OMSI Design Challenge Resource Collection

SUMMATIVE EVALUATION REPORT

Rockman et al
Cooperative
Research & Evaluation

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Our thanks go out to the museum professionals who participated in this study and gave their insightful reflections on the resource collection. We also thank the internal research team at OMSI for taking the time to review instruments and give feedback to inform the evaluation.

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INTRODUCTION

The *Design Challenge Resource Collection*[1] (DCR) is a suite of materials created for museum professionals by the Oregon Museum of Science and Industry (OMSI) as part of the *Designing Our Tomorrow* project. One of the goals of this project, funded by an NSF: Advancing Informal STEM Learning award, is to build capacity in informal science professionals for creating engaging engineering design challenges in museum exhibits. The DCR Collection is a key project deliverable aligned with this goal. It is a professional development resource designed to deepen understanding among museum exhibition developers and designers within informal educational environments who wish to embrace and implement interactive design challenges more fully. More specifically, OMSI outlined the following intended impacts for the Collection in the project's logic model:

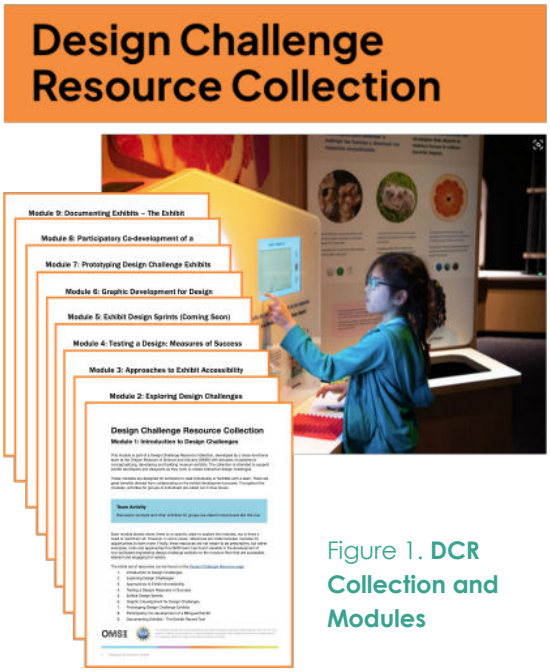


Figure 1. **DCR Collection and Modules**

1. Exhibit developers and designers will have an increased awareness and understanding of factors that influence the development of design challenge exhibits and the process for creating those exhibits.
2. Exhibit developers and designers will report potential value and usefulness of the Design Challenge Resource Collection to their work.
3. Exhibit developers and designers will report increased confidence in their ability to create design challenges.

In this online resource, OMSI provides nine modules (one currently under development). Each module addresses a topic – some which have long been part of exhibit design, and others that are more current or trending. Topics include prototyping, graphic design, accessibility, and participatory co-development of bilingual exhibits with stakeholder communities. The modules can be read and used individually or as a set, and each includes reading material, discussion questions, and practical exercises. OMSI states in the introduction to the Collection:

> *These resources are not meant to be prescriptive, but rather examples, tools and approaches the OMSI team has found to be of value in the development of non-facilitated engineering design challenge exhibits that are accessible, relevant and engaging for visitors.*

This report presents findings from a summative study of the Collection's effectiveness. It summarizes the viewpoints of several museum professionals who reviewed the Collection, completed a reflection assignment, and discussed feedback in focus groups with researchers.

[1] https://omsi.edu/for-museum-professionals/designing-our-tomorrow/design-challenge-resource-collection/

RESEARCH QUESTIONS AND METHODS

Rockman et al Cooperative (REA), an independent education research and evaluation firm, served as the evaluation partner for this project and created a summative evaluation strategy in consultation with OMSI staff members. The evaluation of the Collection focused on the following questions to investigate the extent to which the Collection has achieved the outcomes identified in the logic model:

- Are the **materials relevant to participants' work** and adaptable to different contexts and different projects?
- Do the modules and support materials **increase participants' confidence** in creating engineering design challenges?
- How **do participants envision using the modules** and support materials in their work (e.g. completing all nine modules sequentially, focusing on singular modules of interest, using built-in activities or not)?
- To what extent **do the support modules address participants' questions and obstacles** when it comes to creating engineering design challenges for exhibits?

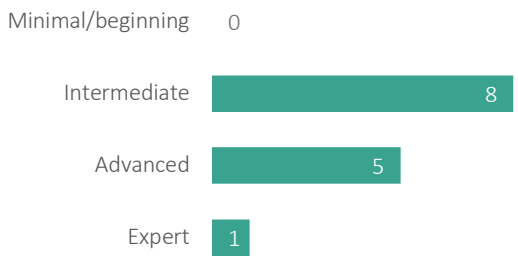
To answer these questions, REA researchers recruited 16 museum professionals to participate in a study of the Collection. Fourteen of these individuals completed all study activities, which included reviewing the Collection, completing a reflection activity on their own, and participating in a one-hour focus group discussion afterward. The reflection activity included responding to open-ended prompts about the Collection and close-ended survey questions on its value and impact. All study participants except one were active employees in science museums whose work involves either exhibition design or programming for design challenges. The remaining individual was an independent professional who works with science museums. The participants represented a diverse group from different institutions (in geographic spread and size) and with varying levels of design challenge development (see Figure 2, Figure 3). Their

Figure 2. **Locations and Institutions of Participants**

TELUS World of Science, Edmonton, Alberta
The Tech Interactive, San Jose, CA
Children's Museum of Sonoma County, CA
Museum of Science and Curiosity, Sacramento, CA
Exploratorium, San Francisco, CA
Thanksgiving Point, Lehi, UT
Explora, Albuquerque, NM
The DoSeum, San Antonio, TX
Children's Museum of Houston, TX
Great Lakes Science Center, Cleveland, OH
DaVinci Science Center, Allentown, PA

in-depth deliberation on the Collection included positive impressions as well as critical feedback and suggestions on opportunities to expand on this resource.

Figure 3. **Participants' Prior Level of Experience Creating Engineering Design Challenge Experiences** (self rating)



OVERALL RECEPTION

On the whole, reflections during the focus group sessions and feedback on the exercise revealed that museum professionals found the Design Challenge Resource Collection valuable. The study participants appreciated the documents' theoretical explanations, practical examples, worksheets, and flexibility. They also appreciated the way the material was written, acknowledging when mistakes or blunders happen, and noting that the exhibit design process is a very challenging one. One individual noted that with any guide like this, "You have to be careful that it doesn't become too prescriptive." Participants seemed to think the Collection walked that line well, providing ideas and guidance without suggesting that the process would be straightforward if readers just follow a formula.

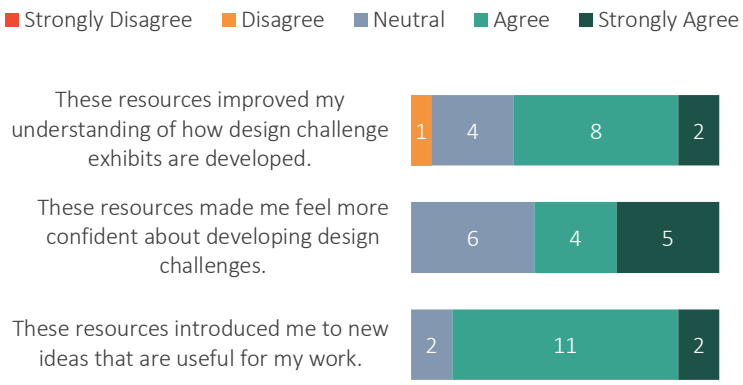
One individual with less explicit training in engineering design challenges said, "This helped me identify which exact exhibits at my institution are using EDP (engineering design practices) – and it was more than I thought." Another participant commented that they didn't really know how to define design challenges, and that this Collection was a helpful "reframing" of how to think about them.

Participants with more years of experience in exhibit development (e.g., ten years or more) were less likely to say that the resources increased their confidence levels or taught them how design challenge exhibits are developed, but almost all participants said they were introduced to new ideas by the Collection. One participant began their reflection by writing:

> *I want to start by saying: I feel seen. There aren't a lot of specific elements of the content that I can point to and say that it is completely new to me, but having it all set out like this in one document is absolutely amazing!*

Furthermore, in their exercises, all participants noted ways they could apply the resources to their work (see Figure 4 below).

Figure 4. **Participants Reflections on the Design Challenge Resource Collection**



Besides appreciating the content, participants also liked the way the Collection was organized. A few participants noted that they were originally daunted by the total size of the Resource Collection and the time it might take to read through it, but said they discovered it was broken into very manageable pieces. Participants liked that each module covered a specific angle on design challenges in a way that they could be used individually according to their current interests.

NEW UNDERSTANDINGS AND REFLECTIONS ON CREATING DESIGN CHALLENGES

Several modules stood out as being particularly helpful to the study participants. Of all the modules, "Approaches to Exhibit Accessibility" was mentioned the most frequently in the reflection activities and focus group discussions. This is a topic that many of the study participants said they have been thinking about in their work and trying to focus on more intentionally. One individual noted, "I really enjoyed reading about the Accessibility Design Matrix. This is something I am excited to try as my team starts some work on new activities and exhibits this year." Another stated, "I appreciated that accessibility challenge was so far up [the module list] because my museum is focusing on that from the beginning of design, rather than an afterthought." Another participant noted that they are trying to move beyond ADA compliance, and this module was helpful for thinking how they can push themselves to be more accessible to their visitors.

The "Measuring Success" module was also popular with the study participants. Twelve individuals (three-quarters of the participants) said they gave this particular module a close read. One participant said they appreciated the way this module talked about "supporting productive failure" in an unfacilitated experience by giving intentional feedback. Another individual, who works more in programs than exhibits, said the principles contained in this module were equally relevant to her work:

> *As a less exhibit-y person, this is the one [Feedback and Measures of Success in Testing a Design] I would use the most. We have a program development team, and we can use this sheet to see what measures of student success we have.*

Also, at science family nights (out in the community) this could be useful to give to students to see what is successful, so they know.

Other helpful information in the Collection that participants mentioned during the focus group discussions included the module on bilingual exhibitions, information on signage, and co-developed exhibitions:

Love the "very little text" idea presented in the graphics section. So many times museums type paragraphs and then get mad that no one reads the novel in front of them before using the exhibit. WHY!?

The references included are also helpful resources, especially on the bilingual aspects using evidence-based data.

I liked the idea of developing the text throughout the process in both English and Spanish. All of our exhibits are bilingual, and our project teams are bilingual, yet we still tend to write it all in English and then translate it.

The Graphic Development and Documenting Exhibits modules were probably the most helpful. I can see myself sharing this information with our exhibit development/design team to help them look at their processes differently.

Even when the information in the Collection wasn't necessarily new, participants seemed to appreciate seeing their own experiences reflected in the resource or conveyed in an organized way, and comprehensive way. One individual noted in their reflection submission, "I loved the intentionality behind the Accessibility Design Matrix--so many of the design elements listed are things we think about, but I don't think we've ever put them all in one place like this before. So useful!" Another participant said of the resource:

This resource, serving as a foundational framework, is helpful in guiding the comprehensive assembly of thematic content, interactive features, and technological integration. It is particularly advantageous for staff members less familiar with the intricate systems essential for building a strong exhibit foundation.

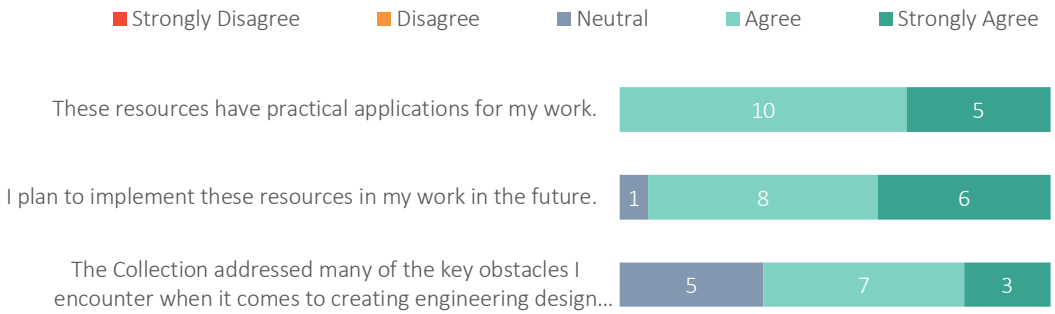
Several other participants also mentioned that having all this information on design challenges compiled into a single resource is extremely helpful. They also appreciated that the Collection links to additional resources created by other organizations – such as NISE Network's Universal Design Guidelines. One described the Collection as "a good launch point."

One slight point of confusion for participants or an unaddressed topic in the Collection was clarifying if it is meant to be a resource for engineering design challenges specifically or whether it is meant to apply to other design challenges as well. Participants also mentioned words like "tinkering" and "making" which often come up in similar exhibit design scenarios. Their discussion showed how the varying vocabulary of the museum field might at times cause confusion about what the Collection is or isn't supposed to address.

PRACTICAL USE OF THE COLLECTION

All of the study participants agreed or strongly agreed that the Design Challenge Resource Collection had practical applications for their work (Figure 5), and all but one individual said they plan to use the Collection in their work in the future. Fewer participants (just two-thirds) said they agreed or strongly agreed that the Collection addressed many of the key obstacles they face when it comes to creating engineering design challenges – perhaps because while the Collection was helpful to them, they can still imagine many questions without easy answers. Nevertheless, participants described many different ways they could incorporate the Collection into their work or ways they already had.

Figure 5. **Practical Value of the Collection**



As noted above, the "Approaches to Exhibit Accessibility" module was seen as a very useful resource to the study participants. Ten out of the fifteen participants mentioned this module in response to the reflection prompt, "Information or strategies that feel relevant/useful to your work." One individual said they were so energized by seeing the accessibility matrix that, "I basically took it immediately to my manager, and asked, 'Do we have one of these, and if we don't, can we make one?'" Other participants agreed that this particular part of the "Accessibility" module was very helpful for thinking through what kind of accessibility changes they ought to focus on first, and what higher level accessibility goals they should be reaching for.

> *The Accessibility Design Matrix will be a good tool that can be pulled into any exhibit development project – design challenge related or not. I found the examples concrete and supported the content well.*

> *The charts on accessibility and feedback for exhibits could be really useful for facilitating genuine criticisms of exhibit prototypes. I would probably adapt both slightly depending on the exhibit - i.e. adding specific questions related to a detail I may think is important but may actually not be.*

Besides having useful applications during the exhibit design process, one participant pointed out that the Accessibility Design Matrix could be a fundraising tool. They talked about their intention to share the accessibility matrix with their fundraising and development team, to show donors how with additional funds their museum could move from the "should" category into the

"could" category – in other words, going beyond the basic requirements and achieving a higher standard of accessibility.

In their reflections, several participants also talked about the utility of the "Prototyping Design Challenge Exhibits" module and how they hope to put the ideas presented there to work.

> *I love the design thinking type approach described in the prototyping section. Just try something and try it quickly, because if it doesn't work you waste WAY less time! It's especially important to involve lots of people in this step. I was already encouraging my team to develop new programs like this, but I love how this explains the process with specific examples.*
>
> *I particularly appreciated the breakdown of the prototyping process in Module 7. As an institution we very rarely follow the "formative assessment" step of allowing the public to test in-progress prototype exhibits. I think it is something we will put into practice more often now.*

The "Graphic Development for Design Challenges" module also prompted a number of comments in the exercises and focus group discussions, as participants relayed their many struggles trying to find the right ways to convey activity information to visitors without overloading them with text. One participant mentioned sharing the module with other teams in their organization to get them thinking about how they utilize signage around their exhibits.

Team Activities

The Design Challenge Resource Collection provides blue text boxes throughout the modules that present activities and discussion questions that teams can do together, as a way to unpack ideas from the Collection or think about the practical applications for their own institutions. Most participants didn't spend time doing the activities or discussing the questions presented, but they generally seemed to like having these suggestions. One participant said the team activities provided a nice way to pause and reflect while reading. Another said they were a way to "get the wheels turning" when first diving into a module. A third said that they often try to generate these kinds of discussion questions and activities to do with their floor staff, but having them provided here was a time saver.

Participants also provided a few critiques on the Team Activities. One individual noted that they varied in the level of effort required. Some were activities or questions that were a little "light," while others might prompt a deep dive. "The activity for Module 7," one participant noted, "might take an entire afternoon." Another commented that some of the activities felt very practical or action-oriented, while other activities felt much more theoretical – prompts that might work well in an academic or classroom setting.

Worksheets

As part of their exercise after reviewing the Collection, participants were asked to take one of the three worksheets provided in the modules and put it either through a practical run at their institution or to treat it as a hypothetical exercise if they didn't have the opportunity. The three activity sheets are listed below (Table 1).

Table 1. **Worksheets Reviewed by Study Participants**

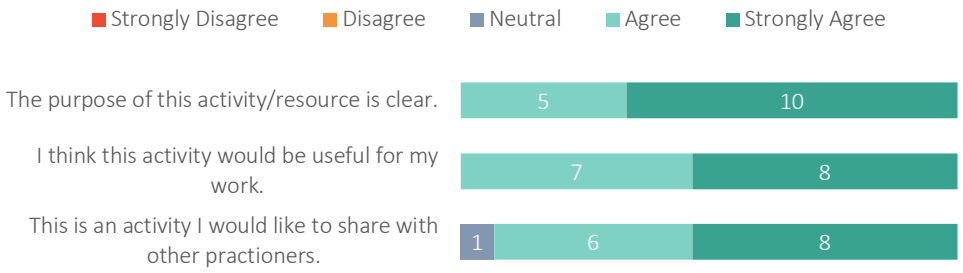
Worksheet	# of Participants who Reviewed
Exhibit Rating Sheet – Rate an exhibit and reflect on its design to see what makes it more or less successful as an engineering design challenge	**7**
Feedback and Measures of Success Planning Sheet – Think through and plan out the goal of an exhibit and how visitors can receive feedback on their progress toward that goal	**1**
Exhibit Record Tool – Document the purpose of an exhibit, how it should function, its key features, and any important info that will help different team members contribute to its success	**6**

A few participants were able to put a worksheet through a practical trial. Other participants treated it as a thought exercise. On the whole, participants gave very positive feedback on the worksheets:

> *I thought the Exhibit Record Tool was fantastic.*
>
> *It felt highly practical and very productive. (re: the Rating Sheet)*
>
> *All of the tools and planning sheets are simple, easy to follow, and useful.*

In their survey responses, participants unanimously agreed that the purpose of the worksheets was clear, and that they would be useful for their work (see Figure 6 below). Only one individual said they were "neutral" on whether or not they'd like to share the worksheet with other practitioners (see Figure 6 below). This individual had reviewed the Exhibit Rating Sheet, but they didn't provide any critiques on the resource. Instead, they commented, "Great reflections including going all the way back to the goals of the exhibit."

Figure 6. **Participants' Ratings of Collection Worksheets**



Two participants who did have the opportunity to use one of the worksheets said that the exercise helped them clarify their ideas about an exhibit at their institution and convey their ideas to others:

> *This planning sheet helped me finalize some decisions for a design challenge exhibit I was working on. Filling it out helped me to better explain what I was trying to achieve when I presented the idea to the floor staff. – (re: the Exhibit Rating Sheet)*

> *I think the worksheet boiled the exhibit development and design process down to what is essential. It made me look again at an exhibit I designed and think harder about it. – (re: the Exhibit Record Tool)*

Several individuals noted that the worksheets were slightly better versions of resources they were already using. One individual said that they and a coworker both completed the Exhibit Rating Sheet and then compared their responses. It prompted them to think about how responses might vary by person, which was useful for thinking about their own perspectives versus those of diverse visitors and how an exhibit might perform for different audiences. Another individual talked about using this as a teaching tool with new staff who were learning about engineering design challenges for the first time.

Participants also appreciated the Exhibit Record Tool as an organizational tool and a means to communicate between teams about the many different features of an exhibit – from its technical aspects to its effective goals with visitors:

> *The exhibit record sheet was very helpful in outlining the different aspects of design challenges, or any exhibit for that matter, that should be considered to provide a robust exhibit experience for the visitor. I especially liked the experience goals section on visitor feelings. I think this is an area that often gets overlooked.*

> *I liked that this activity allows you to think about aspects of an exhibit in a structured, overarching way. It helps you determine the performance specifications and needs of the exhibit and reflect on the exhibit's development and how it can be improved in the future. This would also be a great tool for sharing exhibit work and co-developing with other institutions or partners.*

Another individual said they would like to further customize this tool to make it work even better for their organization, incorporating information on Universal Design, EDGE elements, attracting power, and so on. They also said they appreciated the examples provided by OMSI and how specific their visitor goals were – for example, exhibits that are "family focused" or "girl inclusive."

WHO AND WHEN? UTILITY OF THE COLLECTION AT DIFFERENT TIMES AND FOR DIFFERENT AUDIENCES

Study participants were asked who might use the Collection in their institution and in what specific ways, and responses were varied. Participants said they could envision using the resource individually, for their own reflection and design processes. As noted previously, several

participants already had used it in this way. Participants seemed most energized, however, when they talked about how they could use the resources with other staff members at their institution - for example, to convey information about an exhibit and the ideas behind it, or to gather feedback during the development process. Some parts of the Collection were seen as useful in the early stages of planning an exhibit, while others would come in handy during the prototyping process:

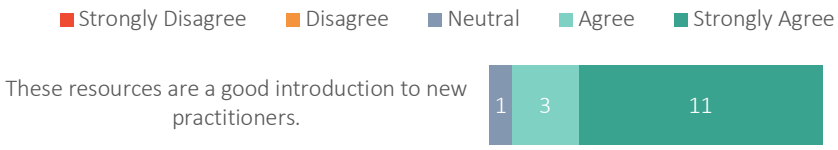
> *I plan on using it earlier in the planning process as a way to help make decisions when building exhibits. As well as a way to organize information for other departments.*

> *I could use it during the prototyping process to assess an exhibit while still developing it. It could also be used during summative evaluation to assess and then revise any existing exhibits.*

Another individual said they would use the Collection (likely the Exhibit Rating Sheet, but perhaps other components as well), to reflect back on finished exhibits and think about changes for the future. For the most part, participants talked about using individual parts of the Design Challenge Resource Collection, rather than using the Collection as a whole. One individual, however, said they thought the modules together would be a good resource for keeping a project on track.

When asked if the Collection was useful to professionals at a certain stage in their careers, many participants talked about the collection as a whole being a good resource for new museum professionals who are working with engineering design challenges for the first time. All but one participant agreed or strongly agreed on the exercise that the Collection would make a good introduction to new practitioners. "I'd say there is some real value in handing them [beginners] a really thorough set of resources," one participant said. Another said they intend to use the Collection as a professional development tool with their floor staff.

Figure 7. **The Design Challenge Resource Collection as an Introductory Tool**



None of the study participants were brand new to their museum careers, however, and all of them still found the Collection to be a helpful resource. Some seasoned professionals were hesitant to say the Collection taught them new lessons, like one individual who has been working in museums for 25 years who commented, "I would say I didn't find anything surprisingly new." They went on to say, however, that the Collection still showed them some ways they could improve upon their practice, showing that even experts in the field can continue to strive for improvement. "There were some topics where they clearly put in a lot of thought, and it shows," this participant commented.

OTHER THOUGHTS ON EXPANDING AND IMPROVING SUPPORT

While the Design Challenge Resource Collection received very positive overall reviews, participants did provide some critiques and talked about other areas where they would love to receive additional support for their work. The Design Challenge Resource Collection is almost finalized and cannot accommodate the many ideas that participants provided, but their suggestions offer ideas that OMSI or other teams might consider pursuing in future projects.

One critique that came up several times in the focus groups and reflection comments was that readers would like to see a wider variety of exhibit examples provided. The Design Challenge Resource Collection draws largely on exhibit examples from OMSI, and some participants noted that these felt unattainable for smaller institutions. Two participants who came from a small museum pointed out that while they loved seeing the kinds of exhibits OMSI is able to put together, it would have helped to see more diversity in the examples, including exhibits that feel accessible to those with smaller budgets. "Many of the exhibit examples were very cool, very well-developed," one individual commented. "Not all of us have the option to build out huge exhibits with computers and so on." Another individual suggested it might be interesting to see the same kind of engineering exhibit, interpreted in different ways by different institutions – for example, several different kinds of wind tunnel exhibits.

A few participants also felt the module "Participatory Co-development of a Bilingual Exhibit" raised more questions for them than it answered. One individual described their own experience working on projects that used the word co-creation, noting, "Sometimes it's easy to say that you are co-creating something, but sometimes you're just checking boxes. It's kind of a wake-up call, for myself included." They mentioned that it would be helpful to have a measurement tool or rubric to help a team assess their success when it comes to co-developing an exhibit. Another participant said they would have liked to see more kinds of questions about cultural relevance and representation worked into the activity questions for this module.

Additional areas where participants said they would love to see the resource expanded include:

- Information on exhibit maintenance, oriented at floor staff
- Ideas for sustainable exhibit materials (in particular, for challenges where visitors tend to burn through supplies)
- Additional information on gathering prototype feedback, such as early-stage prototyping, how many people to include in formative testing, and how to make visitors feel welcome to interact with prototypes
- Ideas on how to help visitors "identify the problem" in engineering challenge exhibits or set their own goals – for example, with a wind tunnel exhibit where one visitor might try for height while another tries to float an object for as long as possible
- Going further into accessibility and the many different kinds of accessibility
- Expanding into engineering design challenge programming

No single professional resource can be all things to all practitioners, but these ideas may inspire future teams to follow OMSI's example in developing resources for the field or find additional ways to link between existing resources.

CONCLUSION

The Design Challenge Resource Collection was an overall success with study participants, who expressed high levels of appreciation for the work. While participants identified areas where they would love to see additional information and examples to help them tackle their design challenge obstacles, they found plenty of useful information in the Collection and had many ideas of how they could begin using it in their professional lives. Both newer and more established museum professionals found value in these resources, and appreciated that OMSI had taken the time to amass so much information in a single place. The Collection has already been incorporated into the work of the study participants, and it is likely to be a valuable asset to broader audiences in the field of exhibit development.

APPENDIX: INSTRUMENTS

RESOURCE REFLECTIONS

Instructions

Please read each of the DCR modules and respond to the questions below as you go. Some modules contain many examples, and you do not need to read every module word-for-word. You may choose to focus more on certain modules that are of greater interest to you and give others a more cursory review.

Reflection Questions

You do not need to take detailed notes on each module, but examples are helpful.

Information that was new or interesting - Did you learn anything from the modules? Did they make you think in a different way about any elements of your work?

Information or strategies that feel relevant/useful to your work - Did you get any practical tips or ideas from the modules that you can see yourself or others at your institution implementing? If so, please describe.

Critiques - Is there anything in the modules that doesn't make sense, that feels impractical or irrelevant, or that you would otherwise change?

Blue Activity/Conversation Boxes - Are these useful? Did you spend time reflecting on these or share with coworkers?

Modules as a resource to professionals - Can you see yourself and/or others using these modules as a professional development tool? If yes, how would you recommend that be used (e.g. individually, as a team exercise, etc.?) If not, please tell us why.

Let us know roughly how much time you spent with each module here:

Module Checklist	Quick Read	Close Read
Introduction to Design Challenges		
Exploring Design Challenges		
Accessibility and Inclusion		
Testing a Design: Measures of Success		
Design Sprints		
Documenting Exhibits - Exhibit Record Tool		
Graphics at Design Challenges		
Prototyping and Materials		
Co-development and Cultural Responsiveness		

Activity Sheet Review

Instructions

Choose one of the three activity sheets below and put it through a practical trial in your museum or your work. We won't collect the activity sheet, but filling it out at least part way will help you assess how well the activity sheet might serve you or other staff at your museum. If you don't have the right opportunity to put one of these activities through a test, treat it as a hypothetical exercise - thinking about an exhibit you have dealt with in the past.

- Exploring Design Challenges - Rating Sheet (p. 3-4 of module) - This activity is intended for completed engineering exhibits.
- Testing a Design - Feedback and Measures of Success Planning Sheet - This activity is intended to be completed during the planning stage of an engineering exhibit, but could also work for a completed exhibit.
- Documenting Exhibits - Exhibit Record Tool - This activity is intended to be completed during the planning or construction stage of an engineering exhibit, but could also work for a completed exhibit.

Assessment

Which activity sheet did you test?

- Exploring Design Challenges
- Testing a Design
- Documenting Exhibits

Please rate the activity sheet on the following: (five-point Likert scale)

- The purpose of this activity/resource is clear.
- I think this activity would be useful for my work.
- This is an activity I would like to share with other practitioners.

What did you like about this activity?

What did you dislike, or how could it be improved?

How would you implement this activity in your work?

Please indicate your prior level of experience creating engineering design challenge experiences:

- None
- Minimal/beginning
- Intermediate
- Advanced
- Expert

To what extent do you agree with the statements below? (five-point Likert scale)

- These resources improved my understanding of how design challenge exhibits are developed.
- These resources are a good introduction to new practitioners.

- These resources introduced me to new ideas that are useful for my work.
- These resources made me feel more confident about developing design challenges.
- These resources addressed many of the key obstacles I encounter when it comes to creating engineering design challenges.
- These resources have practical applications for my work.
- I plan to implement these resources in my work in the future.

FOCUS GROUP PROTOCOL

Introductions

Please tell us your name, the institution you're with and what you do there, and why you signed up for our study. (What interested you about it?)

Collection Overview/ Initial Thoughts

Do you remember any of your initial thoughts when you first started looking through the modules and deciding where to start? (Was it apparent to you what this resource is for? Did certain modules draw your interest?)

- [Skip these if the questions above generate enough starting conversation. Come back to them if there is extra time at the end.]
- Have you ever encountered a set of resources like this in the past?
- What was similar or different to other resources you've encountered on this topic?

Resource Review

Was reviewing these resources a useful exercise to you?

What did you get out of it?

Did the collection help you think about your work in new or different ways? (Please explain)

Did the modules frame things in a way that was familiar? Did the terminology make sense to you?

Did you have any "aha" moments in reviewing these resources?

…Or conversely, were there things that missed the mark or didn't make sense?

Were there any parts of the resources that spoke to challenges that you encounter in your own work?

How did you feel about the balance of theory and practice presented in the modules? (Were there enough big ideas/conceptual info? Enough practical examples and instructions?)

Did the blue activity/discussion boxes seem useful?

Did you end up having discussion with colleagues in response to any of these prompts?

Could you see this being a useful activity in the future? In what context?

How about the worksheet activities? There were three of these:

- Rating Sheet (in Exploring Design Challenges)
- Feedback and Measures of Success (in Testing a Design)
- Exhibit Record Tool (in Documenting Exhibits)

[Call on someone to share which they reviewed and what their thoughts were about it.]

- To what extent is it useful or informative?
- Would you actually fill out a sheet like this in your work? Is it a practical exercise? And if not, does it have other potential?

[Invite additional comments, then move on to the remaining activity worksheets.]

Practical Application

Going forward, can you see yourself returning to this resource in the future?

In what context? When might this be helpful to you? (Can you give an example of how you would use the modules?)

Do you think the collection is best used as a whole, as a sort of curriculum that you work your way through? Do you think the modules are useful individually?

How might other professionals want to approach these resources?

Who do you think might benefit from using these resources?

- At what stage in their career?
- What roles/staff positions within an institution? (e.g., exhibition designers, programmers, etc.)

Overall, how successful do you think this collection is in its goal of supporting better engineering design challenges?

Are there other subjects where you'd like to see OMSI or other museums develop similar resources?

Wrap Up

Final Thoughts - Is there anything else that anyone would like to share to help capture the value of these resources or to highlight challenges - things that perhaps could be addressed in future work?