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Activate Your Exhibition

From Small Budgets to Big Engagement

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fig. 1. Researchers and the public engage with the collections and exhibits side-by-side on the museum floor.

The University of British Columbia’s Beaty Biodiversity Museum is Vancouver’s natural history museum and strives to inspire an understanding of biodiversity, its origins, and importance to humans. The museum houses a collection of over 2.1 million specimens, including an 85-foot-long blue whale skeleton suspended in the atrium. These specimens are housed almost entirely on the public museum floor, and are accessed regularly by researchers from the university and around the world. Through this unique combination of active world-class research, paired with beautiful, compelling exhibitions (fig. 1), we strive to make biodiversity research more accessible to the public.

As part of our temporary exhibition program – which often centers around artworks inspired by specimens in our collections – the Beaty Biodiversity Museum seeks to elevate the traditional, static exhibition to something engaging, interactive, and ultimately more meaningful. So, how do you encourage participatory interactions with your exhibitions when budgets and staff resources are low? With the digital, multisensory, immersive experiences that are being offered in larger

institutions, what options remain for smaller museums like us to explore?

Over the past seven years, we have met this challenge head-on and developed, tested, implemented, and evaluated a number of interactive activity frameworks. While we developed these in the context of biodiversity art exhibitions, all can be easily adapted to specific learning outcomes, audiences, and abilities to facilitate self-guided engagement with many styles of exhibitions in all types of museums. Following is a frank assessment of a few of these simple, self-led, and scalable activities, each of which cost only \$100 to \$400 USD in material costs – a budget range that is achievable for many museums.

Build It

This flexible framework can be replicated with any collection of images, words, or concepts. To celebrate the centenary of the University of British Columbia, our curators delved into their collections and unearthed 100 objects that we celebrated through the exhibition

100 Years, 100 Treasures. From the largest creature to have ever lived on Earth, the blue whale; to the passenger pigeon, an abundant species brought to extinction by humans 100 years ago; to some of the earliest records of knowledge exchange about uses of native plants between European settlers and local First Nations in British Columbia, these treasures tell important tales. The exhibition was predominantly online, so the need arose for an easily transportable physical component as we showcased our exhibition in different venues. We created a simple building set (fig. 2) with printed paper mounted to heavy-duty card stock. Notches on each side enabled visitors to connect the cards together. One side of these cards had an object image, the reverse had a description, inspiring anything from appreciation of the diversity of specimens in our museum to thought-provoking conversations about conservation and the ethics of collecting.

The simplicity of this activity is the key to its success. There is not a great investment of time or money, and the content is already in your museum. The content selection can be themed narrowly, for example, focusing on common birds that can be spotted around Vancouver, or cover a broad representation of your museum's collections, as we did with *100 Years, 100 Treasures*.

Providing something visual, tactile, hand-sized, and interactive is an invitation that visitors, we have found, cannot resist. Many will handle one or two of the cards, but others may stay for much longer periods of time, absorbed in the grand structure they are erecting. Through these structures, visitors curated their own collection of images, creating a uniquely personal mini-museum. Whether visitors stay for two minutes or 20, a set of cards in a buildable form is an accessible entry point to the often-overwhelming area of museum collections.

fig. 2. Building cards invite curiosity through unstructured play. From the exhibition *100 Years, 100 Treasures*, a collaboration with the community.

Draw It

A drawing table is a simple way to engage visitors with low investment. With only a surface, drawing implements, and paper, you can create experiences that are not only fun but are connected to the art, the artist, and the museum in interesting and engaging ways. While assessing works to include in our *Whale Dreams* exhibition, which featured painting and sculpture by artist Colleen McLaughlin Barlow, we came across sketches that the artist had brushed aside, murmuring that they were just “blind contour drawings,” and that she had thousands of them. Digging deeper, we learned that blind contour drawings (drawings done in a single, continuous line with the artist never taking their eye off the object or looking down at their paper) were part of her daily artistic practice and training. Rather than a standard drawing table with paper, colored pencils, and a selection of specimens to draw, this insight into her process led us to set up a different drawing table, one that explored this interesting practice of blind contour drawings.

Alongside the paper and drawing implements, we exhibited a selection of McLaughlin Barlow's blind contour drawings and instructions on the process. We also displayed a number of specimens from the museum to serve as objects for the exercise (fig. 3), further emphasizing the connection between the art and our collections. The small display area for visitors' work was quickly overwhelmed, and we had to enlarge it shortly after opening.

We encourage you to find a point of learning in your exhibition that can be explored and trialed by your visitors through an activity. With an art exhibition, learn how your artist learns, and find a way your visitors can engage in this process too. We found that about 55 percent of visitors who engaged in this activity actually did a blind contour drawing, but





fig. 3. A visitor engages in a blind contour drawing activity of whale bone specimens. From the exhibition *Whale Dreams*, a collaboration with Colleen McLaughlin Barlow.

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fig. 4.

A spin wheel serves as the inspiration for a writing exercise on the ocean. From the exhibition *Backyard Biodiversity*, a collaboration with the Canadian Writers and Illustrators of British Columbia.



fig. 5.

A visitor folds an origami iris flower. From the exhibition *From Meadows Woodlands Far and Near*, a collaboration with Brigitte Potter-Mael.



don't be discouraged if visitors don't follow your prescribed exercise. However they interact with the activity, they will have learned something about the process you are highlighting, viewed some of the museum's collection from a different perspective, and perhaps gained a deeper insight into the exhibition through a more personal connection.

Write It

The written word is a powerful medium, and our *Backyard Biodiversity* exhibition was about engaging with local flora and fauna through children's books. The "ocean table" inspired visitors to write. We not only asked visitors what the ocean meant to them, but added an element of game play with a spin wheel that suggested different starting points. For example, "if I were a fish, the ocean would be..." encouraged visitors to experience the ocean through a different lens. By making the activity open-ended, we got a diversity of responses and outlooks. Being part of an exhibition based on books and authorship, we were pleased to observe diversity in writing form too, from single-word responses, to essays crammed onto the page, to haiku.

We also played with the medium for responding, hoping it would help engage visitors. Instead of plain white pieces of paper, we used blue paper cut into wave shapes. The unusual wave shape and blue color definitely drew people in and made for an eye-catching display on the wall – but the time it took for staff and volunteers to cut out these shapes and keep up with visitor demand leads us to look for better solutions in the future.

A dedicated space for visitors to share their responses is, we feel, an important part of any activity. Visitors feel more connected to – and even develop a sense of ownership over – an exhibition that they have contributed to. Our experience shows that creative ways to do this are more likely to inspire dialogue because they are more fun and interesting for the visitor than store-bought sticky notes on a plain wall. For the ocean writing activity, we used an old fishing net (fig. 4) where visitors could fix their ocean reflections, an appropriate yet thought-provoking framework for discourse on oceans.

Fold It

One of the most accessible, and least messy, forms of sculpture is origami, and the thousands of different designs and instructions available allow you to customize this activity so that it relates directly to your content. We have found origami-making activities to be highly popular, and have employed a number of strategies that have contributed greatly to their success. We let the content of the exhibition drive the selection of the origami so that the engagement complements the narrative. For example, origami beetles and butterflies accompanied an exhibition about local insect life. We also present two options in the activity, simple instructions for a more basic design, and a challenging alternative for a more complicated origami piece. This maximizes the audience we can reach, allows for progression from one origami sculpture to the next, and supports multi-generational engagement within the same activity. And finally, we provide a dedicated and themed place for visitors to add their origami sculptures to the exhibition. This has ranged from a giant tree for origami birds to rest, to an oversized paper garden where origami beetles and butterflies can roam.

What did we do with the 4,430 origami seeds and flowers that were created by visitors during the exhibition *From Meadows Woodlands Far and Near* (fig. 5)? Many visitors chose to take home their origami as a souvenir, but sadly, at the close of the exhibition, thousands of pieces of origami visitor art found their home in the recycling bin. And while we have repeated, in some iteration, this activity – because of its immense adaptability, flexibility, popularity, and ease of implementation – we still harbor unease about the waste of materials this activity engenders. Is there some way to reduce this waste? We are still searching, but possibilities we are exploring include using waste paper as origami paper and flattening out origami creations so the paper can be reused.

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fig. 6. A family poses for a photograph in biologically accurate insect costumes. From the exhibition *Shutterbug*, a collaboration with the family of Ian Lane.

After all, is there anywhere else in the world where you can wear a nudibranch costume?

fig. 7. Visitors work together to solve a life-sized dwarf sperm whale bone puzzle. From the exhibition *Whale Dreams*, a collaboration with Colleen McLaughlin Barlow.



Wear It

Go into the children's section of any museum, and you will often find a dressing-up area. Hard hats in a mining museum and lab coats in a science museum invite our younger visitors to learn through role play. But this invitation should be offered to visitors of all ages, and the potential to encourage visitors to actually step into the exhibition and become a part of it seems a natural extension. Instead of using generic, store-bought costumes, for our *Shutterbug* exhibition – photographs of local insect life – we looked to the content itself. We carefully constructed biologically accurate costumes in close collaboration with our collection curators. A butterfly costume in this exhibition (fig. 6) is not just any butterfly, it is the faithfully reproduced wing pattern of a Western swallowtail, patterned after a photograph on display in the exhibition.

These costumes proved to be immensely popular with children, families, and adults. Elastic shoulder loops sized for children and adults made them easy to shrug on and off, and the colorful backdrop encouraged visitors to share photographs via social media. But with popularity comes challenges. These insect costumes were made of felt, and regular repairs were necessary. We quickly learned to make our costumes out of more durable materials, like heavy-duty nylon with wire reinforcing. The time required to make intricate and accurate costumes is significant, but the visitor experience is so unique that we still continue to invest in this activity as part of our regular rotation. After all, is there anywhere else in the world where you can wear a nudibranch costume?

Puzzle It

Occasionally, an exhibition so perfectly lends itself to an interactive that you just have to do it. In the exhibition *Whale Dreams*, we displayed a series of drawings titled “Drawing My Way Through A Whale,” in which the artist drew every single bone of a dwarf sperm whale skeleton in our collections. This exploration of individual bones underscored the importance that each bone holds in the skeleton and the creature it supports. The series inspired us to create a life-sized jigsaw puzzle to immerse visitors in the experience of fitting together individual bones into a dwarf sperm whale skeleton. We printed out

images of the bones and fixed them onto heavy-duty card stock. Visitors then fitted these individual pieces into place on a plywood dwarf sperm whale outline using hook and loop tape (fig. 7).

Puzzles draw people in with a challenge to solve them, and a large-scale puzzle allows for this challenge to be solved in a group with visitors working together. While working together, visitors engage in dialogue about the puzzle and its content, stimulating learning and interest in the exhibition narrative. In terms of number and depth of interactions, this puzzle was our most successful element in the exhibition, with approximately half our visitors exhibiting a breakthrough behavior – such as asking questions, photographing the puzzle, or drawing a connection between the exhibit and personal experiences.

Conclusion

As we have followed this journey of creating low-cost interactives to compensate for our more limited resources, we have come to the realization that this path is not the poor cousin of the flashy interactive. Rather, non-digital, self-led, low-budget interactives are a shining beacon that stand on their own merit. Nestled amongst the staff-led engagements and the big-budget interactives, simple, visitor-led experiences hold a proud place.

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