

# Map Tools for Adventure

## Case Overview

In a 2002 Global Literacy Survey, young adults in the United States scored next to last (out of 8 countries) in identifying specific countries on a map. This geographic illiteracy is well documented in a number of other studies and points out the critical need to introduce and reinforce geography and geographical concepts in ways that are fun, exciting, participatory, artifact-rich and technologically advanced.



The Children's Museum of Indianapolis (TCM) is partnering with the National Geographic Society (NGS) to create an engaging exhibit furthering geographic education for children, families, and learners of all ages. The exhibit will feature: one-of-a-kind artifacts that help tell the story of maps, past and present; engaging interactives which promote family learning; and technology rich components that feature new and emerging mapping tools. In addition to the exhibit which will travel to other venues, the project includes the creation of a special web site hosted by NGS that introduces kids to the essentials of mapping and geospatial representation.

*The Children's Museum of Indianapolis*, a nonprofit institution committed to enriching the lives of children, hosts over one million visitors a year. As the largest children's museum in the world (14 acres), the 433,500-square-foot facility houses 13 major galleries that explore the physical and natural sciences, history, world cultures and the arts. In existence for over 81 years, TCM defines its mission "to create extraordinary learning experiences that have the power to transform the lives of children and families," TCM sees itself as a place to learn and do, with exhibits, whenever possible, "hands on" or participatory in nature.



Over 28,000 households enjoy the services and privileges of museum membership. The museum employs about 400 full-time and 200 part-time staff members, with a total budget of \$23 million in 2006.

The Children's Museum of Indianapolis maintains and uses a collection of more than 110,000 artifacts. Several thousand programs are offered annually: classes, workshops, gallery demonstrations and interpretation, live performances, field trips, parent/child activities, adult programs, special interest clubs and fairs.

# shaping outcomes

*Making a Difference in Libraries and Museums*



For additional information, go to <http://www.childrensmuseum.org/themuseum/overview.htm>

*The National Geographic Society*, The National Geographic Society was created in Washington, D.C., in January 1888 for “the increase and diffusion of geographic knowledge.” The Society mirrors the world and all that is in it through incisive magazines, maps, books, films and interactive media.

To motivate and enable new generations of children to be geographically literate, National Geographic’s Education and Children’s Programs provides programs for young people to engage them in real-world issues like conservation, offers online resources for students and teachers, provides national teacher training and

supports a network of state teacher alliances.

For additional information, go to <http://www.nationalgeographic.com/>



*These are fictional statements typifying attitudes and illustrating needs, not actual direct quotations.*



**National Geographic Society staff member:** We've got some of the best map experts in the world and we're one of the most prominent promoters of geographic education, but we're always looking for ways to connect more people with geography and to support new and innovative ways to achieve that goal.

**Geography educator:** American students test as some of the worst at understanding world geography. Many can't even identify countries on a map! With the growing significance of globalism, we've got to promote geographic literacy. But not too many students get excited about maps. We need a way to make geography relevant, exciting, and to bring out the sense of adventure and discovery embedded in maps.

**TCM Exhibit Designer:** We're a hands-on kind of museum and we want to create experiences that engage our visitors. We want them to connect with the exhibit content, with each other, and with their own potential as learners. Designing exhibit elements that people of all ages can interact with is a great way to promote these connections, but creating interactives that promote active learning, that don't break easily, and that are easy to use requires lots of time and testing.

**TCM Director of Education:** We get more than a million visitors a year, but with our web site we can reach many more. The MAPS project is a great opportunity to expand our reach to schools anywhere and to partner with such a renowned organization as the National Geographic Society. Our curriculum can also provide ideas for pre- and post-visit classroom activities and help connect the exhibit experience to the broader learning objectives of the teacher. But this goal requires understanding teachers' needs, objectives that meet state and national standards, not to mention creative, engaging content!

**IMLS Program Officer** As with all our projects we want to know if funds appropriately managed and the deadlines being met, but most importantly we want to know if the desired outcomes are being achieved.



# Logic Model

<b>Program Name:</b>	National Geographic's MAPS: Tools for Adventure, Traveling Exhibit	
<b>Abbreviated Name:</b>	MAPS	
<b>Organization:</b>	The Children's Museum of Indianapolis	
<b>Partners &amp; Stakeholders</b>		
<b>Program Partners:</b>	National Geographic Society Environmental Research Systems Institute (ESRI)	
<b>Stakeholders:</b>	<b>MAPS Exhibit Team</b>	<p>How can we use the data collected from front-end and formative evaluation to produce the best possible exhibit?</p> <p>How will we identify appropriate consultants and advisors to provide expert guidance on geographic content and technologies?</p> <p>How can we use the feedback from advisors to inform us as we design and develop this exhibit?</p> <p>How will data from front-end evaluation and content recommendations shape the exhibit design document?</p> <p>How can we leverage our partnerships to identify and borrow artifacts to enhance the exhibit?</p> <p>How will this affect the visitor experience at the museum, as well as at other venues across the country?</p> <p>What will visitors do and learn in this exhibit?</p>
	<b>Geographic educators</b>	<p><b>(classroom teachers, college, university &amp; museum geography educators)</b></p> <p>How can this exhibit contribute to the improved geography learning in the target audience?</p> <p>What will visitors learn?</p> <p>Can we incorporate other educational products in our teaching?</p>
	<b>National Geographic Society ESRI</b>	<p>How can this exhibit contribute to improved geography learning in the target audience?</p> <p>How does this reflect on our institution and our collections?</p>
	<b>IMLS</b>	<p>What key outcomes and indicators result from the planning process?</p> <p>Are the needs met that shaped the planning phase of the project?</p>

	<b>The Children's Museum</b>	How will this exhibit affect attendance levels? What other venues will be interested in hosting the exhibit? How does this exhibit relate to our mission and strategic plan?
	<b>Other Museums</b>	Is this exhibit worth bringing to our institutions?
<b>Audience Needs</b>		
<b>Needs:</b>	<p>Children need basic geography literacy including both skills and knowledge to be productive participants in an increasingly global economy and informed citizens of the world. A 2002 Global Literacy Survey indicates that young adults in the United States are among the most geographically illiterate of the 8 countries tested.</p> <p>Geography educators need curricular materials that engage students and enhance learning experiences by being fun, participatory, artifact-rich and technologically advanced to engage students in order to increase geographic literacy.</p>	
<b>Target Audience:</b>	Children in grades 3-5 and their families Geographic educators	
<b>Audience Considerations:</b>	<p>Parents and children do not perceive that geography is a part of their everyday lives. Parents and children do not see the connection between current events and geography. They are also unaware of the technological tools that are changing the way we view our world.</p> <p>Geographic educators are looking for sources and materials to utilize in teaching geographical concepts.</p>	
<b>Solutions:</b>	<p>An extraordinary traveling exhibit about the dynamic world of maps that has the power to transform the lives of children and families.</p> <p>An extraordinary website and unit of study directed to teachers and librarians.</p>	
<b>Desired Results:</b>	Visitors have family learning experiences in a compelling traveling exhibit. The target audience's level of geographic understanding and skills is improved.	

<b>Program Purpose</b>	
<b>We do what?</b>	Create an extraordinary traveling exhibit and associated web site and unit of study.
<b>For whom?</b>	Children in grades 3-5 and their families Geographic educators
<b>For what outcome?</b>	Target audience (children in grades 3-5 and their families) has positive family learning experiences (according to the museums' family learning rubric) in the exhibit Target audience (children in grades 3-5 and their families) demonstrates improved knowledge of map making, map reading and world geography. Geographic educators use sources and materials for teaching geographical concepts.
<b>Evaluation Plan</b>	
<b>Inputs:</b>	IMLS grant to pay for staff time and travel TCM staff time to conduct research and surveys, plan exhibit, write document Data collected from front-end and formative evaluation Partners at NGS and ESRI provide expertise Project advisors provide expertise National Academic Standards for Science National Academic Standards for Geography Research files
<b>Activities:</b>	Design survey instruments Conduct surveys and focus groups Analyze evaluation data Produce a conceptual and design document Recruit and meet with project advisors and partners Research and secure loans or select from TCM collections appropriate artifacts Manage budget Conduct formative evaluation of exhibit elements and interactives Design, fabricate, and install exhibit
<b>Services:</b>	Children in grades 3-5 and their families have extraordinary experiences at traveling MAPS exhibit Geographic educators are provided with an accurate and engaging unit of study relevant to appropriate national standards Visitors to web site navigate the site easily and gain knowledge about maps Other museums can borrow traveling exhibit

<b>Outputs:</b>	A traveling exhibit A website Unit of study Evaluation data Survey instruments Concept and design document Object lists
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