

Russell Grigg and Helen Lewis

Teaching on a Shoestring



An A-Z of everyday objects to enthuse and engage children and extend learning in the early years



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Introduction

All things bright and beautiful

Margaret Woodbury Strong (1897–1969) was a rather eccentric American who once lined her garden boundary with forty bathtubs filled with flowers. Her wealthy father was an avid collector and on family holidays all over the world she was given a small bag to collect toys, dolls and other small objects. By the time she was an old lady, Margaret had acquired 22,000 dolls among more than 3,000,000 household objects, spread over fifty categories such as sport, holidays and music. The objects included buttons, shells, paperweights, glassware and kitchen appliances, although most of her collections related in some way to children's play. When Margaret died, she left enough funds to open a 'Museum of Fascination' (now called 'The Strong') which includes the National Toy Hall of Fame. Visiting the museum has been likened to being let loose in Santa's workshop on a day in December before the sleigh departs. The Strong is packed full of toys and games that have sustained their popularity over the years, such as yo-yos, puzzles and action figures.

In 2005, however, a rather mundane object was added to the National Toy Hall of Fame – the cardboard box. Undoubtedly one of the most versatile of objects, the cardboard box captures children's imaginations across the world – within a few minutes, boxes are transformed into forts, houses, submarines, castles, caves and spaceships. Smaller boxes become doll's house furniture, while larger boxes are turned into television screens or refrigerators. The cardboard box represents a refreshing change from conspicuous spending, as anxious parents seek to acquire 'the latest thing' for their children. A recent survey of

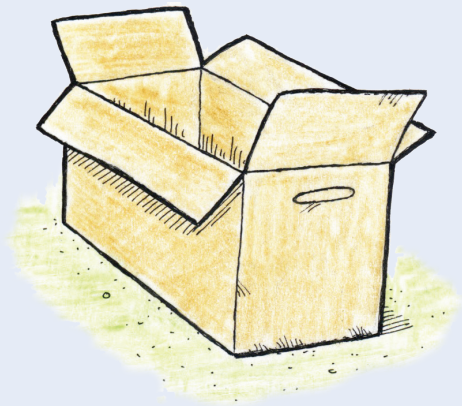


Figure 1. The humble cardboard box

2,000 parents of children aged three and above found that at Christmas time 46% of children prefer playing with boxes instead of actual toys and games, although parents feel pressurised to spend more than £200 on 'must have' items (Davis, 2012; Trajectory, 2012). The reality is that children can derive considerable pleasure and intellectual stimulation without expensive things. Observe any child playing on the beach, in the garden, at home or in the classroom, and you will soon see examples of how their creativity, enthusiasm and communication flourishes by engaging with the very simple objects at hand – pebbles, leaves, tubes, old clothes, pipes, hats, pallets, cloths, hand-bags, steering wheels, egg boxes and suitcases.

This is a book about the educational potential of everyday objects. It is aimed at early years practitioners, students on education courses, parents and those who work in museums and galleries. In the introduction, we provide an overview of objects in society so that readers are well informed when they hold discussions with children linked to the practical activities in Part 2. We believe passionately that the educational potential of objects increases when they are related to people – those individuals that made and used the objects.

Think about the popular television programme, *Antiques Roadshow*. Once the owner and presenter begin to discuss the stories behind the objects, we are drawn into their worlds and the emotions this brings – whether sadness, surprise, laughter or anger. To mark the 100th anniversary of the First World War, the show's producers launched an appeal for people to tell their stories of wartime objects. This resulted in an astonishing response from viewers. Among the poignant objects was a 1914 Christmas dinner menu for soldiers in the trenches signed by all those who were present and William Bell's erroneous death certificate. Bell, a sergeant from Liverpool, was reported to have been killed in action in 1918 and his wife received the dreaded telegram to that effect. Imagine how she must have felt on reading the telegram. Then imagine her reaction when he returned home in 1919. He kept the certificate, despite pressure from the army authorities to return it, saying he would dine out on the story for the rest of his life. Billy lived on until 1975. Many of the objects featured on the programme are now unusual or rare but they were once commonplace.

When discussing mundane, familiar objects with children, it is worth bearing in mind that one day in the future these may become antiques. Michael Hogben (2007), a leading antiques trader, has identified 101 everyday objects which he considers will be highly collectable in the future. These include chunky digital wristwatches from the 1970s, McDonald's toys from the 1990s and the earliest mobile phones, first used by the general public in 1982.

The meaning and significance of objects

A simple definition of an object is a natural or artificial item that can be seen and touched. Many everyday objects define who we are. Some sociologists argue that it is possible to determine your social class from the household objects you own.¹ Etiquette expert William Hanson (2015) has identified the kind of objects that would typically feature in an upper middle class home. The kitchen would include an Aga cooker, a cling film dispenser, cups and saucers (rather than mugs and a mug tree) and no coasters. Ask a group of children to match objects to occupations and most can do this without much difficulty.² Everyday objects have meaning when we use them – we sleep in beds, we use knives and forks to eat, and pens or computers to write.

Objects are produced and used by people at a given time in society and so have social meaning. They reflect our ideas and ideals. Think about the objects in your own home and what they say about your interests, values and relationships. The long running television programme *Through the Keyhole* invites a panel of celebrities to guess the identities of reasonably famous people after a virtual tour of their homes and what clues the household items reveal. The programme's appeal lies in our curiosity and desire to find out about the lives of other people. The objects are a means to this end. When objects are shared they take on a social purpose – they govern or inform interactions. As gifts, objects often strengthen bonds with family and friends.

1 There are online quizzes to this effect, e.g. <http://www.thepoke.co.uk/2016/09/26/how-middle-class-are-you/>.

2 You can find worksheets on this at: <https://www.turtlediary.com/worksheet/match-objects-with-occupation.html>.

Part 1

Important questions

1. Why use objects when teaching in the early years?

One of the main reasons objects should be used in early years practice is that they have the potential to stimulate children's natural curiosity and creative thinking. Babies and toddlers use their senses to explore the physical, observable aspects of their immediate surroundings. The world is full of wonder and newness to investigate. This includes putting objects in their mouths, tapping and shaking things and responding to sounds – thereby gaining more experience and information. They reach out for objects such as mum's necklace, a bunch of keys or a pair of spectacles, which become absorbing play materials. As young children acquire language, they begin to ask questions about the many objects they see, hear, feel, taste and smell in their environments, both natural and built. This sense of wonder can be curtailed, however, through overly directive teaching, a prescribed assessment-led curriculum and an unstimulating learning environment. These factors can mitigate against children's creativity, with lessons reduced to a guessing game in which children try to figure out what answers the teacher wants.

Everyday objects should be used as teaching aids because they are excellent resources to support children's spiritual, moral, social and cultural development. Although physical by nature, objects can also have spiritual significance. Many individuals treasure objects from their childhood even though these may have been discarded by others long ago. Some objects, for whatever reason, become significant and personally valuable. They outlast individuals and are a means of bringing the past into the present, offering stability and continuity. Valerie Flournoy's classic story of *The Patchwork Quilt* (1985) gives young children a clear picture of how a simple quilt passed on from one generation to the next has meaning. Through stories, children can learn that objects are not only solid things (composed of physical matter) but also have symbolic value.

Skilled practitioners can bring a sense of awe into even the most familiar of objects. Take apples as an example (see 'A'). Some are the size of peas, others as large as small pumpkins; their colours range from yellow to lime

green, chocolate brown and burgundy. Or what about that magical material that keeps birds warm and helps most of them fly? Feathers also have camouflage and display functions (see 'F'). One of the more unusual uses for feathers is to help birds grip as 'snow shoes' during winter months – feather-covered feet increase the size of the foot, which keeps the birds from sinking into snow. Woodpeckers use their feathers as supports while climbing trees, whereas Antarctic penguins cross the snow and ice using their smooth feathers in toboggan-style moves. Predators such as owls use their feathered ears as dishes to collect and channel sounds. These kinds of 'amazing facts' have always interested young children and older ones alike – consider the success of the Guinness World Records and Ripley's Believe It or Not!

There is also a moral dimension to the use of objects. Museum curators regularly face dilemmas over what objects to collect and exhibit. The most frequently asked question at the British Museum is 'Where are the mummies?' Is it morally justifiable to display human remains as objects of morbid curiosity? Does it promote voyeurism, or is it a commitment to share knowledge and generate interest in the past? The curators who lead on the Rapid Response team at the Victoria and Albert Museum are interested in collecting objects that reflect society 'warts and all' – and this includes products sold on the so-called 'dark web', the online market for illicit goods. This raises moral questions. Even a mundane object, such as a box of Katy Perry false eyelashes (£5.95 from Tesco), tells us something about a society in which Western teenage girls are encouraged to look like 'pop-cultural icons', while the product is 'knotted from human hair by women in a factory in Indonesia, paid as little as £50 per month'. The false lash industry has an estimated value of £110 million in Britain alone (Wainwright, 2014).

In Part 2, there are many opportunities to encourage young children to think about the moral dimension to the use of objects. For instance, is it right that some people take birds' eggs from the wild or pebbles from the beach (see 'E' and 'R')? There are also less clear-cut discussions to be held when considering the motives of characters in stories and the consequences of their actions – for example, is it ever right to take someone else's belongings? There are opportunities to explore the cultural significance of the objects discussed in Part 2. Feathers, for instance, can be used to create a First Nation American 'talking piece' for circle time.

Part 2

A-Z of everyday objects

F is for Feathers



In a nutshell

Feathers are unique to birds (and most dinosaur species). They are highly specialised and serve a number of functions – from protecting the bird from sun, rain and cold, to providing camouflage, displaying social dominance and attracting a mate. Different types of feathers serve a different purpose – for example, sensory feathers provide information about wind and air pressure, contour feathers are critical for flight and down feathers offer warmth.

Just like our fingernails, feathers are made of a lightweight material called keratin. The feathers are attached to muscles which allow the bird to move them around. Each feather has a central hollow shaft with a flat area either side – called the vane. The bare part at the base of the shaft is called the quill. The vane has many small side branches. These are all linked together by even smaller branches with hooks, called barbules.

A bird keeps its feathers tidy by 'zipping up' the barbules on each one with its bill. When you examine a feather closely you can 'zip' and 'unzip' it for yourself.

Did you know?

- In 2000, a 220-million-year-old fossilised feathered animal, named *Longisquama insignis*, was discovered. Scientists believe that the creature used its feathers to glide between trees 75 million years before the first birds evolved.
- The bird with the largest vocabulary is a budgerigar called Oskar from Germany. He can say 148 words.
- The oldest duck on record was a female mallard called Desi from the UK who lived to be twenty years, three months and sixteen days before she died in 2002.
- The most canned drinks opened in one minute by a bird is thirty-five, achieved by a macaw called Zac from the United States in 2012.
- The largest dreamcatcher on record is 7.42 metres in diameter, and was made by a Russian, Mamaeva Bibigul, in 2016. The dreamcatcher was made of willow branches and jute rope and decorated with beads and feathers.



Ready

- **Key resources:** feathers (we suggest sourcing cruelty-free feathers (available online) which are collected during natural moulting or finding feathers of your own while out walking; alternatively, opt for artificial versions (again, widely available online)); pasta, sequins and other materials (Activity 1); copies of Chris Maynard’s artwork (Activity 2); old yoghurt pots or large pine cones, bird food, raisins, peanuts, grated cheese, suet/lard (Activity 3); large feathers, natural materials, beads, ribbon (Activity 4).
- **Health and safety:** take appropriate steps regarding personal hygiene – always wash hands after touching feathers and never pick feathers from a dead bird. Some children may be allergic to feathers so check this in advance.
- **Key vocabulary:** feather, quill, vane, shaft, keratin, budgerigar, macaw.

Steady

Before teaching, reflect on the following goals/learning intentions:

- To develop control and coordination in large and small movements.
- To experiment with colour, design, texture, form and function.
- To represent ideas through design and technology, art, music and using technology for a purpose.

Go

Activity 1: Peacock sculptures

Explore the beautiful peacock through images – and if possible through a real-life encounter. Use newspaper to shape peacock models – rolling, scrunching, pinching and taping together. Wrap the paper model carefully in layers of ModRoc. Once dry these can be decorated and painted for a fabulous display. Alternatively, press modelling clay onto cardboard to create 3D

peacocks – use pasta, sequins and other materials to represent its beautiful feathers.

Activity 2: Feather mosaic

Feathers are beautiful and varied. Use Chris Maynard's artwork (<http://www.featherfolio.com/shadow-boxes>) as a stimulus and create your own displays, using ICT to record the artwork for display. Talk about shape, colour, size, pattern, texture and orientation of the feathers. Ask the children to zoom in on a favourite feather and explore it under a microscope or magnifying glass, and then draw what they see.

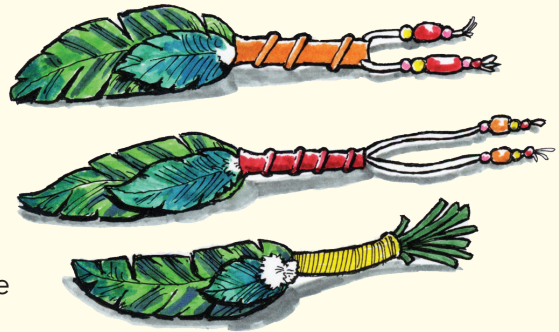


Activity 3: Banquets for birds

Create exciting and nutritious food for your local birds. Use good quality bird seed and mix with raisins, peanuts, grated cheese, suet or lard. Place the mix into recycled yoghurt pots, or alternatively spread the mix onto large pine cones. Place the cakes outside and tally up the birds that come to feast. Get the children to use a bird-spotting guide to start to identify them and note what times of day they visit. Extend by making different varieties of cake (e.g. a nut and seed variety or a fruit variety) and see what the birds prefer. Use natural food colourings to see if the birds in your school garden have a preferred colour of cake.

Activity 4: Talking pieces

In many First Nation cultures, sharing stories around a fire has always been an important part of life. To ensure that all voices were heard, they sat in circles and used a 'talking piece' to pass from individual to individual. This ensured that everyone



had a turn to speak. The talking pieces were usually made from natural and beautiful materials, so get the children to use beads and ribbon to decorate large and ornate feathers to create talking pieces of your own, and pass these around during circle time and group tasks.

Other ideas

■ **You ate what?** For older children, examining owl pellets can be a fascinating piece of detective work. Pellets are small and contain the undigested parts of the bird's food which are ejected through the mouth. Pellets are not droppings so they do not smell and are not unpleasant to work with. They consist of things like the bones of birds, mammals and fish; teeth, claws and beaks; insect head parts and wing cases; seed husks; and other indigestible materials. These are usually enclosed by softer material like fur, feathers and vegetable fibre. You can dissect pellets with tweezers and cocktail sticks when they are dry or you can soak them in a little water first.

■ **Build a bowerbird nest:**

bowerbirds decorate their nests in beautiful and complex ways to attract a mate.

Examine these via the Internet or non-fiction books. Then go into the outdoors and build nests from twigs, leaves and other natural materials and then decorate them with

natural and recycled materials (remember to take these home at the end of the day). Challenge children to make a nest for a very small bird (e.g. wren or hummingbird) or a very large one (e.g. eagle or swan).



■ **Build a bird house:** young children can be taught to use simple woodworking tools and will enjoy measuring, hammering nails and sawing pieces of wood to create a house for birds. This could be an

ideal opportunity for some community engagement with DIY-keen parents or grandparents coming in to help or an afterschool club with older children. If a bird house seems ambitious, a bird table may be more manageable, especially if you create a tray-sized one to hang from a branch.

Find out more

- Buy owl pellets from the Barn Owl Trust: <http://www.barnowltrust.org.uk/product/pellet-dissection-pack>.
- Take part in the RSPB's Birdwatch scheme: <https://www.rspb.org.uk/kids-and-schools/kids-at-school/schools-birdwatch>.

We take many everyday objects for granted.

But in a time of ever-tightening school budgets these objects can be invaluable in affording low-cost, high-impact opportunities for learning.

With these value-for-money principles in mind, Russell and Helen have packed this practical A–Z handbook to the brim with fun facts, inspiring ideas and exciting activities to help teachers make the best use of familiar objects as launch pads for effective learning.

Underpinned by solid theory, *Teaching on a Shoestring* explores the educational value of twenty-six inexpensive, readily available resources – from apples to ice cubes to zebra-patterned fabric – and shows how they can be exploited to develop in young learners the four skills widely regarded as essential in the twenty-first century: communication, collaboration, critical thinking and creativity.

Suitable for early years educators and anyone who works with young children.

Teaching on a Shoestring is an indispensable guide for any teacher eager to use everyday objects effectively in the learning environment. Beautifully simple, the activities excite further curiosity and would encourage any child to ask questions.

Gail Parker, Senior Lecturer – Early Years, Institute of Education, University of Wales Trinity Saint David

All schools should have a copy of *Teaching on a Shoestring* so that they can inspire teachers with new, creative ideas with which to nurture independent learners.

Mark Austin, Challenge Adviser for Pembrokeshire County Council and the Central South Consortium

Teaching on a Shoestring definitely provides a boost to the imagination, and offers teachers a wide range of adaptable ideas to incorporate into the planning and resourcing of lessons.

Sophie Margetson, PGCE student

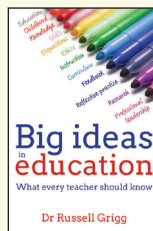
A must-read for any educator, providing a plethora of ideas with which to create an object-rich learning environment that needn't cost a fortune. It brings a common-sense approach to twenty-first century learning and takes the reader on a beautiful journey through the effective use of objects to achieve this goal.

Lindsey Watkins, Head Teacher, Millbrook Primary School

Dr Russell Grigg was previously an associate professor at the Wales Centre for Equity in Education. He has extensive experience in teacher training and has written many books and articles on the subject of primary education. He has recently taken up a post as school inspector and consultant for the Ministry of Education in the United Arab Emirates.

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