Making Play Smarter, Stronger, and Kinder
Lessons from Tools of the Mind

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Although most early-childhood educators agree on the value of play in child development, they find it increasingly harder to advocate for play given today’s pressure for academic achievement. Using the theoretical work of Lev Vygotsky, the authors discuss how make-believe play among children helps them develop skills critical for success in school and beyond. They discuss the strategies of the Tools of the Mind curriculum that scaffold mature make-believe play, and they demonstrate how Sesame Street and Esme and Roy, shows from Sesame Workshop, help parents and teachers use these strategies with children. Key words: early-childhood education; emotion control; make-believe play; self-regulation; sociodramatic play; symbolic thought; Vygotsky’s theory

Tools of the Mind is an early-childhood curriculum that focuses on promoting self-regulation and executive functions in young children by supporting their mature intentional make-believe play and playful learning (Bodrova and Leong 2018). We describe some of the Tools of the Mind strategies for supporting play associated with the goals stated in the curriculum developed for television’s Sesame Street. To make children “smarter, stronger, and kinder,” as appears in Sesame Workshop’s mission statement, we also want their play to become smarter, stronger, and kinder.

Having spent many years advocating for make-believe play in early-childhood classrooms, we have much evidence to support the value of play in children’s learning. Yet, we have noticed that it has grown harder and harder to persuade school administrators and even some classroom teachers that learning through play is the right kind of learning—and often the best kind of learning—for young children. Although this position can be partially explained by the increasing pressure for academic achievement, another reason may lie in the misunderstanding of the relationship between play and learning.

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We focus on the relationship between play and learning viewed from the perspective of cultural-historical theory (also known as the Vygotskian and post-Vygotskian approach) (Bodrova and Leong 2007, 2015), which formed the theoretical foundation of Tools of the Mind curriculum. We then demonstrate how this approach helped develop strategies for scaffolding play used in Tools of the Mind classrooms as well as the curriculum developed for Sesame Street shows.

Vygotsky’s Views of Play

Before we describe Lev Vygotsky’s views of play, we should note that he focused primarily on the sociodramatic or make-believe play typical among preschool- and kindergarten-aged children. Thus, the features of play identified by Vygotsky do not necessarily characterize other activities such as games, object manipulations, or explorations frequently called play by parents and educators. Vygotsky’s definition of play would also not apply to the teacher-initiated activities, however engaging, sometimes presented to children as play and games.

Make-believe play, according to Vygotsky, has three distinct features: children create an imaginary situation, take on and act out roles, and follow a set of rules determined by these roles. Each of these features is important in developing the competencies necessary for children’s success in school and beyond.

Emergence of Abstract Symbolic Thinking

One of the more important outgrowths of play is the ability of children to “think in their heads,” signaling the emergence of abstract symbolic thinking critical for success in school and beyond. In play, children act in accordance with internal ideas rather than with external reality: a piece of yarn in reality is not a stethoscope but it becomes one once a child decides that he or she needs it to play doctor. In other words, play requires the substitution of one object for another, requiring a child to begin to separate the meaning or idea of the object from the object itself. According to Vygotsky (1967), “in play, the child creates the structure meaning/object, where the semantic aspect—the meaning of the thing—dominates and determines his behavior. To a certain extent, meaning is emancipated from the object with which it had been directly fused before. . . . Word meanings replace objects and thus an emancipation of word from object occurs.” (13)
Developing Emotion Control

Vygotsky’s theory of child development includes the major idea that children learn to master their own behavior as they engage in specific culturally determined activities and interactions. Mastering one’s emotions is a part of this process, and mature make-believe play provides one of these activities. In play, a child sometimes needs to express pretend emotions if these are associated with a particular role and imaginary situation, such as when a child needs to act as an angry parent in one episode and as a scared child in another. Expressing emotions on demand, children take a first step toward becoming aware of their own emotions and learning to control them. As Vygotsky put it, “the child weeps in play as a patient but revels as a player” (14). Controlling pretend emotions is easier for a child than controlling real ones, so make-believe play provides a safe context in which to practice initiating and restraining various emotional behaviors, including those still hard to control in real life.

Developing Self-regulation

Counterintuitive as it may sound, Vygotsky argued that make-believe play is not spontaneous but contingent on players abiding by a set of rules. This makes play the primary context for young children to develop self-regulation because they are now driven not by their need for instant gratification prevalent at this age but by the need to suppress their immediate impulses. As Vygotsky explained, “a child experiences subordination to a rule in the renunciation of something he wants, but here subordination to a rule and renunciation of acting on immediate impulse are the means to maximum pleasure” (14).

Summarizing the role of play in child development, he concludes that play is “the leading source of development” in early childhood and that this “play-development relationship can be compared to the instruction-development relationship, but play provides a background for changes in needs and in consciousness of a much wider nature” (16).

Elaborating on Vygotsky’s insights into the nature of play, his student Daniil Elkonin (1978, 2005) introduced the idea of “mature” or “fully developed” play, emphasizing that only this kind of play can be a source of development in early childhood or in Elkonin’s terms, its leading activity. According to Elkonin, play starts with the object-centered role play of two- and three-year-old children in which their choice of props determines their choice of roles and which evolves gradually to become the elaborate relationship-centered play of kindergarten-aged children. This play is characterized by well-defined roles and an awareness
of the reasons behind the rules children adopt. Only such mature play develops
the cognitive and social-emotional skills children need to function successfully
in school and beyond, and children need to complete the full trajectory of play
development—from the first acts of pretense to elaborate pretend scenarios—to
be ready for the demands of formal schooling. In other words, for the play to
become the true vehicle for learning, this vehicle needs to be properly built.

**Hurried Play for a Hurried Child?**

Unfortunately, in today’s primary classrooms we see ever more often students
who seem play deprived. They have a hard time self-regulating, taking on
another’s perspective, and comprehending a story. Often we see children trying
to sneak play into the classroom. Some of them use unit blocks to build roads
and fences instead of counting; others draw smiley faces in their “o”s as they
write “look” and “book.” It looks as if the entire trajectory of play development
has been compressed, and children have been hurried to replace play with
teacher-directed activities. This strategy, however, tends to backfire. Replacing
play in kindergarten (and to some degree in preschool) with teacher-directed
activities does not improve test scores, and, at the same time, has a negative
effect on children’s well-being (Miller and Almon 2009; Gray 2011). Veteran
teachers report that the lack of play opportunities in today’s kindergarten affects
negatively children’s social skills and language development (Costantino-Lane
2019).

Attempting to engage children, teachers often use what they consider
playful methods of teaching. Teachers, for example, may pretend that a puppet
asks the questions they put to the children. Such methods should not replace
child-initiated make-believe play but rather use it as a necessary foundation.
But these methods, if used too early, may seem more playful to teachers than to
their students. Children who have not learned to play maturely cannot create
and maintain the imaginary situation in which the presence of a puppet in
the classroom might be meaningful. Some children may even be puzzled by
why their teacher cannot directly answer their questions. Thus, a teacher’s
misunderstanding of the relationship between play and learning can result in a
“play impostor”—an activity that looks like play but does not engage children in
the same way play would. Vygotskians emphasize that these playful methods of
teaching work best when children have already developed mature play skills and
have multiple opportunities to use them in self-directed play (Leontiev 2009).

Many children however do not develop mature play before kindergarten. They do not stay immersed in play but rather engage in short episodes only to disengage quickly. Their play scenarios lack imagination and often involve the repetition of the same short scripts with minor variations. They limit their use of props to toys that are exact replicas of the real objects. Experienced early-childhood teachers often observe that today’s children do not play as well as the children of fifteen or twenty years ago. Some of them, say these teachers, do not even know the meaning of pretense. This decline in play seems worldwide and has been reported by researchers from Australia to Russia (Robertson 2016; Smirnova and Gudareva 2015).

Where Did the Play Go?

Unlike some other theorists who attribute the development of play to the natural maturation of children, Vygotskians view play as a social phenomenon and as an outgrowth of children’s interactions with adults and peers. Changes in today’s culture of childhood have affected these interactions and resulted in a decrease in both the quantity and quality of play (Gleave and Cole-Hamilton 2012; Smirnova and Gudareva 2015). Some of these changes are associated with the changing character of peer groups. Instead of playing in a multiage group of children and learning play skills from older and more experienced playmates, children now spend most of their time in a classroom with the same age peers who all possess equally immature play skills. The amount of unstructured time available to children also influences the quality of play. Between school and structured afterschool activities, young children now have very little time to play.

Although these two factors (the absence of multi-age peer groups and the reduction in free time) have been associated in the literature with a “play deficit,” a new factor not previously discussed in this context seems to have emerged. Many adults—parents and teachers alike—have difficulty engaging in playful interactions with children because their own childhood was marked by this deterioration of free play. This intergenerational play deficit we witness first-hand in our work may be attributable to the effects of a “remote control childhood” (Levine 1998). The remote control generation is now raising a new generation of kids who cannot play.

Much of this falls outside our control, but it is possible to restore play
in early childhood by educating teachers and parents about play and ways to support it. In the past, early childhood teachers did not need to teach children how to play—children had plenty of opportunities to learn it from their siblings, friends, and neighbors. This is no longer necessarily the case. The early-childhood education classroom may soon become the last place children’s play can survive and thrive. Over twenty-five years, we have been implementing Tools of the Mind curriculum in preschool and kindergarten, and we have learned that for children to be able to learn through play they first need to learn how to play. Approaching play from the Vygotskian perspective, we have identified the conditions necessary for the development of mature play and developed strategies early-childhood educators can use to support play in their classrooms. Some of these strategies designed to make play smarter, stronger, and kinder, which we will describe, are now integrated in the Sesame Street curriculum.

**Making Play Smarter:**
**Building Background Knowledge**

A child’s ability to engage in complex play scenarios constitutes one sign of mature play. Children, however, often lack the background knowledge required to build such scenarios. Even to play something so common as “hospital,” children need to know what hospitals look like and who works in them—what their titles are, what each of them does, and so on. To build this knowledge, Tools of the Mind teachers use field trips, guest speakers, books, and videos. Elkonin’s (1978, 2005) notion that role forms the core unit of play guides the choice of locations for field trips as well as the choice of books and videos. When field trips or books center on objects or animals, children reenact very little of their content in make-believe play. For a field trip to become the background for make-believe play, teachers must explicitly show children the roles involved—what those encountered would say and do and how they would interact with each other. When we asked teachers attending Tools of the Mind trainings about their field trips, we learned that they rarely considered the use of the field trip as a fodder for play to guide their choice of the venue. In the past, teachers frequently took their students to places that were a lot of fun (like a traditional October trip to a pumpkin patch) but that did not offer enough roles for children to play. In contrast, places supposedly familiar to children (like a grocery store or a restaurant) offer many opportunities for creating pretend scenarios. We have
come to realize that children are often unaware of what goes on around them in the places they visit with their parents. Sometimes, at such spots, they are given things to play with—like coloring books in a restaurant—to occupy their time and prevent them from bothering the adults. As a result, children may not notice that there are roles to be played that represent those present in such places, and they may not be able to conceive the pretend actions that accompany the roles of food server or cashier.

While looking for the books to supplement field trips (or to be used in the programs that do not include field trips), we realized that most of the books failed to provide enough information for building play scenarios. Elkonin (2005) specified that “only those works that clearly and understandably described people, their activities, and how they interacted caused the children to want to reproduce the content of the story in play” (41). We ultimately produced our own books with descriptions of people, their activities, and their interactions (see figure 1). These books act as virtual field trips, walking children through a grocery store or a doctor’s office, introducing them to different people, and explaining the use of different objects.

Figure 1. Let’s Pretend book—introducing people working in the veterinarian office
Making Play Smarter: Using Props to Support Abstract Thinking and Imagination

As we have said, Vygotsky associates make-believe play with children’s emergent ability to operate images and ideas in their heads where they transition from earlier modes of thinking—sensory-motor and visual-representational—to the more advanced symbolic thought. Vygotsky (1967) also sees play as a transitional stage in the development of imagination, reversing a commonly held belief that imagination precedes play and proves necessary for its emergence.

“The old adage,” he writes, “that children’s play is imagination in action can be reversed: we can say that imagination in adolescents and schoolchildren is play without action” (8).

Vygotsky then makes a connection between children’s use of objects for pretending and the later development of advanced mental processes. As he explains, “Play is converted to internal processes at school age, going over to internal speech, logical memory, and abstract thought” (13). For this conversion to happen, however, a child needs to practice pretend actions with real objects, hence the importance of play props viewed by Vygotsky as “pivots” for transferring meaning. Older children gradually learn to play without physical props, which signals the development of imagination as an internalized mental process.

One characteristic of the immature play of today’s children concerns the nature of the play props they use. The toys children play with both at home and at school typically are not designed to develop youngsters’ imaginations and symbolic functions. Just the opposite seems true: toys have become increasingly realistic and can be used only in limited ways. A good example would be play food that represent menus in various restaurants (tacos or sushi anyone?). Mechanical and electronic toys that move and talk limit the repertoire of children’s pretend actions even further.

To scaffold children’s transition from real to imaginary actions with objects, Tools of the Mind teachers start by modeling how to pretend. Younger children learn how to use a familiar object in a pretend way: for example, a pencil becomes a magic wand, a rocket, or a baton. Children take turns making a pretend gesture with an object, naming its new function, and sometimes making sounds associated with whatever this object now represents—counting down, for example, to the blast-off for a pretend rocket.

Children learn how to create props for their play and how to repurpose
existing props for a new function (see figure 2). As with all Tools of the Mind activities, teachers start by providing extensive assistance in deciding which props will be needed and in the making of props. As they gradually withdraw this assistance, the children take more responsibility for inventing and producing their own props. Although younger children will continue using teachers’ help, older preschoolers become more independent.

Making Play Stronger: Helping Children Develop Emotion Control

As children’s make-believe play reaches its mature stage, children focus on the relationships between the characters, not just the actions these characters carry out. It becomes important to display appropriate emotions when playing a particular character: a patient admitted to a hospital is scared; the patient’s parents are worried; the ambulance driver grows impatient when stuck in a

Figure 2. Child-made props for a “PetVet” theme
traffic jam; and the nurse speaks to the patient calmly and with compassion.

To support children's ability to regulate their pretend—and, later, real—emotional behaviors, Tools of the Mind teachers use specific strategies, such as group dramatization when a teacher reads an episode in a familiar book and children act out this episode expressing the emotions of the characters while using appropriate intonations and facial expressions. By looking at each other and listening to their peers during such group dramatizations, children learn to read each other's emotions and understand their meaning. To further extend children's understanding of emotions, Tools of the Mind teachers also incorporate similar exercises and discussions about the relationship between characters' feelings and their actions in regular literacy activities such as read alouds.

With younger children, group dramatization may be short as children listen to one of the Let's Pretend books and follow a specific prompt (see figure 3). These pre-play activities help children act out emotions later when they take on the role of a character who becomes upset, scared, or angry.

**Making Play Kinder: Developing Self-regulation**

Vygotsky's insight about the relationship between make-believe play and the development of self-regulation inspired numerous studies conducted both by Vygotskian scholars (e.g., Elkonin 1978; Ivanova 2000; Manuilenko 1975) and by researchers sharing other theoretical positions (White and Carlson 2016). In some of these studies, children were unable to demonstrate more advanced self-regulatory abilities when placed in pretend situations (Smirnova and Gudareva 2015). Further investigation revealed that the positive effects of play on self-regulation only exist when the play itself has reached its mature level.

Vygotsky described the rules of play that determine children's pretend actions as "implicit," meaning that children do not seem to negotiate these rules and refer to them only when they get broken (e.g., when a child playing a patient pretends to handle a doctor's medical kit). The existence of such implicit rules indicates that the play is already relatively mature and that children have some knowledge about the scenario they are following and the roles they are playing. In the past, children in multiage groups acquired such knowledge as they observed more experienced players, and sometimes
they were directly regulated by their older friends. In today’s early-childhood classrooms, children need to be explicitly taught special strategies that help them establish and maintain the rules of their play.

In Tools of the Mind classrooms, we use play planning as a strategy—an approach in which, prior to starting play, children discuss what they are going to do and represent their plans in pictorial form (see figure 4). First modeled by the teacher, planning later becomes a child-initiated activity. The process of planning by itself engages children in a self-regulatory activity. As children discuss what they are and are not allowed to do, they assume specific roles, and they become aware of the rules and learn to control their immediate impulses. For example, if there is one role everyone wants to play such as a doctor, play planning gives children an opportunity to brainstorm other jobs in the hospital that might be equally attractive such as an x-ray technician or an ambulance diver.

In addition, pictorial plans serve as tangible reminders for children who might be distracted by a toy or prop that another child needs to carry out his or her role. These plans assist children in coregulation because they can use these pictures to remind their playmates about the role they initially chose. The use
Figure 4. A play plan of a four-year-old, preschool child made during “PetVet” theme
of play plans not only reduces the number of conflicts in play but also helps children make faster progress toward mature play. (See figure 4.)

**Making Play Smarter, Stronger, and Kinder?**

How can early-childhood educators and parents help children develop mature make-believe play? Some of the strategies we describe are being used by Sesame Workshop, the nonprofit educational media organization, and the producer of television’s *Sesame Street* and a new animated series, *Esme and Roy*. Monster sitters and play guides, Esme and Roy model how to use play to solve their little monsters’ familiar problems and help them learn a range of lessons while extending the little monsters’ interests through play. Esme and Roy use different types of play, such as pretend play, rule-based play, and making or building play props to expand children’s play patterns and give children agency to take the lead in play while extending learning across content areas.

*Sesame Street* has always inspired children’s make-believe play with its playful stories, songs, and animations and through its engaging and diverse characters, both Muppet and human. In particular, in *Sesame Street*’s forty-ninth season, the curriculum focus was learning through play, presenting a range of jobs children could pretend play and modeling guided play patterns that promoted school-readiness skills. We examine these strategies (also used in Tools of the Mind classrooms) and discuss how *Sesame Street* content can be employed by teachers and parents to scaffold the development of mature make-believe play, the kind of play most needed for child development.

**Making Play Smarter: Developing Background Knowledge**

During planning for its forty-ninth season *Sesame Street*’s producers learned that children were less frequently being taken on on field trips during which they could be exposed to a range of real-world jobs, which limited pretend play about such jobs because they had so few role models to follow. In season 49, episodes offered more such models so that children would play the associated roles. For example, in one, Rosie tells her friends about her visit to a hospital and an adult character helps guide make-believe play as he pretends to be a patient, and Rosie and her friends become a doctor, a nurse, and an x-ray technician.

Teachers and parents can use both the segment of the program that shows the real place and the episodes that show how to play there to help
children re-create the setting in addition to using books and field trips to doctors’ offices.

**Making Play Smarter: Using Props to Support Abstract Thinking and Imagination**

As we have pointed out, it is key that a child be able to construct, assemble, or repurpose props that require imagination to function as symbols for real things. In season 49 of *Sesame Street* and in *Esme and Roy*, children are shown how to use everyday objects as these kinds of props. For example, in *Esme and Roy*, the show’s monster sitters help a young monster assemble a train using cardboard boxes, paper plates, and art supplies in a lesson to encourage him to put toys away.

There are few television shows that teach children how to do this and how this kind of prop can be repurposed (such as using a large box as a city bus one day and later transforming it into a space station). The props used in *Sesame Street* and *Esme and Roy* are everyday objects that parents and teachers have ready at hand so that the connection for children can be immediate.

**Making Play Stronger: Helping Children Develop Emotion Control**

Make-believe play is a context in which children practice feeling different emotions while controlling the situation so that resolutions to a social dilemma can be tried without social penalty. Although the play shown in season 49 of *Sesame Street* demonstrates different social problems that occur as children play different scenarios, an episode of *Esme and Roy* focuses on a single social problem and illustrates how a make-believe solution might work. In that show, when a little monster feels scared during a loud thunderstorm, monster sitters Esme and Roy help him overcome his fear through play and a self-talk mindfulness strategy. They notice when a monster feels scared during a loud thunderstorm and describe the ways the little monster is communicating that he is afraid, then they use his love for an action figure of a brave knight to help the child “think like the knight.” Together, they build a pillow castle and pretend that they are brave knights protecting the castle and that the loud thunder is a roaring dragon. Once the little monster imagines himself to be a brave knight, he becomes no longer afraid of the loud thunder.

**Making Play Kinder: Developing Self-regulation**

One technique for making children’s play mature is to help them plan their play
in advance. The concept of play planning can be seen in both *Sesame Street* season 49 and *Esme and Roy* episodes. In both, the characters walk the children through a plan and discuss the plan with others. On *Sesame Street* the lesson was reinforced with a segment and song, “Plan the Play,” repeated throughout the season.

Modeling how to plan the play is particularly useful for parents and teachers and can be easily adapted to real life. Adults can re-create scenarios modeled in season 49, such as hospital, a city bus, grocery store, library, restaurant, veterinarian's office, and the activities of a dog walker, just to name a few of the many play themes. The characters talk about what they will need for props, what they need to know about the specific situation, what kinds of problems might happen and how they will solve them, and how they will act (what to do and what to say when playing each of the roles). Thus, they model how to think through the plan and then how to act it out.

**Using *Sesame Street* and *Esme and Roy* Shows as Jumping Off Points for Play at Home and at School**

If we were to use these shows with preschoolers who do not yet have mature play skills, we would repeat the viewing of an episode. The first time we would have the children watch an entire episode, and then we would show small clips breaking down the action into playable sections. Here we use the toy knight episode of *Esme and Roy* already mentioned to illustrate this approach.

As the little monster becomes scared, we can stop the video to talk to children about being scared and how they know that they got scared. We will ask children to turn to their neighbors, show them their scared faces, and tell what makes them scared. Then we will ask them what their moms or dads do to comfort them and if they can now make unscared faces.

As monster sitters Esme and Roy show the little monster a book about knights, we would make sure the children have some background knowledge about knights, castles, and dragons. If children do not know much, there are many books that will fill the gaps in their knowledge because a field trip to a medieval castle or having a real dragon as a guest speaker will most likely be out of the question.

As Esme and Roy build a castle, we will have children bring different everyday objects typically found at home or in a classroom and show each
other how they can use this object to make the castle. As Roy pretends to be a scary dragon, we will ask the children to make scary sounds and who can they scare away by making these sounds? If children become excited after watching this show, we can brainstorm about whether we can build our own castle and what we can use to build it. We can also talk about different characters who live in the castle and what each of these characters does. And then we will all start playing but not before everyone draws a play plan showing who they will be and what they will do.

**Conclusion**

We shared some of the ways teachers and parents can use Tools of the Mind instructional strategies and *Sesame Street* and *Esme and Roy* shows to help children develop mature make-believe play. We hope that these examples will inspire readers to come up with their own ideas of how to make play smarter, stronger, and kinder. Ultimately, we want to give children’s play an opportunity to fully develop so that it will in turn become the powerful vehicle for children’s learning.

Happy pretending!

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