GOVERNOR'S OFFICE OF ENERGY DEVELOPMENT
Advancing Utah's Energy Future

Utah's Energy & Minerals Education Initiative

2018 IOGCC Annual Conference – Coeur d'Alene, ID
October 1, 2018

Utah Governor's Office of Energy Development
Kevin Brooks - Education & Energy Program Specialist

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The Governor's Office of Energy Development is dedicated to advancing all forms of responsible energy and minerals for the provision affordable, reliable and sustainable energy through planning, policy and direct engagement.

-Gov. Gary R. Herbert

Energy Action Plan

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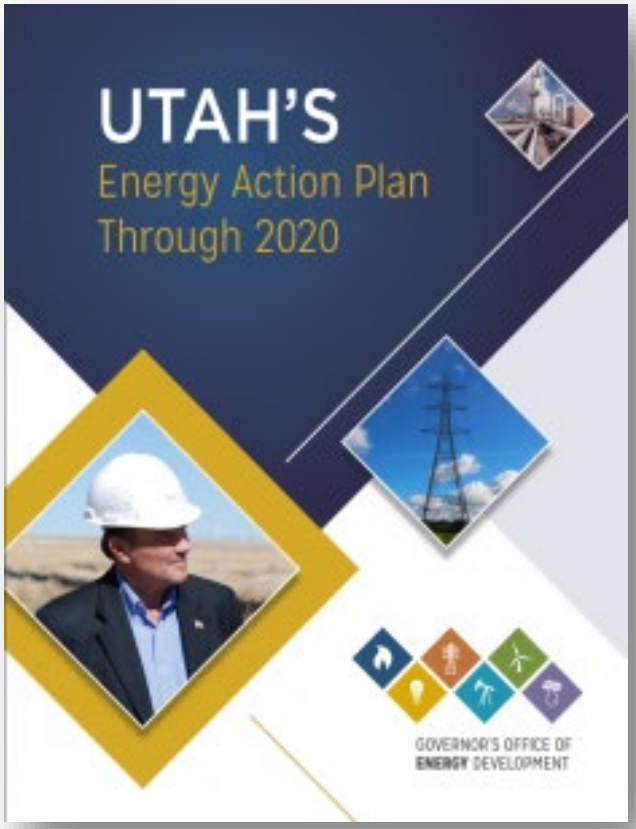
- Support Energy Research, Demonstration and Development Initiatives
- Expand Education Initiatives
- Continue to Organize Energy and Minerals Events
- Increase All-of-the-Above Energy Communications



Summary:
Advancing Utah's Energy and Minerals Economy

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Policy & Planning

- Inform and advance state and federal policy to promote development and drive innovation

Industry Assistance

- Funding & Incentives
- Public/Private-Sector direct engagement
- Trade Missions

Education & Outreach

- K-12 Education
- University Energy Research Triangle
- Summits, Symposia, Workshops, Forums

Website
utahenergyed.org

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Curriculum

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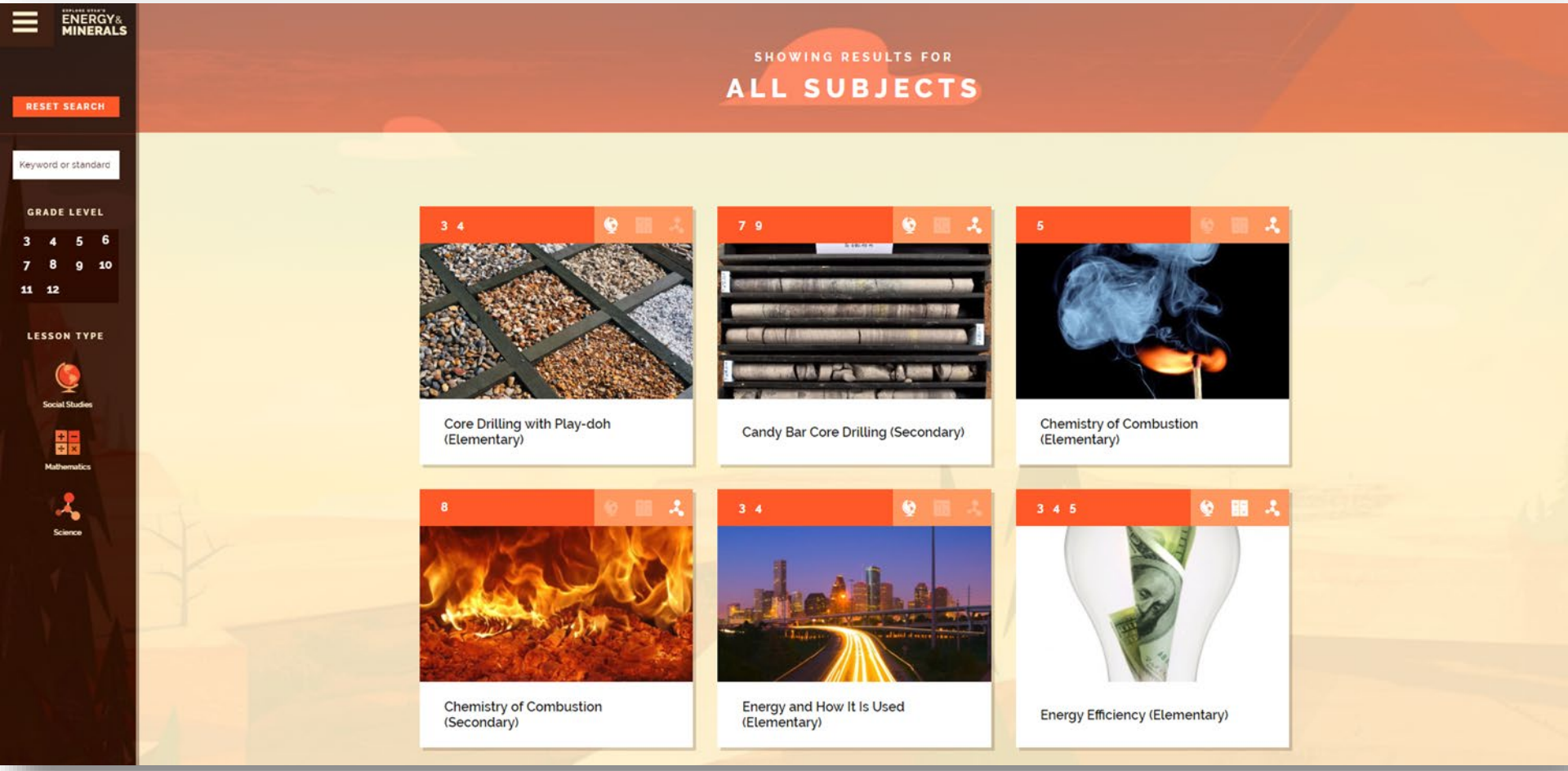

Lesson Plans

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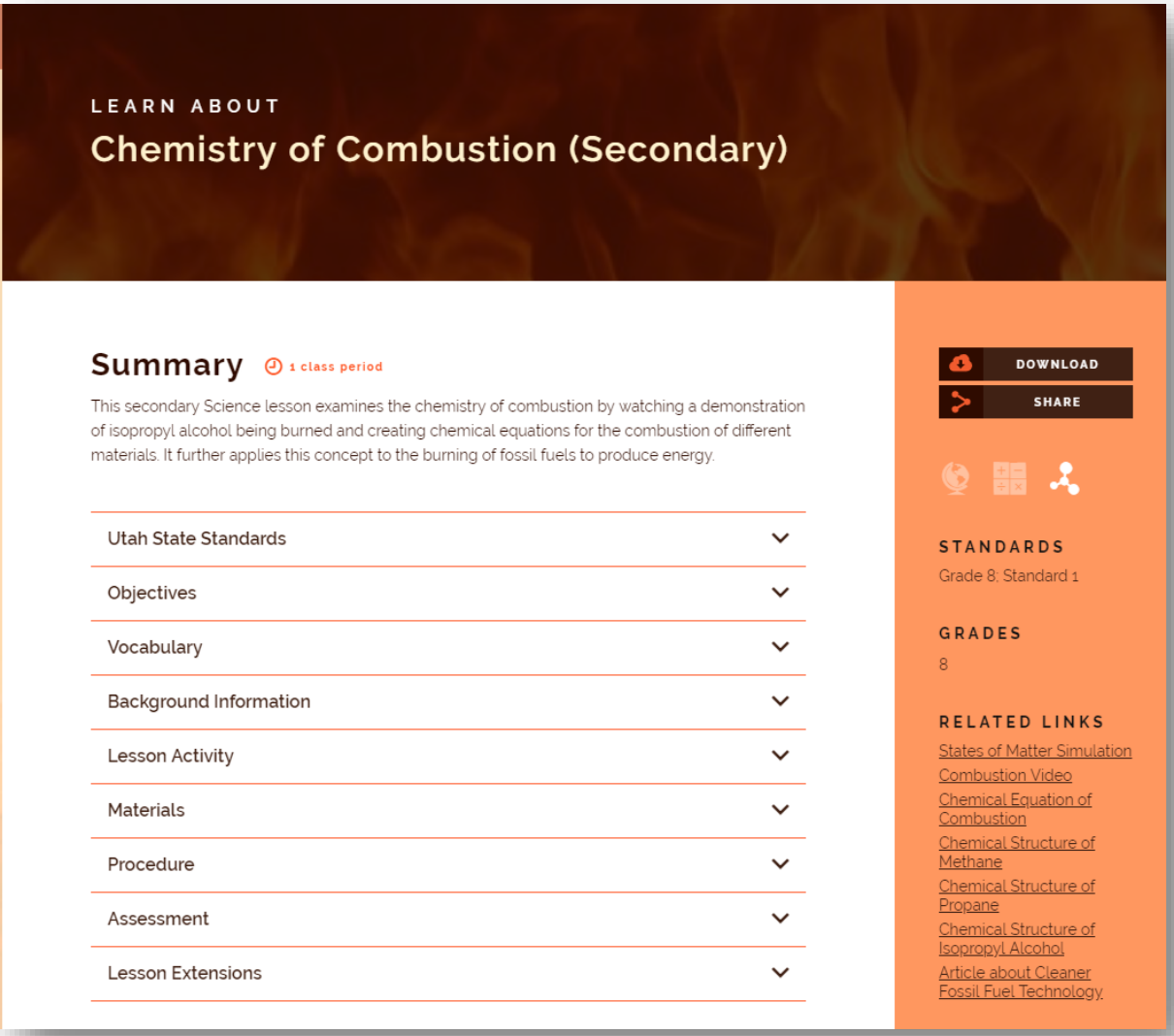

LEARN ABOUT

Chemistry of Combustion (Secondary)

Summary 1 class period

This secondary Science lesson examines the chemistry of combustion by watching a demonstration of isopropyl alcohol being burned and creating chemical equations for the combustion of different materials. It further applies this concept to the burning of fossil fuels to produce energy.

- Utah State Standards
- Objectives
- Vocabulary
- Background Information
- Lesson Activity
- Materials
- Procedure
- Assessment
- Lesson Extensions

DOWNLOAD

SHARE

STANDARDS

Grade 8: Standard 1

GRADES

8

RELATED LINKS

- States of Matter Simulation
- Combustion Video
- Chemical Equation of Combustion
- Chemical Structure of Methane
- Chemical Structure of Propane
- Chemical Structure of Isopropyl Alcohol
- Article about Cleaner Fossil Fuel Technology

To Date

- 24+ Lesson plans
- Covering grades 3-12
- 3 Lesson types
- Set to Utah State Standards
- Featuring STEM based activities
- Free to download

Energy & Minerals Education Videos

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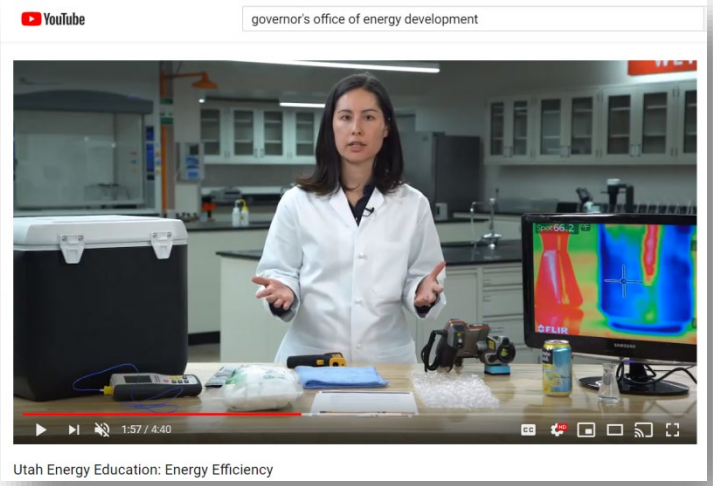
- 40+ YouTube Videos
- Featuring 6 hands-on energy and minerals education activity videos
- Directly tied to their specific lesson plan
- Designed with the teacher in mind



Scholarship Programs & Partnerships

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- Utah Energy Workforce Scholarship Program
  - 3 years running
  - 13 Scholarships awarded
  - Total amount awarded = $48,000

Workshops, Trainings, and Events

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- Governor's Energy Summit
- The Energy and Minerals Pavillion at STEM Fest
- Utah's Energy Career Expo
- 8th Grade Classroom Presentations
- SheTech Explorer Day
- CTE Pathways to Professionals Conference (Fall 2018)
- Utah Science Teachers Association Conference (Winter 2019)
- Greenpower Electric Car Challenge

Conclusion/Continued Partnerships

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- Building partnerships
- Increasing public awareness
- Elevating the value of public-private partnerships
- Growing our curriculum
- Integrating utahenergyed.org with media and partners
- Supporting workforce development through event participation
- Driving Utah's rising generation to supporting our energy and minerals future

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Thank you!

Kevin Brooks
kevinbrooks@utah.gov
801-538-8725