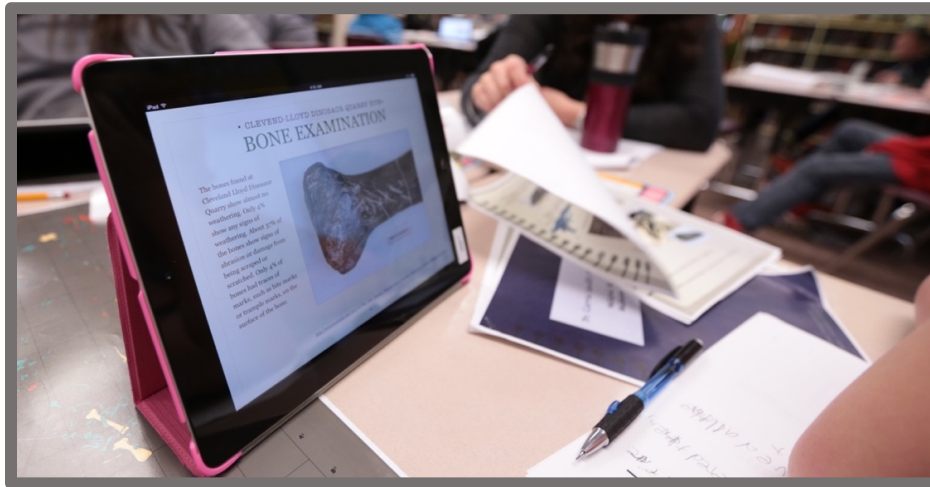


# RESEARCHQUEST

Critical Thinking. Serious Fun.



## Background

The story of Research Quest begins in the spring of 2013, when the Natural History Museum of Utah, with the invaluable support and encouragement of the Joseph and Evelyn Rosenblatt Charitable Fund, dedicated to educational excellence, set out to help kids become better **critical thinkers**.

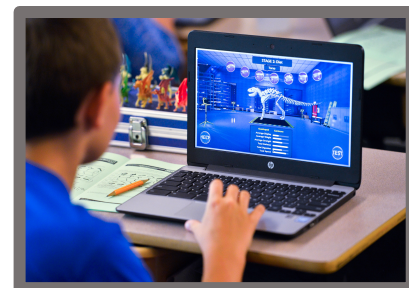
Their shared **objectives** required the program to:

- be scalable to a broad audience
- have measurable impact
- leverage new technology
- be truly innovative
- be able to leverage support from future partners
- be aligned with NHMU's strengths, resources, and strategic goals
- offer sustained social engagement for participants

Beginning with the creation of an Advanced Critical Thinking project team comprised of learning experts, university research scientists, museum professionals, and digital designers, they surveyed the research on teaching and learning critical thinking and investigated best practices for using **technology-based learning**. The team generated ideas, narrowed their choices with the help of an interdisciplinary national advisory team, and selected the most promising idea for development. Then, they developed and tested prototypes to see if they could generate the kind of critical thinking they were searching for.

## Project Description

**Research Quest** is a digital, standards-based classroom resource available to middle school teachers and their students throughout Utah and across the country. The first module in the program includes three investigations focused on the mysteries of the world-renowned Cleveland-Lloyd Dinosaur Quarry. Students examine 3D images of actual dinosaur fossils and use scientists' field notes from the site. They receive a range of support as they engage in the same investigative methods our scientists use to gather, reason, construct and communicate evidence-based explanations. These are the critical thinking skills that allow all people to make informed decisions in their lives and as engaged members of their community.



The Natural History Museum of Utah is deeply grateful for the continued support of the Joseph and Evelyn Rosenblatt Charitable Fund and the JJ and Jeanné Wagner Foundation. Their ongoing support combined with a generous grant from the Utah Department of Workforce Services' Utah Cluster Acceleration Partnership program, funding from the Utah State Legislature's Informal Science Education Enhancement program, and a grant from the National Science Foundation has allowed *Research Quest* to become a valued teaching resource for teachers and students throughout Utah and in states nationwide.

### Project Milestones

- Official Research Quest website launch, January 2016
- Received \$1.3 million grant from National Science Foundation, 2018
- Won 'Best of Show' at New Media Consortium's Annual Conference, 2015
- Used by 440 teachers & 50,000 students since 2016 launch
- Four new investigations launching in October of 2019
- Seven additional investigations preparing to launch over next 18 months
- Follow-up testing indicates students using investigations experience significant growth meta-cognitively and with practical applications, including the ability to transfer learned skills to other areas of study.



### Active Teacher Feedback

"My students were excited to collaborate with each other and I was excited to see them improve their critical thinking skills..." ~ Kristine Davenport, 4<sup>th</sup> Grade Teacher, Morningside Elementary, Granite School District, Utah

"I wish there were more materials like this that covered other standards for science so that I could use it for more practice of critical thinking and argumentative development. Great job!" ~Jennifer Borders, MS Science Teacher, Northwood Middle School, Greenville County School District, South Carolina

### Research Quest Partners

- University of Utah, College of Education, Educational Psychology Department
- ACT National Advisory Team
- ACT Education Advisors
- Utah Education Network
- Spy Hop, Video Production Team
- Entertainment, Arts and Engineering (EAE) Program, University of Utah
- Idaho State University for Digitization and Modeling
- Autodesk
- Youth Teaching Youth ACT/EAE Interns
- Research Quest Teacher Fellows

### Funding Partners

- Joseph and Evelyn Rosenblatt Charitable Fund
- I.J. and Jeanné Wagner Foundation
- National Science Foundation
- Utah Department of Workforce Services, Utah Cluster Acceleration Partnership
- Utah's Informal Science Education Enhancement

\* For a complete list of partners visit:

<http://researchquest.org/about/team.shtml>

