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Last Paper

Energy Policy and Education

According to the online version of American Heritage Dictionary of the English Language, a school is "an institution for the instruction of children"¹. Nowhere within the definitions given is the word described as a place where learning takes place or where children go to gain valued knowledge. The whole 'hallowed halls of learning' is a myth propagated by movies and some educators. In reality schools are where children go to learn how to fit into society. Why else would one of the largest complaints against homeschoolers be the possible loss of social skills²? Schools teach children the 'rules.' While Americans may have more difficulty in admitting that schools have nothing to do with knowledge, other countries not only admit the fact, but expect it. In Japan teachers act as parents toward their students and raise the students to be 'good Japanese.' In *Learning to Bow* former English teacher, Bruce Feiler, notes that many students complained that they had to attend a *juku* or cram school because they did not learn anything useful in school. However, they do learn how to work together, how to not stand out, and so on³. The entire education system is not to educate, but rather to integrate students into society.

An interesting perspective on schooling that sets the stage for your thesis below.

¹ American Heritage Dictionary of the English Language: Fourth Edition 2000. Bartleby's: <http://www.bartleby.com/61/4/S0140400.html>.

² Suzie Hanrahan. "Home is Where the School Is" (2001) <http://easyreader.hermosawave.net/news2001/0906/mb-homeschool-090601.asp> 11.

³ Bruce Feiler. *Learning to Bow*. Ticknor and Fields, New York: (1991), chapter 15.

Therefore, how a student functions within a society depends greatly upon what he or she learned while schooling. This is why the government needs to consider education when formulating an energy policy. While finding alternative fuels and curbing consumption are important concerns, the energy crisis will only escalate if the mindset of the nation remains unchanged.

I pointed out the following quote in my comments on Emily's paper and will do so again here, because it's one of my favorite quotes from Al Gore's book: "There is a great danger in seeing technology alone as the answer to the environmental crisis. In fact, the idea that new technology is the solution to all our problems is a central part of the faulty way of thinking that created the crisis in the first place." ["Earth In The Balance" by Senator Al Gore, Houghton Mifflin Co., 1992]

Unfortunately, shifting the paradigm of an adult is extremely difficult. Most people beyond school age have become set in their ways and normally only a crisis of some sort can move them. Children, however, bend easily. So unless children are taught that consumption is bad and efficiency good, the mindset of the nation will probably never change and any measures the government takes will only serve as ragged bandages on a growing, gaping wound.

Luckily, the need for energy education in schools has been recognized before. The government would not be starting with a blank slate. When the concern for energy in education began, the issue was tied closely to environmentalism. So to understand how the status quo came to be, the fluxes of involvement in environmentalism must first be examined. Environmentalism has enjoyed many large swells of involvement starting as far back as the Industrial age in the United States. However two large swells of involvement are of the most interest to this topic. The first occurred in the 60s when the

connection between population and pollution was first realized⁴. This swell culminated with Earth Day 1970⁵. While this first Earth Day was distinct from any school systems, lower level schools now use the day to promote environmental (and by extension, energy) concerns. Some schools schedule special events, such as clean-up parties or tree-planting, to celebrate the day. Now, while these events do promote some awareness in students, many schools use the day as an excuse. By this, I mean, many schools do not educate students about energy except around Earth Day, as if celebrating April 22 made up for the other 179 days of the school year when energy is neglected.

The second swell of involvement occurred in the early to mid- 1980s. This flux actually spawned the initial concern for energy education in schools⁶. Many students who were in school during the 80s probably received an onslaught of energy education, a great portion of which may have been in posters and such. This concern faded however in the economic upbeat of the early 90s. However now, the need has been reawakened. Some isolated school communities are beginning programs. One organization, Rebuild America⁷, provides teachers with a top 10 list which enumerates the reasons why energy should be taught within schools and it also provides information about how teachers could get students in energy.

The National Department of Energy has also started to recognize the importance of education in the past decade or so. However, the focus of the department is placed upon the training and raising of future scientists. While events may double as ways to

⁴ <http://husky1.stmarys.ca/~evanderveen/wvdv/Environment/environment_movement.htm>

⁵ Columbia University. "SUSTAINABILITY:AN INTRODUCTION FOR ENVIRONMENTAL STUDIES STUDENTS" <<http://www.eeexchange.org/sustainability/content/5.HTML>>, 14.

⁶ <http://husky1.stmarys.ca/~evanderveen/wvdv/Environment/environment_movement.htm>

⁷ This program is affiliated with the National School Board Association. Information on this program can be found here: <<http://www.rebuild.org/sectors/SectorPages/nsba.html>>

inform the public, the educational function is often incidental. Nowhere in the national energy policy is education mentioned.

A shocking omission given that everything we know is derived from education - experiential as well as formal.

The Department of Energy admits that America needs a policy that plans for the future, but they hope to achieve this through alternative fuels, efficiency measures and so on⁸. While these policies are also very crucial, the Department of Energy should not neglect the importance of education. Some efforts the department could take include the issuing of pamphlets to schools discussing the importance of energy education, generating more press for the various contests they host, and creating (or encouraging a group such as the National School Board Association to create) a curriculum framework for energy and the environment. This framework would outline the knowledge students need to be informed on the issue of energy.

And at what ages children become able to absorb and understand new ideas and the complex interconnectedness of the ecological system we are a part of.

Unfortunately, the national government cannot force schools to adopt any curriculum standards. However, the government can 'encourage' schools to use the standards. One form of such encouragement would be to threaten to cut funding to schools should they not comply.

Regardless of whether or not the government creates a framework, the question of how a curriculum should be formulated remains. Posters and recycling lip-service hardly

⁸ <http://www.doe.gov/engine/content.do?BT_CODE=AD_AP> On this site look specifically to President Bush's cited quotation and the mission given in the beginning of the policy.

teach children to care. We should not be content with simply regurgitating old lines and ideas, instead children should be educated about the problems within the world so that they come to care [*emphasis added*] about the earth and design their own policies or choose to carry out and already existing one.

*The development of a genuinely "ecological conscience" is, according to this environmentalism, the required next step in the ethical evolution of humankind.
Norman Care, p. 213 of the text*

If students feel as though they own the ideas, they will be more diligent about carrying them out. Therefore I propose a system within in which teachers do not merely exalt the miracles of recycling and/or conservation infrequently throughout the year. Instead of giving students a list of 'do's' and 'don'ts', teachers should give the students the reasons why such a list was created. For example, instead of being told to carpool because excessive driving is bad for the earth, students should be taught about how driving affects the air quality, vegetation, and oil depletion. This would allow students to make their own conclusions. Of course this method may take longer as students must generate their own plans of action, but the plans derived would be much more effective in the long run. The education system should also be a continuous process. Younger students may be best suited for studying a certain biome or country, while older students could focus more on world issues and trends. The curriculum should also emphasize more unorthodox teaching methods, such as community service, field trips, and cross-curricula projects.

Excellent ideas!

However a curriculum is eventually formed, the importance of the formation must be realized. If the United States truly wants to overcome the energy crisis, then it must look to more than just new fuels and techniques. In order to curb consumption, the entire

nation's paradigm must be changed. The only way this can be done is through the minds of children. Schools need to live up to their definition as places of instruction and start instructing students about the world they occupy. If they don't, then no matter what measures the government takes, the energy crisis will come.

An excellent and original paper that really gets to the heart of the matter – A⁺