

Informational Books in the Preschool Classroom
Topic of Study: Creating with Recycled Boxes

Box by Min Flyte, illustrated by Rosalind Beardshaw
What to Do With a Box by Jane Yolen, illustrated by Chris Sheban
Not a Box by Antoinette Portis

Introduction

In this guide children are engaged in creative experiences with recycled boxes; activities that primarily support three domains in the *Arkansas Child Development and Early Learning Standards: Birth through 60 months: Emergent Literacy, Science and Technology, and Creativity and Aesthetics*. The **Learning Goals (with Strands)** that precede each activity relate to specific areas of development and learning that are the focus of the activities.

Through the three featured books children are encouraged to let their imaginations soar as they use recycled boxes in creative ways.

Connecting to Adventures in Learning

This curriculum guide does not specifically connect to any Adventures in Learning Topic of Study. However, recycling boxes for use in the classroom is included in some of the topics. And the topic definitely connects to another topic of study, **Taking Care of Our World**, in the Informational Books in the Preschool Supplemental Curriculum which can be found on the Better Beginnings website.

Teacher Notes

Consider some of the reasons for engaging children in experiences with recycled boxes:

- Cardboard boxes can engage children for minimal cost and minimal impact on the environment
- Play with cardboard boxes can build skills and concepts that toys with bells and whistles and batteries may not:
 - Creativity – thinking “outside the box”
 - Imagination
 - Problem solving
 - Resourcefulness
 - Cooperativeness
 - Empowerment - they can move and manipulate an object that is bigger than they are
 - Engineering practices and thinking
- Play with boxes encourages children to think about the concept of reusing things for other purposes
- Play with large boxes develops spatial awareness as children climb in and out of and crawl through boxes

Materials to Collect and Make

Materials to Collect

- Large collection of boxes of different sizes
- Loose parts – open-ended materials that children can easily assess and combine with their box play
 - Blocks of wood and pieces of wood (no splinters)
 - String
 - Short pieces of rope
 - Masking tape
 - Glue
 - Clothespins
 - Scissors
 - Cardboard tubes
 - Cardboard
 - Empty and clean containers such as yogurt cups
 - Carpet squares
 - Lengths of fabric
 - Paint and paint brushes
 - Washable markers
 - Tempera paint
 - Large buttons
 - Pie tins
 - Collage materials: shiny paper, ribbon, lace, scraps of paper, circles of aluminum foil, wall paper
 - Wooden beads
 - Chenille stems
 - Blocks of florist's foam

Ideas for Using Recycled Boxes to Enhance the Learning Environment

- Organize your files in a recycled box which you may choose to decorate.
- Convert a recycled box into a doll bed by placing a baby doll and a blanket in the box and adding it to the Dramatic Play Center. An extra blanket or small pillow can be added for a mattress if needed.
- Create a song/language prop box by gathering a collection of items that suggest children's songs, nursery rhymes, finger plays and placing the items in a recycled box: For example:
 - Dog, cat, sheep, cow, mouse, bear, book such as *Wheels on the Bus*
 - During group time, show the item and involve children in deciding which song, nursery rhyme, etc. the item suggests. For example, the bear may suggest "We're Going on a Bear Hunt", and then you and the children say the action finger play together.
- Make a car garage out of a **shoebox**:
 - Cut doors in the front of the box; doors large enough for cars to go through.
 - Draw lines to indicate parking spaces, giving each space a number.
 - Write the word Garage on the front of the box.
 - Have available small cars that will go through the doors.

- Use empty **cube-shaped tissue boxes** to create a learning tool for children:
 - Carefully fill the box with crumpled newspaper or shredded paper. Use several sheets of newspaper to make the cube more durable.
 - Cover the cube with self-stick paper.
 - Glue pictures to each side of the cube; pictures related to the current topic of study such as Farm Animals or Tools.
 - Ask a child to toss the cube, name the animal or tool and tell one thing about it.
 - Continue with each child having a turn to toss the cube.
 - Consider using the cube as a transition activity, giving each child a turn to toss the cube and name the animal or tool and transition to the next activity.

- Involve children in using **large appliance boxes** to create something related to the current topic of study such as Travel Safety and Taking Care of Vehicles:
 - Allow this activity to take place over two or three days.
 - Invite them to help you decide what type of vehicle it is and where to put the windows and a door.
 - Remove one of the long panels of the box and use it for another activity.
 - Involve children in using a ruler of cloth measuring tape to measure the size of the door and windows.
 - You cut out the windows and door. Cut the door, leaving one side attached to the box.
 - Involve children to decide on the color of tempera paint to use.
 - Provide the paint and brushes and invite children to paint the vehicle.
 - Allow the paint to dry.
 - Involve the children in discussing what else the vehicle needs: tires, steering wheel, etc.
 - Suggest that children look through a box of recycled materials (refer to list above) and decide what to add to the vehicle.
 - Add the vehicle to the block center or take it outdoors.

- Use large and sturdy recycled cardboard boxes such as **paper boxes with lids** for prop or theme boxes:
 - Store props for each theme or topic of study in the box.
 - Label each box with the name of the theme or topic of study.
 - Tape an inventory list to the inside cover of the box.
 - Check prop boxes periodically and repair or replace items that are torn or broken.
 - Invite families to contribute recyclable items for the prop boxes.

Teacher Note:

- *Prop boxes include a variety of materials relevant to a particular theme or topic of study.*
- *As children use the items in the prop boxes, they are recreating and exploring the topic-related and life experiences they have had and gaining a better understanding of the world around them.*
- *Refer to Adventures in Learning Tips and Techniques, page 6, on the Better Beginnings website for information on Developing Prop Boxes.*

Story Presentations

Learning Goals:

CD2.4 Holds and manipulates information in memory (*short-term and working memory*)

LD1.1 Understands and responds to language (in child's home language) (*vocabulary and language comprehension*)

LD2.1 Uses increasingly complex vocabulary, grammar, and sentence structure (in child's home language) (*expressive vocabulary*)

EL1.1 Shows interest in literacy experiences (*engagement in literacy experiences, variety of interests*)

EL1.2 Engages in read-alouds and conversations about books and stories (*story comprehension*)

EL3.1 Responds to features of books and print (*book knowledge*)

Book: *Box* by Min Flyte, illustrated by Rosalind Beardshaw

- Prepare to read the book, *Box*.
- Bring two or three boxes of different sizes to the reading area.
- Show the boxes to children and ask them what they might do with them. Encourage a variety of answers by repeating what a child has said and asking children to think of something else you can do with a box.
- Explain to children that you are now going to read a book with them that shows boys and girls doing many different things with boxes.
- Show the cover, give title, author and illustrator. (Explain that the author is the person who writes the story and the illustrator is the one who draws the pictures.)
- Invite children to look at the cover and describe what they see.
- Read the story so all children can see the pictures in the book, especially when lifting the flaps.
- Follow up the reading by involving children as follows:
Begin to reread the story, inviting children to recall what is in the box before lifting the flaps.
- Explain to children that this is teacher's book and that you will be happy to read the book with them in the Library Center.
- Explain to children that for the next few days, boxes and other materials will be added to some of the learning centers.

Story Extension:

- Read the story with children at another time.
- Follow up the reading by showing the pages where sizes of boxes are mentioned and involve children in discussing and showing with their hands the sizes of the various boxes: little, medium-size, big, enormous.

Additional Learning Goal:

MT3.1 Participates in exploratory measurement activities and compares objects (*comparison*)

Teacher Notes:

- *Help children understand words that may be unfamiliar to them. For example: nook: a small place that is hidden or partially sheltered, egret is a large bird that lives in marshes, Paris: a city far, far away in a country called France.*
- *Developers suggest that this book be kept with your materials because it could easily be damaged by children.*
- *Join children in the library area and read and discuss this book with them if they seem interested.*
- *Read the book to the group again if they request it.*

Book: *What To Do With a Box* by Jane Yolen, illustrated by Chris Seban

- Prepare to read the book, *What To Do With a Box*
- Show the cover, give title, author and illustrator. (Explain that the author is the person who writes the words and the illustrator is the person who draws the pictures).
- Remind children that you previously read the book, *Box*, and invite them to recall some of the things children did with boxes in the story.
- Say to children, "In this book we are going to learn about more things that children can do with boxes."
- Read the story so all children can see the pictures in the book.
- Follow up the reading by showing the pages and inviting children to recall what children are doing on each page.

Story Extension:

- Read the story with children at another time.
- Follow up the reading by explaining to children that they are going to help you read the story by filling in the rhyming words. For example, read "A box! A box is a strange device. You can open it once. You can open it _____ (twice)."
- Continue reading the pages with rhyming words.

Additional Learning Goal:

EL2.1 Notices and manipulates the sounds of language (*rhyme*)

Teacher Note: *This process of pausing and letting children fill in the missing word is called the cloze technique.*

Book: *Not a Box* by Antoinette Portis

- Prepare to read the book, *Not a Box*.
- Show the cover, give title, author and illustrator. (Explain that the author is the person who writes the words and the illustrator is the person who draws the pictures. Antoinette Portis is both the author and illustrator.)
- Repeat the title and ask children, "If it's not a box, what do you think it is?" Accept all answers, then say, "Let's read and find out."
- Read pages 2 and 4, and then ask children, "If it's not a box, what is it?" Allow children to discuss what it is.
- Continue this process to the end of the book.

Teacher Notes:

- *Page 5: race car, page 9: mountain top, page 13: building on fire, page 17: robot, page 21: crow's nest of a pirate ship, hot-air balloon, elephant, boat; page 27: rocket*
- *Crow's nest (page 21) is a structure in the upper part of a ship used so a person can look in all directions. Pirates looked for other ships on the ocean that they could rob.*

Additional Language and Literacy Activities

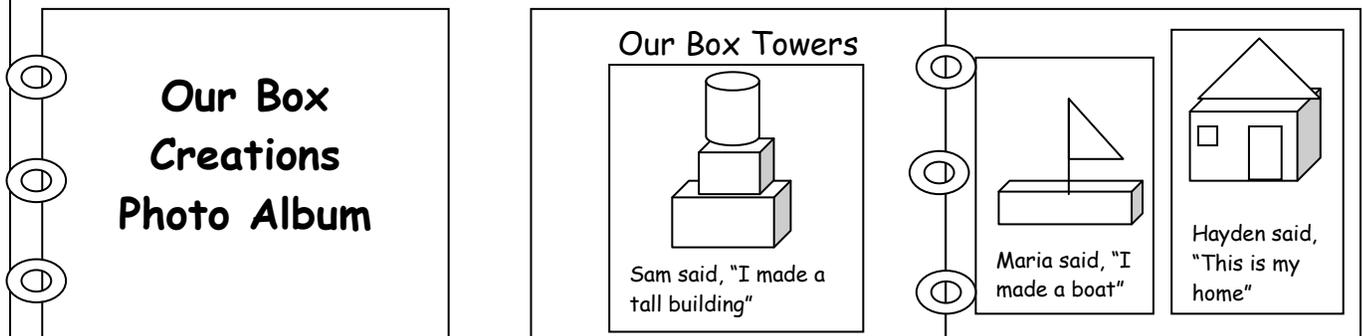
Learning Goals:

EL3.1 Responds to features of books and print (*print knowledge*)

CA2.1 Explores, manipulates, creates, and responds to a variety of art media (*exploration of art*)

Activity: Create a Photo Album

- Take photos of children's experiences and structures that they create with boxes. For example:
 - 3-D Art
 - Box Towers
 - Family Bricks
 - Family Box
 - Large Appliance Box Creations (vehicle, gas pump)
 - Cardboard Box Tunnel
- Invite children, either individually or in a group where appropriate, to dictate a story about the photos.
- Create a photo album with the photos and the dictation.
- Several photos can be included on the same page.
- Share the photo album with the children by showing a page, invite children to discuss what they see, and read the dictation to them.
- Place the photo album in the Library Center.
- Invite families to look at the photo album with their child and have him or her tell them about the photos.



Learning Goals:

CD2.4 Holds and manipulates information in memory (*short-time and working memory*)

LD1.1 Understands and responds to language (in child's home language) (*vocabulary and language comprehension*)

EL1.1 Shows interest in literacy experiences (*engagement in literacy experiences, variety of interests*)

EL3.1 Responds to features of books and print (*print knowledge*)

Activity: Review of the Topic of Study

- Take a marker board or chart sheet and markers to the large group area.
- Invite children to join you in a review of the study about creating with boxes.
- Say to them, "For the last _____ (how many days/weeks) we have been busy creating with boxes. Now it's time to look back and see all of the things you have created with boxes."
- Add the title, Our Box Creations, to the board.
- Invite each child to recall one thing we did with boxes, write that response on a marker board or chart pad and read it back to the child. Give prompts as necessary.
- Continue this until each child who chooses to, has added something to the list.
- Read the list back to children.

Our Box Creations

Learning Environment

Block Center

Learning Goals:

SE1.2 Interacts with peers (*stages of play, social skills*)

CD1.1 Shows curiosity and a willingness to try new things (*exploration and investigation*)

CD3.1 Uses reasoning and planning ahead to solve problems and reach goals (*problem solving*)

MT3.1 Participates in exploratory measurement activities and compares objects (*comparison*)

ST1.1 Engages in the scientific process to collect, analyze, and communicate information (*investigation and hypothesis testing, data analysis and communication*)

ST3.2 Uses tools and engineering practices to explore and solve problems (*engineering practices and thinking*)

Activity: Building a Tall Tower

- Add a variety of boxes of different sizes to block center.
- Observe to see if children begin to build a tower with the boxes. Is their tower collapsing? Did they use a larger box for the foundation, adding graduated sizes of boxes to the base?
- Join children and involve yourself in the building process based on your observations. For example, if the tower is sturdy, invite children to tell you how they built the tower. How did they get the boxes to balance so the tower wouldn't collapse? If the tower collapses, ask them why they think the tower collapsed. Guide them to select a large box for the foundation and then ask them which size box comes next, then next. Talk about balancing so the boxes do not fall over.
- Leave the boxes in the Block Center as long as the children seem interested in creating with them.

Activity: Using Loose Parts

- Refer to the **Materials to Collect and Make** at the beginning of this guide for a list of loose parts
- Gather a collection of the loose parts, place them in a box(s) and add to the Block Center.
- Add boxes of different sizes to the center.
- Place the book, *Not a Box*, in a small basket and add to the center.
- Observe children as they experiment with the boxes and loose parts. Based on your observations, involve yourself in their play by asking questions and/or making suggestions. For example, if a child is using masking tape to try and attach something to a box and it isn't working, you might ask the child "Can you think of something else you can use to attach the bottle caps to your structure?"

Library Center

- Add the following books:
What to Do With a Box
Not a Box

Art Center

Learning Goals:

SS1.1 Demonstrates positive connection to family and community (*family and cultural identify*)

CA2.1 Explores, manipulates, creates, and responds to a variety of art media (*exploration of arts*)

Activity: Family Box

- Provide a shoe box for each child.
- Ask families to send a family photo for a classroom activity.
- Explain to children that they can create a family box for school and then to take home and share with their family.
- Allow this activity to take place over three days.
- Invite children to use tempera paint to paint the outside of the box their favorite color (day one).
- Provide decorative collage materials such as shiny paper, ribbon, lace, scraps of paper, circles of aluminum foil, and wall paper. Suggest that children decorate the outside of their box and cover with the materials (day two).
- Children place their family photo in their box (day three).
- Display the boxes in the classroom.
- Suggest that children say “good night” to their family as they are ready for rest time.
- Send the boxes home with the children with a note thanking families for sending the family photo.

Teacher Notes:

- *Be sensitive to children who may not want to share their family box with the group.*
- *Suggest that a child draw his or her family if a photo is not sent from home.*

Activity: Creating 3-D Art With Boxes

- Collect the following and put in a storage container (box):
 - Small boxes such as different size jewelry boxes and cube-shaped tissue boxes.
 - Blocks of wood, florist’s foam or heavy cardboard (for foundation)
 - Items such as clothespins, chenille stems, feathers, and pom poms.
 - Glue
- Invite children to join you in the Art Center.
- Allow them to explore the items in the box and talk about what they are.
- Show children a drawing that one of them has done and explain that this art is flat, and that sometimes people do art that may be tall or wide, and this is called 3-D art.
- Explain that when you do 3-D art, you have to begin with a base or a foundation; something that you can add to so that is tall and/or wide.
- Suggest that children look in the box and decide what would be a good foundation for 3-D art. (blocks of wood, blocks of florist’s foam, or heavy cardboard).
- Invite children to once again look in the box and decide what they could add to the base to make it tall and/or wide. Call attention to the boxes as possibilities.
- Explain that this box of materials will be placed in the Art Center for them to use.

Teacher Notes:

- *Leave the box in the art center as long as children remain interested in the contents.*
- *Add additional items and allow children to add items if they are safe and are recyclables.*

Extension Activity: Writing a Story about My Creation

- Invite children who are interested to dictate a story about their creation.
- Record their story on a large index card.
- Invite each child to sign his/her name to the story. Explain that they are now the author and illustrator.
- Involve individual children in reading their story with you.

Additional Learning Goals:**EL3.1 Responds to features of books and print** (*book knowledge, print knowledge*)**EL3.3 Demonstrates emergent writing skills** (*letter and print writing concepts, early word writing*)**Extension Activity: Three-dimensional Art Gallery**

- Identify a space in the classroom for display of children's creations.
- Label it **Box Art Gallery**.
- Invite children to display their art along with their stories in the gallery.
- Suggest to children that they invite their families to view the structures in the art gallery.

Outdoor Environment

- Create a tunnel by cutting out both ends of a large appliance box. As children are crawling through the tunnel, they are developing physical skills and spatial awareness.
- Add a structure such as the car made from a large appliance box which is described at the beginning of this guide.
- Involve children in creating a gas pump from a large appliance box. Markers can be used to add the prices per gallon. Attach a piece of hose for putting gas into the tricycle.

Transition Activities**Learning Goal:****CD2.2 Shows flexibility in adjusting thinking and behavior to different contexts** (*adjusting behavior to match context*)

- Hold a covered box in your hand as children are preparing to transition to another activity.
- Invite each child to say what special treasure he/she would put in the box. Child then transitions to next activity.

Family Connection and Engagement

- Send home to families a note explaining that children are involved in activities using recycled boxes and suggest that families be involved in the activities by involving their children in creating a family brick.
- Include information/instructions on how to create a family brick.
 1. Stuff a cereal or snack cracker box with old newspaper or other paper for stability.
 2. Tape the box closed with clear tape.
 3. Cover the box with plain wrapping paper or a brown paper sack.
 4. Add to the outside of the box pictures of the family and activities the family does together. This now becomes your family brick.
 5. Bring your family brick to your child's teacher. She will cover it with clear self-adhesive paper.
- Cover each brick with clear self-adhesive paper.
- Invite children to share with you and with other children the pictures that are on their individual brick.
- Place the family bricks, with each child's permission, in the Block Center.

Additional Books

A Box Story by Kenneth Lamug
The Birthday Box by Leslie Patricelli
Not a Stick by Antoinette Portis