Creating fun and guiding learning!
Techniques for excellent facilitation
ACM Interactivity 2019

Rae Ostman, rostman@asu.edu
Brad Herring, brad.herring@lifeandscience.org
Ali Jackson, ajackson@sciencenter.org

nisenet.org
NISE Network’s online catalog contains nearly 200 professional development resources, many of which focus on program development and delivery. Here, we’ve collected some of our favorite tools to support excellent facilitation of hands-on science activities. In addition, all of our STEM educational activities and programs include detailed facilitator guides and other training tools.

Training videos
NISE Network has many training videos that focus on facilitation, developed for projects on a variety of science topics. The selections below use humorous storylines to engage staff and volunteers in learning core skills and approaches.

http://www.nisenet.org/catalog/educathalon-facilitation-strategies
http://www.nisenet.org/catalog/speed-ucate-video-or-how-have-effective-science-and-society-conversation
http://www.nisenet.org/catalog/americas-next-top-presenter

Tips sheets
NISE Network often creates quick-reference Tips sheets for facilitators, which provide a handy reminder of fundamental facilitation techniques. These exist in many versions, including the following examples.

http://www.nisenet.org/catalog/explore-science-tips-leading-hands-activities
http://www.nisenet.org/sites/default/files/chem_tips_for_facilitating_0.pdf

Improv exercises
Improv exercises empower educators to facilitate positive, learning conversations with visitors. NISE Network offers a guide to leading improv exercises with your staff, as well as instructions for a variety of different improv games.

http://nisenet.org/catalog/improv-exercises
Hands-on activities
Some NISE Network projects have included hands-on activities to familiarize facilitators with science content and learning objectives. Two recent training activities engage educators in learning about chemistry, while an old favorite focuses on nanotechnology.

http://www.nisenet.org/catalog/nano-around-world-card-game

Team-based inquiry
Team-based inquiry (TBI) is a practical approach to empowering education professionals to get the data they need, when they need it, to improve their products and practices. The TBI process involves an ongoing cycle of inquiry: question, investigate, reflect, and improve. NISE Network TBI resources include an overview guide, data collection tools, and training videos.

http://nisenet.org/catalog/team-based-inquiry-guide

Universal design
Universal design is an approach to developing, designing, and delivering programs so that they are accessible to all audiences. NISE Network universal design resources include written guidelines and an archived online workshop.

http://www.nisenet.org/catalog/universal-design-guidelines-programs

Online workshops
Many NISE Network online workshops include information on best practices for program facilitation. Sign up for our newsletter to stay current on our offerings, and check out archived workshops on our website.

http://www.nisenet.org/

This work is supported by the National Science Foundation under award numbers 0532536, 0940143, and 1612482. Any opinions, findings, and conclusions or recommendations expressed in this presentation are those of the authors and do not necessarily reflect the views of the Foundation.

This work is supported by NASA under cooperative agreement number NNX16AC67A and 80NSSC18M0061. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).