



Designing for Children

- With focus on 'Play + Learn'

Harnessing a Child's Love of Play:

Examples from Sesame Workshop India's Community Outreach Initiatives

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Abstract: One of the loves in a child's life is *play*, which has been a focus of Sesame Workshop India's (SWI) curriculum design and implementation since 2006. Reaching over 250,000 children around India, SWI's community outreach programs have transformed preschools and communities into interactive environments for children. This case study describes SWI's preschool and mobile community viewing programs and two particularly innovative educational tools, the story pond and the bioscope, and how they are promoting engagement and basic skills uptake in the classroom. Driving the design of SWI's interactive tools is a strong program of formative and summative research, strengthening and supporting SWI's play and learn focus.

Key words: preschool, early care and childhood education, interactive, play, child-centered

1. Introduction

Play is an essential element of childhood and should be part of a child's education, especially for the very young (Almon, 2003). As interest in early care and childhood education (ECCE) for all grows globally (UNESCO, 2007), it is critical that play-based activities and materials are integrated into programs for pre-school age children (Miller and Almon, 2009).

In India, about half of eligible children attend pre-primary schools (UNESCO, 2007). Despite the growing interest in play-way and child-centered approaches to teaching and learning in India, these approaches are still the exception rather than the norm (Prochner, 2002). Similarly, though recognition of the importance of ECCE and enrollment of children

in pre-schools are on the rise, traditional didactic modes of teaching are still common practice. In many areas, such as the underserved areas of major urban centres, creating interactive play environments is challenging because of inadequate school buildings and materials and low-literate and untrained teachers.

Sesame Workshop India aims to reach underserved Indian children and caregivers with innovative, engaging, and play-based materials that transform pre-schools and communities. To this end, we have developed outreach initiatives with tested materials.

2. Sesame Workshop India Outreach Initiative

2.1 Mobile Community Viewings (MCV)

Mobile community viewings are community screenings of thematic compilations of episodes of Sesame Workshop India's television show *Galli Galli Sim Sim* (GGSS) and related material, in four Indian cities (Kolkata, Mumbai, Delhi, and Ahmedabad). The screenings involve a re-purposed vegetable cart that houses a standard television set and DVD player, which is rolled into the community by facilitators who are employed by a Kolkata-based theater group. The facilitators rally the children and their caregivers, show the compilation, which in 2009 is focused on health, and then lead an activity with the children. The facilitators also give out mini-booklets reinforcing the messages from the television show to children and caregivers and in some sites, facilitators distribute leaflets on the importance of ECCE to caregivers. In Kolkata, children who attend MCV screenings also participate in a mask-making activity and/or theater workshop, an intervention piece that will be expanded to the other MCV cities in 2010.

Between eight and ten MCV screenings are held in one city on a given day and each community has a screening twice during a four-month cycle of the program. In 2009, about 246,000 children and 58,300 caregivers attended MCV screenings across all four cities and since the inception, MCV have touched close to half a million children and caregivers. Exposure to the MCV improves awareness and covieing with parents of the *Galli Galli Sim Sim* television program. In addition, caregivers' attitudes toward early childhood education and progressive versus didactic pedagogy improve after attending the MCV activities (PRISM, 2009).



Figure 1. Mobile Community Viewings reach children with health messages

Sesame Workshop India is exploring additional technologies to enhance the MCV experience. One opportunity may be to incorporate the multi-point access technology developed by the Microsoft Corporation. The multi-point access technology allows several users to manipulate computer mice on one computer and monitor/screen. We envision the use of multi-point access with children, to engage them in screen-based activities that reinforce the video compilation messages.

2.2 Balwadi (Child-Care Centre) Program

The balwadi/anganwadi program includes the development and distribution of innovative and engaging, play-based educational kits to balwadis via partner organizations, and augmented with teacher trainings. The educational kits are created by educators and include teacher's guides, posters, games, puzzles, and more. Each kit addresses a specific curricular area that is of importance to ECCE. Since 2006, a total of 14 kits have been developed and distributed, addressing the domains of: literacy, maths, science, and Health, which are described in Table 1. The purpose of the kits is to supplement and enhance the existing balwadi program curriculum.

Usually, the kits, which are branded with the characters from GGSS and/or contain colorful and child-appealing illustrations, are different from anything else in the classroom. They are more colorful and interactive, and they invite play and learning. One very successful educational kit has been the Story Pond, which uses a play approach to develop children's vocabulary and narrative skills.

Curricular Area	KIT Name	Objectives	Materials for Children and Caregivers
I. LITERACY			
A	AANCHOO TEACHES LETTERS	Helps children learn alphabets, new words, identify letter sounds within words and write their own names	<ul style="list-style-type: none"> • Leveled activity books • Chamki cut-outs and stickers • Alphabet poster • Alphabet book Caregiver Guide • Laminated board and letter and picture cards
B	STORY POND	Helps children increase vocabulary, describe/ categorize animals, familiar objects, places, etc, narrate events in sequence and creatively imagine stories.	<ul style="list-style-type: none"> • Story pond floor game: The vinyl sheet is illustrated with a pond filled with "stepping stones." • Story book: "Story Pond" - Related segments from GGSS for DVD and bioscope
C	SCRIBBLES TO STORIES	Encourages children to draw lines, curves, and dots, to scribble, and engage in other pre-writing activities.	<ul style="list-style-type: none"> • Foldable blackboard and chalk • Flashcards • Storybook 1: Scribbles To Stories • Storybook 2: What's Hidden in the Black Board? • Story book 3- Scribble world
D	ALL MY FRIENDS	Encourage modeling of decisions and behaviors around friendship and understanding that they can be friends with people from different backgrounds.	<ul style="list-style-type: none"> • Finger/stick puppets, props and children characters • Character cards • Situation cards • Caregiver booklet
II. MATHS			
A	GOOGLY'S WORLD OF SHAPES'	Help the child recognize and name two-dimensional shapes and their properties and use in their everyday lives.	<ul style="list-style-type: none"> • Set of 84 laminated shape cut outs • Storybook 1: "What can you see?" • Storybook 2: "Chowkor Raja"
B	NUMBERS ARE EVERYWHERE	Help children to recognize numbers in the environment, observe instances of one to one correspondence, and to do simple additions and subtractions.	<ul style="list-style-type: none"> • Game board of a cityscape. • People cards • Story accordion with rhyming stories • Storybook - Chamki and Aanchoo experience simple addition and subtraction problems on a bus ride
III. SCIENCE			
A	CHAMKI KI ADBHUT DUNIYA'	Helps children understand the stages of life cycle in living things, that living things grow, change, and are interdependent.	<ul style="list-style-type: none"> • Flash cards that show the stages of growth in plants, birds, insects, animals and amphibians. • Five in one storybook - 'Chamki's Wonderful World'

Curricular Area	KIT Name	Objectives	Materials for Children and Caregivers
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III. SCIENCE (continued)			
B	GOOGLY'S GREEN PARTY	Helps children enhance skills in reasoning and memory, visual discrimination, sequencing of events, problem solving.	<ul style="list-style-type: none"> • Story/activity book • Garden tools - Paper cut-outs
C	WILD ANIMALS: WHAT IS SPECIAL?	Present children with animals and their names and encourage children to learn the characteristics of wild animals	<ul style="list-style-type: none"> • 3-piece animal puzzles to identify physical characteristics of animals • Flash Cards on facts about animals • Story book
IV. HEALTH			
A	DHANYA-VAAD SHUKRIYA THANKYOU	This kit promotes healthy habits and personal hygiene in a variety of ways.	<ul style="list-style-type: none"> • Activity books on basic morning routines and healthy habits • Sequencing cards to arrange steps of washing hands • Poster on washing hands • Caregiver guide with simple activity ideas focusing on washing hands • Flash cards healthy routine
B	READY FOR SCHOOL	Encourage children to cover their mouths while coughing/sneezing and to use a handkerchief if necessary, know the importance of wearing footwear, bathing and combing their hair, and eating "clean" food	<ul style="list-style-type: none"> • Healthy habit cut outs. • Storybook 1: Great germ hunt story book • Story 2: Uncle, Fly and the Health Detectives • Healthy habit fashcards
C	GO, GROW, GLOW	Encourage children to recognize the 3 main food, to recognize that a balanced diet has all the three food groups, and to learn the value of regular meals	<ul style="list-style-type: none"> • Flash cards of types of foods • Dice to play multiple games • Nutrition Wheel that helps children identify food groups • Story Accordions (5) • Instruction leaflets for the caregivers

Table 1. Summary of Galli Galli Sim Sim Educational Kits for Balwadis (2007-2009)

2.2.1 Story Pond Kit

The story pond kit includes a 5' by 5' vinyl mat that contains an image of a large blue pond. In the pond are about 25 stepping stones, which each has an illustration of a person (e.g., a woman in a sari), animal (e.g., a bird), or thing (e.g., a fruit) (see figure).

Children are encouraged to use the story pond in many ways. At first, the teacher may ask children to stand on a stone and identify the person, animal, or thing on it, which builds vocabulary. Over time, the teacher and children use the pond in various ways, which would eventually include having children go from stone to stone narrating a story about

the people, animals, and things on the pond. As children tell these stories, they build sentences and develop their narrative skills, both important parts of language development. The kit includes a teacher's book, which provides guidance on how to use the story pond and a sample story.

Though relatively simple in design, the story pond is extremely powerful in activating children's imagination and playfulness. In the creations of stories, children construct roles and scenarios similar to pretend play. The addition of telling the story out loud builds children's sentence formation and their narrative skills, which are important pre-literacy skills. While using the story pond, children also develop gross motor and balancing skills. To date, the story pond kit is the most popular with balwadi teachers. Another favorite of teachers, which provides an exciting interactive environment, is the bioscope.



Figure 2. Story Pond Kit incorporates play and imagination to build literacy

2.2.2 Bioscope

The GGSS bioscope revives a traditional form of Indian entertainment to reinforce GGSS messages interactively. The bioscope consists of a decorated box with large peepholes inserted around the outside. Inside, there is a scroll featuring still images from the GGSS television show, which is wound by a teacher or caregiver from the top of the bioscope. Balwadi's receive a tape and tape recorder so they can play music while turning the scroll and children view the material from outside. The bioscope invites children to see the television characters and their classroom materials in a different way and they are able to talk about what they have observed in meaningful ways after viewing.

Bioscopes are available in 500 balwadis in the six intervention cities. Caregivers report that attendance is highest on the days when children know that the bioscope will be used at the centre.

2.2.4 Balwadi Program Outcomes

Longitudinal research suggests that the GGSS balwadi intervention has a significant impact on the narrative skills of children (PRISM, 2009). Narrative skills are one of the six early literacy skills that a child should develop for better reading comprehension for later life (Multnomah County Library, 2009). In addition, families with children in GGSS balwadis are more likely than other families to have more items for the child to play with in the home (PRISM, 2009)

3. Formative and Summative Research

Sesame Workshop India puts a strong emphasis on rigorous formative and summative research to evaluate educational materials throughout development and implementation. The SWI intervention evaluations, which are conducted by third-party research firms, provide valuable information to improve materials, both before and after implementation.

Formative research refers to the research that goes into developing or “forming” content for an educational kit or MCV outreach materials. Formative research can be further broken down into two parts. First, formative research refers to the collection of information that helps to develop content, such as literature reviews and baseline or exploratory data collection to understand where children are in their understanding of a topic and where caregivers are in terms of their comfort with a particular teaching approach. Second, formative research also refers to the pre-testing of materials with the intended audience, using a systematic approach to assessing the appeal the kits and children’s comprehension of the activities.

Over the years, SWI has pretested many educational kits and the results have identified key areas for improvement. Over time, pre-testing has indicated the need for low-literate and limited text for teacher instructions. Further, materials for children must be durable and large enough for children to manipulate them without aid. Pre-testing indicates that children respond well to the bright colors and characters on the GGSS materials. All of the educational kits include items that children can play with and touch and feel. After pre-testing, the kits are revised before going to print and distribution.

Sesame Workshop India also conducts process evaluation to assess whether the process outcomes, such as conducting the appropriate number of MCV screenings in a day, are being met. Process evaluation helps program staff to change implementation as is needed and provides information for studies of program impact.

Finally, SWI commissions summative evaluation studies on the impact of the MCV and balwadi programs. One large, five-wave study on the balwadi intervention ended in early 2009. In addition, a randomized control trial to assess the knowledge and attitudes of children and caregivers after viewing the MCV intervention in Mumbai is underway at the time of writing this paper. These studies will help us to assess the impact of GGSS on children's learning and caregivers' perceptions of child learning.

4. Conclusions

Sesame Workshop India has developed a line of educational materials and opportunities that transform balwadis and communities into more interactive and playful environments for children. With a strong program of formative and summative evaluation, SWI is constantly strengthening its initiatives and materials based on sound research, and in turn impacting the lives of underserved urban children.

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References

- Almon J. (2003) The Vital Role of Play in Early Childhood Education [Online PDF]. Available at <<http://www.waldorfresearchinstitute.org/pdf/BAPlayAlmon.pdf>> [Accessed 14 November 2009]
- Miller, E. and Almon J. (2009) Crisis in the Kindergarten: Why Children Need to Play in School. Education Digest, vol.75, no.1:42-45.
- Multnomah County Library (2009) Six Early Literacy Skills [Online PDF]. Available at <<http://www.multcolib.org/birthtosix/elitskills.html>> [Accessed 14 November 2009]
- PRISM. (2009) A report on the Longitudinal Educational Impact Survey. PRISM, India.
- Prochner L. (2002) Preschool and playway in India. Childhood, vol.9, no.4: 435-453.
- United Nations Educational, Scientific, and Cultural Organization (2007) Education for All: Strong Foundations [Online PDF]. Available at <http://www.unesco.org/en/efareport/reports/2007-early-childhood/> [Accessed 14, November 2009]