NHSaves Education Challenge

Elevate student voice and give students an authentic audience for their work through the NHSaves K-12 student writing challenge. Students respond to topics about energy efficiency and create projects to educate and encourage their community to make sustainable energy choices. Submission format may vary as long as a written component is included with the entry and the project is shareable via local newspapers, on school websites, or other public formats. Winning entries will be selected three times per year, published through various media outlets, and awarded a prize. See the NHEEP website for all details.

Guidelines for entries:

1) Work should be that of students themselves, though teachers or parents can guide the process through questions and suggestions.
2) Submissions may include (but not be limited to) essays, poetry, informational comics, scripts, infographics with explanation, a letter, or the script of a speech. The written portion of each project must be submitted.
3) Submissions may be the work of individuals or groups.
4) Please submit edited, legible work. Adult guidance and suggestions are fine, but the edits should be completed by the students.
5) Submissions should include permission to publish.
6) NHEEP will assess student responses using this writing rubric.

Grade levels: 7-9

Writing Instructions:

1. Read, watch/listen to at least four resources (listed resources, class work, and/or personal research).
2. Choose one prompt. Write in response to the prompt. Length should be about 300-500 words.
3. You must specify your target audience.

4. Be sure to include evidence from at least 4 sources in your own words and cite at least 4 sources appropriately.

Prompts/Questions:

Prompt 1: Describe "phantom power" and identify sources of "phantom power" in your home and school. Determine and propose possible solutions to eliminate these sources in your home, school, and other public buildings.

Prompt 2: What more could our state do to decrease the environmental impacts of electric or heating energy use?

Prompt 3: Explain 'energy efficiency' and give reasons it is beneficial for people and the environment. Describe one cost-effective way homes, schools, businesses, or municipalities can increase energy efficiency.

Resource Links:

Phantom Power

- **Reading**: *"Phantom of the Outlet: Why You Should Pull the Plug"* by Carla Davis from NC State University © 2014 https://sustainability.ncsu.edu/blog/changeyourstate/phantom-load-save-energy-at-home/
- **Reading**: *"Phantom Load: How Unplugging Can Save You $100 or More"* by Native Energy © 2017 https://nativeenergy.com/2017/11/phantom-load-how-unplugging-can-save-you-100-or-more/
- **Reading**: *"Phantom Power"* by Hydro One © 2009-2019 https://www.hydroone.com/saving-money-and-energy/residential/tips-and-tools/phantom-power

- **Video:** *"Phantom Power - Save On Energy Bills by Unplugging Devices"* by Alliant Energy on AEPowerHouseTV © 2016 https://www.youtube.com/watch?v=VACJdcgUpmY
- **Borrow a Kill-a-Watt Meter** - Contact your local library or NHEEP in order to borrow a meter to check for phantom loads in your home.

Electricity Sources and Impacts

- **Reading**: *"Electricity in the United States"* by U.S. Energy Information Administration © March 2020 https://www.eia.gov/energyexplained/index.php?page=electricity_in_the_united_states
- **Reading**: *"Are we powering our way into a climate crisis?"* by Environmental Science Journal for Teens © October 2018 https://sciencejournalforkids.org/wp-content/uploads/2019/09/Future_article.pdf
- **Reading**: NEED Energy Infobooks © 2018 https://www.need.org/energyinfobooks
- **Video:** "*Electricity 101: Electrical Generation"* by EnergyNOW © 2011 http://www.viewpure.com/20Vb6hlLQSg?start=0&end=0
- **Video**: *"Renewable Energy 101"* by National Geographic © 2017 http://www.viewpure.com/1kUE0BZtTRc?start=0&end=0

Energy Efficiency

- **Reading**: *"What it really takes to power your home for a day"* by Popular Science © 2018 https://www.popsci.com/what-it-takes-to-power-home-for-day/
- **Video**: *"Saving Energy Around the Home - Energy Efficiency Tips"* by Reduction Revolution © 2016 http://www.viewpure.com/pY6fAYkscTY?ref=bkmk
- **Video:** "*Peak Demand"* by EnergexLtd. © 2014 https://www.youtube.com/watch?v=CwnZyu940lo

Additional NHEEP resources: Electricity and the Environment Workshop
https://www.nheep.org/

Standards:

ELA Common Core Writing Grade 7 (referenced writing standards are for 7th grade)

ELA Common Core Language Grade 7 (referenced writing standards are for 7th grade)

ELA Common Core Science and Technical Subjects Grade 6-8

ELA Common Core Discipline Specific Content Grade 6-8

CCSS.ELA-LITERACY.W.7.1 Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-LITERACY.W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

CCSS.ELA-LITERACY.W.7.3 Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

CCSS.ELA-LITERACY.W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCSS.ELA-LITERACY.W.7.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

CCSS.ELA-LITERACY.L.7.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-LITERACY.RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts.

CCSS.ELA-LITERACY.RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

CCSS.ELA-LITERACY.WHST.6-8.1 Write arguments focused on discipline content.

CCSS.ELA-LITERACY.WHST.6-8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

CCSS.ELA-LITERACY.WHST.6-8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and

generating additional related, focused questions that allow for multiple avenues of exploration.

CCSS.ELA-LITERACY.WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

CCSS.ELA-LITERACY.WHST.6-8.9 Draw evidence from informational texts to support analysis, reflection, and research.

NGSS:

MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

HS-ESS3-2 Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

MS-ESS3-4 Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

MS-ESS3-5 Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.