



Dr Megan Argo, University of Central Lancashire
@AstroMeg

SCIENCE AND STORYTELLING

WE SHARE THE SAME MOON

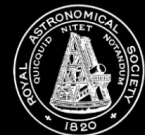
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THE PROBLEM

- ▶ The UK primary school curriculum contains some astronomy, but not a lot.
- ▶ Primary-age children often love space as a topic and have lots of questions.
- ▶ Many primary school teachers have no STEM background and find teaching this content a challenge.
- ▶ If science is not taught well to young children, it can switch them off the subject for life.

- ▶ The question: can we help teachers without a science background teach astronomy in a creative and engaging way?

OBJECTIVES

- ▶ Use 2019 anniversary of Apollo 11 landing on the Moon as a hook.
- ▶ Collect and collate Moon folktales from cultural groups represented in British society.
- ▶ Produce an online resource of Moon folktales in multiple accessible formats.
- ▶ Link these stories with aspects of the primary science curriculum.
- ▶ Develop, test and evaluate a series of curriculum-linked astronomy-based activities for use in primary school classrooms and informal educational settings.
- ▶ Link each activity with one or more folktale to use as a gentle introduction to the topic.
- ▶ Develop accessible resources linking the stories and activities, and test them in collaboration with our target audience (teachers and pupils, including SEND groups).
- ▶ Develop and deliver training for teachers and informal educators in using storytelling to communicate science creatively.

COLLABORATION AND TESTING

- ▶ Astrophysicist: Dr Megan Argo, Senior Lecturer in Astronomy at the University of Central Lancashire.
- ▶ Storyteller: Cassandra Wye, professional storyteller with experience working with SEND groups.
- ▶ Pilot schools: Bath Schools Science Network (Bath, Bristol), St. Joseph's RC Primary School (Burnley), Puss Bank School (Macclesfield) all provided pilot audiences and helped us test the activities in the classroom.
- ▶ SEND pilot schools: Elmfield School of the Deaf and Westfield School provided audiences for the pilot phase and evaluation of suitability for SEND groups.
- ▶ Family events: Solarsphere festival (Wales), Bristol Museum, Alston Observatory (UCLan) allowed us to pilot activities with families and in informal educational settings.

RESULTS

- ▶ Developed and tested 21 creative science activities, each linked with the curriculum.
 - ▶ Collected 41 folktales from 19 countries, each linked with an activity.
 - ▶ Tested activities and stories in nine schools with twenty three classes and teachers.
 - ▶ Tested activities in five informal settings with family audiences.
 - ▶ Evaluated activities and modified following teacher and audience feedback.
 - ▶ Created website to host all activities and stories together.
 - ▶ Overall pilot audience: 1940 people during 2019.
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- ▶ Website: www.wesharethesamemoon.org
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- ▶ All 21 science activities and 41 stories freely available for anyone to use.
 - ▶ Science activities grouped by curriculum level and topic.
 - ▶ Stories grouped by country and approximate reading age.
 - ▶ Tens of thousands of downloads from around the world.