

# Programming for Preschoolers: What Makes for Effective Educational Television

PREPARED BY SHALOM M. FISCH, PH.D.

*“We all learn best from people  
who genuinely care about us.”*

- MISTER ROGERS

Years ago, one of the greatest challenges for programmers was simply finding enough quality preschool programming to put on the air. Today, however, the situation is very different. Thanks to an explosion of preschool programming over the past 10 to 15 years, today’s programmers often must choose among more potential series than they have time available to broadcast.

Naturally, when faced with such choices, every programmer wants to pick only the best of the available options – the series that will be the most appealing and educationally effective for the target audience (as well as fitting all of the other necessary constraints, such as scheduling considerations, economic factors, and so on). But it’s often difficult to predict which series will be most successful.

Fortunately, a sizable body of research has studied young children’s reactions to and learning from a wide variety of educational television series. Taken together, this research points to a number of features that have contributed to the effectiveness of existing series – and that programmers can look for while evaluating the strength of potential new series.

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## Educational Content

The strongest test of the educational effectiveness of any series is *summative research*, empirical research with children that assesses the degree to which viewers learn the educational content embedded in the series. However, not all series have summative data available – especially in time for programmers to decide whether to pick up the series. So, in the absence of summative data, how can programmers evaluate the educational strength of a new series? Advice from experienced educators (be they outside advisors or in-house outreach specialists) can provide a great resource to inform decisions. And, when reviewing potential series, programmers and educators alike can look for the following features, all of which have been found to contribute to the educational power of television series for preschoolers:

- **Curriculum goals:** Age-appropriate educational content for preschoolers can span a wide range of subject areas. As in series for older children such as *Cyberchase* or *WordGirl*, perhaps the most obviously “educational” choices are academic subjects such as early literacy or preschool mathematics or science. Other age-appropriate choices for preschoolers can run the gamut from health and safety to problem solving skills to socioemotional development. Indeed, some series combine these, embedding both academic content and age-appropriate prosocial messages in every episode.

Yet, whether the focus of a series is literacy (as in *SuperWhy*, *Between the Lions*, or *WordWorld*), science and math (as in *Curious George*, *Zoboomafoo*, or *It’s a Big Big World*), or encouraging children to pursue challenges (as in *Dragon Tales*), effective series should be built on a set of clearly-stated educational goals, and a substantive curriculum that fleshes out these goals in greater detail. By aligning the curriculum with national educational standards or the recommendations of organizations such as the National Association for the Education of Young Children, the curriculum can point the way toward a viable educational approach and age-appropriate topics for individual episodes. A strong educational curriculum can serve as the spine on which everything else is built.

Of course, although a substantive curriculum is necessary, it does not guarantee that viewers will learn from the series. To promote comprehension and learning, the educational content has to be built into the series in ways that make the content comprehensible to preschoolers – and that make them care about it. The rest of the features discussed in this section can help that happen.

- **Age-appropriate stories:** Just as educational content should address age-appropriate topics, children find it easier to understand, relate to, and care about stories that map onto their developmental needs. In series such as *Arthur*, this is accomplished through fairly realistic stories that deal with issues that kids have to handle every day, such as bullying, telling the truth, or sibling rivalry. In other series, such as *Dragon Tales*, the setting might be more fantastic, but the underlying issues are the same.

Stories should also build upon subject matter that young children are interested in and enjoy. Animals, birthdays... all of the things that preschoolers love in real life can provide rich fodder

for stories. And children’s prior knowledge about these subjects can make it easier for them to understand the story (and its embedded educational content).

The structure of a story should be tailored to suit young children, too. Stories for preschool children should be linear, with a clear beginning, middle, and end. Lots of flashbacks, “instant replays,” or other techniques that mix up the sequence of a story can be challenging for preschoolers, many of whom mistakenly think that flashbacks happen in the present or a replay means that something happened twice.

- **Concrete, explicit educational content:** Whether on TV or in real life, preschool children often have difficulty understanding abstract concepts; they find it much easier to grasp concepts that are concrete, tangible, and presented clearly. For example, the scientific concept of “change of state” might be difficult for children to appreciate in the abstract. But when an episode of *Curious George* embeds it in the context of melting ice cream, it relates directly to children’s own experiences and becomes easier for preschoolers to understand.
- **Content on the plotline:** Apart from evaluating whether a program’s educational content is presented clearly in and of itself, it’s also important to consider how well the content is integrated into the story that surrounds it. Research has shown that children remember educational content better when it is “on the plotline” – that is, when the educational content is central, rather than tangential, to the story (e.g., when a scientific principle is used to uncover the crucial clue that solves a mystery). To judge whether content is on the plotline, a good rule of thumb is to see whether you can summarize the story without mentioning the educational content. If you can, the content is *not* on the plotline.
- **Repetition and reinforcement:** For preschool children to fully grasp a new concept, they often have to encounter it more than once. This can help in two ways: First, it gives children another chance to master the concept if they didn’t fully understand it the first time. Second, even if children did get it the first time around, the repetition can help reinforce the concept and contribute toward mastery. Thus, it’s often best for an episode of a television show to focus on a small number of educational concepts – or even a single concept – and present each one several times over the course of the episode. If the concept is presented in different contexts or different ways throughout the episode (such as when *Sesame Street* might present the letter *B* in the context of several different words, like *Bird*, *Ball*, and *Bed*), it can encourage children to look for other applications of the concept as well.
- **Formal features:** Researchers who study children and television use the term “formal features” to refer to production techniques such as cuts, fades, or montage. When employed judiciously, these sorts of techniques can be used to support viewers’ comprehension of television programs. For example, a close-up or pan in a television program can direct children’s attention to a specific object or part of an object, as when the camera tracks a sequence of steps in a complex machine to show how the machine works, or when the letters in an on-screen word are highlighted as a voice-over sounds out the word.

- **Viewer participation:** Today, many series incorporate viewer participation to encourage children to get more involved in the episode. In some PBS series, such as *SuperWhy*, participation is a central element of the series. In others, viewers might be invited to play along with a game in a single segment or interstitial (e.g., playing along with a counting game in *Miffy and Friends*). Music can also be an effective means of eliciting participation, via encouraging children to sing along, clap, or bob to the music.

To succeed in getting kids to join in, participatory moments need to present clear questions or prompts that have well-defined responses, so that viewers understand what they're being asked to do. They need to allow enough time for preschool children to figure out the answer and respond (which is typically more time than an adult or older child would need). And to be as educationally effective as possible, the participatory behavior should require viewers to engage actively with the same sort of educational content that the series is designed to promote. For example, asking viewers to count along or find an on-screen shape may carry more educational value than asking them to shout out a nonsense word.

- **A springboard for learning:** Apart from encouraging viewers to participate while they watch, television programs can also motivate preschoolers to “bring the learning home” by engaging in follow-up discussions and activities long after the television is turned off. Live-action interstitials (as in series such as *Curious George* or *Arthur*) can make bridges to real-life applications of the concepts presented in a program, and encourage children to apply them in their own lives. Other on-screen approaches can also be effective, as when segments of *Raggs* are followed by Dumpster the cat interviewing real children about their own related experiences. Beyond the television screen, related online and outreach activities can provide additional opportunities for learning as well.

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## Appeal

Appeal may not be an “educational” factor in and of itself, but if children don’t enjoy a television series, they simply won’t watch it – and everything else becomes moot. As David Connell (the first executive producer of *Sesame Street*) used to say, “You have to get them into the church before you can preach to them.”

When evaluating the appeal of a potential new preschool series, it’s crucial to remember that we’re talking about appeal *for a preschooler* – and what appeals to an adult may not always be the same as what appeals to a three-year-old. So what appeals to preschoolers?

- **Humor:** Kids love to laugh. But, to a preschooler, “humor” means silliness, incongruity, slapstick, and surprise. More sophisticated forms of humor, such as puns, are typically less funny to preschoolers because young children aren’t developmentally ready to appreciate two meanings of a word at the same time. And mean-spirited humor is never funny to a preschooler.

- **Stories:** As any parent knows, young kids love stories, and they'll happily sit through a favorite story over and over again. For preschoolers, stories should be fairly simple, linear, and relevant to kids' lives (as noted earlier).
- **Characters:** Frequently, one of the major factors that contributes to the appeal of a program is the use of compelling characters with whom kids can identify. Whether it's Elmo or Abby Cadabby on *Sesame Street* or Clifford the Big Red Dog, kids like characters who are smart and/or funny, and who help other characters with their problems. Often, kids enjoy seeing animals or other children on screen, especially if the on-screen kids are a little older than the viewers themselves.
- **Visual action:** Young children like to see things happen on screen. Obviously, that doesn't mean that preschoolers are looking for constant car chases or explosions, but it does mean that playing, dancing, or other forms of activity are generally more appealing to preschoolers than lengthy scenes of "talking heads."
- **Music:** From lullabies at home to alphabet songs at preschool, music is a prominent part of children's lives. In television programs, music has also been found to be an effective way to attract children's attention and get them engaged; for example, in research on *Raggs*, children named its lively songs as one of their favorite things about the series. A wide variety of musical styles have been used successfully on preschool television; there's no one style that's "best." In keeping with the previous point, though, music often works best when it's accompanied by lively visuals on screen.

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## Ask a Child

Last but not least, it goes without saying that the best judges of what will work for kids are kids themselves. Speaking personally, after more than 20 years' experience in conducting research and collaborating on the production of educational television series, I can usually watch a program and predict how children will react – but, every once in a while, children still surprise me.

There is no substitute for watching children watch a program, or talking to them afterward to see what they took away from it. The most powerful predictor of success typically comes from experienced researchers testing stories, rough cuts, or actual episodes with a reasonably large sample of target-age children. But even if time and resources don't permit a formal test, it's still worth getting a rough peek at children's reactions by sitting informally with a small number of kids to see what they think.

After all, remember the well-known industry story about the first season of *Barney and Friends*, when *Barney* almost didn't get renewed... until the decision-makers saw the Nielsen ratings. By the same token, when I was asked to join the production team for *Raggs*, I watched a few of the existing episodes and appreciated them for what they were – but I didn't fully grasp the power of *Raggs* until I watched them with my four-year-old daughter, and saw just how glued she was to the TV during the stories and songs. She spent much of the following week asking me if we could watch them again.

**Kids are the real experts. We can learn a lot by listening to them.**

## Pulling It All Together

More often than not, a truly successful educational series grows out of a magical blend of elements in which the whole is greater than the sum of its parts. Nevertheless, we can learn from the successes of the past, and thanks to a sizable body of research over the years, we now know a lot about the sorts of features that contribute toward effective educational television. Our list is far from complete, but we can use it to create a checklist of things to look for when evaluating a possible new series:

### *Will the series be educationally effective?*

- Is the series built on a clearly defined set of educational goals, and a curriculum that's aligned with current practices in education?
- Are the stories age-appropriate, clearly structured, and easy for children to follow?
- Are the educational topics age-appropriate?
- Is the educational content presented clearly?
- Has the material been made as concrete as possible (through discussion, visuals, links to children's prior experiences, etc.), even if the underlying concepts may be relatively abstract?
- Is the educational content central to the story, so that you can't summarize the story without mentioning the content?
- Is the educational content reinforced in multiple ways throughout an episode?
- If the series invites viewer participation, will preschoolers understand what they're supposed to do? Is there enough time for a preschooler to respond? Does the participatory behavior engage children in actively thinking about or using the educational content?
- Are there opportunities for children to extend their learning after the program is over and the television is turned off?

### *Will the series appeal to preschoolers?*

- Is the humor age-appropriate for preschoolers – silliness, slapstick, and surprise, rather than puns or mean-spirited jokes?
- Are the stories relevant to preschoolers' issues, experiences, and interests?
- Are the characters smart, funny, helpful, and/or easily relatable for preschoolers?
- Is there enough happening on screen to hold children's attention (as opposed to relying heavily on lengthy scenes with "talking heads")?
- Is music used in ways to catch children's attention and get them engaged?

Of course, it's unlikely that any one series will emerge as ideal in every dimension. However, thinking about these questions can provide a framework to assess the potential educational effectiveness of a possible new series. And when more educationally powerful series are on the air, the result can only be good for children.

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To order a laminated checklist or additional copies of these materials, visit [www.Raggs.com/effectivepreschooltelevision](http://www.Raggs.com/effectivepreschooltelevision)

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## Professional Biography Shalom M. Fisch, Ph.D.

For over 20 years, Shalom (Sholly) Fisch has used educational practice and empirical research to help create TV series, websites, magazines, and other media that both entertain and educate children. He is President of MediaKidz Research and Consulting, through which he consults for numerous PBS producers, as well as clients ranging from the National Academy of Sciences to DC Comics to Sea World/Busch Gardens. Prior to founding MediaKidz in 2001, Sholly spent 15 years at Sesame Workshop, where he served as Vice President of Program Research. Among his current projects, he is currently the lead educational consultant for *Raggs*.

For questions or further information, please contact Sholly at [mediakidz@lycos.com](mailto:mediakidz@lycos.com).

*This guide owes a tremendous debt to the many researchers and producers who have devoted themselves to educational television over the years. Their work made this guide possible – and, more important, their creative efforts have enhanced the lives of millions of children around the world.*

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## *Raggs* Television Series Presented by KQED, San Francisco Distributed by American Public Television (APT)

*Raggs* stars five colorful canine characters and their wisecracking pet cat, Dumpster, who explore the world from their cool clubhouse. However, *Raggs* and his friends are not your average canines – they're also talented musicians and together make great rock'n roll music as The *Raggs* Band.

Each episode follows the band through engaging, emotional and humorous stories that rock the house and explore issues faced by real kids. The characters' chemistry and friendship is immediately evident as they work through a series of creative and often humorous steps to find a successful conclusion to everyday challenges.

Music is an integral part of this fast-paced show and provides a hook to engage young viewers as the band goes from one adventure to the next. Each program is based on one main theme that promotes social and academic readiness while also addressing specific preschool curriculum topics such as:

- Emergent literacy
- Mathematics
- Social studies
- Movement, music and dance
- Visual arts
- Science and discovery

Each show also focuses on the development of social and emotional skills and models cooperation between friends.

The format is innovative and contemporary in its ability to knit together and reinforce a single theme through the use of various segments – live action clubhouse segments, animation shorts, music videos and interviews with children – all creatively expanding on the theme. Interactive studio concerts featuring real-life fans and a Wag & Wiggle dance segment promote movement and physical fitness, adding another dimension and heightening the entertainment value.

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A checklist for reviewing curriculum-based content

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