

# Demonstrating Impact: A summative evaluation of the Skyline exhibition

## 1 What is Skyline?

Skyline is a National Science Foundation-funded exhibition designed to facilitate family learning of science, technology, engineering, and math (STEM) concepts relevant to building a stable structure.

## 2 What impact is Skyline trying to achieve?

The National Science Foundation's (NSF) Framework for Evaluating Impacts of Informal Science Education Projects requires museums to define **impacts** within five categories plus "other"—awareness, knowledge or understanding, engagement or interest, attitudes, behaviors, and skills—and **indicators (visitor outcomes)** as evidence of these impacts.

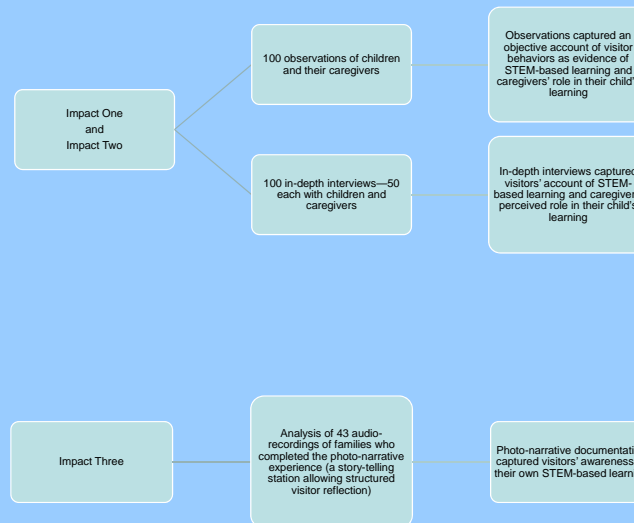


Chicago Children's Museum (CCM) developed the following impact statements for Skyline:

NSF Impact Category	Intended Impact Statement	Example Indicator(s)
Awareness, knowledge, or understanding	Families will increase their understanding of relevant STEM concepts related to how buildings stand up	<ul style="list-style-type: none"> <li>More than 11 percent of observed children build a stable, free-standing structure</li> <li>One-half of interviewees use STEM-based language when talking about their building experience</li> </ul>
Attitudes Skills	Caregivers will gain confidence and skills in facilitating their children's learning	<ul style="list-style-type: none"> <li>More than 58 percent of children are coached by their caregivers while building a structure</li> </ul>
Awareness, knowledge, or understanding	Caregivers and children will be aware of their own STEM-based learning	<ul style="list-style-type: none"> <li>One-half of visitor groups reference one or more STEM-based learning outcomes</li> </ul>

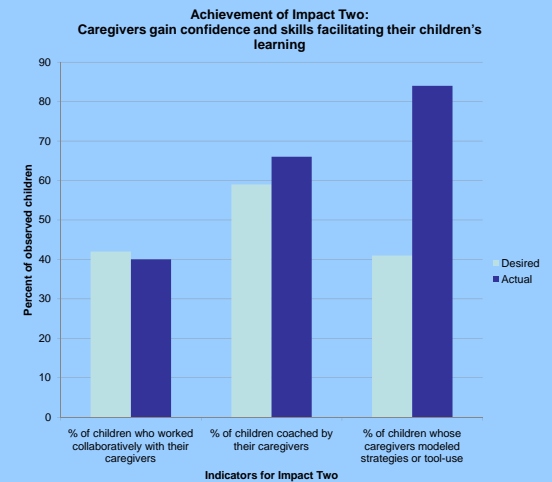
## 3 How did RK&A approach this study?

RK&A explored achievement of Skyline's intended impacts on visiting families using three methodologies—observations (scans), in-depth interviews, and photo-narrative documentation. Observation data were also compared to front-end study data to further explore the exhibition's intended impacts.



## 4 What did we learn?

Notably, Skyline achieved nearly all three of its intended impacts. For example, the figure below illustrates the extent to which Skyline achieved impact two (see full report\* for further details):



## 5 What are the study's implications?

Museums can use evaluation to demonstrate impact; the achievement of specific visitor outcomes (or indicators) can, together, create an overall desired impact on one's target audience. CCM was able to use study findings to demonstrate Skyline's impact to NSF.