

# The Power of Objects:

Old, Yet New —

Ways of Engaging Students

in Museums

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# INTRODUCTION TO OBJECT-BASED LEARNING



Objects are everywhere! They are ubiquitous in nature and offer great diversity. They can be new or old, large or small, familiar or unfamiliar, all with a story and myriad ways to be understood. Objects are found in the natural environment—pine cones, flowers, rocks, shells, and gems—but also represent the innovative thinking of human beings—from ancient pots and everyday dishes to regal garments or commonplace shoes. From the earliest days of a child's life, objects are a source of information and allow a child to construct meaning about his world.

The idea of learning from objects is relevant for educators in the formal learning environments of schools as well as for professionals working in informal learning spaces like museums, libraries, and other cultural institutions. Objects offer rich opportunities for children to learn about themselves, their culture, and the greater world. This is an idea that has been valued within the museum field for some time, yet is new for many educators in schools.

Learning from objects is a concept deeply embedded in museums, with their emphasis on collecting, studying, preserving, displaying, and interpreting objects. As caretakers of collections, museum professionals value objects and understand that each represents a unique account of some happening in the world. Museums draw from their collections to tell stories through exhibitions that will enlighten the visiting public. This focus on the concrete stuff of the world defines the nature of the museum.

Educators in formal learning environments also have a unique opportunity to enrich children's understanding of their world through the power of objects. Lessons crafted around carefully selected objects offer possibilities to engage students in thoughtful and meaningful exploration of ideas as well as create habits of mind that are essential in the twenty-first century. Objects can be commonplace and inexpensive or treasured artefacts examined on visits to museums. In either case, an object-based approach to learning inspires curiosity, increases engagement, and offers new insights into educational content.

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#### **TEACHING WITH OBJECTS**

The concept of teaching with objects has a shared history connecting schools and museums. In the world of museums, professionals have a long history of recognising objects as a source of knowledge, an entry point for exploring science, history, and culture, where evidence in or from the object serves as a catalyst for interpretation, often with myriad possibilities. Museums also recognise the place of objects in telling the stories of the world.

In the eighteenth century, the term "object lesson" was introduced into a school setting by Johann Pestalozzi as an educational method for young children, most often using objects from nature, and ultimately served as a model for Friedrich Froebel's kindergarten, also known as "the children's garden". Today, that method, whether in museums or schools, is often referred to as object-based learning and is considered a valuable tool for teaching. A simple object lesson offers insight into what object-based learning looks like and illustrates the benefits of this approach to learning.

## AN OBJECT LESSON FOR EARLY LEARNERS: A FEATHER

Everyone has some knowledge of the word FEATHER. The word is part of the everyday lexicon of most individuals, including children. Not only can most people visualise a FEATHER, but they are likely able to draw some representation of the object.

In a discussion about birds, children eagerly demonstrate their expertise and give meaning to this word by acknowledging that birds have feathers, fly, and lay eggs, yet there is certainly a lack of depth in their knowledge based on limited experience with real-world objects.

Object-based learning offers an opportunity to explore the tangible world more fully. It is a process for constructing meaning about objects, at times with a focus on one object, but always with the possibility of expanding the study to garner insight into related objects and ideas. This learning technique requires that children think critically about what they see as a starting point for interpreting their experience. Learning needs to be understood in the context of connecting new discoveries with past knowledge, as well as using acquired knowledge in future experiences. Ultimately, learning is most effective when children are encouraged to look at each object with a sense of wonder and curiosity.

An object lesson has its own pace, which is determined by children's interest and a teacher's ability to encourage further exploration through open-ended questions. Central to the process is the understanding that the experience is a CONVERSATION that hopefully inspires children to think deeply and approach the study with an open mind.

#### AN OBJECT LESSON ON FEATHERS—PART I

#### Introduction to the Lesson

Let's explore a simple object that relates to our study of BIRDS. What do you know about BIRDS?

Encourage children to share their ideas. Listen carefully to their thoughts.

Before looking at any objects related to this lesson, invite the children to create drawings from memory that relate to their observations about birds. They might DRAW a feather ... an egg ... a nest ... a bird. Save this work for later in the lesson.

## Display a large FEATHER for children to see.

Is this an object that we think about when we're talking about BIRDS?

Is it what you imagined a feather to be?

## A Deeper Exploration of FEATHERS

Let's explore the object to learn more.

**LOOK** ... Invite the children to look closely at the object, attending to the details. Looking is a critical step in the learning process.

What do you notice? Is anything surprising to you?

**EXPLORE** ... When using everyday objects, invite children to use their senses to learn more about the object. [Educators can also introduce sensory experiences in galleries through a collection of teaching objects that relate to the museum artefact.]

What can you discover by touching the FEATHER? What other senses will help you learn about this object?

#### DESCRIBE ...

Now that we've had a chance to look at the FEATHER and possibly touch the object, what did you notice?

Make a list of the descriptive words. These will certainly include noteworthy attributes such as COLOUR, SIZE, SHAPE, TEXTURE, WEIGHT, PATTERN, and FORM.

#### **DRAW** ... Document findings from the object lesson.

Create individual drawings or one large CLASS DRAWING. Use the FEATHER as a model and ask the children what to include in the drawing. When the conversation lags, ask what other details are missing. Provide appropriate scientific terms such as "barbs" in conjunction with class discoveries. Use the real object as inspiration for noting detail. Post the class drawing.

#### IMAGINE ...

Close your eyes and imagine a bird. Think about our FEATHER and if your bird would have feathers similar to ours.

Is the bird you imagine large or small?

Do large birds have only large feathers or can they also have small feathers? Can a small bird have large feathers? What do you think?

What colour is the bird that you see in your mind?

Can birds have feathers of different colours or only one colour?

Is each feather a single colour or can one feather have multiple colours?

**CONNECT** ... Encourage children to see this object in a broader context.

Now that the children have examined the FEATHER, it's time to provide additional context and information. Show illustrations of various birds, particularly those that reflect the questions pondered by the group. Include

photographs and artists' prints in your class discussion. If visiting a science centre/museum or an art museum, look at specimens of birds or artists' renderings.

#### QUESTION ...

Do you have any questions about birds? How can we find the answers?

Identify sources of information and work to find answers to the children's questions [Internet, books, visits to a zoo or nature centre, scientists, experts from museums].



An object lesson is the beginning of deeper exploration of a topic, rather than an end point. As the lesson concludes, it's important to review DISCOVERIES and document what is known, but it's equally important to provide time for QUESTIONS. What do we want to learn about and how can we find those answers? Future lessons build on knowledge gleaned in the first lesson.

#### AN OBJECT LESSON ON FEATHERS—PART II

AN OBJECT LESSON ON FEATHERS—PART III

In a second object lesson, introduce a COLLECTION of feathers of different colours, sizes, shapes, textures, and patterns. Choose one feather for a comparison: possibly a PEACOCK FEATHER, since there are so many points of contrast. Through a comparison, knowledge of the object expands to include new and varied ideas.

Encourage children to

LOOK—DESCRIBE—
IMAGINE—COMPARE—
CONNECT—QUESTION

How do these FEATHERS compare with our original FEATHER? How are the FEATHERS alike? How are they different?

**DRAW** ... Ask each child to choose one feather to DRAW. Encourage careful looking and attention to detail. At some point, compare the drawings from the introduction of this object lesson to these drawings. What do you notice?

Museum artefacts offer unique opportunities to expand on ideas introduced in the classroom. There are myriad objects in museums that are inspired by nature. Objects from the Hong Kong Palace Museum collection reflect this connection between art/artists and the natural world. Visit the gallery to look at a specific object or introduce a reproduction print of the artefact.



The Palace Museum

There are beautiful images of birds and flowers on this teapot for children to see.

How did the artist create the feathers on the birds? Do they look like the feathers that we examined?

For student groups visiting the gallery, it might be helpful to divide them into small groups. While one group looks at this artefact, other groups can explore the gallery to

identify other objects, maybe some with birds, that are inspired b
nature. At some point, each group will spend time with the origina
artefact.

Object lessons encourage certain habits of mind, one of which is OBSERVATION. Over time, children will naturally focus their looking and attend to details as a means of discovering more about their world. This becomes evident in their language and in their drawing.

# AN OBJECT LESSON FOR MIDDLE CHILDHOOD: A MOONCAKE TIN BOX

In this object lesson, students are introduced to a learning process that encourages careful looking, critical thinking, and analysis. A familiar object, a MOONCAKE TIN, is the starting point for exploration, but the aim of the object lesson is to look beyond naming or labelling to focus on details for further interpretation.

#### OBJECT LESSON: A MOONCAKE TIN BOX—PART I

#### Introduction to the Lesson

#### Celebrations and Holidays

What comes to mind when you think about HOLIDAYS?

Are there customs or family traditions that you enjoy?

Do you associate certain foods with specific celebrations?

What do you envision when you think about the Mid-Autumn Festival?

## Encourage students to share their ideas.

Unveil a MOONCAKE TIN.

LOOK ... Invite students to look carefully at the object.

**EXPLORE** ... Let the children examine the tin carefully, using multiple senses. For this initial exploration, focus on the sense of sight. As the lesson proceeds, allow students to use all of their senses—SIGHT, SOUND, TASTE, TOUCH, and SMELL—whatever is possible.

**DESCRIBE** ... Upon seeing the tin, most students will quickly want to label or name the object. Let them know that naming is only one aspect of knowing and encourage them to attend to the details of the tin to explore the object in greater depth.

What do you notice about the object?

Observations will likely include specific ATTRIBUTES—COLOUR, SIZE, SHAPE, TEXTURE, WEIGHT, or CONSTRUCTION

Is the purpose of the object easily identified?

Does the object have more than one function?

Do you think that all mooncake tins look the same?

**ANALYSE** ... The object conveys meaning through its colour, shape, images, and words. Discuss the design of the tin. What did the designers want to convey through the images, the words? What QUESTIONS are left unanswered by the examination?

#### IMAGINE ...

Where would you expect to find this particular object? Is there anything unique about this tin?

Suggest that students look closely at the words printed on the tin to identify specific clues that tell more about it.

**EXTEND** ... Take a few minutes to DRAW the object, being careful to include as many details as possible in your sketch.

SMALL GROUPS ... DISCUSS possible designs for creating a mooncake tin. Work together in groups and list critical elements that are essential to the design. What is the shape of the newly designed tin? What colour? What words or images are incorporated into the design to convey a specific message? Students can create individual designs based on their group discussion or the group can create a collective design to share with the class.

**RESEARCH** ... Scan social media, magazines, and other sources to create a collection of images of mooncake tins.

What can we learn from our collection of images?

#### **OBJECT LESSON: A MOONCAKE TIN BOX-PART II**

## A MUSEUM EXPERIENCE AT THE HONG KONG PALACE MUSEUM

Throughout this object lesson there is ample opportunity to discuss tins or boxes of various types—in different SIZES, SHAPES, and COLOURS, and with varying purposes. This connects with the research suggested in Part I of the object lesson.

The Museum collection includes artefacts that may be used to expand and enrich students' thinking on this idea.



Box in the form of pumpkin

This unique BOX represents the work of a creative artisan from long ago. It offers students an expanded view of the complexity of the world as they discover that there are many variations of almost any object.

The Palace Museum

What words would you use to DESCRIBE this object?

How might the object have been used?

What inspired this artist? What would inspire you as an artist?

Imagine a special BOX. What would you put in it and what would it look like?

Class Collection—A culmination of this object exploration could be a CLASS COLLECTION. Ask students to bring in a small box or tin from home to display in the classroom. Students can write labels describing their boxes to be included in the class exhibition.

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The ultimate aim of object-based learning is to think deeply about an object. Over time, students develop habits of mind that include attention to detail and analysis of what they see, skills that are beneficial in many different learning scenarios. Object lessons encourage students to see learning as a process that extends beyond naming or labelling. These skills are applicable to almost any object, from the mundane or commonplace to the treasured artefacts found in museums.

#### MUSEUM ARTEFACTS AND OBJECT LESSONS

Habits of mind—looking, thinking, and interpreting—are essential skills for all students, and beneficial to students' ability to construct meaning from everyday objects as well as museum artefacts. Object lessons offer rich opportunities to reveal the many layers of meaning embedded in an object regardless of the nature of the object.

Critical to object-based learning is finding a point of relevance for students. New experiences in the classroom or the museum are most effective when children can make a meaningful connection to something that is familiar, a point that intersects with prior knowledge.



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Portrait of Empress Dowager Cixi

#### AN OBJECT LESSON ON PORTRAITURE

Artists have been creating PORTRAITS or likenesses of people for centuries. These representations tell us a lot about the person portrayed and can be thought of as descriptions without words. The details of a painting or sculpture provide insight into an individual's life and serve as a beginning point for interpretation.

**LOOK** ... Encourage students to look carefully at the PORTRAIT. As this lesson begins, do not share any details about the painting. Allow the painting—the work of the artist—to speak for itself.

#### **DESCRIBE** ...

What do you notice about this PAINTING? What do you see?

What can you tell about the person based on the painting? What do you think?

#### IMAGINE ...

Use your imagination to THINK about where the person might be and how she spends her day? What do you wonder?

#### ANALYSE ...

THINK about this portrait and the clothing that the person sitting for the portrait is wearing. COMPARE what you see in the painting with your own life experience.

Is this a special occasion for the person in the portrait or is this everyday clothing? Is this person wealthy or poor? What do you think?

#### COMPARE ...

What do you wear for holidays or other special events?

What do you wear to school, at play, or for bedtime? What can a choice of clothing tell us about a person and what is happening in that person's life?

Ask students to bring a photograph to school to share with the class. The photo can be of their family or one of themselves. Another option is to collect images of people from magazines or social media sites. Any collection of images can serve as a basis of discussion. In this case, the conversation will focus on clothing and what it might tell us about a person.

Three questions included in this object lesson ... What do you see? What do you think? What do you wonder? ... are part of a technique referred to as Thinking Routines [Harvard's Project Zero].

# TEACHING WITH COLLECTIONS: EARLY LEARNERS

Everyone collects in one way or another. The idea of collections, ever present in museums, is also a powerful opportunity to engage students with thinking about their world. Opening children's minds to the concept of collections is a valuable teaching strategy and can be introduced at a very young age.

## AN INTRODUCTION TO TEACHING WITH COLLECTIONS

A simple children's book like Clever Crow by Cynthia DeFelice (1998) serves as an engaging introduction to the idea of collections. As children listen to the story of Clever Crow, they quickly learn that this feathered friend has some distinct likes.

"Clever crow loves shiny things, Nickels, quarters, diamond rings. Watchful bird has bright, sharp eyes On the lookout for a prize."

Crow's actions document his love for shiny objects as he stores his treasures in his nest. Children are quick to notice this inclination toward shiny, silver things and are able to talk about how Crow decides what he wants to collect.

This story is a perfect way for children to recognise what it means to collect. By sharing ideas as part of a discussion, young children readily grasp the concept of a collection and see the common theme that defines the objects. Through this experience, young children begin conversations about the idea of collecting and recognise collections in their own world.



Museums have objects made of many different materials. A walk through a museum gallery can be an informal introduction to the museum and the idea of collections. After reading Clever Crow, encourage children to look for objects on display that Crow would like in his collection.

#### **EXPLORING COLLECTIONS WITH CHILDREN**

Children intuitively understand the idea of collections long before they are able to articulate the overarching theme of a collection. As children mature and develop greater language skills, they are able to describe the rationale for "belonging" that comes with the idea of collections.

Provide a random sampling of small, everyday

objects. It's important to provide at least twenty to thirty objects. The types of objects to include in the sampling could be a leaf, a toy car, a spoon, a baby shoe, a pine cone, a button, a cup, a coin, a pencil, chopsticks, a Hello Kitty figure, a rock, a shoelace, a notebook, a flower. Gather what is easily available.

#### AN OBJECT LESSON ON COLLECTIONS

#### Introduction to the Lesson

Display the objects for the children to see and introduce the activity as an opportunity for everyone to think about the idea of COLLECTIONS.

Take a few moments to **LOOK** closely at the objects. Begin to think about similarities and differences that you discover. How might these objects connect to the idea of collections?

Suggest that you are a COLLECTOR and are interested in certain kinds of objects and you want to introduce the collection through a few objects. Place the leaf, pine cone, and flower on a black piece of paper.

What do you think I'm collecting?

Why do you think that?

What other objects—not from the sampling—would fit this collection [objects from nature]?

Take a photo of the COLLECTION and return the objects to the original grouping. Also, start a LIST of possible COLLECTIONS that can be created from this random set of objects, beginning with Objects from Nature.

#### **Small Group Activity**

Next, ask students to work in small groups [2–3 students], quietly discussing other possible collections that can be represented by objects from this sampling. Gather the children together and invite one group to select objects from the sampling based on their discussion, again placing the items on a piece of coloured paper, then ask the class to identify the theme of the collection. What else could be added to this collection?

Take a photo, return the objects to the initial group, and add the theme to the class list.

Continue with groups sharing their ideas for collections and make a list of ideas. There are many possibilities.

A few possible themes might be: Round Objects, Square Objects, Things you Wear, Toys, Things Used to Eat, Nature, Blue Objects, Red Objects, Green Objects, Wooden Objects, Plastic Objects, Things that Move, Things with Parts. Collections will vary based on the specific objects included in the original sampling.

#### **Culminating Activity**

This object lesson offers many possibilities to engage students. A culminating activity might be a DISPLAY of the many types of collections, using the photos from the activity. Students can create LABELS that describe each collection idea and the LIST of COLLECTIONS can also be displayed with the photographs.

#### **CREATING A CLASS COLLECTION**

Once children have a sense of what it means to collect, it is time to create a CLASS COLLECTION. Any collection can serve as the theme for the class collection. For this discussion, simple everyday objects, like shoes, are an excellent starting point for exploring the idea of collections.

seems to save baby shoes that are no longer useful—and place the objects randomly in a basket. An introduction to this activity could be as simple as telling the children that you collect lots of things and today you want to share one of your favourite collections with them.

Collect baby shoes from friends—everyone



Place the basket of shoes in an empty space and ask the children to gather round. Remind the children that this is a COLLECTION and that the objects in the collection are all the same in some way.

Let's LOOK closely at the objects in the basket. What do you notice?

How are the objects the same? How are they different? What do you notice when you look at the objects?

There are so many possible responses to this openended question. Some children will pay attention to the overall theme—they are all baby shoes—while others will notice different types of shoes [sandals, slippers, walking shoes], an array of styles [tie, Velcro, slip-on], a range of colours, or even differences in sizes and textures. There are many opportunities for children to look closely and discover something new.

Now that children have identified some of the unique details of individual shoes, it is time to view the collection in a new way. It is time to consider different ways to DISPLAY the collection. This is an opportunity to explain that museums are known for their displays or exhibitions of objects. Curators make decisions about how to organise or place objects in a certain way to tell a specific story or encourage visitors to think about the objects in a specific manner.

Let's THINK about some possible ways to organise the baby shoes.

In all likelihood, someone will suggest making pairs and will be more than willing to demonstrate a display that reflects "pairs". An excellent practice is documenting each experience whenever possible—

perhaps, taking a photo—so that the experience can be revisited later and further discussed.

Students will quickly notice additional ways to group or organise the shoes—by colour, type, purpose, or gender. Another possibility is to order the baby shoes by size, from the smallest shoe to the largest. Ordering and reordering the shoes for different types of displays takes time and allows children to see some of the possibilities for display.

Introduce the idea of collections in museums and compare the class collection with collections found in museums. How are they the same and how are they different?

Object lessons can focus on a single object or be examined in a broader context of a collection or a simple comparison. In any case, objects can serve as a point of departure for a specific academic lesson. A simple object can be an introduction to a new maths concept in a study of shape or it can provide an opportunity for language development. How many different words can we use to describe this object?

#### **OBJECTS AND CHILDREN'S BOOKS**

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A gardening pot

Collections are equally appropriate for classroom learning. In preparation for a new story or class novel, select a few meaningful objects from the story and display the collection as an introduction to the study.

This decorative gardening pot is a perfect object for introducing The Empty Pot by Demi (1996). Other objects that could be added to the collection would be other pots, packets

of seed, or gardening tools. This simple collection of objects can be the catalyst for a conversation about an upcoming story for young children. This approach encourages children to think critically about the objects and then propose how these objects might be relevant to the story. After reading the book, return to the conversation and the children's new insights.

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## MAKING CONNECTIONS — THE FAMILIAR AND THE UNFAMILIAR

Many museums collect objects from long ago. Collections from the past often include unfamiliar artefacts and are a source of curiosity for children. Simple, unfamiliar objects gain meaning when compared to present-day objects.

A pair of hairpins



These beautiful HAIRPINS, believed to have been worn by an empress of China's Guangxu period at an imperial wedding, can be compared to hair fasteners/accessories that young children wear today, although the latter are certainly not made with the same precious stones or materials.

What is the first thing that you think about when you see these objects?

What would it be like to wear the empress's fancy HAIRPINS?

Collect a variety of hair accessories—barrettes, hair combs, elastic bands, headbands—and ask the class to make a list of similarities and differences.

#### **COLLECTIONS IN MUSEUMS**

Collections are central to museums as institutions that collect, study, preserve, and exhibit objects. Museums understand that every object tells a story and that artefacts from the museum's collections are used to share stories of history and culture with their visitors.

There is much to be learned from the manner in which objects are displayed. The choice of objects from a given collection, as well as their arrangement, contributes to the narrative of the exhibition. Regardless of the type of museum—art, science, history, or culture—collections are on view for visitors to see and interpret, and are visually diverse in their make-up, from objects displayed for the purpose of explaining a specific event in time [i.e., the life of an emperor] or possibly encouraging comparisons [i.e., rocks and gems]. Art museums often identify a specific theme for each gallery.

Museum experiences offer students unique opportunities to look at specific artefacts, but also encourage them to understand how objects relate to one another to see what they have in common.

At times, a group of objects is viewed from the beginning as a COLLECTION, such as in the case of this set of twelve lobed dishes, each a different colour, that were presented to China's Yongzheng Emperor as a gift. It makes sense that a set is automatically viewed as a collection. This group of objects offers a unique starting point to discuss collections in the museum.

Encourage the children to LOOK at the artefacts

How are the objects the same? How are they different? Is this a COLLECTION? Why do you think that?



A set of twelve porcelain dishes

Extend the conversation to encourage students to THINK about other collections. What collections do you have in your kitchen? [i.e., a set of dishes, a collection of mugs or glasses, a set of silverware, a set of dish towels]

Can you group objects from your kitchen to create a collection?

Do we all think about collections in the same way?

As educators, it is possible to integrate objects and collections into almost any lesson. Objects can be everyday, familiar objects or they can be highly treasured artefacts found in a museum. Whether including a visit to the museum to see an artefact or using a photographic image or print in the classroom, learning will be enriched by the inclusion of objects.

Teapot and cover / washer



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#### A CHALLENGE

Look at the two objects and select one for an object lesson. How would you introduce the object and what type of open-ended questions would you ask? How would you connect the object with something that is part of your curriculum?

Over time, teaching with objects becomes a mindset, a way of thinking about engaging students. As an educator, think critically about the objects you choose and the power they have to engage students.

#### Good luck!