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Whose Education? Reform, Culture, and an Amish Mennonite Community

A MERICAN FORMAL EDUCATION seems to be lacking consensus and continuity. A system of different levels of bureaucratic control, for example, of federal, state, and local governing bodies, each with its own authority, nearly ensures, in and of itself, that conflict will ensue. Such is the American system of education.

Still, there are "reform" movements today that seek, if not to homogenize American education, at least to standardize it. One such movement—to implement national science education standards is the subject of this article. The effort to standardize science education will be examined in light of ethnographic research done of an Amish Mennonite community and its school. Other implications of our research into this alternative school will be offered as well.

In writing that American formal education is lacking in consensus, we wish to call attention to particular nonconsensual areas that are central to the national dialogue concerning how schooling is accomplished; even as to how schooling is conceived and thought of across America. These broad, contested domains and the dialogue that swirls within them affect not only education but speak to the most hotly-debated issues in American society today: pluralism versus "Americanization" (homogeneity versus heterogeneity); liberal education versus instrumental education (education as integral to the growth of a person or citizen versus education for work and productivity); and liberation versus assimilation (education to free the potential within an individual, whatever that may be, versus acculturation or socialization). Though we do not expect to resolve these issues within the limits of this article, we intend to inform them by what we write here.

An Amish Mennonite Community

The Amish Mennonites have a history of being persecuted for their religious beliefs and way of life, beginning in Europe and following their move to the Americas in the 17th century. The Amish Mennonite community of Oak Knoll, South Carolina (a pseudonym), was established in 1969, after a group of Mennonites in Virginia Beach became dissatisfied with the rapid urbanization of that area and its effect upon their way of life. Originally, three families bought several farms in Oak Knoll, totaling approximately 1,000 acres.

Some community elders recalled the move:

Most of the adjustments were pleasant ones. Having lived in such a congested area, it was no longer the normal practice to wave at people as you pass on the road. Here, again, were folks who were interested enough to wave as you passed by. (Stoll & Stoll, 1995, p. 11)

That first year, the Mennonite children attended the local public school. The Mennonites

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opened their own school, for Mennonite children primarily (though others were welcome), in September 1970, in the basement of the church they had recently constructed.

The first principal of the school was also a minister in the church and one of the community leaders. The Oak Knoll Amish Mennonite community, situated on the outskirts of the South Carolina town of Springhill (a pseudonym), now totals about 250 individuals. These Amish Mennonites quickly became a vital part of the economic life of the Springhill community, opening several highly-reputable restaurants and bakeries. The reputation of some of the family-owned businesses-especially the countertop and cabinet business, the horse trailer manufacturer, and the fireplace manufacturerhas become such that people from all along the Eastern seaboard come to Oak Knoll to buy their products. The fireplace and fireplace insert business markets nationally. Other families work the land.

Though firmly situated in an agrarian lifestyle, these Amish Mennonites maintain ties with other Mennonite and Amish communities throughout the United States, often traveling between communities, sometimes intermarrying. Many members of this community travel abroad, to El Salvador, Belize, Guatemala, Haiti, Kenya, and Paraguay, for example, on missionary work and disaster relief.

The School

The members of the Oak Knoll Amish Mennonite church and community (actually the terms are roughly synonymous) decided to build a small building for the school. They called it the "green building." In 1980, they added a 50' x 100' metal building, dedicating two-thirds of the space for classrooms and the remaining third for a small play area. In 1990, the building was again enlarged to accommodate a fellowship hall/gym addition. An upper room was added and is used for the school music classes (taught without instruments) and by the "sisters" for their monthly sewing circle. Quilts are stored there while being completed.

According to a commemorative edition of the recollections of the community members, *Oak Knoll Mennonite Church, 1969-1995, After Twenty-Five Years:*

From the beginning of the school until 1979, the basic curriculum was chosen from various Menno-

nite publishers and others as needed. In 1980, the new material from Christian Light Publication was chosen and used for two years. The first year it was used in a conventional way and the second year as an individualized form.

Presently, we are using the ACE [Accelerated Christian Education] curriculum which we have been purchasing from Basic Christian Education since 1982. Over the years, the highest enrollment was 52 [K-12] students with 38 for the past year [1994].

The school has proven to be a blessing to the church community. We're also thankful to our government for allowing us this freedom to teach and train our children as we feel the Bible dictates [italics added]. (Hochstetler, 1995, p. 31)

Upper-level classes are primarily self-paced, programmed instruction. Students read their texts in each subject, alone at their individual carrels. They then take tests over their comprehension, and self-check and correct their answers. They score and then post their scores themselves. Teachers help answer students' questions. Students do not raise their hands to get their teacher's attention; they post a red flag atop their carrel as a signal that they seek the teacher's assistance. The classrooms are quiet, orderly places. The "sisters" provide hot lunches in the school cafeteria on a rotating, volunteer basis.

The science curriculum, as with all the other subject matter curricula, is selected to conform with the religious beliefs of the community. Specifically, the curriculum conforms to the community's interpretation of the King James version of the Bible. The Bible influences all areas of community life. For instance, these Amish Mennonites accept science as a way of knowing only to the extent that it is consistent with their religious convictions. Science for them is: a list of facts from the literal translation of the King James Bible; an explanation for Creation, The Great Flood, and their other significant stories; and an explanation of the world based on their religion. Hence, their version of science is in no way incompatible with their religion.

Examples from the written curriculum used by the school illustrate the interdependent qualities of the areas of knowledge and belief we modernists typically assign to the categories of "science" and "religion." A textbook discussion of evolution states:

Evolutionists attempt to demonstrate that life evolved from lower forms of life. This is their academic justification for their unbelief and refusal to bow their knee to the divine, righteous Authority and declare obedience to Him. . . .

God fashioned every living thing perfect and complete without relying on "primitive ancestors" to complete the job. While the Bible and men's theories often disagree, scientific facts and evidence always agree with the Bible. (Accelerated Christian Education, 1992b, p. 30)

A passage headed "Gene Alterations in Plants and Animals" states:

Although God can enable people to overcome the effects of damaged genes by hard work or other abilities, damaged genes in plants and animals produce alterations that are almost never helpful to the offspring. (Accelerated Christian Education, 1992b, p. 17)

This last statement most certainly contradicts the claims of "evolutionists." In another textual example, a treatment of chemical reactions, a box of text in the upper left of the page is titled "Wisdom." It reads in part: "Even though there are limiting factors in chemical reactions, there are no limiting factors in the power of Almighty God" (Accelerated Christian Education, 1992a, p. 30).

These examples demonstrate the interplay between science, science education, and religion as practiced by these Amish Mennonites. The first and recently retired principal of the Oak Knoll Amish Mennonite School sent a fax to one of the authors in response to a query on his view of science education. It read simply: "My view of science education is that it is an intrinsic part of the entire education component. It is needed to understand the basic laws that govern our lives each day."

Science and Technology

For most of us, technology represents the practical application of science. These Amish Mennonites view technology differently, and their reactions to technology are defining moments for them. It is technology and its use, primarily, that separates the Amish from the Amish Mennonites. Technologies and their adoption or rejection can cause rifts within an Amish Mennonite community and, in the present case, led to the separation of a smaller community from the main Oak Knoll Mennonite community. Technology, for this group of Amish Mennonites, "takes what science reveals and makes life as useful as possible [in service of God]" (Amish Mennonite female, field notes, April 1994). Technology is to be used to help the Mennonites better serve their God. This community is extremely selective in their adoption of technologies. Radios are prohibited, as are motion pictures and television. Computers are found in places of employment, but generally not in homes and not in the school. (The school has two manual typewriters on which the students learn.) These Mennonites believe that "we use technology when we can control it, not it control us" (Mennonite elder, field notes, April 1994).

These criteria-their belief system and utilitarianism in service to their God-create a strong filter by which these Mennonites judge technologies prior to adopting them. Still, people in this community are industrious and creative in their application of those technologies they have adopted. Once, the workers in the cabinet shop were faced with a problem: With the staple gun available to them through a major U.S. manufacturer, they were only able to staple one side of laminate at a time to a countertop that needed two sides of laminate to be glued and stapled. The workers designed a staple gun that stapled on two sides at the same time. The Mennonite leaders contacted the staple gun maker, only to discover that such a two-at-atime staple gun had not yet been invented. The manufacturer assisted a group of these Mennonites to fit the pneumatic hoses required. The Mennonites refuse to patent their invention because their religious convictions do not permit them to go to court, so it would be unthinkable for them to defend a patent against infringement.

Other examples of such inventiveness and creativity, especially as regards practical problems and their solutions, abound within this community. Those we have shared should be sufficient to illustrate the combination of the instrumental *and* religious criteria by which science and resultant technologies are judged before being allowed to become a part of this community and its culture.

In society at large, socialization or enculturation and cultural transmission are integrated, ubiquitous, and ongoing processes. However, particular sites (e.g., schools) and the processes that occur there are especially important for cultural reproduction. Under conditions of modernity, the Enlightenment project of the separation and rationalization of science, morality, and art is occurring, or has already occurred. Habermas (1993, p. 102) called attention to the penetration of "economic and administrative rationality" precisely at the sites where value and cultural reproduction take place. According to Habermas, these sites are ripe with "protest and discontent," especially for cultures, societies, and communities that do not choose to participate in the cultural mainstream.

The Mennonites protect those sites especially vulnerable to penetration by the values and norms of modernity—the school, church, and community, especially—and inhibit one of the primary agents of that penetration, technology, from penetrating.

National Science Education Projects

Along comes the American Association for the Advancement of Science with a set of rationales undergirding their proposal to create a scientificallyliterate U.S. population. This project qualifies as an administrative rationality, in Habermas's terms. Specifically, certain of the rationales posit that:

[2] By emphasizing and explaining the dependency of living things on each other and on the physical environment, science fosters the kind of intelligent respect for nature that should inform decisions on the uses of technology; without that respect, we are in danger of recklessly destroying our life-support system. . . .

[4] Technological principles relating to such topics as the nature of systems, the importance of feedback and control, the cost-benefit-risk relationship, and the inevitability of side effects give people a sound basis for assessing the use of new technologies and their implications for the environment and for culture. Without an understanding of those principles, people are unlikely to move beyond consideration of their own immediate self-interest. . . .

[5] Although many pressing global and local problems have technological origins, technology provides the tools for dealing with such problems, and the instruments for generating, through science, crucial new knowledge. Without the continuous development and creative use of new technology, society will limit its capacity for survival and for working toward a world in which the human species is at peace with itself and its environment. . . .

[6] The life-enhancing potential of science and technology cannot be realized unless the public in general comes to understand science, mathematics, and technology and to acquire scientific habits of mind. Without a scientifically literate population, the outlook for a better world is not promising. (Rutherford & Ahlgren, 1990, pp. vi-vii)

These rationales, and the others, will serve as bases for the development of new science education standards. If this is to be the case, the standards will most certainly run counter to the beliefs and practices of the Amish Mennonites regarding science, science education, and religion.

As regards rationale No. 2 above, the Amish Mennonites do not see an interdependency of living things. "Man" is supreme. Though God-created, other living things were put on Earth to benefit humankind in service of God. What is more, the overemphasis on technology and technologies reflected in the rationales above clearly conflict with Amish Mennonite beliefs.

For example, rationale No. 5 states: "Without the continuous development and creative use of new technology, society will limit its capacity for survival and for working toward a world in which the human species is at peace with itself and its environment." These Mennonites are already at peace with themselves and their environment. They survive, and handily, without the adoption of many of the technological advances readily available in the U.S. consumer marketplace. Amish Mennonites believe that technologies "do not have the tools to deal with themselves" (Mennonite informant, field notes, February 1996).

The success of the Amish Mennonites is attributable to other factors, factors not addressed by the scientific literacy rationales. The success of the Mennonites is most certainly not attributable to the strength of their school curriculum, as can be seen from even a rudimentary analysis of, for example, the science program cited. Though the *education* (as opposed to schooling) of these Amish Mennonite children is robust; the strength of their education lies in the coordination of all the social agencies of which the children are part—home, church, school, culture, and community. Each reinforces the other.

The Mennonites have a strong, vital community, united by common beliefs with known and accepted sanctions (such as shunning and ostracism). They practice a simple life and exercise fiscal conservatism. Whenever possible, community members gather together to assist others with building projects, through works of charity, and education in the informal sense. For example, all children are expected to be industrious in their after-school time. Girls help in the home, and boys, upon reaching adolescence, are expected to assist their father at his trade. In the few cases we are aware of where the boy either has no father or the father is unable to provide him work, other community members accept the boy and teach him.

These Amish Mennonites understand, perhaps better than others, the likely effects modern discoveries, "advances," and inventions, in short, modern culture, will have upon those who blindly accept them (as compared with rationale No. 4 above). By viewing the rationales, and the likely science education standards to follow from them, through the eyes of a marginal group such as the Amish Mennonites, the "techno-logical" epistemology of those rationales are exposed for what they are. The rationales, and the beliefs underpinning them, hinge on the modernist assumptions that "progress" is ever forward and that technology (and science) hold the keys to our betterment, if not our salvation. These beliefs are at the heart of the toooften unexamined modernist scientific faith.

The Amish Mennonites have been successful—that is, they maintain a vital community—not because they are scientifically literate as the authors of the rationales above would define it, but for other reasons. First, it must be admitted that the Amish Mennonites as a group pose little or no threat to the communities of which they are part or to the U.S. society at large. The Mennonites are nonviolent, they keep to themselves, and are industrious. The relatively small population of Mennonites shows no sign of overtaking the larger culture.

That these people do not hold to the same definition of science and science education, as examples, as the wider society has not proven to have been a detriment to them. Rather, one of the more striking implications from our study of these Amish Mennonites is that the strength of the community and of its individual members lies in the nearly seamless integration of the parts, the agencies, of the community. This unity contrasts sharply with modern American society and its educational system, whose entities are divided and subdivided, endlessly and to the minutest detail.

Education, for instance, is divided into disciplines and subdisciplines (consider the modern American high school or colleges of education), each with its own set of beliefs, methods, goals, and objectives. The concept of scientific literacy is an excellent example of the disunity we are speaking of. Should there be a standardization of American education?

Lessons Gleaned

The Amish Mennonites, as a marginal group with an alternative school, have lessons to teach the rest of us, though they might not be easy to accept or to implement. As they acknowledge in their commemorative recollections of their history at Oak Knoll ("We are . . . thankful to our government for allowing us this freedom to teach and train our children as we feel the Bible dictates" [Hochstetler, 1995, p. 31]), the Mennonites have a right to live as they see fit, and to teach their children accordingly. These people, and groups like them, should be encouraged. Diversity strengthens us. They should not be forced to accept the wider culture's interpretation of science and science education, as examples.

The other lessons we can take from this group are easier put:

Smaller is better. Less is more.

There are numerous advantages to small class size (Achilles, 1996) and to small schools (Meier, 1996). Larger schools serve a bureaucratic or administrative rationality; they make little or no educational sense.

Amish Mennonite children are not distracted by wanton consumerism. They and their elders recognize life's essentials and are able to concentrate on them. They relish and practice old fashioned neighborly goodwill, where each watches out for the other and where the welfare (both material and spiritual) of each and all is a common concern. This is one of the reasons why this group moved to a small town: People tend to get lost in large cities or in large schools.

The Mennonites are not victims of time urgency, where people become slaves to time and tasks to be accomplished. In modern society the daily tasks to be done far outstrip the resources people can muster to accomplish them. The tasks to be done and the tasks undone can combine to pose a seemingly insurmountable obstacle, paralyzing some from acting at all. Prioritizing and the winning of small victories are antidotes to the paralysis of over-complexity and feeling overwhelmed. When it comes to curriculum, Howard Gardner (see Brandt, 1993) believes that less is more. Concentrate on fewer tasks, but do them well and in-depth. The lessons learned in such endeavors are easily transferable to other areas of life and study; for it is not the facts learned or the information accumulated that contribute to a wise person, but the process of learning to learn in itself.

Unity over disintegration

Having the whole community (and church) involved with the education of the child strengthens the student's education. Schools are not the only institutions that teach. Each of the Mennonite's community agencies (church, home, school, business) sends a consistent message, and that message is reinforced by all the others. No time is lost in bickering between teachers and parents, or between teachers and administrators. Everyone is concerned with the welfare of the child. The closest approximation of this type of unity in the wider U.S. educational system is the small magnet school that has substantial parent involvement.

Unity of purpose is affected by school size too. Large modern high schools and colleges of education are comprised of numerous departments that frequently compete with each other for resources (Hargreaves & Macmillan, 1992). This state of affairs must have a negative impact on students and staff.

The unity we speak of is that at the local level. In public schools, such unity may be achieved through Glickman's (1993) process of developing a covenant for the school and its community. The local level is also where diversity should be cultivated. That is to say, we more readily accept the quilt analogy than others that have been proposed (e.g., the tapestry) to represent American diversity-small pockets of uniqueness, coordinated at levels that guarantee the rights of all, but do not seek conformity. The Mennonites are right to thank "our government for allowing us this freedom to teach and train our children as we feel the Bible dictates." For the rest of us, that passage might end "as we see fit." An imposition of standards would run contrary to this type of diversity.

Simplify, simplify, simplify

The real lesson here is to simplify as much as possible. Simplify the curriculum (which does

not mean to "dummy" it down). Simplify school. Simplify life. Simplify assessment as well. Everyone will be better for it. Block scheduling and thematic or integrated units are examples of current practices designed to simplify curriculum, though these practices have yet to become common, popular occurrences in our nation's schools. Other rigorous, yet simpler, curriculum designs have been proposed by Gardner (1991), modeled on apprenticeships (an informal Mennonite practice) and children's museums.

The last lesson is the simplest to say, but the most difficult to put into practice. Would that we all had the strength of the Amish Mennonites to hold fast to our beliefs when faced with vast societal pressures to do more, buy more, earn more, learn more, and be more.

References

- Accelerated Christian Education. (1992a). Science activity pack (Booklet 1114). Nashville, TN: Author.
- Accelerated Christian Education. (1992b). Science activity pack (Booklet 9100). Nashville, TN: Author.
- Achilles, C.M. (1996). Students achieve more in smaller classes. *Educational Leadership*, 53(5), 76-77.
- Brandt, R. (1993). On teaching for understanding: A conversation with Howard Gardner. *Educational Leadership*, 50(7), 4-7.
- Gardner, H. (1991). The unschooled mind: How children think and how schools should teach. New York: Basic Books.
- Glickman, C.D. (1993). Renewing America's schools. San Francisco: Jossey-Bass.
- Habermas, J. (1993). Modernity—An incomplete project. In T. Docherty (Ed.), *Postmodernism: A reader* (pp. 98-109). New York: Columbia University Press.
- Hargreaves, A., & Macmillan, R. (1992, April). Balkanized secondary schools and the malaise of modernity. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Hochstetler, E. (1995). The Oak Knoll Mennonite School. In L. Overholt & W. Hochstetler (Eds.), Oak Knoll Mennonite Church, 1965-1995, after twenty-five years (pp. 30-31). Springhill, SC: Oak Knoll Mennonite Church.
- Meier, D.W. (1996). The big benefits of smallness. Educational Leadership, 54(1), 12-15.
- Rutherford, F., & Ahlgren, A. (1990). Science for all Americans (American Association for the Advancement of Science). New York: Oxford University Press.
- Stoll, B., & Stoll, K. (1995). Why leave Virginia Beach? In L. Overholt & W. Hochstetler (Eds.), Oak Knoll Mennonite Church, 1965-1995, after twenty-five years (pp. 9-11). Springhill, SC: Oak Knoll Mennonite Church.