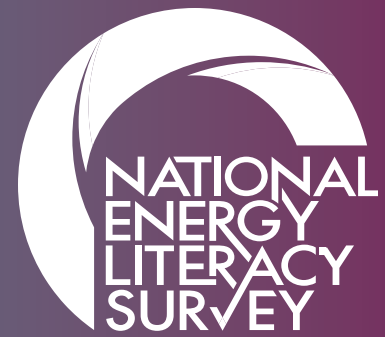




National
Energy
Foundation®

NATIONAL ENERGY LITERACY AMONG HIGH SCHOOL SENIORS AND RECENT GRADUATES

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OUR HISTORY

The National Energy Foundation (NEF) has empowered millions of students and families to make wise energy choices for over four decades through its nonprofit mission to cultivate and promote an energy literate society. A community of volunteer classroom teachers and staff educators brings unique educational integrity to NEF's K - 12 energy education programs, with many programs resulting in national recognition like the award winning energy efficiency program, Think! Energy. Energy utilities and organizations partner with NEF to address critical energy topics such as efficiency, safety and transportation. NEF recognizes the importance of education in making informed energy decisions.

Energy from natural resources impacts our economy, our national security, the environment, and our quality of life. Access to energy knowledge allows students from any background and circumstances to be empowered in personal energy decisions, as well as local and national energy discussions. Energy education in schools is an effective way to deliver important messages to students, families and communities on a local and national level.

As NEF continues to grow our national presence we are committed to representing the communities in which we serve and the classroom educators who make our work possible. Each year, NEF reaches communities across the country with a diverse makeup of teachers, students and families. Achieving our mission to cultivate and promote an energy literate society requires our teams to stay current with critical energy topics, maintain educational integrity, and understand the behaviors and attitudes of students toward energy.



ABSTRACT

In 2017, the National Energy Foundation conducted a national survey to assess the energy literacy of high school students. The survey, which included a demographically diverse sample of 2,005 high school seniors and recent graduates, used a robust assessment tool to measure understanding of five core energy topics. The goal of the study was to develop a framework for measuring energy literacy and to obtain a benchmark for future reference. Using the benchmark set by this first iteration, another study was commissioned five years later in 2022. This second study was conducted in the same manner as the first: it polled a representative sample of 1,559 high school seniors and recent graduates, and it provided longitudinal data to highlight changes in literacy. The results show that there has been a statistically significant drop in energy literacy among high school students in the United States. Along with this drop in literacy, students were also slightly less likely to engage in energy efficient behaviors. Such results invite collaborative and broad-sweeping energy education initiatives to help students enter their adult years as informed consumers and voters.

ENERGY POLICY AND HIGH SCHOOL

Energy-related headlines over the past few years have continued to drive narratives around renewable energy, energy efficiency, research and technology, and infrastructure. In 2022, governmental policy continues to promote energy efficiency and renewable energy with incentives and credits. Technological developments in domestic oil and natural gas production inspire debates regarding the protection and development of energy resource-rich local lands. Electric vehicle ownership and production have accelerated, buoyed up by legislation incentives.ⁱ Solar energy is becoming more affordable and mainstream.ⁱⁱ Debates continue surrounding nuclear energy's place in our modern world, and voters, activists, and leaders struggle to counterbalance oft-competing economic benefits and environmental impacts.

Although political opinions vary, one thing is clear: having an energy-literate voter population is of utmost importance to generating productive conversations and sustainable solutions. Are today's

high school seniors and recent graduates informed enough to join the conversation? As young voters, do they understand energy well enough to support policies that foster energy independence, national security, and economic prosperity while also accounting for responsible environmental impact?

The short answer is: probably not. The average high school senior is wrapped up with thoughts of college applications, social interactions, prom dates, and impending graduation. Recent graduates are moving away from home for the first time, adjusting to the workforce or college campus life—tasting the thrill of independence tinged with the fresh burden of adult responsibility. With everything that high school seniors and recent graduates have on their minds, it's no surprise that research showsⁱⁱⁱ they don't spend much time thinking about energy consumption and policy. Yet, the graduating seniors of today are the voters of tomorrow. They are active consumers of energy, and their hands will shape future domestic and global energy policy. If their energy literacy scores are low, how will they make informed decisions as they enter adulthood?

To add granularity and humanity to these broad-stroke concepts, we interviewed Cassandra,^{iv} a mother of an 18-year-old recent high school graduate, about her son's energy literacy. "As a digital native, my son hardly understands life without a cell phone in his hand—how to drive anywhere? Apple Maps. How to connect with friends? Snapchat and TikTok. How to relax? Game apps and YouTube. Because high school kids nowadays spend most of their time on their phones, they are also dedicated energy consumers with a daily routine of charging up a phone and a school-issued laptop in order to complete assignments. Can't survive a day without a full charge!"

"Although electronics govern students' communication methods, schoolwork, and entertainment, I would say that their understanding of energy—and frankly their interest in it—often stops at the wall socket. Plug in and play. Some high school seniors have an interest in environmental politics, but they often occupy the margins more than the mainstream."

"I would say my son's energy literacy is somewhat higher than most of his peers because he is really into physics. For example, he could easily explain concepts that you surveyed like chain of energy transformation and light bulb energy conversion, and he'd probably even draw a scientific diagram. However, he does not know as much about the production and consumer issues you surveyed, like how renewable energy resources are defined. This is somewhat interesting because we live in Houston, TX, which is known as "The Energy Capital of the World." Many local high school kids have parents who work in the oil and gas industry—from port operators, to plant operators and chemists, to supply chain and executives. That energy industry information has to rub off.

"Although my son has chosen to attend college to study computer science, some of his peers will instead start jobs at chemical plants or at the Port of Houston—it's great money for a kid that age. Those grads will learn firsthand many energy-related concepts that you surveyed, but that high school did not teach them, such as about import and processing of petroleum, production of power, and so on. Honestly, I'm not too surprised that most high school seniors nationally have probably never heard of these energy-related things. I mean, I worked in the oil and gas industry for about five years and I couldn't tell you the definition of energy literacy offhand!"

We will pause the interview here so that we can explain the details of the study. In 2022, we performed a follow-up study to our benchmark 2017 study. With this benchmark, we identified demographics, built measurement machines, stress-tested our survey questions, and collected data designed to benchmark future data and reveal where energy education in K-12 is working. We will explain below how we define energy literacy, and we will summarize our research objectives, methodology, results, and recommendations.

ENERGY LITERACY

Energy literacy as defined by the US Department of Energy, "is an understanding of the nature and role of energy in the world and daily lives accompanied by the ability to apply this understanding to answer questions and solve problems."^v Beyond simple scientific knowledge, energy literacy also includes an understanding of energy systems and a willingness to act on that knowledge.^{vi} According to the Department of Energy, an energy-literate person:

- Can trace energy flows and think in terms of energy systems
- Knows how much energy they use, for what purpose, and where the energy comes from
- Can assess the credibility of information about energy
- Can communicate about energy and energy use in meaningful ways
- Is able to make informed decisions based on an understanding of impacts and consequences

HOW INFORMED ARE AMERICANS?

Historically, research has shown relatively low energy literacy scores for young people in the United States.^{vii} For example, a 2011 study published in *Energy Policy* showed that secondary students in New York State “may lack the knowledge and skills they need to effectively contribute toward solutions.”^{viii} A 2012 study of urban eighth-grade students’ energy literacy identified “many misunderstandings” students held “with regard to energy resources” and “low conceptual energy knowledge” overall.^{ix} Various studies and reports^{x, xi} suggest that American high school students currently have a limited understanding of energy-related topics and issues. Our own 2017 study also showed relatively low energy literacy among this demographic, even among groups who were concerned about energy-related topics and issues.^{xii} In short, Americans as a whole have fairly low energy literacy.

Why target this age group? High school seniors and recent graduates are at a pivotal point when students transition into young adulthood and take on greater responsibility for their energy consumption, voting behavior, activism, and so on. Because real change starts young, organizations such as the National Energy Foundation (NEF) regularly secure and

deploy resources to engage with students early on in their K-12 education with the goal of driving real change for communities and future leaders of the United States. As yesterday’s students become today’s workers, voters, and leaders, their energy literacy directly affects their ability to make informed policy decisions around sustainable energy, energy-related national security, and environmental impacts.

RESEARCH OBJECTIVES

The results from 2022 paired with past data from 2017 provide valuable insight into areas of emphasis or improvement. Using longitudinal data, we can assess the trajectory of energy education in the United States and identify which areas and demographics are losing or gaining literacy. The survey is designed to return tangible data that answers these questions: Are high school seniors of today as informed about energy consumption and policy as were high school seniors of five years ago? As new voters, what do they understand about energy policy around consumption and production, including the economic and environmental impacts?

As with the past iteration, the primary objective of this study was to develop an understanding of energy literacy among high school seniors and recent graduates, as well as to compare this cohort’s scores with those of the past group. To accomplish this goal, we designated the following four research objectives:






1. Test the explanatory and predictive value of various elements typically associated with energy literacy
2. Identify understanding of, perceptions regarding, and behavior related to the core elements of energy literacy
3. Assess differences in energy literacy associated with variation in regional,

educational, and other demographic categories

4. Understand energy literacy among predefined segments established in 2017, as well as provide a modern longitudinal comparison to the past iteration of this study

METHODOLOGY

As with the benchmark survey in 2017, the 2022 survey utilized a thorough framework for testing energy literacy, as designed by industry experts and educators. We implemented holistic research methodology to ensure that the data captured were accurate, complete, and reliable around the five core energy topics:

-  Basic Energy Concepts
-  Energy Use
-  Energy Tradeoffs and Implications
-  Energy Efficiency and Conservation
-  Sources and Types of Energy

In order to generate longitudinal data, these core topics remained consistent for the second iteration of the study. To keep pace with the times, some questions were added and adjusted to test literacy on topics which are more prevalent now compared to five years ago. Table 1 summarizes the key themes, concepts, ideas, and facts that were identified for each core topic.






CORE ENERGY TOPIC	THEMES
 BASIC ENERGY CONCEPTS	<ul style="list-style-type: none"> General definition of energy Laws of energy Energy transformation
 ENERGY USE	<ul style="list-style-type: none"> Consumer energy usage General energy consumption trends Health and safety factors
 ENERGY TRADEOFFS	<ul style="list-style-type: none"> Quality of life Energy resource limitations Energy development impacts/constraints
 EFFICIENCY AND CONSERVATION	<ul style="list-style-type: none"> Impact of technology on energy Impact of behavior
 SOURCES & TYPES OF ENERGY	<ul style="list-style-type: none"> Energy sources Renewable versus nonrenewable Types and forms of energy

Table 1: Core Energy Topics

REACHING A NATIONAL SAMPLE

We recruited over 1,500 high school seniors and recent graduates through a leading consumer panel company that randomly sampled the target population. Partnering with a panel provider ensured high data integrity and a sample of students that is representative, reliable, and engaged.^{xiii} To ensure proper student representation, we enforced quotas during data gathering to balance distribution of responses across census-defined attributes, including:

- Geographical region
- Age
- High school status
- Household income
- Gender
- Ethnicity

Over a period of three weeks, participants aged 18 years and older could complete

the entire online assessment themselves. Participants under the age of 18 required parents' responses for certain demographic questions, as well as parental consent to their participation in the assessment.

NATIONAL ENERGY LITERACY RESULTS

The remainder of this paper focuses on results and recommendations. We'll break down results into energy literacy scores, demographic differences, and attitudes and perceptions.

ENERGY LITERACY SCORE

Each participant's energy literacy score is calculated as an average of the percentage of correct responses for each of the five core energy topics, weighted such that the overall score is therefore an average of the components, not the average of all the questions. The overall average energy literacy score for 2022 high school students and recent graduates is 42.4 out of a maximum score of 100. The distribution of scores is normal. In 2017, the overall score for the same target population was 48.8, representing a drop of 6.4 points over that timeframe.

Many factors could have influenced literacy scores among high school seniors and graduates. One of the most notable things between 2017–2022 that directly impacted the lives and education of high school students was the COVID-19 pandemic. When students were sent home for safety and education suddenly moved online prior to platforms and teachers being fully ready, education quality overall suffered. It was difficult enough to get students through core subjects like math, science, and English that extra programming related to energy literacy was sometimes sidelined. In addition to changes in education, students also struggled with the emotional impact

of isolation, uncertainty, and fear. Many faced illness and mortality of loved ones in a real way for what might have been the first time in their lives to date. Sustained over the course of years, such stress could understandably have reduced the bandwidth for students in learning about energy—it is difficult to stoke curiosity about sources and types of energy, for example, when you are wondering whether you will get to see your friends again in the coming months. Whatever the reason, the data results are clear: energy literacy has declined over the past five years, and US educators have a chance to re-engage to boost energy literacy of future cohorts of students.

Literacy scores varied across the five core energy topics, with students scoring highest on energy efficiency and conservation (51.6) and lowest on topics about energy use (28.1). The other topics returned median results, including basic energy concepts, energy tradeoffs and implications, and sources and types of energy. Conservation is an understandable high score since that concept is emphasized at school and at home with financial motivation—any savings on the energy bill is money that can be allocated toward other family expenses.

Reinforcing the validity of the methodology, the scores' normal distribution is an important indicator of the scoring metric's usefulness. Other common assessments for high school students such as the Standard Achievement Test (SAT) and American College Testing (ACT) also have a normal distribution. Figure 1 provides greater detail regarding the energy literacy score curve.

ENERGY LITERACY SCORE DISTRIBUTION

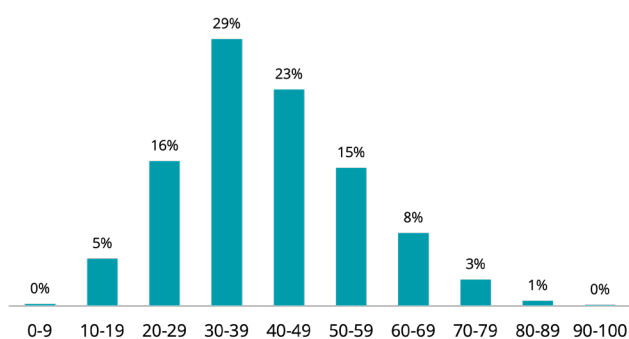


Figure 1: Energy Literacy Scores

DEMOGRAPHIC ANALYSIS

The overall energy literacy score varied substantially across certain demographic groups by age, ethnicity, household income, political affiliation, geography, and parent education.

Age. Younger respondents in our sample had higher scores compared to their older counterparts. 16- and 17-year-olds scored an average of 46.7, while 18- to 19-year-olds averaged more than 5 points lower at 41.4.

Ethnicity. Asian seniors and recent graduates had the highest literacy score at 47.9, more than 3 points higher than any other group. Black or African American individuals in the study had the lowest average energy literacy score at 36.3.

Household Income. Unsurprisingly, household income was positively correlated with energy literacy scores. Students with household incomes below \$50,000 scored the lowest at 39.7, while those with household incomes above \$100,000 had an average score of 47.6. Although the 2022 scores are still lower overall than students surveyed in 2017, the same correlation carries through in the data such that students in homes with higher household incomes had higher energy literacy scores.

Political Affiliation. There were slight differences shown between political

affiliation and energy literacy. Students who considered themselves somewhat liberal or very liberal showed higher energy literacy scores than those who considered themselves somewhat conservative or very conservative (44.2 vs 42.2).

Geography. Students living in a suburban environment had the highest scores at 43.8, scoring above those who live in rural or urban geographies, at 40.9 and 39.9 respectively. This can be partially explained by socioeconomic and cultural differences between urban and suburban/rural communities.

Parent Education. Parental education proved to be a significant differentiator for students' energy literacy scores. Those whose parents had not finished high school scored an average of 39.9, while those whose parents had graduate degrees scored roughly 9 points higher at 49.0.

For comparison, demographic data patterns in this study show similar distributions and trends common to standardized testing scores, which could imply that students' demographics—and especially ethnicity, household income, and parental education—affect not only students' understanding of energy, but also their education as a whole.^{xiv}

Regarding future strategy, because the results regarding energy literacy echo results about academics overall, researchers and educators who are investing in improving education for lower socioeconomic status and minority students could take on the challenge to also provide further education regarding energy literacy. Several federal and nonprofit organizations^{xv, xvi} provide materials that could support the process and make a tangible difference.

ENERGY ATTITUDES AND PERCEPTIONS

In addition to the knowledge-based assessment designed to deliver the energy literacy score, the survey included 22 attitudinal questions and behavioral measures found within the study to create distinct personas in the data. These were designed to track trends and enable categorization in broad thought patterns. We used factor and cluster analyses to segment the surveyed population into four distinct groups, each with varying levels of engagement and differing perceptions of energy. The four personas are agent of change, mindful wanderer, big talker, and indifferent onlooker.

Agent of Change. These 27% students place a higher priority on energy than others do, and they are fairly engaged across multiple areas of energy. They perceive energy as a critical component of national policy, and they are focused on the environment. Being fairly vocal about expressing their opinions on energy, they

tend to take responsibility in making a difference. They are highly knowledgeable about energy efficiency and conservation, as well as about the sources and types of energy. This 2022 group size stayed about the same compared with the 2017 benchmark of 29%.

Mindful Wanderer. In 2017, this was the largest of all segments at 36% of students, but it dropped substantially over the past five years to 24% in 2022. These students see the importance of energy, but they are unsure what they can do to get involved or make a difference—perhaps because they feel their impact on the bigger picture is too small. They are unlikely to get involved in policy or activism although they would be likely to take smaller steps like turning off lights when they leave the room.

Big Talker. At approximately 32% of students, the 2022 Big Talker group size rose significantly from the 2017 benchmark of 11%. Big Talkers agree that energy is important, but they are unwilling to change many personal energy-related behaviors

ENERGY LITERACY ACROSS CATEGORIES AND GROUPS

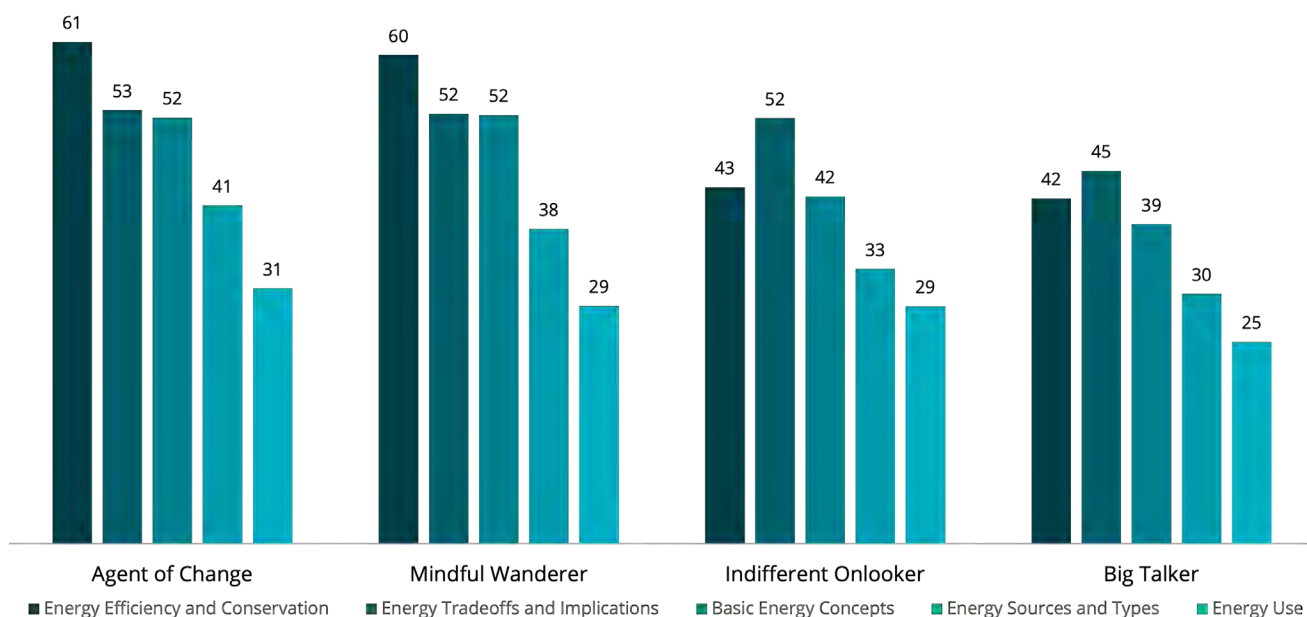


Figure 2: Energy Literacy Scores

if there is an impact on their personal comfort and convenience. This group was the largest of all groups in 2022.

Indifferent Onlooker. This group size in 2022 at 17% actually shrank compared with the 2017 benchmark of 24%, which implies that students are becoming more polarized about energy issues. When asked about energy topics, these students don't express a strong opinion either way. Their energy literacy score is below the average, and they express enthusiasm-free neutrality toward energy-related topics.

ENERGY ACTIONS AND BEHAVIORS

When it comes to taking action to conserve energy, some students report actively engaging in behaviors that make a difference. For example, most students turn off lights before leaving a room, but they are less likely to be doing more impactful (and expensive!) activities, such as actively obtaining and installing energy efficient products. Unsurprisingly, Agents of Change are most likely on average to take action to conserve energy, while Big Talkers and

Indifferent Onlookers are least likely to take measures to conserve, particularly if those measures negatively impact personal comfort.

Table 2 provides greater detail about how behavior modification percentages have evolved since the 2017 benchmark. These results show that alongside the decline in literacy, energy efficient behaviors have also dropped somewhat since 2017. Turning off lights is still the most common behavior, and the largest behavior change is represented by the 7% drop in those who choose to consciously travel without a car.

Student Research. In the survey, students were provided a list of energy-related topics and asked which they were most likely to learn more about during their own research. Many expressed interest in energy efficiency and environmental impacts, and several students honestly indicated that they are unlikely to independently seek out information on energy.

Information Sources. For information about energy, students are most likely

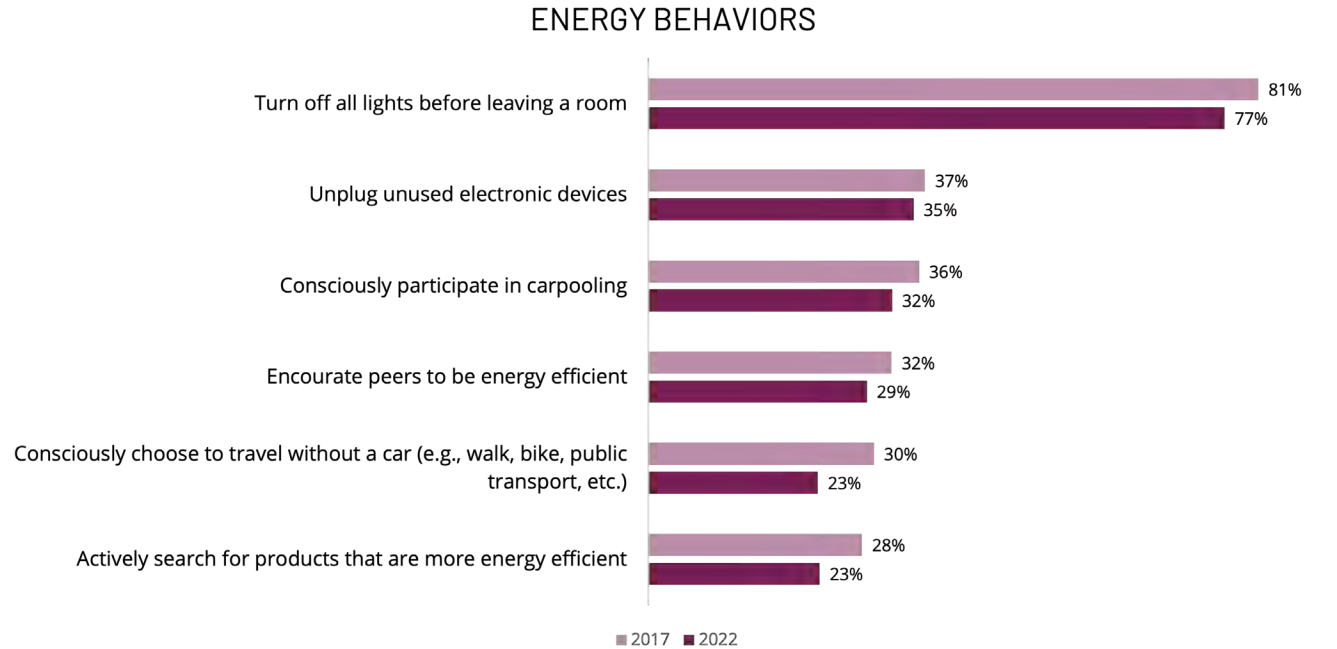


Table 2: Energy Behaviors

to first turn to an internet search engine, which is no surprise as these students are digital natives. Some students would turn to family or friends for more information, although conversations regarding energy are not always popular. Compared with 2017 benchmark data, students in 2022 are increasingly looking for information on social media, such as Twitter, TikTok, YouTube, etc. Very few students said they would turn to teachers, textbooks, or nonprofit organizations for information. This likely has to do with student attitudes toward teachers and textbooks as well as their lack of information about helpful nonprofit organizations.

FUTURE RESEARCH IMPLICATIONS

Using this established energy assessment survey with ongoing cohorts will enable us to measure the effects of both local and national campaigns to improve energy literacy. Combined with implementation science, this measurement will enable educators to see which efforts are working to improve energy literacy and which are not working as well.^{xvii} Over time, the survey will catalogue shifts in attitudes and behaviors that correspond with greater energy literacy.

Future national energy literacy study results may suggest more customized recommendations to help energy initiatives gain long-term traction among high school students. As stakeholders come together to enhance educational resources, improvements can be made to foster student understanding of energy basics, energy sources and types, energy usage, tradeoffs and implications, and efficiency and conservation.

CONCLUSIONS AND RECOMMENDATIONS

The most obvious conclusion of this survey is that energy literacy education has room to grow. High school seniors and recent graduates have some base knowledge—especially among specific demographics—but many students are entering their adult years without the ability to join the broader discussion. Although this demonstrated gap is somewhat disheartening, it highlights an exciting educational opportunity to engage students in energy information, behaviors, and policies. Environmental concern alone does not usually lead to meaningful behavior change; rather, behavioral change comes from strong energy education.^{xviii}

Accordingly, here are seven possible avenues for strengthening energy education for young adults:

- 1. Utilize Technology.** Research shows that technology such as online videos can create more engagement with students.^{xix} Real-time displays of smart meters can allow children to see energy consumption in real time. Game-type phone apps could fill a niche by providing accurate age-appropriate energy-related information.
- 2. Connect with Industry.** Invite people who are involved closely with energy production and distribution to interact with students and explain their industries. Many energy companies have dedicated energy workforce development efforts, which facilitate this kind of connection.
- 3. Harness Peer Influence.** Students who fall into the Agents of Change group can help sway the other groups. Agents of Change are not only convinced that energy is important, but they are also relatively engaged in energy-related topics. For the time being, the other three groups are not sufficiently convinced

of the importance of energy and are not actively engaged in discussions related to energy.

4. **Improve Energy Education in the Classroom.** Refine curriculum to strengthen energy-related learning standards around core topics. Educators can partner with nonprofit organizations such as the National Energy Foundation, who have information and projects designed to improve student energy literacy.
5. **Provide Extra Support for Lower-scoring Demographics.** Strategize how to improve student access to knowledge as well as how to engage students in energy-related discussions. Invite students to translate their knowledge about energy into specific conservation and awareness behaviors. Implement rewards. Because the results regarding energy literacy echo results about academics overall, researchers and education organizations who are investing in improving education for lower socioeconomic status and minority students could also provide education regarding energy literacy. Several federal and nonprofit organizations offer materials that could support the process. For example, educators could utilize programs from the Department of Energy, the National Energy Foundation, and numerous energy industry players that promote energy literacy for children and adults. These programs are engaging, and often have a competition or challenge aspect. It takes a community.
6. **Take the Message Home.** Energy literacy is reinforced best at home. To help reverse the decline in energy efficient behaviors seen since 2017, educate families about cost-saving energy savvy behaviors.^{xx} Keep the

tone of the message encouraging rather than guilt-inducing, and customize suggestions as needed for specific family situations and home environments.^{xxi}

7. **Roll Out Behavioral Initiatives in Phases.** As we consider initiatives, it is generally easier to get people to conserve energy than to proactively install energy efficiency devices.^{xxii} Thus, effective initiatives should take a phased approach. Begin with lower hanging fruit, so to speak, like conservation by turning off lights (and thus saving money), and then graduate to more difficult, proactive tasks like installing efficient light bulbs or making weatherization improvements (with an upfront cost to produce future savings). High school seniors and recent grads generally don't have a huge budget, so they're very unlikely to spend money on weatherstripping or door sweeps, for example. But, they might be able to influence family purchasing decisions if they care about the issue. We can start with conservation behaviors which cost nothing and have a feel-good aftertaste.

THREE FINAL PRACTICAL RECOMMENDATIONS

To conclude, we'll return to the end of our interview with Cassandra, mother of an 18-year-old recent high school graduate. We summarized survey results and asked if she had any action plan suggestions borne of life experience.

She responded: "How can we incentivize high school kids to learn more about energy and thereby improve their energy literacy? That's a tough one. They seem to automatically care about energy when

it affects their lives and particularly their phones. When the power goes out, the world as they know it ends because they cannot entertain themselves with video games or computer games, and they cannot connect with friends on Snapchat, TikTok, or whatever app is in vogue. Overall, students are just more focused on what they can do with energy, such as developing and interacting with artificial intelligence. Students are less focused on how the energy that powers their phones and computers is produced and transported.”

The principle of focusing on what young adults can do with energy is, of course, of great importance. But the principle of how energy is produced and distributed is also critically important. After all, if we want people to make positive energy decisions both in their personal lives and in the voting booth, this knowledge is fundamental to informing those behaviors. This foundational need leads us to our final recommendations.

- 1. Involve the Internet.** The generation currently graduating high school uses the internet in every piece of their lives. We can do a better job of aligning educational resources to formats that fit within the lives of these young adults. The possibilities are endless. We have seen internet challenges like “the ice bucket challenge” raise awareness for physical ailments like ALS^{xxiii}, capitalizing on the desire people have to do quirky things, get attention, but most importantly contribute to worthy causes. Influencer psyche is very comfortable saying ‘look at me doing something fun for an important cause – now your turn!’ The more we can use the internet in formats which connect more with graduating students, the quicker we can get key messages across as they

transition to adulthood.

- 2. Align Literacy to Incentives.** As we have discussed in this paper, students at this age are very distracted not just by the increased presence of social media but also the large decisions they are going to make such as whether to go to college and how to pay for it, or what their first step is toward their future careers. There is a possibility to attach scholarships for school or funding for work training programs to students who take energy issues and literacy seriously. Whether through a literacy test, essay contest, or other means of finding these students dedicated to energy and conservation issues, aligning energy knowledge to making their next steps easier could help incentivize learning about these topics and applying them to their behaviors.
- 3. Capitalize on Interest in Energy Topics.** The results of our study showed that while energy literacy rates have dropped, many students are concerned with and interested in things like energy efficiency, resources, and conservation. Clearly, the interest is there, but there may be a disconnect between interest and behaviors. It is a great thing that youth are interested in energy topics, but they need to make the connection between their behaviors, the energy principles surrounding those behaviors, and the challenging energy-related tradeoffs that are a part of our rapidly changing world. It is our job to continue giving students of all ages interesting and useful information, and in time as they enter public policy conversations, they will be armed with the knowledge they need to be good citizens, voters, and leaders with regards to energy.



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