

## **THE RENEWABLE DEAL; ASPECT TWO**

### **PLANK EIGHT: EDUCATION**

(Revised 08 Feb 09)

#### **The Purposes of Education**

We submit that the purpose of education in an Ecozoic, democratic society is to equip its citizens with the knowledge and skills needed to simultaneously serve each individual's and the polity's enlightened, long-term self-interest. To achieve this,

1. each citizen must know how to think critically in order to identify which course(s) of action among available options make it possible for the individual to successfully achieve personally-relevant goals while also serving, or at least not harming, the collective interests of the culture with which the individual is interdependent.
2. each citizen must acquire the skills by which to examine themselves to determine what they like and do not like, for what they have talent and for what they do not, in order to set the personally-relevant goals for themselves, enabling them to "pursue happiness."
3. each citizen must acquire the symbolic skills which enable the citizen to read, write and comprehend the language(s) of one's society, and do the mathematics necessary to operate one's household economy and meet the demands of business or career.
4. each citizen must acquire the skills necessary to participate constructively in civic affairs, public decision-making, and the institutions of one's society.
5. each citizen needs to have available to them, on a lifelong basis, educational training which permits them to update occupational skill sets or learn new occupational skill sets so that any citizen who wishes to do so can take a constructive role in the economies of their communities.
6. each citizen must learn the self-discipline skills necessary to control impulse and organize their behavior to make progress towards achievement of the personally-relevant goals they have chosen for themselves.

#### **Educating Citizens for the Ecozoic Society**

Education section, Part 5 - Requirements for Energy Transition, in *The Real New Deal*, Post Carbon Institute, online December 2008:

"The energy transition will result in the creation of many millions of new jobs and careers. While President-elect Obama called for the creation of five million green-collar jobs, the energy transition will in fact demand something on the order to a ten-fold increase in that goal.

However, these new jobs and careers will require skill sets largely different from those currently being imparted by our educational system.

Because they are inexpensive, numerous, and widely dispersed, community colleges could play a central role in preparing workers for new opportunities in sustainable food production, renewable energy installation, grid rebuilding, rail expansion, public transport construction, and home energy retrofitting.

In order for community colleges to fill this new role, teacher training and curriculum development on a grand scale will be needed, ideally organized and coordinated at the national level through the Department of Education.

This reorientation of curriculum should begin with gardening programs in all grade schools and increased course emphasis on topics related to energy and conservation.”

[www.postcarbon.org/book/export/html/7553](http://www.postcarbon.org/book/export/html/7553).

### **Characteristics of Successful Public Schools**

School size and drop-out rates: Fifteen percent of the nation’s high schools produce more than half of its dropouts. Many academic studies have identified factors associated with a high graduation rate from high school. School size tops nearly every list. The factors in small schools causing higher graduation rates include lower student to teacher ratios, high participation in extracurricular activities, lower rates of discipline problems, and few truancy issues.

Effects of arts education: A 2008 report from the Dana Foundation linked the intensive study of music with geometry skills, and the practice of a performing art with better attention among schoolchildren in the USA.

Student to teacher ratios and academic performance: A study in the March 2008 issue of the *Elementary School Journal* found that having small classes benefitted high-achieving children in kindergarten and first grade more than low-performing students. The achievement gap between the two groups in small classes was larger than in regular-sized classes. The data used tracked the performance of thousands of elementary school children in Tennessee over four years starting in 1985.

However, in New York City, Mayor Bloomberg took 60 failing neighborhood schools and replaced them with 200 smaller schools that cap enrollment at about 100 students. Evaluations of the results show that school staff has been able to forge closer bonds with students. In 2002, fewer than 40 percent of students in grades 3 to 8 were reading and doing math at grade level, versus 65 proficiency in math and 51 percent in reading achieved in the smaller schools. This improvement won the Broad Prize in education. The New York City educational reforms also increased high school diploma graduation rates in failing schools from below 30 percent to above 60 percent.

Differences between high and low-achieving public schools: was studied in the *Qualities that Differentiate High-Achieving and Low-Achieving High-Poverty Rural High Schools* by Dr. Perri Applegate of the University of Oklahoma.

A stable, dedicated staff is the primary need. A staff based on collaboration, shared vision, and a sense of community is, according to the study, the prime difference between high-achieving and low-achieving rural high schools.

A companion finding is that high-achieving schools have democratic leadership that develops staff while involving the community in school decision-making. High-achieving school leadership pursues access to resources to build opportunities for students and teachers, and to build a curriculum broad enough to serve all students. This results in the higher measures of equity in high-achieving schools. This creates a “democratic learning community” where rural schools and their communities serve each other and share responsibility for building a strong local community. High-achieving schools had more place-based or locally relevant education in all academic areas, which resulted in students being more likely to remain in or return to their communities.

High achieving schools had a “no excuses” attitude. High-achieving schools developed plans to address problems and barriers; low-achieving schools only cite the problems they face.