the world. When a child looks at a screen, not only is she more passive, but also her attention shifts away from her own initiative.

In my view, this is a very fundamental point. We want to encourage young children to act on the world, to be interested in exploring everything around them. When we teach them early in life that an object—a screen—entertains them, we are undermining their inherent capacity for taking initiative and learning through discovery.

## **#2. YOUNG CHILDREN LEARN FROM DIRECT, FIRST-HAND EXPERIENCE IN THE REAL WORLD.<sup>2</sup>**

Everything on a screen is a symbolic representation of something in the real world. You and I know this without even thinking about it. But young children don’t understand this. And it takes them many years to realize fully that what is on the screen is a representation of something and not the real thing. Even my grandson Miles, at the age of four, punched the television set because, he said, “I thought the bad guy was coming out of the TV.”

The youngest of my eight grandchildren is Max, who is two years old and lives in Swaziland. Recently, we had a Skype call with him and his parents. Max kept reaching for the screen, trying to touch me, to play and interact the way

When a child looks at a screen, not only is she more passive, but also her attention shifts away from her own initiative.

we did when I was visiting him last summer in Africa. He was confused. It’s true that with more experience, young children seem to get used to talking to a screen version of their loved ones. Skype and various apps that allow for real time conversations can help children be in touch with loved ones who are far away, and many families are glad to have this way to connect.



Photo #2  
Grandson Jake Skyping from the U.S. with his Guatemalan family

In the ideal sense, children benefit most from having direct experiences in the actual world of relationships and objects. This is because three-dimensional experiences are wholistic, they involve a child fully—body, mind, and feelings--and this level of engagement is greater than what can be gained from two-dimensional experiences.



Photo #3  
Enlight KiddieTAB Advertisement

In photo #3, we see a young child reaching for something she sees on a screen. This is an advertisement from the company KiddieTab that is promoting the use of screens with young children. It says: "The Benefits of Exposing Young Children to Modern Technology."

There is a lot of marketing to parents that asserts the benefits of screen technology use with young

children. And a majority of parents believe that early screen use is beneficial.<sup>4</sup> But we need to be cautious about these claims, as companies can make them even if they are false or not grounded in research.<sup>5</sup>

Let's imagine that the child in photo #3 is reaching for a ball that she sees on the screen. Think of all the things she could do with an actual ball. She could grab it, turn it over in her hands, roll it, watch it roll away, crawl to get it, throw it, bite it--she could keep on inventing new ways to explore the ball. And with each exploration, the neurons in her brain would be getting stronger, new synapses connecting.

When I was in Swaziland last summer, Max was 18 months old. He was using a ball to work on a very important cognitive concept: object permanence. This is one of the most fundamental concepts in human development--the idea that when something is out of our sight, it still exists. Without this concept, humans wouldn't learn language or math or be able to think of anything abstractly. We all constructed this concept in our minds during the first two years of life, and we did it by having lots of experiences interacting with objects and people. Slowly, we learned that things existed even when we couldn't see them.

Max spent a lot of time working on this idea last summer. He would roll the ball under the couch so it was out of sight. At first, he looked a bit confused. Where was the ball now? Eventually, he would crawl under the couch and find it. He practiced this countless times, each time getting a little more secure with the idea of where that ball was even when it was out of his view.

Max wouldn't have been able to build this important concept in his mind without having had direct experiences with the ball in three-dimensional space. Seeing the ball on a screen would not have given him the data he needed to construct this idea.

There are many concepts young children develop out of their experiences with three-dimensional objects. When we watch them, we see that they are learning almost constantly from banging things, dropping them, rolling them, mashing them around, covering them up, tasting them, rattling them, etc.

I saw a research study recently that said that young children couldn't transfer information learned on a two-dimensional screen to three dimensions.<sup>6</sup> That seems obvious to me because of how they learn and need to learn in the early years. Presenting a child with images on a 2-D screen short changes a child by giving her far too little to go on, too little information on which to build concepts needed in order to build the foundation for later learning.

### **#3. YOUNG CHILDREN LEARN BY INVENTING IDEAS.**

Children are active learners. They learn by interacting with other people and by having lots of hands-on experiences with all kinds of things around them.

Children don't learn optimally when we try to put information into their heads directly. Most of us probably remember having to learn some things by rote when we were in school. And most of us probably know that we forgot what we learned quite quickly. For genuine learning to happen, kids need to construct ideas for themselves, in their own minds. This is the kind of learning that is real and genuine and stays with us.

Presenting a child with images on a 2-D screen short changes a child by giving her far too little to go on, too little information on which to build concepts needed in order to build the foundation for later learning.



Photo #4  
Block building in a Kindergarten classroom

Let's look at photo #4 of children building with blocks. When kids build with blocks and with many other materials, they are working on a whole variety of concepts. One very important group of concepts relate to number. With blocks, kids classify them into groups by shape. They put them in order by length. They match them up in various ways. They do this usually while they are playing and this learning is happening naturally. These concepts build toward an understanding of quantity, a concept that is quite complex and takes time to understand, a concept we all constructed at one time in our young lives.

If you and I look at different objects--let's say at a group of four giraffes, a group of four watermelons, and a group of four cupcakes--we know without having to think about it that there are four objects in each of these groupings, even though they look very different. But we didn't always know this, and young children don't automatically know it. They have to build this understanding over time. For young children, whichever grouping is the biggest—takes up the most space—has the most in it. Without thinking about it, you and I can “abstract” the quantity of four from the materials and understand that these different-looking amounts have a “fourness” in common.

This isn't a concept that we can teach children directly. Like many concepts, children have to construct this idea from their own experience with materials. That is why having lots of experiences with a whole variety of real objects is critical to early math learning.

In many early childhood classrooms these days, adults are teaching children by direct instruction through rote learning. Commonly, there will be flashcards with number symbols written on them: 4, 5, 8, 9, etc. Teachers will hold these up for children to name. But a child can call out the correct "name" of the numeral without understanding the "concept" of the number. He could say that "4" is "four" without understanding the concept of quantity.

Unfortunately, in early childhood education today, there is far too much drilling of number names and other specific memorizable "facts." Many adults are deceived into thinking that children understand concepts because they can parrot back the names of symbols. But children have to construct this understanding in their own minds through their ongoing actions on materials and in play with other kids.

Good early childhood education offers play-based learning experiences that allow children to build ideas through engaging activities. This is what active learning really means. It's the opposite of drills and rote learning. The focus in a play-based classroom is on each child's developing understanding and not on getting final right-or-wrong-answers.

Good early childhood education offers play-based learning experiences that allow children to build ideas through engaging activities.

When we observe children, we notice that they are often working on these early math concepts spontaneously. I was in Guatemala where my grandson Jake lived, and he was five years old at the time. We had a lovely fruit salad one morning for breakfast. The bowl of fruit was out on the table for five of us to share. Jake went out to the table and set up the breakfast on his own.



Photo #5  
Children work on math concepts in their everyday lives

He put a plate at each chair (one-to-one correspondence). Then he spooned three pieces of watermelon and two pieces of pineapple onto each plate (classification by three's and two's). Again, Jake was working on these pre-number concepts on his own, just through his own natural activity.

During this same visit, I noticed that Jake was getting interested in counting. One day as we walked by the lake in his lakeside village, we saw some ducks on the water (there were five). He started to count: "one, two, three, four, eight!" He grinned at me happily.

If Jake were in a classroom with an emphasis on direct instruction and right answers, the teacher would correct him for counting incorrectly. But actually, Jake was showing how much he already knew about number. He was matching the name of a number to each duck. He knew that those names referred to quantities. He stated the

names in an order. This was a lot to already know. But he still needed more experience before he would understand the specific quantity that each of those names referred to.

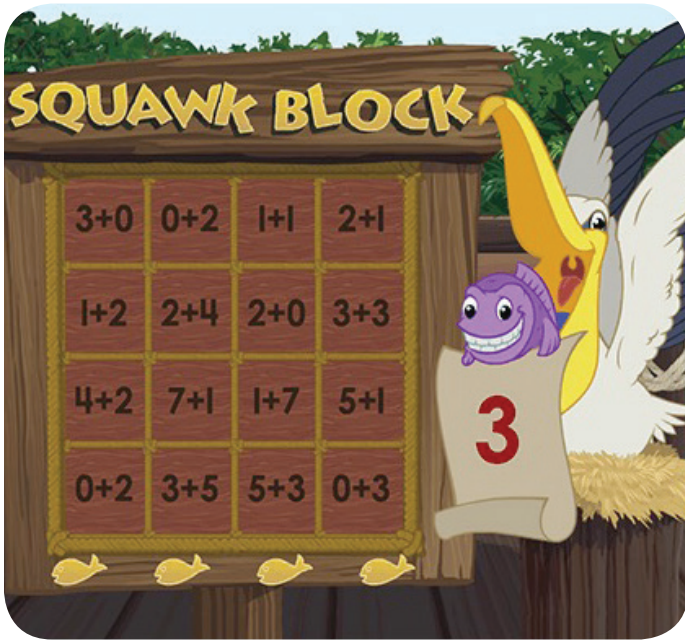


Photo #6

ABC Mouse Online Curriculum for Children Ages 2-8

Unfortunately, most of the learning apps and computer learning games such as the example in photo #6, by their very nature, promote the kind of learning that emphasizes getting the right answers and learning by rote. Kids follow directions and give answers. With screens and digital devices, they can't learn by manipulating actual building materials. If they do have an app that lets them move objects around on a screen, for example, they will learn something, but far less than what they could potentially learn from having materials in their hands and discovering myriad things to do with them. The learning that comes from drills and producing answers does not provide as solid a foundation of understanding in a child's mind. It is a more superficial kind of learning that does not hold up as well as the kind of learning that a child constructs through direct action on materials.

In addition, when children are learning through interaction--with materials and with other kids--they are learning about learning itself. They learn that they can have their own original ideas. They can create and invent and build understanding in their own minds. Because screen-based learning focuses on direct instruction and right answers, kids get the wrong idea about what learning actually is. In classrooms where children have too much direct instruction, they can think that knowledge and answers belong to the teacher. And when they learn by computers and apps, they can think the answers are in the devices. In both cases, the answers lie outside of the child, and are not within his or her own power to discover.

#### #4. YOUNG CHILDREN MAKE SENSE OF THEIR WORLD THROUGH PLAY.

When you and I have experiences that cause us angst--maybe we have a disagreement at work, or something scary happened to us, or there was a conflict at home--we tend to go over the moments of difficulty in our minds. We replay the events mentally as we try to sort through what happened. We might talk with someone we trust and verbally describe what took place and how we feel. As adults, we have this ability to use our thoughts and words to process our experiences. But children don't have these

tools. The way that young children process and make sense of their experiences is through play.

Play is so vital to young children's emotional and mental health that it is sometimes called the engine of development. Play is universal among children, as universal as walking and talking. All children know how to play, and no one has to teach them. Surely, any activity that is wired into humans this way is critical for human adaptation and development.

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When my grandson Jackson was two years old and I was giving him a bath, a small spider dropped down from above onto the rim of the bathtub. Jackson started screaming in fear of the spider. I was surprised and tried to show Jackson that the little creature was harmless, but he kept on screaming and seemed genuinely scared. So, I wrapped Jackson in a towel and lifted him out of the tub.

The next day when Jackson came over to my house after day care, I had some play things set out. There was playdough, a tiny doll (Jackson's baby brother had just been born so he played with the little doll a lot), and a plastic spider—the kind you can buy in a jug full of different kinds of plastic animals. There was also a little box on the table. Jackson put the toy baby into the box. He squished some playdough into a flat shape, covered the baby up, and said, "The baby is scared of the spider." Then he took the baby back out of the box, then quickly returned it to the box, covered it with playdough and repeated, "The baby is scared of the spider." And, then once more, Jackson repeated the same little scenario.

A two-year-old is just beginning to play, but we can see the simple and important elements of play in what Jackson did. He told a little story that was based in his own experience with the spider, but it was also partly from his imagination. He projected his own fear of the spider onto the baby and then found a way to protect the baby from the spider with the playdough cover. Jackson repeated this little story several times, all the while getting a sense of mastery over what had scared him.

As children get older, their play becomes more complex. Brain scientists would tell us that the neural structures of the brain increase as children's play gets more complex, and the growing brain supports more complex play.

Children get better at playing the more they play. They need to practice every day so they can become good players.

Jackson's spider encounter is an example of an everyday stress that could happen in the life of a fortunate child like Jackson whose basic needs—for a home, food, love, and security—are well met. There are forms of stress that some children experience that are far more severe than seeing a spider. But even in situations where there is more extreme stress--often when there is poverty or violence in a child's life--play is a vital resource that can help children cope. I have been amazed at the ability of children I've worked with in situations of violence and war that are able to use their play to strengthen their sense of safety and security.

Because play is such a vital resource for healthy development, it is worrisome to observe the significant decline in children's play today.

In observing children at play, whoever they are and whatever their circumstances, I look for the basic elements of play that we saw in Jackson at age two: a story that comes from the child's own experience; some original parts to the story that come from the child's imagination; some evidence of emotional benefit to the child (i.e., making sense of a situation; feeling positive, secure and safe; having fun).

Because play is such a vital resource for healthy development, it is worrisome to observe the significant decline in children's play today. Children are now playing less both at home and in school.<sup>7</sup>

In classrooms for young children, we've seen a dramatic decline in play. The education reforms of the last almost twenty years have pushed academic standards and testing down to our youngest kids, even to preschoolers. Studies have shown that classrooms for young children have far less play than in the past, less arts, less recess, and more direct instruction and

worksheets.<sup>8</sup> These changes in early childhood education have been detrimental to all young children, but most harmful to black and brown children living in low-income communities where misguided education reforms have had their greatest impact.<sup>9</sup> The loss of play in classrooms for young kids has robbed them of one of the greatest resources they have for making meaning of their lives and gaining feelings of mastery over difficult experiences.

The loss of play inside of schools has corresponded to a reduction of play in children's lives outside of school. Children are spending more time in front of screens — watching television, movies, and using computers, tablets and phones — than ever before.<sup>10</sup> The time kids are spending with these types of media is replacing child-directed play, even among very young children.

Many of us are familiar with issues relating to screen addiction, and all age groups, including young children, seem to habituate to screens. While there are many factors involved in screen addiction, different for each age group, it is worth noting that from a developmental perspective, young children may be especially vulnerable to habituation because of how their minds work. Young children are more swayed by what they see than are older children and adults who have a more developed capacity to think critically and to step away from what they are seeing if they choose to. Young kids live in the moment: they get engrossed with the images in front of them, and they are pulled in completely.

Young children are more swayed by what they see than are older children and adults



Photo #7

Action figures of characters from the movie *Frozen*

Not only are children today playing less, but when they do play, their ability to create their own original stories has declined.<sup>11</sup> The prevalence of screens in combination with the mass marketing of toys and products linked to screen media has affected how children play. When children see movies—for example, *Frozen* or *Star Wars*--and then play with the action figures, props, and costumes linked to these films, they typically act out the media-based stories and not stories of their own. The play looks very similar from one child to the next. Ideally, however, no two children would play in the same way. This particular influence of commercial culture has meant that not only do children today play less, but even when they do play, the experience isn't as fully beneficial as it might be.

Also, the messages in media culture tell children about themselves and their world. There's an over-representation of white characters in much of kids' pop culture and more whites featured in leading roles, as well as a prevalence of rigid gender stereotypes—all of which can negatively impact children's sense of self.<sup>12</sup>

## **#5. YOUNG CHILDREN BUILD INNER RESILIENCE AND COPING SKILLS THROUGH PLAY.**

After our visit to Guatemala the year my grandson Jake was four years old, I learned that he had cried for a long time when he realized that my husband Doug and I had left. The following year after our next long visit, I was determined to do a better job of helping Jake prepare for our departure.

The day before we were leaving to return to the U.S., I brought Jake over to the little casita where we were staying. I had some things to play with set out: my familiar home-made playdough, some popsicle sticks, paper, crayons and glue.

I drew a simple house on paper with two stick figures and said to Jake, "Tomorrow, Grampa Doug and I are going on an airplane back to Boston" (he had visited Boston in the past). Right away, he picked up a crayon and drew his own "house" on paper. He put us all inside the house and gave us names: Mommy, Papa, Grampa Doug, Nancy, and Jake. On another piece of paper, he drew another "house," ringed it with play dough and called it Boston. He put the same five people in there too. Then he started making airplanes. Jake glued two sticks together and put five people on the plane: Mommy, Papa, Grampa Doug, Nancy, and himself. He flew the plane from the house in Guatemala to the house in Boston. All of us were on the plane and all of us were in the houses together. He made more planes, always with five of us on them, and flew them all around the room and between the two houses. He was very engrossed in this play and it went on for a long time. When it was time to wind down, I said, "Jake this has been really fun playing with the airplanes and houses. But remember that tomorrow, Grampa Doug and I will go in an airplane back to Boston." I put two of his little playdough pieces on a plane and flew it to the Boston house.



Photo #8  
Jake's house with everyone inside

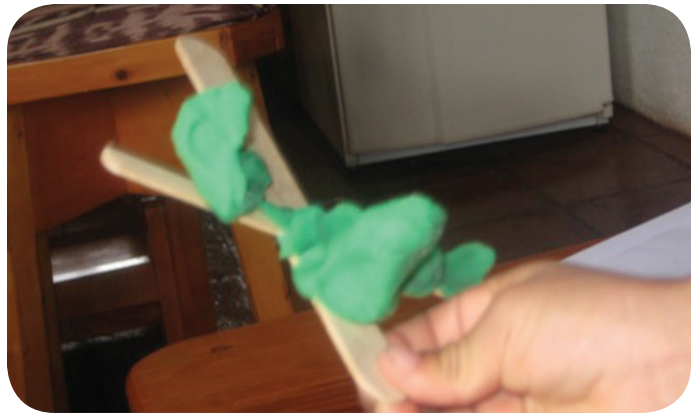


Photo #9  
Jake's airplane with all of us on board

The next day after we had left Guatemala, Jake's mom wrote to me to say that Jake woke up that morning and announced, "Grampa Doug and Nancy are gone. They went back to Boston." He seemed settled and tranquil, with no sign of distress.

Inner resilience builds in children over time. When children have the chance to play every day, they increasingly build skills that help them work through challenging experiences. Just in this one play episode, we can see that Jake was able to come to terms with an event that was potentially difficult for him. Instead of the feeling of despair he'd had the year before, there was a different confidence: "I can do this. I know Grampa Doug and Nancy left and I'm okay." When children play this way over time, their inner resilience strengthens; they become secure in handling the challenges life brings.

The materials Jake played with had a lot to do with his ability to create play of benefit to him. The materials were undefined and open-ended. With popsicle sticks, playdough, crayons and paper, he could make whatever he wanted. Giving kids undefined materials allows them to reach inward to create the props and symbols they need to get the most out of their play. This can't happen when we give them defined toys or screen apps or games because the images are pre-set. They determine what happens in the play and impede a child from accessing his or her own imagination and emotional needs.



Photo #10  
The Puppets Pals phone app

There are screen apps and games that many children spend a lot of time “playing.” Puppets pals, the app pictured in photo #10, is an example of a phone app. The creators of Puppets Pals advertise the app as “encouraging creative play.” There are characters in the app--policeman, ballerina, doctor, astronaut—and kids can tap on the screen to mix their heads and bodies. They can make the characters talk, move their limbs, and put them on animals or vehicles to ride as they tell a story.

I watched two of my granddaughters as they played with Puppets Pals. They had a lot of fun creating the characters, making them move, putting them on animals to ride. Almost all of their time was spent this way. The story they told was brief and confined to the characters and actions of the app.

It can be helpful to realize that the more that elements on a screen shape play, the less a child’s play can come from within. And the less a child’s play comes from within, the harder it will be to build inner resilience and coping skills through play. All of the entertaining options offered on the screen

Inner resilience builds in children over time.

The more that elements on a screen shape play, the less a child’s play can come from within.

interfere with a child’s own story and the needs of her own psyche. It’s a tradeoff we can keep in mind: More direction from outside means less access to the inner life of imagination and emotion.

## #6. CHILDREN LIVE AND LEARN IN A CONTEXT OF SOCIAL RELATIONSHIPS.

There is a human, social dimension to almost everything a child does. If we look again at photo #4 of children building with blocks, we see that the children weren’t only learning math with the blocks, they were learning math from one another. They learned from hearing each other’s ideas and they also learned about getting along with each other as they played.

Children’s emotional and social development happens slowly over time, just as their cognitive development does. They develop awareness and skills slowly that grow from their experience interacting with others.

Today, the context in which children are developing socially and emotionally is changing rapidly and dramatically. Children are playing less both in school and at home and therefore, have less experience interacting with other kids. And it seems, judging from the research, that many children have less time or less focused time with parents.<sup>13</sup> Many parents are less available to children because of time spent with technology.<sup>14</sup> Because child development theory would tell us that children need lots of social interaction for healthy development, it is a concern that they are getting less of it today.

It’s hard to pinpoint exactly what it looks like for children today to be having less social interaction, but this story really made me think. My friend Joyce told me that she recently rode on a bus and in the seat across from

her was a young child who looked to be about one year old sitting on the lap of a caregiver. Joyce said that she and the child began to interact. They smiled at each other, made faces, and went back and forth in their nonverbal communication. Suddenly, the caregiver whipped out a smart phone and handed it to the child who went quickly into a phone-absorbed state and never looked at Joyce again. This is one small example of one mobile device affecting one social interaction in a baby's life. What will be the effect on children of an accumulation of countless social experiences reshaped by technology?

When smartphones came out about ten years ago, many of us noticed parents on their phones with their children in public places like parks and restaurants. Teachers would tell me about parents on cell phones at day care pick up time, paying no attention to the child or the teacher, while continuing their conversations. Researchers began reporting that children felt "unimportant" when parents were on their phones; that they felt they were competing with technology for parents' attention.<sup>15</sup>

There's a large body of work in the child development field on children's healthy attachments and sense of security. While there are many important factors that affect children's emotional security, having the consistent, focused, loving attention of an adult is a major one. Perhaps those of us who interact with children have an opportunity here. We can practice giving our full, undivided attention to children at least during some times of the day. Doing this offers us a meaningful experience in the act of being present, something most of us find very difficult. Just staying in the moment of being with a child with awareness is a satisfying practice for us, and a true gift to children, one they sorely need today.

Soon after smartphones appeared on the market a decade ago, apps and tablets for kids became more prevalent. And as the prevalence of kiddie technology increased, something else began to occur. Parents and caregivers began to see an easy opening for using phones to amuse and distract children. What quickly became a common practice was to offer a phone to a child in a difficult situation--a hard transition, a conflict, a scary moment--or simply to occupy a child, like the caregiver on Joyce's bus. It was an easy solution. Distract the child, end the distress, amuse the child, make life easier. But at what cost to the child's social and emotional development?

A few summers ago, I spent a week with close friends, including five-year-old Quentin and his Nana. Quentin is very close to his Nana, he adores her. After we'd spent a full week together, Nana explained to Quentin that she had to leave in the morning to visit her own mom. When Nana pulled out of the driveway, Quentin let go with a painful cry. He wailed so completely, with so much sadness, as he watched his Nana drive away. I took Quentin on my lap and there he sat, crying. After a while, when I thought it might be possible, I made a suggestion: "Quentin," I said, "I have an idea. Let's get some paper and markers and you can make a picture for Nana and we can send it to her." Quentin liked this idea. He was ready to feel better.

What will be the effect on children of an accumulation of countless social experiences reshaped by technology?

I set Quentin up at the table with the paper and markers and left him for a bit. When I came back to the table, I was quite amazed. Quentin hadn't made a picture for Nana, he had written her "a letter"—something he had never done before.



Photo #11  
Quentin's "Letter" to Nana

Quentin's letter, pictured in photo #11, was written in five-year-old invented spelling. Maybe you can decipher it, but here is what Quentin told me it said:

"I MISS YOU NANA. WHY DID YOU HAVE TO LEAVE? I REALLY LOVE YOU."

When Quentin was in my arms crying hard, I could've offered him my phone to play with. Quentin loves to play games on the phone. (He's one of those kids who gets his hands on your phone if it's on the table, and surprise! You have a new downloaded app before you know it.) Offering Quentin my phone would've been a really easy option and one that would've distracted him right away from his pain.

What a seductive option that is for an adult! It works so effectively. But the problem is, it works only in the short term.

If I had given Quentin my phone, he would not have had the chance to feel his feelings of sadness and

If I'd given him my phone, I would have bypassed all of that rich emotional experience he deserved to have.

loss, to find the words to express those feelings, to write a letter to his Nana and to strengthen their relationship in doing so. If I'd given him my phone, I would have bypassed all of that rich emotional experience he deserved to have.

Children need to have the full range of emotional and social experiences in order to grow that part of themselves. If we bypass those harder moments and don't let children make their way through them, they will grow up without a rich emotional life and without the tools that develop from life experience. They will learn that when they feel bad, instead of looking inward to find the resources to cope, they can turn to a screen or something else external to make themselves feel better.

## CONCLUSION

Knowing how young children develop and learn, in my view, is the single most important resource we have for making decisions about screen use. The six core ideas from child development, listed on page 14, lead to specific suggestions that we can put to use when trying to decide how to handle screens and digital devices with young children.

Knowing how young children develop and learn, in my view, is the single most important resource we have for making decisions about screen use.

## **SUGGESTIONS FOR PUTTING THE SIX CORE IDEAS TO USE:**

1. Surround young children with opportunities to move and explore using their whole bodies and all of their senses.
2. Provide young children with all kinds of objects to explore. And try to give them lots of opportunities for social interaction--remembering that kids grow cognitively, socially and emotionally as they actively engage with materials and people.
3. Keep children away from screens in the first two years of life as much as possible and keep screen use to a minimum throughout the early childhood years. When a child wants screen time, we can ask ourselves: "What is the potential of this activity for fostering imagination and/or social development? Is there a more beneficial, more fully engaging experience available for my child right now?"
4. Try to provide a space (even a corner of a room in an apartment can work well) and uninterrupted time for children to play every day.<sup>16</sup>
5. Give children undefined materials (playdough, art materials, blocks and building materials, household objects) to play with that will encourage the deepest, most creative and expanded play possible.
6. Try to pay conscious attention to our own use of mobile devices in the presence of children and try to set devices aside until later as much as possible.
7. Try to make screen use with children a conscious choice and not one we turn to automatically.
8. Try practicing the art of being fully present with children—giving them our full attention-- even if it's just for a few moments.
9. Avoid using screens to occupy children or to distract them from difficult feelings or moments. Keep open-ended materials like playdough, markers and paper, building materials easily accessible.
10. Be alert to the school environment children have and advocate for classrooms that engage kids through playful learning and allow them to follow their own curiosity rather than the didactic learning that is so widespread today.<sup>17</sup>



## REFERENCES

1. Hertsgaard M, Dowie M. How big wireless made us think that cell phones are safe: A special investigation, *The Nation*, March, 2018.
2. The field of child development defines “young children” as children from birth to age eight.
3. Frost JL. Neuroscience, play, and child development, Paper presented at the IPA/USA Triennial National Conference, June, 1998.
4. Zimmerman FJ, Christakis DA, Meltzoff AN. Television and DVD/video viewing in children younger than 2 years, *Archives of Pediatrics & Adolescent Medicine*, 2007.
5. Campaign for Commercial Free Childhood. FACT SHEET: Baby scam: Marketing to infants and toddlers. [www.commercialfreechildhood.org](http://www.commercialfreechildhood.org).
6. Strouse GA, Ganea PA. Toddlers’ word learning and transfer from electronic and print books, *Journal of Experimental Child Psychology*, July, 2016.
7. Haidt J, Lukianoff G, How to play our way to a better democracy, *New York Times*, September 1, 2018.
8. Bassok D, Latham S, Rorem A. Is kindergarten the new first grade? *ScienceDaily*, January, 2014.
9. Ibid
10. Ravichandran P, DeBravo BF, Beauport MPH and R. Young children and screen time (TV, computers, etc.), *National Center for Health Research*, 2018.
11. Levin DE, Carlsson-Paige N. *The War Play Dilemma*. New York: Teachers College, 2006.
12. Carlsson-Paige N. *Taking Back Childhood: A Proven Roadmap for Raising Confident, Creative, Compassionate Kids*. New York: Penguin books; 2009.
13. Radesky JS, Kistin CJ, Zuckerman B, Nitzberg K, Gross J, Kaplan-Sanoff M, Augustyn M, Silverstein M. Patterns of mobile device use by caregivers and children during meals in fast food restaurants, *Pediatrics*, 2014.
14. Dona Matthews, Turn off that smartphone, mom and dad! *Psychology Today*, November 23, 2017.
15. Caroline Bologna, Many kids feel “unimportant” when parents are distracted by smartphones, survey says. *Huffington Post*, July 2015.
16. TRUCE (Teachers Resisting Unhealthy Children’s Entertainment)  
[www.truceteachers.org](http://www.truceteachers.org).
17. Michael Yogman, Andrew Garner, Jeffrey Hutchinson, Kathy Hirsh-Pasek, Roberta Michnick Golinkoff, The power of play: A pediatric role in enhancing development in young children, *Pediatrics*, August, 2018. From the American Academy of Pediatrics Clinical Report.

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