



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
- Savannah R. Graham
 - Ph.D. Candidate Science Education
 - savannah.graham@tcu.edu
- Jason E. Titus, Ph.D.
 - Area of Expertise: Curriculum Studies
 - j.titus@tcu.edu