

On the Shoulders of Giants

SD Science Content Standards

2-12 Nature of Science

Materials:

Scientists through the Ages by J. VanCleave – borrow from ESA2 Lending Library (10 copies available)

Lesson Plan:

Students research a great scientist and present information. Scientists through the Ages provides information on over 80 scientists.

Teacher sets guidelines for this project. Use the following suggestions (differentiate for age/ability):

- Students may work individually or with partner/s
- Students write a report
 - Use and cite at least three valid sources
 - Show how scientist affected the way people view and comprehend the natural world and the place of humans in the universe
 - Discuss social, political, and religious institutions of the time period
- Students present to classmates
 - Role play the scientist speaking to colleagues (classmates) appropriate to time period of scientist
 - Explain/recreate an experiment by scientist
 - Create a visual using multi-media
 - Provide notes for classmates
- Assessment
 - Student self-assessment rubric
 - Peer assessment rubric
 - Quiz based in information learned from presentations/notes
 - Students write an essay choosing four (or other number) of scientists who he/she thinks had the greatest impact on our understanding of the natural world or human's perception of themselves. Explain why each scientist was chosen stating facts learned from presentations.
- Timeline
 - After each presentation add the scientist's name to a paper or electronic timeline and mark his/her lifespan
 - Also include historical events – wars, scientific discoveries, natural disasters, inventions, etc.