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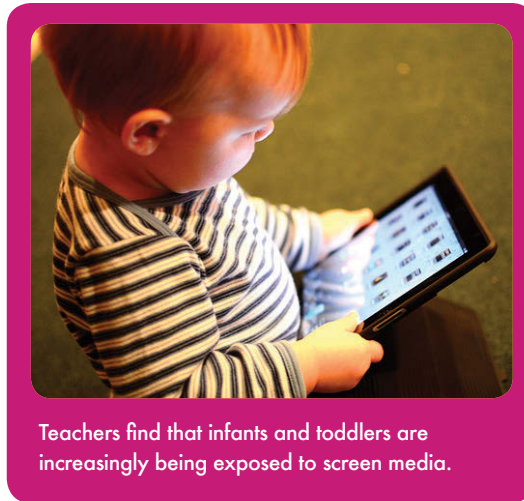
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# Infants, Toddlers, and Screen Media

BY SHANNON LOCKHART, HIGHSCOPE SENIOR EARLY CHILDHOOD SPECIALIST



In a technology-driven age, infants' and toddlers' exposure to "screen time" is a hot topic. As caregivers in the classroom, we may feel pressured by parents who use screen media with their children at home — parents who would like us to help their children acquire technology skills they will need to use later on. But we know that not all screen media are healthy for children. The American Academy of Pediatrics (AAP) has

found that exposing very young children to screen media may have lasting impacts on their learning. The AAP recommends that no child under the age of two be exposed to screen media, and that screen time for children over two years be limited to no more than two hours per day (AAP 2010). In this edition of *Extensions*, we will view screen time through the lens of infants' and toddlers' development to help us make intentional decisions about what is best for children, and to assist in giving parents a healthy alternative to screen media.

## Definitions

First, we need to define what "screen time" or "screen media" is and discuss the status of screen media with regard to infants and toddlers in our society. The definition of screen time or media time is any period of time spent viewing or using TV/video, video games, computers, handheld video game players, cell phones, smartphones, iPods/iPads/androids, or any other digital tablet device. Most parents, early educators, and health providers agree that screen media can have a profound effect on children's learning and development, whether it be positive or negative. A recent report from Common Sense Media titled "Zero to Eight — Children's Media Use in America 2013"

## Screen Time — Children Aged Birth to Eight

Some general findings from the Common Sense Media research report include the following:

- “Total screen media use has decreased from two hours and 16 minutes in 2011 to one hour and 55 minutes in 2015. Fifty percent of this time is television viewing.
- “Television still dominates children’s media time, with an average of nearly an hour per day (57 minutes) as opposed to other screen media.
- “Children have access to a variety of services to view TV or movies; however, the vast majority of viewing still involves the TV.
- “Thirty-six percent of children have TVs in their bedroom. The most common reason given for the TV in the bedroom is to free up other TVs for other family members to watch.
- “Seventy-five percent of children aged eight and under have access to some type of a mobile device — an increase from 52 percent in 2011.
- “Seventy-two percent of children aged eight and under have used mobile devices for playing games, watching videos, or using apps — an increase from 38 percent in 2011.

(continued on page 3)

states, “The only way to maximize the positive impact of media on children is to have an accurate understanding of the role it plays in their lives: which platforms they are using, the activities or content they are engaging with on those platforms, and how their media use patterns vary by age, gender, or socioeconomic status” (Rideout, 2013).

### A Picture of Media Use

So what does screen media use look like for an infant or a toddler? Below are some findings based on research conducted by Common Sense Media specifically for this age group. (See sidebar for overall birth to age eight findings.)

- “Children under the age of two spend an average of 58 minutes per day with screen media. Forty-four minutes of that time is spent watching television.
- “Children aged two to four spend an average of one hour and 58 minutes per day with screen media. One hour and four minutes of that time is spent watching television.
- “Sixteen percent of children under the age of two, and 37 percent of children aged two to four, have a television in their bedroom.
- “Forty percent of children aged birth to one year, and 76 percent of children aged two to four years watch ‘educational shows,’ described as ‘Sesame Street,’ ‘Mythbusters,’ and the like.
- “Mobile media use starts young.
  - Thirty-eight percent of children under age two use a mobile device for some type of media activity. This has increased from 10 percent in 2011.
  - Mobile device use for children aged two to four years has gone from 39 percent in 2011 to 80 percent in 2013.
  - Devices for playing games are the most commonly used types of mobile media (63 percent).



Teachers can educate parents about the research on use of screen time with young children and suggest alternatives.

## Screen Time — Children Aged Birth to Eight

(continued from page 2)

- “The number of children using mobile devices on a daily basis has more than doubled — from 8 percent in 2011 to 17 percent in 2015.
- “Average use of mobile media went from 43 minutes in 2011 to one hour and 7 minutes in 2013.
- “Fifty percent of children aged birth to eight have used mobile media apps — up from 16 percent in 2011.
- “Access to mobile devices among the poor and minorities has increased (going from 27 percent to 51 percent), but the gap between rich and poor is still large.”

(Rideout, 2013)

### PUBLISHER CREDITS

HighScope Extensions is a practical resource for early childhood teachers, trainers, administrators, and child care providers. It contains useful information on the HighScope Curriculum and on HighScope’s training network.

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Produced by HighScope Press, a division of HighScope Educational Research Foundation

ISSN 2155-3548

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- “Parents of children aged birth to eight say they use media to occupy their children when they are running errands together (23 percent, often; 80 percent, sometimes) and doing chores at home (13 percent, often; 42 percent, sometimes).”  
(Rideout, 2013)

### Interpreting the Research

So what do these findings mean in terms of infant and toddler development and what we should be doing with infants and toddlers in our programs? More and more studies are showing that excessive media use can lead to attention problems, difficulties in school, sleeping and eating disorders, and obesity. As seen in the above findings, children at younger and younger ages are not only exposed to media but are using media for longer periods of time. According to Boston University Medical Center, media “could interfere with the development of empathy, and social and problem-solving skills that are typically obtained by exploring, unstructured play and interacting with peers” (Boston University Medical Center, January 2015).

Young children need to be actively engaged with their learning, through both mind and body. According to the Boston University Medical Center, researchers have found that children younger than 30 months do not learn from television and videos as well as they do from real interactions with people and materials. It is less clear whether

this is true with interactive applications; however, “early research suggests that interactive media, such as electronic books and learn-to-read applications can be useful in teaching vocabulary and reading comprehension, but only in children preschool-age or older” (Boston University Medical Center, January, 2015).

Also, excessive sedentary and passive screen time is associated with negative

consequences for children’s development. Language is one such area of development, and since infants and toddlers are laying the foundation for language learning, this is extremely important to note.



Research shows that access to screen media has increased among children aged birth to 8.

## The Five Ingredients of Active Learning

To ensure an environment that builds trust, autonomy, and initiative, and where active learning can flourish, caregivers provide the five ingredients of active learning:

- 1. Materials.** There are abundant, age-appropriate materials the child can use in a variety of ways. Learning grows directly out of the child's direct actions on the materials.
- 2. Manipulation.** The child has opportunities to explore (with all the senses), manipulate, combine, and transform the chosen materials.
- 3. Choice.** The child chooses what to do. Since learning results from the child's attempts to pursue personal interests and goals, the opportunity to choose activities and materials is essential.
- 4. Child communication, language, and thought.** The child communicates his or her needs, feelings, discoveries, and ideas through motions, gestures, facial expressions, sounds, sign language, and words. Adults value, attend to, and encourage the child's communications and language in a give-and-take manner.
- 5. Adult scaffolding.** Adults establish and maintain trusting relationships with each child in their care. Adults recognize and encourage each child's intentions, actions, interactions, communications, explorations, problem solving, and creativity.

As shown in the statistics given above, television is still the dominant use of screen media, and there has been an increase in ways young children can access TV shows through mobile devices — which makes them easier to view anywhere and at any time, including in bedrooms. We even see children using their parent's iPhone when coming into or leaving our programs. It is also important to note that, when adults use media to distract children or manage their behaviors, children don't learn to internally self-regulate or develop the social and emotional skills needed to interact appropriately with others (Boston University Medical Center, January 2015).

## The Importance of Active Learning

Jean Piaget defines infants and toddlers as sensory-motor learners — meaning they learn about their world through their senses and with their whole bodies. They need interactions with objects to learn what they feel like, how they smell, how they taste, what they sound like, and how they can be used. It is for this reason that HighScope's active participatory learning model is so helpful for children's growth and development. Active participatory learning is defined as “the direct and immediate experiencing of objects, people, ideas, and events — a necessary condition for cognitive restructuring and hence for development” (Epstein and Hohmann, 2012, p. 17).

Infants' and toddlers' learning grows out of their direct actions on materials, people, and events in their environment. As active learners, these very young children need to be able to stretch, reach, grasp, hold, mouth, bang, roll, sit, crawl, pull, walk, climb, carry, and so on. They need to engage in a three-dimensional investigation of their world to build true understanding of the functions and properties of materials and to build trusting relationships with the people who care for them.



Materials that children can explore with all their senses — materials that promote active learning — are the most important to young children's development.



“If infants’ and toddlers’ explorations and experiences involve screen media, then their brains are literally being ‘wired’ to learn in a different way.”

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It is through a multitude of experiences with real objects and real people that children build connections in their brain and strengthen those connections to make them automatic. Infants’ and toddlers’ brains are wired for learning, and the brain grows according to the ways in which it is nurtured. As children interact and experience their world, they are developing the necessary neural connections in their brains for continued learning. With each repetition of an action, they are strengthening these neural connections, and thus laying the foundation for all future learning. If infants’ and toddlers’ explorations and experiences involve screen media, then their brains are literally being “wired” to learn in a different way. For example, an infant sitting in front of an iPad and randomly hitting the screen of a two-dimensional keyboard as it makes a sound (prompting the infant to repeat its actions) will not have the same connections in her brain as an infant who bangs on a real piano while being held by a caregiver. However adorable it is, an infant’s play with an iPad produces different sounds, different images, and different experiences, and the child is not using all of her body and senses to engage in the experience; she therefore is not having as rich a learning experience as she could with other materials — meaning that her brain is not developing the way it is naturally intended to.

In addition, for optimal learning to occur, *all* the ingredients of active learning need to be present; including the vital ingredient *adult scaffolding*. We scaffold children’s learning when we support children at their current developmental level and provide gentle extensions to their play and exploration as they are ready. Screen media promote the opposite of this kind of learning because they take out the two-way interaction. For infants and toddlers to be able to venture out into their world to explore and investigate, they need a secure attachment with a trusted, responsive caregiver who will be there as a safe base. Nurturing relationships underlie all learning at this age.

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In summary, infants and toddlers learn best when they are actively engaged with real objects and people instead of using screen media. There is no evidence that, if children are exposed to screen media at a young age, they will become more advanced in their learning of technology. However, there is evidence that early exposure to screen media may have negative effects on children’s learning. Just as we know children will grow up and learn to ride a bike or drive car, we also know they will learn how to use screen media and do so quite easily when their brains are developmentally ready and primed to learn in this way.



Shannon D. Lockhart, a senior early childhood specialist with HighScope Educational Research Foundation, has served as a national and international researcher, teacher, curriculum developer and trainer, and educational consultant. She develops early childhood curriculum and training materials (preschool and infant-toddler), oversees the HighScope Infant and Toddler Curriculum development and training, and works on numerous research projects. Her areas of expertise include child development (infant and toddler, preschool) and instrument development (observations, program evaluation, and child assessment). She holds a master's degree in early childhood education.

As caregivers and parents of infants and toddlers, we can provide alternatives to screen media that will be more beneficial for the children's learning. In this issue's "Classroom Hints" article, we discuss ideas for open-ended materials that engage infants' and toddlers' minds and bodies, as well as the safe use of these materials.



For optimal learning to take place, adult interest and support is crucial.

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## CLASSROOM HINTS

# Engaging Materials for Sensory Learners

BY SHANNON LOCKHART



Infants and toddlers need direct, hands-on interactions with open-ended materials — those that engage many senses and can be used in a variety of ways. Such experiences allow children to learn the functions and properties of the materials and ultimately begin to use them in more complex ways. In this article, we discuss materials that promote children's sensory development.

You can talk with parents about using these materials as alternatives to screen media and closed-ended plastic toys.

### What Are Open-Ended Materials?

Open-ended materials are items that can be used in a variety of ways and involve a number of senses as children explore the material. Examples include a tin can and a metal whisk, an empty cardboard box, a container of wooden spoons, and water (in the water table).

### What Are Closed-Ended Materials?

Closed-ended materials are items that are limited in the number of ways they can be used and that don't involve a number of senses. Examples include plastic, commercialized materials, such as rattles, stacking cups, and push toys.

### Materials for Sensory Learning

**Everyday household objects.** Young children play with, imitate, and pretend what they see. Infants and toddlers are particularly drawn to the everyday familiar materials they see in their homes that are used by family members. Generation after generation of moms tell stories of their children dragging out the pots, pans, and lids to bang on them, or stacking the mixing bowls and knocking them down. This list also includes other real household objects such as wooden spoons, spatulas, cups, plates, silverware, bottle brushes, metal strainers, whisks, funnels, metal measuring cups and spoons, wooden bowls, cookie/coffee tins, metal/dog chains, cell phones, flashlights, cameras, purses, wallets, hats, shoes, necklaces, eyeglass cases, scarves, shirts, skirts, vests, gloves, baby blankets, clothes, diapers, various-size hair curlers, brushes, and so on.

**Natural and found materials.** These types of materials offer children a wide variety of experiences that appeal mainly to the sense of touch but to the other senses as well: sponges, loofa, shells, stones, corks, pine cones, straw, bamboo, bark, tree cookies (slices of tree trunks or limbs), sticks, twigs, dried gourds, big feathers, leaves, flowers, yarn, cotton, various textured fabrics, water/pop bottles, cardboard tubes, carpet samples, tile/countertop samples, empty oatmeal/formula containers, empty metal food cans\*, pickle/large lids, tongue depressors, string, Styrofoam, foam, keys, Styrofoam peanuts, metal canning jars and lids, different textured ribbon, large wooden spoons and beads, smooth scrap wood, newspaper, bubble wrap, cellophane, foil, and so on.



**Nontypical materials for complex investigation.** These types of materials promote concentrated investigation and



invite longer engagement: sensory bottles, clothespins, cans, cardboard boxes, stacking cones, round sponges and container with lid cut in a circle, tissue container with scarves, spice bottles, metal lids and large plastic mayonnaise container, cookie tins and large beads, tubes that children can drop metal chains and necklaces into, bottles with corks, wooden beads and a coffee container with cuts in the lid, metal tins such as mint containers with metal clips, bottle lids with an oatmeal container having an opening cut in its lid, large shoelaces with large wooden beads, and different kinds of fabric strung together.



\*Use a smooth-edge can opener to open canned food, and save the metal lids and can for children to explore. Make absolutely sure that there are no jagged edges — check by running your finger and forearm across the edge of the lid and can opening.





### Other considerations.

Keep in mind that infants and toddlers need easy-to-handle materials, materials to set in motion (e.g., balls, wheeled toys), and materials with which to make noise (you can find many of these items in the above lists). As caregivers observe children's growing abilities, they rotate materials into the classroom that will challenge children's thinking and physical abilities. This is especially important for

toddlers, because it will keep them engaged and therefore will reduce the number of conflicts that occur throughout the day.

As children's abilities increase and their interests change, rotating materials becomes more important; however, a basic set of materials should remain in the classroom to encourage the ongoing find-use-return sequence, allow young children to develop object permanence (the ability to know that something is there even when not visible), and support children's continuing play themes. Some basic sets of materials that should remain in the room include dolls, dress-up clothes, pretend play accessories, blocks, people figures, cars, push toys, toys to put together and take apart, play dough, paper, crayons, paint, water for water play, puzzles, and books. The important guideline to keep in mind is to always be aware of children's changing interests and abilities, and to modify the environment and available materials to meet those needs to ensure continued growth and development.

For a comprehensive list of materials that appeal to the senses, see the HighScope book *Tender Care and Early Learning: Supporting Infants and Toddlers in Child Care Settings* Ypsilanti, MI: HighScope Press, pages 265–267.



### Materials and Safety

With this age group, for any materials provided — whether plastic commercial materials or nontypical materials — safety should always be at the forefront of caregivers' minds. Keep the following guidelines in mind:

- Some materials, such as boxes, tin cans, cookie tins, utensils, stacking materials, large shells, and rocks, can be placed in the learning environment to be used at all times, instead of having only plastic materials.
- **IMPORTANT:** Materials that are dangerous without the teacher's presence should only be brought out when the caregiver is available to observe and interact directly with the children.
- If there are materials that appeal to infants and toddlers that you are uncomfortable having in your environment, think outside the box and incorporate materials that can provide a similar sensory experience.
- The teacher's interaction is the most important factor for stimulating learning with these materials. Use adult scaffolding strategies to promote active learning.
- Make safe materials accessible to children by placing them in open baskets or in clear containers on low shelves.
- Materials that are unsafe for babies and/or require adult supervision for toddlers' use can be stored out of the room, in closets or on high shelves in clear containers so toddlers can point at or ask to use them when the provider is available.
- Some materials not suitable for babies may need to be accessible to toddlers or older children. In these cases, store them in clear containers with twist-top lids so toddlers and older children can get to them but young children cannot.
- There are particular times during daily schedules and routines when caregivers can bring materials out for children to use in the adults' presence and with their interaction. Group times are the most appropriate times during the day to experience treasure baskets and heuristic materials needing an adult presence but outside time and choice time can be considered as well. Most important, choose a time when your children are most likely to be engaged (e.g., not when they are tired, hungry, or have just woken up).
- The caregiver's interaction is the single most important factor in children's learning — and safety — with these materials.



## Treasure Baskets

“Treasure baskets,” which were introduced by Elinor Goldschmied, are ideal for nonmobile infants. A treasure basket is a shallow, sturdy basket, box, or metal or wooden bowl containing a collection of everyday familiar and natural items for babies and toddlers to play with and explore. The items chosen for treasure baskets should vary in weight, size, texture, color, taste, temperature, and sound. For example, items might include a pine cone, a lemon, a leather ball, a wooden egg, a natural sponge, and an egg whisk or any of the materials listed earlier in this article. In the presence of a responsive, unobtrusive caregiver, babies should be allowed to spend as long as they want picking up each piece and exploring them by feeling, tasting, moving, waving, and banging them.

**Safety With Treasure Baskets.** Keep the following guidelines in mind:

- Choose a basket that is strong and durable without jagged edges.
- Objects should be washable, disposable, and replaceable; for example, pieces of fabric or recycled items. Each object should be clean and safe.
- Always check the basket regularly for broken or overused objects.
- As always, check to make sure all components of materials are nontoxic. If in doubt, don't include them.

- **Never leave young children, especially babies, alone with baskets of materials if they contain anything unsafe. Safe materials include metal cups, wooden spatulas, textured fabric, wallets, spice bottles, and baby jar lids.**

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In this article, we have looked at materials that help infants and toddlers develop through ongoing explorations and challenges to their thinking skills. By providing these types of materials — rather than plastic, closed-ended materials or screen media — we can keep this age group actively engaged in learning about the world they live in.



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## TRAINER-TO-TRAINER

# Active Learning With Infants and Toddlers

BY SHANNON LOCKHART



Infants and toddlers are all about whole-body, sensory learning! In this 90-minute workshop, participants will learn the difference between activities that promote active learning and those that promote more passive forms of engagement. After experiencing active learning firsthand, participants will make a materials list to better support active learning in their own classroom.

### Objectives

By the end of this workshop, participants will be able to (1) discuss the current research on use of screen media with infants and toddlers, (2) review the ingredients of active learning, and (3) identify sensory-motor materials that engage and challenge young children's thinking.

### What you will need:

- A copy of this issue's feature article for each participant (Central Ideas and Practice);
- Computer for showing YouTube video (Opening Activity) and web clips from HighScope's website (Central Ideas and Practice);
- Copies of this issue's "Classroom Hints" article for each participant (Central Ideas and Practice; Application); and
- Various types of materials (metal materials — tin cans, measuring cups and spoons, spoons used for eating, whisks, funnels, spatulas, chains, lids; natural materials — shells,

rocks, corks, pine cones, fabric, felt, sponges, loofa; wooden materials — spoons, beads, spools, blocks, rolling pins, clothespins; other materials — balls, cellophane, foil, turkey basters, newspaper, balls of yarn, cardboard boxes, eyeglass cases; also, a few plastic rattles or toys (Central Ideas and Practice) *Note:* You will need to place a selection of these materials on each group table before beginning the activity (see step 10).

### Opening Activity

#### Watching Television (15 minutes)

1. Prior to the training, find any five- to six-minute segment on YouTube that you think wouldn't interest very many people. (This segment can include any of the following features: something fast paced, something very slow, an advanced topic beyond most people's understanding, a nonsense topic, or something you think most viewers would find boring.)
2. Show the segment to the group while providing no focus or reason for showing it.
3. Discuss participants' reactions to the segment and what they see as its benefits to their learning. Have them think about how watching it engaged their mind and affected their bodies. Ask "What was lacking in this experience to allow optimal learning? Do young children have the same experience when watching TV?" Record participants' answers on chart paper.

### Central Ideas and Practice

#### Screen Media Research (35 minutes)

4. Present some of the research on use of screen media with infants and toddlers from the feature article in this issue of *Extensions*.
5. In small groups, discuss these findings as they may pertain to the children you work with and their parents. Ask something like "How have you seen the children you work with exposed to screen media?" and "What are your thoughts about children's use of screen media, based on this research?"
6. Share responses as a whole group. Ask something like "Are

these the kinds of experiences we want children to have as a foundation to all their future learning?”

7. Now have the group watch one of the following segments from HighScope’s Infant-Toddler KDI Web Clips “Mirror and Chains,” and “Mirror Play” (find them by going to the website [highscope.org](http://highscope.org), logging in, then clicking on “Web Clips” and then “Infant-Toddler KDIs”). Discuss participants’ answers to the following questions:

- What learning was occurring?
- What characterizes the interactions?
- Can these things be learned from screen media?

8. Review the following five ingredients of active learning, and have participants discuss how these relate to their experience in the opening activity as compared to how they saw the infants exploring in the web clip:

- Materials
- Manipulation
- Choice
- Child communication language, and thought
- Adult scaffolding

9. Summarize with the following points:

- Learning occurs when children can choose and manipulate materials and can freely use their whole bodies (and all their senses) to explore.
- Active learners need to engage in direct, physical actions: stretching, reaching, grasping, mouthing, banging, rolling, sitting, crawling, pulling, walking, climbing, carrying, and the like.
- Infants and toddlers are active learners and need to engage their brains with real materials (three-dimensional objects) — not two-dimensional things within a screen that they cannot touch and explore with all their senses — to get a true understanding of the objects.

### Taking a Closer Look at Materials (20 minutes)

10. Prior to this activity, place some of the materials that you have gathered on each group table.
11. Ask each group to investigate the materials on their table and discuss the learning opportunities provided by these materials. Ask participants to use the active learning ingredients to assess these materials.

12. Discuss participant responses as a whole group. Pose the question “How does this relate to screen media and infants’ and toddlers’ learning?”

13. Summarize with the following points:

- Through the direct manipulation of objects, people, and events in their environment, infants and toddlers make sense of their world and begin to learn the functions and properties of materials. They will use materials in more complex ways after they have mastered this learning.
- Through exploration of open-ended materials and repeated experiences of being actively engaged, children build their working memory of what things are; they employ cognitive flexibility to adjust their thinking as they continue to learn about materials and how to use them. They cannot experience this same learning process through screen media.
- Parents and caregivers play a crucial role in children’s learning as well. Through direct interactions, children learn verbal and nonverbal communication and all the skills needed for building successful relationships that include positive attachment. This cannot be felt, nor can it be learned, from screen media.

### Application

#### Supporting Active Learning in Our Classrooms (25 minutes)

14. Ask the groups to think of the classroom materials they currently have available for infants and toddlers. Have them discuss the following questions concerning their materials:
- How do your materials support the ingredients of active learning?
  - How do your materials support the guidelines for sensory-motor materials?
  - How do your materials engage children’s minds and challenge their thinking?
15. Using the list of materials from this issue’s “Classroom Hints” article, have participants create a list of sensory materials that they would like to add to their classroom. You can also refer to the list “Materials that Appeal to the Senses,” found in the HighScope book *Tender Care and Early Learning*, pages 265–67.
16. Have participants generate ideas on how to get these materials.



17. Share ideas as a whole group.

## Implementation

### Action Plan for Gathering More Engaging Materials (5 minutes)

18. Have participants individually use the materials list they created from the Application Activity to develop a plan of action for acquiring more engaging materials – those which will challenge their children’s thinking and further support their sensory-motor development.
19. Ask participants to write down how they will share with parents what they have learned, to help them understand the importance of having no screen time for their infant and/or toddler. Ask participants how they can get parents to invest in having real materials at home that their children can engage with instead of using screen media.
20. Have each participant share his or her ideas with a partner.



## SPECIAL EDUCATION

# Screen Time, Children With Special Needs, and Language Learning

BY RENEE LIBBY, DEVELOPMENT CENTERS LEAD HOME VISITOR/EDUCATION SPECIALIST, DETROIT, MICHIGAN

With rapid advancements in computer technology, such as tablets, handheld devices, and apps that purport to teach young children new skills, it may be tempting for early childhood educators to use these tools to support infants and toddlers with special needs in the classroom. Although it is true that screen-based assistive technology (such as picture-exchange communication system apps) can be helpful — and even necessary — for some children in early care and education settings, it is also critical to keep in mind that all young children benefit most from supportive interactions with the important people in their lives. Because children with developmental delays and disabilities are much more *like* their typically developing counterparts than they are *unlike* them, it is incumbent upon us as early childhood educators to support them in the same manner as other children in our programs.



As the supervisor of an Early Head Start home-based program, I have met quite a few families with children who have disabilities or developmental delays and have established Individualized Family Service Plans (IFSPs). One family I visit has a two-and-a-half-year-old who is involved with an early intervention program, and I was surprised to learn from the mother that the home-visiting teacher from that program mostly used a tablet with learning apps on it when working with the child.

When I asked her how the teacher used the device with her child, she simply shrugged her shoulders and said, “He just touches a picture and it tells him what it is. Then he swipes the screen to change the picture and does it again.”

I asked this mother if her child liked the learning app, and she explained that he wasn’t interested in it at all. Later she said that she thought her child learned more from our Early Head Start visits than from the early intervention visits because I brought out “real things” and helped her find items from around her home that were fun and interesting to her child. While this made me feel good about our program and the ways we helped her child, it also made me stop to think about how early childhood professionals use technology with children who have delays or disabilities. As I reflected on this mother’s thoughts on the use of the tablet for teaching, it occurred to me that she truly felt that the use of technology as an intervention tool did little to support her child’s language acquisition.

As mentioned in this issue’s feature article, the American Academy of Pediatrics (AAP) recommends no screen time for children under the age of two (including children with developmental delays or disabilities) and very limited screen time for children under the age of five. Although some early childhood educators may be tempted to use screen-based technology with young children who have autism or speech or cognitive delays, we need to remember that young children learn language by listening and observing others. In fact, when one observes babies, it is easy to see how intently they watch our faces and our mouths as we speak with them. This is because the acquisition of language and other communication skills is an active, *social* learning process that is relationship-based — meaning that it requires the participation of the child and another individual. Researchers know that “within this interactive social milieu, infants and toddlers learn that communication is a give-and-take process; that you don’t need words to convey and understand safety, acceptance, approval, and respect; that there are lots of ways to make your point; and that trusted people are interested in what you have to communicate and say” (Post, Hohmann, & Epstein 2011, pp. 43 and 45).

Young children, especially those with autism and speech delays, should be developing social skills with peers and adults — and the only way for them to do that is through direct interaction with others. Dr. Bruce Perry, a leading researcher and expert on early childhood and brain development, points out that many of our modern technologies do not provide children with the “quality and quantity of crucial emotional, social, cognitive, or physical experiences they require when they are young” (Kneas, K.M., 2015). We know that if we want children to grow and develop in ways that help them reach their full potential, we must give them what Dr. Perry calls the “right combination” of active learning experiences, rather than passive screen time or exposure to learning apps.

Children with language delays, cognitive impairments, or autism require good role models to aid in the development of their speech and language and, unfortunately, the use of screen-based technologies to support their communication will likely fall short if it is not paired with positive relationships and supportive adult strategies to enhance the experience. This means that if we want children to learn language, we must provide rich and varied experiences paired with language throughout the daily routine.

### References

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Renee Libby has more than 20 years of experience educating young children and parents. She has served as a Great Start Readiness Program Teacher & Director, Parent Educator, Early On Coordinator,

Manager of Education, TA Consultant for Great Start to Quality, and Education Specialist for Early Head Start. Currently Renee supports a team of Early Head Start Home Visitors at Development Centers in Northwest Detroit. She has been trained in HighScope’s Infant-Toddler Curriculum, Parents As Teachers, Parents Interacting with Infants, Cognitive Coaching, and Adaptive Schools. Renee has presented and trained fellow early childhood professionals at the local, state, and national levels on a variety of topics. She holds a master's degree in early childhood education.

Learn more at  
[highscope.org/specialneeds](https://highscope.org/specialneeds)



## ASK US

BY SHANNON LOCKHART

***One of my parents has two children — one is four years old and the other is eight months. The parent is upset because we agree with AAP’s recommendation that children under the age of two should not have screen time. She said that her eight-month-old loves to play with her phone and watches the cartoons on the screen, and that this is the only time that she can get anything done at home. How can I help her see the value in offering her child real materials, such as pots and pans, purses, nonworking watches, etc., rather than letting her play on a cell phone, and that she will still be able to get her chores done around the house?***

— A Preschool Teacher

This is an age-old issue with parents — getting chores done at home when children are awake and active. First, it’s important that parents realize the effects that screen media have on the brain of a developing child. Sharing some of the findings with the parent may open her eyes to what could be happening with her own child. Also, introducing the parent to treasure baskets, as discussed in this issue’s “Classroom Hints” article, may be helpful. Try treasure baskets out yourself in the classroom. Take pictures to share with the parent, and talk to the parent about a few of the key developmental indicators (KDIs) that children engage with while using the materials. Discuss how children get involved and stay engaged with these types of materials for longer periods of time, and how the parent could create a treasure basket containing only items that don’t need adult supervision (such as metal measuring cups, wooden spoons, textured fabrics, a wallet, or baby jar lids) to bring out when she needs to do laundry or fix dinner. She might even see her older child enjoy using the materials as well!



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## NEWS BRIEFS

### W.K. Kellogg Foundation Awards HighScope Grant to Design Early Childhood Professional Learning Communities

HighScope has been awarded a \$385,000, one-year grant by the W.K. Kellogg Foundation to create a pilot Professional Learning Community in Ypsilanti, Michigan, and Seattle, Washington, that is dedicated to diversity, equity, and excellence in education for young children from diverse backgrounds.

By creating a Professional Learning Community linking the efforts of HighScope and the Seattle early learning initiative, this pilot will break new ground in the understanding of diversity among young children and how to bring about individual and institutional changes through professional practice.

“This important grant supports a framework for a Professional Learning Community that will provide early childhood teachers with professional development in dual-language acquisition and cultural responsiveness,” said Sue Bredekamp, Chair of the HighScope Board of Directors. “The result will be an organization with the demonstrated commitment and capacity to advance both excellence and equity in education for young children from diverse cultural, linguistic, racial, and economic backgrounds.”

Read more at [highscope.org](http://highscope.org).

### HighScope Aligns With State, Federal, and Professional Standards

Locating alignments just got easier, with our newly revised alignment web page. The interactive map allows you to click on your state to see how your standards align to HighScope’s COR Advantage items. HighScope’s assessment instruments reflect best practices and align with key early childhood standards. COR Advantage (HighScope’s child assessment instrument for birth through kindergarten) aligns with state early learning standards, the Common Core State Standards, and Head Start’s Early Learning Outcomes Framework.

Visit [highscope.org/alignments](http://highscope.org/alignments) to see specific alignments.

### Annual HighScope International Conference May 9–12

# SAVE THE DATE

## HighScope’s 2016 International Conference

May 10–12, 2016

Detroit Marriott at the Renaissance Center

 HIGHSCOPE.

[highscope.org/2016conference](http://highscope.org/2016conference)

Highscope will host its 2016 international conference at the Detroit Marriott at the Renaissance Center. This year’s conference theme is “Striving for Excellence and Equity in Early Learning.” Conference activities will begin on Tuesday, May 10, with a keynote opening address presented by Walter S. Gilliam, the Director of The Edward Zigler Center in Child Development and Social Policy. The conference will conclude at noon on Thursday, May 12. One-day preconference workshops are scheduled for Monday, May 9.

Look for registration to open in mid-February. For more information, visit our website at

[highscope.org/2016conference](http://highscope.org/2016conference).

### Look for Us at These Upcoming Conferences!

**February 24–26:** Michigan Head Start, Lansing, MI

**March 31–April 2:** California Association for the Education of Young Children (CAEYC), Pasadena, CA

**March 31–April 2:** Michigan Association for the Education of Young Children (MiAEYC), Grand Rapids, MI

**April 13–15:** Young Child Expo, New York City, NY

**May 10–12:** HighScope International Conference, Detroit, MI

**May 16–20:** National Head Start, Nashville, TN