



# **Society & Curriculum: Similarities between the *Sputnik* and COVID Influence on [Science] Education**

Alex T. St. Louis  
Savannah R. Graham  
Jason E. Titus, Ph.D.

**College of Education, Texas Christian University**



We pose to investigate society's response to *Sputnik* and the COVID-19 pandemic and how this response has shaped the K-16 science curriculum. Where was the curriculum prior, during, and after each societal event, and what inequities, barriers, and cultural implications emerge?

## *Sputnik & Space Race*

- Began: October 1957
- Response:
  - Formation of NSF
  - Push for developing scientists
- Legacy: Reviving science studies/education

## **COVID-19 Pandemic**

- Began: March 2020
  - Year 3
- Response: ??
- Implications: Unknown

- Past Events Shape Access
- Barriers in Society
- Barriers in Education
- Access to Education
  - Internet
  - Place of Learning
  - Resources and Resilience



# Intellectualism vs. Anti-Intellectualism

- Curriculum is Exclusive
- The View of Science / Knowledge in Society
  - Media
  - Politics
  - Education
  - Accountability for "Intellectuals"

- Goal of Science Education
  - Producing scientists
  - Science for everyday citizens (science in context)
  - In the past, the goals have switched between the two above
- Is there a way to reach both goals?
  - Should producing scientists be a K-12 goal or only higher education?
  - Socioscientific issues-based instruction
    - A way to produce scientists and scientifically literate citizens (able to consume and understand science)



# What the pandemic has shown us

- Need for critical analysis of information
  - Media literacy, pseudoscience, reliable and trustworthy sources
- Scientifically literate citizens
  - Able to make informed decisions based on science
- What can education researchers do to help with these needs?
  - Should K-12 focus on producing scientists or is this a higher education focus?



## Discussion Questions

- What is “our” educational response to COVID-19?
- What has been your experience regarding...
  - Access
  - Intellectualism vs. Anti-Intellectualism
  - Scientific literacy?
- What legacy do you predict COVID-19 will have within contemporary education?





Thank you

- Alex T. St. Louis
  - Ph.D. Candidate Science Education
  - [a.tolar@tcu.edu](mailto:a.tolar@tcu.edu)
- Savannah R. Graham
  - Ph.D. Candidate Science Education
  - [savannah.graham@tcu.edu](mailto:savannah.graham@tcu.edu)
- Jason E. Titus, Ph.D.
  - Area of Expertise: Curriculum Studies
  - [j.titus@tcu.edu](mailto:j.titus@tcu.edu)