

National Aeronautics and  
Space Administration



# EXPLORE SCIENCE

**Evaluating the Effectiveness of the NASA eClips™ 4D Program**

**Shelley Spears, Shannon Verstynen**

National Institute of Aerospace (NIA) - CISE for Integrative STEM Education (CISE)

October 31, 2020

# Evaluating the Effectiveness of the NASA eClips™ 4D Program

Year 4: July 1, 2019 – June 30, 2020



NASA eClips™ Teacher Advisory Board	NASA Spotlights Video Development	Collaborator and Partner Relationships and Impacts
<ul style="list-style-type: none"><li>• Teacher and student feedback for newly developed videos and resources</li><li>• 14 educators reaching more than 1,200 students</li><li>• Reviewers described resources as ways to:<ul style="list-style-type: none"><li>✓ Build real-world context for science concepts</li><li>✓ Engage and develop student-centered learning</li><li>✓ Introduce and reinforce vocabulary</li><li>✓ Meet a variety of learning styles</li><li>✓ Change students' understanding of science misconceptions</li><li>✓ Combat stereotypes of who can pursue/succeed in a STEM career through relatable role models</li></ul></li></ul>	<ul style="list-style-type: none"><li>• 6 educators and data collected from 145 students</li><li>• Students showed significant gains in their:<ul style="list-style-type: none"><li>✓ Understanding of the presented science concept</li><li>✓ Knowledge of key misconceptions about the topic</li><li>✓ Ability to confidently describe the misconception and correct science to others</li><li>✓ Knowledge of available NASA resources</li></ul></li><li>• Teachers reported significant benefits to their students including:<ul style="list-style-type: none"><li>✓ Learning to listen and work with others</li><li>✓ Valuing others' opinions</li><li>✓ Growing their research and video production skills</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Survey data from SciAct collaborators and external partners (88% respondents) indicated both groups value their working relationships with NASA eClips™</li><li>• They appreciate:<ul style="list-style-type: none"><li>✓ Responsive nature and support</li><li>✓ Resources that engage their audiences through real-world experiences</li></ul></li></ul>

To learn more about NASA eClips™, please visit <https://nasaclips.arc.nasa.gov/>.