



Michigan Social Studies Journal

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Introduction to This Edition and Teacher Resources

This issue is very important to read and to incorporate into our classrooms. Why? There are three compelling reasons: the reduction of human suffering, the building of environmental health, and the opportunities for active citizenship. Developing graduates who can and are willing to help solve societal problems is a crucial goal for our educational system. Students need knowledge, analysis and change agent skills to successfully express their civic, environmental and social responsibility.

Many students and teachers feel overwhelmed by society's economic, environmental, and social problems. They feel that the world's problems are so large and complex they cannot do anything about it. Some decide to let apathy and cynicism become their dominant attitudes, often giving up on making the world a better place and just taking care of themselves and a few around them. Knowledge should be empowering our teachers and students to contribute to society instead of making them passive and apathetic. How do we turn this around while teaching our required curricula? This journal issue explores how to graduate engaged citizens while meeting our state educational standards.

The first reason to read and use this journal issue is human suffering. For example, an estimated thirty thousand people die every day of starvation and starvation-related diseases. Most of them are children. Research has shown that population growth is controlled by educating women and giving them access to birth control, not by these needless deaths. Your students probably are unaware of these daily deaths and the solutions they can engage in to help eliminate them. Yet every day our consumer and investment decisions interact with the dynamics that create or mitigate human suffering. Students can apply social studies knowledge that is relevant to their choices today and to human suffering by exploring <http://www.coopamerica.org/>. Eighteen strategies for confronting the major systemic problems confronting humanity is wonderful material for teaching and discussion at <http://www.osearth.com/resources/wwwproject/index.shtml>. This site shows how we can afford to solve societal problems. It is one of the few sources of information where I see students hungrily reading the footnotes.

Environmental health is the second reason to read and use this journal issue. Humans are living beyond the carrying capacity of the planet and changes in

individual and collective behaviors are required now to create a sustainable future. The esteemed science journal *Nature* just published a piece explaining the impact of continuing our present path of human-induced climate change through the year 2050. These scientists estimate that this climate change, produced mostly by the continued burning of fossil fuels, will cause between 15 and 37 per cent of terrestrial species to be "committed to extinction."¹ It is probably the most comprehensive analysis to date on climate change and its impact on species survival. Other research points to climate change producing more disease, more extreme weather and economic disruptions, and many more environmental refugees. You might say, "This is an issue for science class, not social studies." Absolutely not. Climate change is occurring, according to the Environmental Protection Agency, NASA, the National Oceanographic and Atmospheric Administration, the United Nation's Intergovernmental Panel on Climate Change, and the vast consensus of the scientific community, mostly because of behaviors humans are choosing. Social studies has a crucial role to play, empowering students to understand how to change their behavior (psychology), how to help change societal norms and cultures (sociology and anthropology), how to correct subsidy imbalances that favor fossil fuels and disadvantage conservation and renewable energies (economics and political science) and more.

The Center for a New American Dream created a website for people who want to take simple actions to address this problem. The effects of those who sign up to take actions are tabulated and reported on the site at www.turnthetide.org. Students can join others who sign up to take action and see their joint impact on the environment in tons of reduced pollutants. The Environmental Protection Agency offers a calculator for greenhouse gas contributions at <http://www.epa.gov/cleanenergy/powerprofiler.htm>. The site also helps students understand how to improve energy efficiency in their homes and buy green power. A "Get Smart About Energy" CD with 250 learning activities is available for free from the U.S. Department of Energy. Email rebuildorders@rebuild.org or visit their website at www.rebuild.org and click on the solutions center for other free downloadable lesson plans.

The third reason to read and use this journal issue is because many solutions exist for society's problems if we help our students become active citizens. You don't have to be the experts; just help the students ask questions and become engaged. Explore the information available, learn together and act. Use

social studies knowledge to help make the world a better place. I've seen how empowered my students became when they used their knowledge to change U.S. Senators' and local planning commissioners' votes with letters and phone calls.

The United Nations has declared 2005-2014 the Decade of Education for Sustainable Development. Sustainable development is achieved when all people on Earth can live well without compromising the quality of life for future generations.² On a very simple level, experience the deep satisfaction that occurs from feeding the hungry or preserving the environment (free for a click of the computer at <http://www.humane.net/>). Learn about the state of the world at <http://www.worldwatch.org/>. The United Nations has a free curriculum about environmental and social sustainability education at <http://www.unesco.org/education/tlsf/index.htm>. This site shows how teachers can easily integrate sustainability issues into their existing curricula.

Many other wonderful resources exist. The Center for a Sustainable Future has free, downloadable, learning activities for K-12 about sustainability under curriculum at <http://csf.concord.org>.

Efficacy skills are effectively taught via the Giraffe Project (<http://www.giraffe.org/>). The project is presently used in forty-seven states to help students construct a self-concept that includes engagement in solving community or societal problems.

At <http://eduref.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Interdisciplinary/INT0201.html>, find a detailed description of how to help students create positive scenarios for the future of society and even host a Positive Futures (Volunteer and Career) Fair for the school or community.

At <http://www.graduationpledge.org/>, information is available about a graduation pledge that helps students sculpt their self-concept to include social and environmental responsibility.

This journal issue is filled with easy ways to become involved while also meeting state education standards. In addition, Michigan is lucky to have an online Sustainability Education Handbook that includes quotes, learning activities, questions to include in any lesson plan, and free downloadable curricula, all tied to Michigan's education standards and benchmarks at www.urbanoptions.org/SustainEdHandbook. Research has shown that using sustainability as an integrating theme produces higher standardized test

scores in reading, writing, math, science and social studies as well as less classroom management problems. Students showed a greater enthusiasm and engagement in learning as well as greater pride in their accomplishments. The Council of Chief State School Officers administers project funding and the Pew Charitable Trusts provides financial support. For more extensive information, including best practices and teacher resources, visit www.seer.org.

The bottom line will be your individual teacher decisions to include the sustainability paradigm, knowledge, skill building and action in your classrooms. Help students embrace sustainability and overcome the perception that it is abstract, overly complex or someone else's problem. The future is up to us.

By: Debra G. Rowe

Debra G. Rowe, Ph.D. is a Senior Fellow with the Association of University Leaders for a Sustainable Future. With ULSF, she is working with higher education associations and K-12 associations on the integration of the sustainability paradigm into all levels of formal education. Dr. Rowe is also working on a national public communication campaign about sustainability.

Debra teaches psychology and renewable energies at Oakland Community College. She also created and teaches energy management and renewable energies in an on-line format. She created an Energy Awareness Center at the college and hosted many conferences and customized trainings on sustainable design practices. Debra was Interim Dean of Applied and Engineering Technologies at Oakland Community College in 2002-2003.

Endnotes

1 Thomas, Carl, Alison Cameron, Rhys E.Green, Michael Bakkenes, Linda J. Beaumont, Yvonne C. Collingham, Barend F. N. Erasmus, Marinez Ferreira de Siqueira, Alan Grainger, Lee Hannah, Leslie Hughes, Brian Huntley, Albert S. van Jaarsveld, Guy F. Midgley, Lera Miles, Miguel A. Ortega-Huerta, A. Townsend Peterson, Oliver L. Phillips, & Stephen E. Williams, 4 January 2004, *Nature*, Vol. 427; 145-148, www.nature.com

2 Jucker, Rolf. 2003. UNESCO's Teaching and Learning for a Sustainable Future: A critical Evaluation, *Trumpeter*, Vol. 19 No. 2

Mapping a Path to Civic Involvement and Sustainable Living

Dr. Robert Zuber

Deanne Bednar

Losing Sight of our Local Ecology

Across the US and elsewhere, it is a relatively easy matter for social studies teachers to find and describe problems in the local environment, from toxic sludge and solid waste disposal to declines in bio-diversity and the health of waterways. But the most astute teachers know that there is more to environmentally-focused education than discussing ecological problems. We must also address with students the ways in which we relate to the environment.

In an increasingly urbanized world, including the birth of mega-cities from Moscow and Mumbai to Mexico City and Rio de Janeiro, people tend to have a more abstracted relationship to natural rhythms and ecological resources. For many residents of urban centers, nature is something out there” rather than something that can be discovered and cultivated in our own backyard. More and more, people of all ages display insufficient knowledge about or appreciation for the various social/cultural resources, diverse life forms and ecological rhythms that exist (and even flourish) in urban settings, resources that make communities unique and directly impact the quality of life to be found there.

The types of questions that we at Green Map and many of our colleagues in the teaching profession pose routinely to young people and their parents about their local community and ecology seem elementary enough, but it is amazing to us how few people of any age can answer them successfully. (The questions change, of course, depending on location, culture and ecological features.) Where does

your food and water come from? Who do you contact for help in creating a community garden or bicycle path? Which government agency is responsible for ensuring the ecological health and safety of school buildings? Which plant life in school gardens is native, and which is imported? Which birds and animals used to call (and may still call) your community home? Where (and at which times of the year) can you buy locally grown organic produce? Where does the waste go when you are finished consuming the products you buy? Where is the best place locally to watch a sunrise or sunset? What are the main causes of asthma or other air borne pathogens in your community? What are the primary cultural backgrounds of local residents and how has the cultural mix of your neighborhood changed over time? These and a host of related questions explore both environmental health and the general quality of life in urban (and many rural) settings. Motivating youth and adults to seek out answers to what ought to be common questions must become a larger component of our educational work. In many ways, the long-term ecological and civic health of our communities depends on it.

This combination of the abstract way that we relate to the natural environment, especially in urban settings, and the lack of basic knowledge of local ecological, cultural and civic resources, leads to several unfortunate consequences. First and most obvious, when people don't see themselves as an integral part of a community or ecological system, there is little incentive to care for or restore those systems. Often, some of the most important and potentially enriching ecological and cultural resources in a community are virtually ignored by a wide cross-section of local residents. The lesson here is that people rarely care for things that they don't even realize they have!

Secondly, people who know little about local resources are not in a good position to advocate for them, to assist those responsible for planning and development at local levels to make

decisions that respect local needs and interests. Many planners, architects and government officials with whom we have spoken at the Green Map office in New York or at international workshops and conferences are frustrated at how ill-equipped most citizens are to participate in civic planning decisions. Often, officials don't hear from the public until there is a complaint to lodge in a defense of some private interest, long after the initial planning decisions have been made! The lesson is here is that the more that citizens know about and appreciate their local resource base, the better able they are to ensure fair and transparent planning as well as proper attention to areas of greatest need in their communities.

A broad and successful civic activism requires many things — including teachers committed to making civic participation and cultural appreciation a priority. But such activism also requires a comprehensive and transparent base of information about key local resources (such as provided by Green Mapmaking) and the willingness of residents to seek it out through the media or in the schools!

Where precious and unique ecological and cultural resources are ignored or undervalued by the public, it can be difficult to motivate the press and other public information sources to properly highlight issues affecting those resources. Many journalism professionals with whom we have spoken are happy to include issues of local sustainability as part of their “beat,” but they need reassurance that there is a viable audience for this type of story. A public (including its schools) that is on record as being actively concerned with preserving and enhancing local ecological and cultural “treasures” will often find journalists and others willing to publicize those efforts.

Motivating Ecological Care in the Young

It is becoming clearer and clearer to me that young people, if they are to exercise more civic responsi-

bility and live more sustainably, need more in the way of motivation than classroom lectures or sets of abstract ecological and civic values. Children, especially, need to spend time in the presence of adults whose values result in a happy and fulfilling life. They also need to see adults committed to projects and activities designed to repair their own ecological damage rather than leaving their messes for their children. Finally, children need to participate in adult-led skill building in support of greater civic participation and more sustainable communities.

Like most things, engaged, healthful, sustainable living requires practice, the cultivation of habits such as recycling, voting, bicycling, volunteering, composting and walking that can become “second nature” — much like brushing teeth and fastening seat belts in automobiles. Making habits such as these visible in adults can reinforce for children the benefits and satisfactions of practicing them also.

At Green Map System, we understand our own role in helping teachers and other adults motivate young people (and each other) to take more responsibility for the community's culture and ecology. Our “media” involves the creation of common “texts,” visions of sustainable community that define local priorities and motivate local responses. These community-generated visions can help residents understand more about local resources (including the people and organizations helping us to develop stronger habits of caring and protection), expose threats to ecological health and safety, and high-



light opportunities to get personally involved in making more public green space, improving the health and security of food sources, highlighting diverse local cultures, improving access to and the cleanliness of waterways, making government agencies more responsive, and protecting (or even expanding) the remaining local biodiversity.

Both the creation of common community visions for sustainability and the work of ecological restoration are daunting tasks in a time when economics has so little reference to ecologically sustainable lifestyles, when rapacious consumption and the desire for wealth in parts of the global north — even in this time of terror and warfare — undermine cultural respect and environmental care. Such tasks prove even more difficult in poorer neighborhoods and communities trying to stave off what we might call cultures of negativity, places where people have lost interest in community restoration, in part, by having lost touch with the environmental and cultural features that make their hometowns unique and “special.” Where people feel no pride of place, where economic and cultural options seem limited, these are the places that have witnessed a steady exodus by young people fortunate enough to obtain the education or financial means to go elsewhere. We can see this pattern in effect from urban Detroit to rural North Carolina young people who have found and pursued the means to choose greener pastures, far from friends and loved ones and familiar neighborhoods, but far also from what they perceive to be the tedium, hopelessness or other negative influences of their birth cultures and



communities.

Sustainable Learning Outcomes

Despite stubborn obstacles and disturbing trends, there are many useful tools for formal and non-formal educators seeking to raise common awareness of ecological and cultural resources as well as encourage pride and involvement in local communities. The tool with which we are most intimately involved, the Green Map (www.greenmap.org), provides an adaptable framework to help adults and youth create and share compelling visual images through the charting of important ecological and cultural resources in their hometowns. Using a set of award-winning digital icons, teams of map investigators and mapmakers of all ages explore, narrate, design, publish and disseminate compelling visual images that reflect the ecological and cultural resource base of a community. Through Green Map System in New York, all adult and youth map projects (over 160 at present, including citywide projects in Bangkok, Mexico City, Toronto and other sites from Ann Arbor and Lansing to Kalamazoo and Detroit**) are digitally linked on our website so that mapmakers of all ages can share best mapmaking practices, key sites, educational materials and, even more importantly, sustainability-related outcomes flowing from their investigations and paper/online map products. (**See end of article for a brief overview of the Detroit Green Map project.)

In addition to providing direction for adult citywide map projects, Green Map System provides materials, guidance and communications linkages for youth map projects that promote curriculum standards and a variety of important learning outcomes (click on the kids icon found on our home page for stories, classroom practices and learning objectives from a variety of youth projects).

All Green Maps promote authentic place-based

education that helps students develop critical thinking, visual and ecological literacy, civic participation, design and communications skill development, biodiversity appreciation, and more. Another of the key learning outcomes of Green Maps is related to the mapmaking process itself— helping ensure that the visions embodied on students’ maps serve a genuinely public purpose rather than merely a private one. We live in a time when so much public space is being privatized — not only through private property acquisition but through the overuse of cell phones, automobiles, CD Walkmen and other technologies that enable us to restrict contact with other people, their ideas and needs. In this climate, it is important to remember that it is only genuinely public visions that can inspire concerted public action, action that is well informed and driven by a broad and inclusive community interest. This inclusiveness is an important goal in most communities where we work, but it is especially critical in urban cores or places of considerable political turmoil. Here, incomplete, self-serving or politically motivated visions of sustainability, civic responsibility, etc. can inflame the community tensions that collaborative tools and frameworks such as those we have developed were originally designed to help heal.

Another important learning outcome relates to the ability of mapmakers of all ages to share information and perspectives on sustainability across cultures. Like some other tools of this type, the success of Green Map (see www.greenmap.org for a complete listing of our awards and articles, email us at info@greenmap.org) is tied both to the strength of our communications network and to the flexibility of our materials. Our icon set — which can be locally adapted and even expanded — provides symbols that represent a wide range of ecological and cultural resources.

Mapmakers in Detroit or Kyoto or Copenhagen can use our icon symbols combined with their own narratives to highlight resources that are unique and precious in their communities, set common

agendas for more sustainable local practices, or share the best local ecological, civic and cultural activities with mapmaking teams, students, environmentalists and general internet users around the world. The opportunities for cross-cultural sharing facilitated by GMS have been highly prized by the social studies and other teachers who have adapted Green Mapmaking for their classroom use.

Keeping Them Home

Despite our own affinity for Green Map and the successes, large and small, that we have done our modest part to promote, we know that there are no quick and simple applications of any educational tool, whether in Jakarta or in Lansing or in Harlem (New York City), that can result in a strong, workable consensus on local ecological and cultural priorities in multi-ethnic communities. However, as students and other local residents invest time and energy in creating compelling visions of local resources, they will not only come to see their own hometown with a sharper and more appreciative eye, but will also learn to see their community through eyes other than their own. This broadening of vision is important at many levels, but certainly (as we have already noted) to the enhancement of community and civic planning, where citizens are often ill-equipped to counter collaboratively the challenge posed by government agencies, planning boards, developers and others seeking to remake local neighborhoods without a detailed knowledge of (or interest in) local conditions. Green Maps can help remedy information deficits regarding diverse local resources while helping to empower residents to become stronger, more impassioned, more knowledgeable advocates in a broad array of decisions that affect their homes, schools and families.

Through tools like the Green Map, we can test our assumptions about our hometowns, and the diverse people who inhabit them, but we can also build our local knowledge base and develop priorities that can help re-energize our passion for our local environment and restore local resources. We can

put into practice the skills we need to refresh our local environments, renew our interest in civic life, and highlight/celebrate diverse cultural achievements.

Even more important, we can use visioning tools like Green Map to help give children a reason to stay home, to develop and use their own skills and capacities to help make their own communities healthier places to live. There is no future for communities, urban or rural, once significant numbers of young people conclude that there is no future for them at home. If all the “action” is understood to be happening in Chicago, or Los Angeles, or Paris rather than in Midland or Battle Creek or Toledo, young people will want to make their futures in those places. They will want to be where the action is.

Of course, given the power of global media (see www.mediachannel.org for resources to teach about the global media), especially the seductiveness of its images for restless young lives, it is not feasible that any tool — including a Green Map — is going to be successful by itself in keeping more young people from straying to large and exciting urban centers. In order to stay closer to home, young people need educational and economic opportunities. They need to be able to stretch their capacities and test their values under the watchful eyes of wise and compassionate adults who are active in ensuring healthy and sustainable communities. And, they need compelling visions of a better future to which they can make substantive and lasting contributions.



About the Authors:

Robert Zuber is currently a Senior Consultant of Polluted Places Initiative and the Blacksmith Institute, as well as a board member of the Center for International Media Action and the Manhattan Land Trust. He can be contacted at zuber@erols.com

Deanne Bednar is past president of the board of Upland Hills Ecological Awareness Center and is currently coordinator of the Strawbale Studio Natural Building Project. She illustrated the “World Pledge” and several books on natural buildings including *The Hand-Sculpted House* and *The Natural Plaster Book*.

YOUTH GREENMAPS and Green Maps in Michigan:

Greenmaps are sprouting up across Michigan, and around the world.

To locate a Green Map that is LOCAL to you, or to find out more about YOUTH GREEN MAPS and Green Map ICONS, visit www.greenmap.org.

The Detroit Green Map Development Team is currently piloting several Youth Green Maps with students! We are also in the process of developing an On-line Detroit Green Map and printed Detroit Green Map. The local Youth and Community Green Maps can be linked with the larger Detroit On-line Green Map, which in turn can be linked with the International Green Map System (see above)! We are seeking funding and volunteer support to assist with these projects.

We have received a 2004 Community Energy Grant from the State of Michigan Energy Office to integrate GREEN BUILDING RESOURCES into the evolving On-line Detroit Green Map, so visit our website, and check in on our progress, at www.detroitgreenmap.org.

The Global Ecovillage Project Deanne Bednar

The Future is the world's biggest art project that we are all co-creating together whether we realize it or not.

How can we as humans, live a high quality life, now and into the future, without depleting the environment?

To address this question in the classroom, my students created models of sustainable communities. Over time, I refined this "Global Village" Project making it an effective way to explore the interaction of many sustainability issues. My students really enjoyed coming to class and working together in groups, imagining and creating. The Global Ecovillage Project is able to integrate essentially all the Social Studies Standards because it is creating a whole, complex system of interactions between humans and their environment. It is able to include the social, economic and ecological elements of culture.

Creating an Ecovillage: Step by Step

To begin the project I engage students in "mapping" the issues of the future. In this brainstorming session, the students share their responses to the question, "What do you think will be the important issues in the future of our world?" while I record the issues on the board. They can come up with issues such as ecology, population, crime, economics, war/peace, education, and politics. I scatter these issues on the board, drawing a circle around each. Students seem aware of many important issues, but they are not as aware of the connections between the issues. I ask them to suggest possible connections between the issues, and record them on the board. I do this by drawing a line between the issues. I ask students to consider the connections between issues and I write a description of the connection on the line. I then ask the students to think more about the connections between these main issues. This mapping process begins to help helps students explore the complex interconnections between humans, the environment and quality of life.

An additional introductory activity could include the

use of *The Ecological Footprint*, a tool for measuring the ecological impact of daily life choices. The website, www.rprogress.org. could be useful at this time. By answering a few questions, the online Footprint Calculator will give feedback as to the relative ecological impacts of the students' current life. This may serve as a reality check and further inspiration to create a more sustainable future.

The second step in the project includes sharing sustainability information and having students research some main components of a sustainable future. Some components may include healthy, non-polluting sources of energy, food and housing. I allow students time in class to research these issues. Once students have had sufficient time to prepare their research, they presented their find-

I found by pre-testing, that most of my 7th grade students did not know the energy sources for the heat and light in the classroom or their homes. They therefore did not know about the impact burning coal, or the by-products of nuclear energy. If a person does not know the sources or consequences of their life styles and product choices, then how can they make informed decisions?

In our culture and in this time, we do not make things from our natural, local environment, as was done by our ancestors since the beginning of human history. In the past people were very directly connected to their environment in all aspects of their lives. However, in these times, we in the U.S. purchase all the things we need from a store. These productions come from around the world, and we seldom have any idea of their impact on the health and well-being of the workers that made them — or the environment costs of their production, packaging, shipping and eventual disposal. (See the Ecological Footprint).

Since we are not directly involved in food production or making our clothes or homes, or creating our own energy...the connections between things become "invisible". Even we as adults find it an almost impossible task to identify the impacts of the products we purchase. Food for instance is shipped an average of 1200 miles! What is happening at the source and production points? Are the fields being sprayed with chemicals that poison the workers? Are their children getting cancer at highly accelerated rates? Are the workers forced to buy expensive imported food because they do not own the land that is being used to grow luxury, non-nutritive food items for the richer countries? Are the forests being clear cut?

In our current global economy, the social and ecological consequences of our life choices become difficult to track and understand. The U.S. is only about 5% of the world's population, but uses about 25% world's resources. Our over-consumption of the planets' resources is a social, ethical, economic and environmental issue. Unaware consumption has been woven into our consciousness as "how life is". However, by gaining perspective and becoming more aware, we can gracefully transform destructive practices to life-enhancing practices.

ings orally to the class. These presentations are designed to, as a whole, build a base of common knowledge before creating the “Ecovillages” which would integrate the concepts.

The third step involves small teams of students creating a 3D model of a sustainable community. Some students chose to do a drawing or writing instead, but using the same criteria. To create 3d models I gave students cardboard covered with green roll paper to look like grass. Students constructed land features, buildings and roads with the scrap materials such as little blocks of wood, popcycle sticks, and paper. However, I have found that the village tended to be square and boxy looking, reflecting the materials I had given the students.

As the project evolved, natural building material such as clay, sand and straw has been used instead of finished products for the main sculpting materials. Seventy-five percent clay and twenty-five percent sand with a plywood base. Optionally add some short fibers such as chopped up straw or dried grass for tensil strength. This combination may be just what you have in the ground around your school or house. Or the materials can be purchased, mixed and stored in plastic bags or containers. If it haardens without cracking, you’ve got it - enough clay to be sticky and enough sand to avoid cracking.

Using only these natural materials, the villages the students create are more organically shaped. I believe this shift away from manufactured materials toward naturally occurring materials is significant because it puts students directly in touch with nature as they create this model, and nature is more “naturally” included in the model. In the Ecovillage Project, I take great effort to focus on the quality of life and fun that we can gain from more local, ecological living. .

After the projects are completed, each team makes a presentation to the class describing some of the special parts of their Ecovillage. The projects can also be shared with township planning boards or videotaped for various uses.

Recommended websites

[Urban Options.org/SustainEdHandbook](http://UrbanOptions.org/SustainEdHandbook): Research the many aspects of sustainability related to MI educational standards funded by the State of Michigan.

progress.org: Take the Ecological Footprint quiz.

Worldwatch.org/topics: Access information on the state of the world.

Sustainable.doe.gov: U.S. Department of Energy website on sustainability.

The success of this project is based on several factors:

Fun: Students doing art, working in teams, creating parks, recreation & natural spaces, focusing on the positive.

Real World Application: Students are motivated by exploring their possible future choices.

Higher Level Thinking Skills: Synthesis, Evaluation, Analysis

Group Process: Small teams allow for rich interaction & collaborative decision-making.

Teacher input: The team structure allows the teacher to visit the groups and interact with them

Evaluation: The requirements assure that students will include a complex variety of sustainability components. There is good balance between “required” and “optional” components.

Standards: Because of the potential for modeling the rich interactions inherent in society and nature, this single project easily incorporates and integrates most of the Social Studies

About the Author:

Deanne Bednar received a Masters Degree in Social Ecology from Goddard College in 1980 and developed/taught a “Sustainable Futures” course at the Orchard Lake Middle School, West Bloomfield Schools from 1981 until her retirement in 1996. She is currently retired from formal school teaching, yet still involved in educational endeavors. Inspired by the Ecological Footprint (a guide to the relative impact of products and life choices) she is collaborating with educators, non-profits and game designers to create an online CD game about Sustainability. Her other projects are book illustration and natural building (see photos and information about the sculptural Thatched Roof Studio: www.geocities.com/rainforest/vines/7729.htm) Deanne She continues to share the Global Village project, and offers hands-on natural building experiences for youth.

Philanthropy: A Day at the Beach

Kathleen Veenstra

For almost a half a century, I have lived within five miles of our beautiful Lake Michigan. I have always enjoyed walking along her sandy shore as I have witnessed her many, varied moods and the wonders of her ecosystem. I have traveled to forty-nine of our fifty states, lived on both the east and west coasts of this magnificent country, and have been pulled back like a magnet to this incredible Great Lakes ecosystem. As Dorothy exclaimed, “There is no place like home!”

Michigan is unique! We are fortunate to live in this amazing part of creation. These phenomenal dunes, formed by glaciers, sand, wind, and time, are a miracle in our own backyard. These ever-shifting magnificent wonders support a diversity of wildlife and vegetation. We are called to be good stewards of this extraordinary place. However all that sparkles and glistens is not clean and healthy, thanks to humankind in the name of Progress, Industrialization, Fertilization, Sand Mining, Recreation, and Property Development.

Just as humans have spoiled its beauty, we also have the power to correct mistakes and ensure ongoing protection for one of the earth’s natural wonders so upcoming generations may be inspired as well. Our students will be the ones to make future decisions about this fragile environment. That is why I feel so strongly about the Beach Sweep, an Academic Service Learning project that we teach every fall (this unit can easily be adapted to fit any natural resource and students of any age). There is nothing like “being there and doing that” to teach lessons that students will not forget. This unit pulls in many benchmarks from Social Studies, Math, Science, Language Arts, and the Arts. These benchmarks and a more detailed outline of the lessons can be found in their entirety by going to this unit on the web at www.learningtogive.org (for-

merly known as K-12 Education in Philanthropy). Go to “Lesson Search Engine” on the left menu, then to “Lesson Content Area,” down to “Service Learning,” and click on “Let’s Clean the Beach.” This is Lesson Three of five, but then you can scroll all the way down to access the entire unit at the bottom. This hands-on connection plants the seeds of philanthropy, stewardship, teamwork, and a sense of responsibility to create a more humane and environmentally sound future for our valuable, irreplaceable natural resources. The rewards that are reaped will be citizens who care and want to make a difference in this world, to preserve and sustain our precious ecosystem

What student wouldn’t want to spend a day at the beach...instead of sitting in the classroom? When we mention our upcoming Beach Sweep (referred to nationally as the International Coastal Cleanup), motivation soars! Little do students realize how many important benchmarks and curricular goals will be met through this project. They know that they will be cleaning up a neighborhood park on the shores of Lake Michigan. This unit ties in beautifully with our reading theme: “Earth Patrol: Preserve and Protect,” as well as with our social studies focus on the Great Lakes, the formation of our fragile sand dunes, our watershed, and ecosystem.

This unit encompasses all students at all levels, including those with physical or mental disabilities. We have cleaned the beach with a young girl in a wheel chair as well as with another with a walker. This can be a multi-age project. It works well to partner with another class for this activity. It provides a “real” situation to create open-ended response questions which is great for MEAP preparation. The Beach Sweep provides a great opportunity to use most of the Multiple Intelligences. The latest brain research has found that to stimulate real learning, positive emotions (the Limbic System) must be involved; this project does just that!

I will lead you through the steps of this journey:
Prepare: We begin by sharing aloud Chris Van

Allsburg's Just a Dream. This sets the stage for individual responsibility for the care of our environment. Throughout the project we read many excellent pieces of literature: Chris Van Allsburg's Just a Dream, Lynn Cherry's A River Ran Wild and The Great Kapok Tree, and Jack Prelutsky's We Are Plooters (along with other environmentally-sensitive writings).

We introduce the role of Michigan's DNR by using the Great State, Great Parks, Great History publication which describes how they protect our land and water. We visit P. J. Hoffmaster State Park and learn about pioneer conservationists like P. J. Hoffmaster and Genevieve Gillette who crusaded for public ownership of our natural resources. The Gillette Nature Center has a wonderful video presentation and exhibit area that explains the wonders of the dunes.

As part of our Academic Service Learning project we learn about philanthropy, defined as the giving of one's time, talents, and treasures for the common good. This correlates nicely with Core Democratic Values. The learningtogive.org web site is a fantastic place to find more lessons on philanthropy. The class discusses what a non-profit group is, and then we introduce The Lake Michigan Federation (www.lakemichigan.org), a "watch-dog" agency that oversees the Lake Michigan ecosystem (students can research other agencies such as Sierra Club, Green Peace, etc. on their own). We invite a volunteer from the LMF to come in and tell us how they protect this area and how the students can help. One year we brought in gifts of money (in lieu of giving Christmas gifts to each other) and donated \$400 to the Lake Michigan Federation as they learned how a non-profit group obtains the funds they need. Another year we transplanted dune grass to hold the sand in a blowout area. The representative explains what the International Coastal Cleanup is (scheduled for the third weekend in September) and challenges students to participate.

Our guest goes on to demonstrate the proper procedure for this task. This person often bring in a bag with debris that has been found on a local beach. Students are shown the rubber gloves, garbage bag, and the official tally sheet with the various categories. As an item is pulled out of the bag, the students must classify that piece of debris and tell whether it is garbage and should be picked up or whether it should be left on the beach (like feathers, driftwood, stones). Then they must determine into which category it belongs...good math and science skills. They are told that their results will be faxed in and included in the national report. Students become aware that they are part of a bigger picture: a nation-wide clean up of our environment.

Students are put into teams. There are three main jobs: the bag holder, the tally sheet recorder, and the gloved gatherers. These can be rotated if the team wishes. This activity builds Lifeskills in a real-life setting. They must use cooperation, motivation, initiative, curiosity, caring, responsibility, organization, and more. We discuss proper attire for the weather. Students must bring a backpack with a sack lunch and pencils and paper to be used for the dune sketching and poetry that follows the cleanup (we model focus poetry or Cinquain or Haiku poetry in the days preceding the event).

Do it! After getting off the bus, we divide into teams, get our supplies, listen to last-minute instructions and head to the beach. It helps to have parent supervisors, but it is not essential. It does help to have a whistle, as the class will be spread out as they each have their own "territory" to clean. Students are warned not to go up into the dune grass or they may cause erosion by trampling the sand-holding grass. They scour the beach for about an hour, depending on the condition of the beach and the weather. The actual cleanup does not take very long. It is the preparation and the ongoing reflection that make this project so meaningful.

After gathering the collected garbage and supplies, we settle in the sand for a well-deserved picnic lunch (or under a nearby pavilion if the weather doesn't cooperate).

Reflect: Our first piece of reflection is pencil sketching of the awesome dune scenery. In the preceding days we have discussed artistic point of view, making a drawing seem three-dimensional, using shading, making objects relational in size, utilizing the whole piece of paper, etc. (these sketches may be used later to inspire the making of note cards to raise funds and to illustrate their poetry). Students are reminded to sit at least an arm's length away from each other so they are better able to focus on the task at hand.

Our second piece of reflection is writing focus poetry, Cinquain, or Haiku poetry. We use "recipes" for this that the students have reviewed in the classroom and packed in their bags. The focus poetry centers on the use of adjectives in describing a particular noun. They may choose the appropriate noun (dune, lake, clouds, birds, sand, waves, etc.) and then brainstorm one and more-than-one syllable adjectives to "fill in the form." Back at school these will be typed on the computer, illustrated (using their sketches as reminders), and published in a book for parents to read at conferences. During "personal reading time" this book is often seen in the students' hands throughout the year.

When we return to the classroom we do our third piece of reflection. After totaling the results of the entire group, graphing it, and faxing it in, we discuss our findings (like the item found the most often, the funniest object found, the most dangerous pieces of garbage, etc.) and feelings. We talk about the details: What did we do? How did we do it? Why did we do it? How did it look when we arrived (sometimes it looks pretty clean on the surface)? How did it look when we left? What did we take away (up to fifty pounds of debris)? What

did we leave behind? Then we write in our journals. We follow that up with a pair-and-share time of reading our entries to a partner. Next we report one important thing that our partner had written. Other types of reflection activities have included, an artistic reflection were students can be to create a "garbage sculpture" with the items that were cleaned from the beach. This can be a team or whole class activity. Another artistic reflection is to create a poster for their locker promoting the Earth Patrol theme. A third activity is designing and painting "Earth Patrol" t-shirts. We have done reflections with music as well. Students (independently or in groups) compose a song or rap about their experience.

Respond! The students get pretty passionate about finding over seven hundred cigarette butts in "their" park. It's amazing how possessive they can get...they take ownership of the public property and care how it is treated. A typical response has included an increased fervor for cleaning up their own property and playground. Many also report back in subsequent weeks that they went to another park with their family and cleaned up a new area. Philanthropy in action catches on!

As a final formal piece to this project, students are called to advocacy. They must write a persuasive essay about "Earth Patrol: Preserve and Protect" which may be sent as letters to the editor of a newspaper. Students are taught how to write a persuasive essay and given a rubric for specifics to include in their writing.

This unit provides so much fodder for future lessons in a variety of areas. When we learn about graphing in math, we remember how we graphed our tally results after the Beach Sweep. When we read a persuasive essay, we remember composing one ourselves. When we read about the fragile Lake Michigan dunes and the surrounding ecosystem, we know what that means because we have been there. When we hear about philanthropists,

we know we have been one. We put our Lifeskills to use in the real world. We pulled together to clean our community and environment. We covered so many curricular themes without realizing it. However as we served, we also learned...a great deal! This rich experience also serves as a bonding agent for the class...a shared lesson they will never forget. We always get more out of it than I anticipate. The students' enthusiasm and eagerness is fresh and inspiring!

The wonder of it all was brought home again this fall when a new student moved here from Georgia just in time to join us for the Beach Sweep. This was his first visit to our awesome Great Lakes ecosystem. He continually sifted the warm, sugary sand through his fingers as he watched the seagulls soar overhead above our towering wooded dunes. He was mesmerized by the frothy waves rolling in from that huge body of water. It was difficult to be a tough taskmaster as I remembered the feelings and saw the dream being born anew.

These are quotes by the students six months after the beach Sweep:

- I was amazed that people all over the country were cleaning beaches when we were.*
- It felt good to be helping our environment and animals who live there.*
- We were actually making a difference!*
- It wasn't as bad as I thought it was going to be.*
- I felt happy trying to make a difference.*
- I was amazed at how much trash we found.*
- I am amazed that people are pigs and they don't take care of the beach.*
- I am proud of myself for making the world a better place.*
- It has changed how I act when I go to parks. I take care of my garbage.*
- Mrs. Veenstra is a take care of Lake Michigan freak.*

That's a reputation I can live with! I thank God

for the privilege of being an educator. I have hope for the future for this great state we call

Michigan because the seeds to preserve and protect our precious environment have been planted in the lives of those who will be leading us further down the path as we continue this lifelong journey. Our future is in good hands!

About the Author:

Kathleen Veenstra graduated from Hope College in 1970. She has taught at the elementary level for over two decades in New Jersey, California, and mostly in Michigan; she currently teaches fourth grade at Central Elementary in the Reeths-Puffer District in Muskegon, Michigan. Kathy lives in Ferrysburg, MI, along the Lake Michigan shoreline with her husband, Rick, and near her four children and two grandchildren. This Beach Sweep unit has won the J.C. Penney Golden Rule Award, the Learning to Give Unit-Writing Award, and the Lake Michigan Federation Educator's Award for Stewardship.

Teaching Controversial Issues: A four-step Classroom Strategy for Clear Thinking on Controversial Issues.

Pat Clarke

For the past decade, one of the most popular workshops offered by our provincial teachers' federation has been one entitled "Teaching Controversial Issues — Without Becoming Part of the Controversy." The popularity of this workshop reflects, no doubt, a growing awareness on the part of teachers of the need to teach social issues. Yet the motivation for teaching about issues such as environmental sustainability, limits to growth, animal rights or euthanasia is at the same time tempered by an understandable inclination to be wary of dealing with controversy. So while our workshop on teaching controversial issues is well subscribed, we know that the pedagogical danger zone that social issues present is one that a large number of teachers avoid.

The reasons teachers may avoid controversial issues as classroom topics are as complex as teaching itself. These issues are complicated. Teachers are often discouraged, perhaps not so much by complexity, but by their lack of familiarity with the topic: they are uncomfortable if they do not feel "expert" or at least well versed. Furthermore, teachers may be concerned that complicated issues would take too long to cover and regular curriculum would be neglected. In this age of increasing standardization and calls for "accountability," teachers are not inclined to venture down the side roads of learning where social issues can so often lead. We also live in a time of general decline in the protocols of civil discourse. Television talk shows bristle with outrageous behaviour which teachers are understandably reluctant to see reproduced in their classrooms.

Also, we sense that we are living in particularly cantankerous times when our actions as teachers are under close and often uninformed scrutiny. If we teach about an issue, we can easily find ourselves accused of bias or ulterior political motives. In other words, in teaching about a controversy we become the controversy. Teachers in the Pacific Northwest have experienced this when they have addressed sustainability issues and found themselves accused of being anti-logging.

But the fact remains that contemporary teaching presents certain challenges, not the least of which is the matter of relevance. The value of a formal education is increasingly measured according to the degree that it is future oriented. Further, there is a growing belief that a good contemporary education is in essence a global education. That is, an education that concentrates on helping students understand connections and interdependence, develop an awareness of the planetary condition, and be well prepared to act as effective, responsible citizens in a complex world. In this context, the relationship between education and public issues is apparent: global education in practice turns to contemporary issues for its content. We could well ask what are our chances of becoming global educators if we remain averse to taking on controversial public issues as part of our teaching practice.

What is needed is an approach to teaching issues that overcomes these obstacles — specifically, a concern for the influence of a teacher's own biases, a fear of becoming a lightning rod for controversy oneself simply because a controversial issue is discussed in a class, and a lack of confidence because of unfamiliarity with an issue.

The approach to teaching an issue put forward here tries to answer at least part of these concerns. It does not deal directly with the role of issues in prescribed curricula. The possibilities for teaching issues as permitted or encouraged by curricula vary from one jurisdiction to another.

However, it would not be extreme to suggest that any teacher who wants to can find a way to integrate consideration of issues into regular course work. I sometimes refer to this approach to teaching issues as a de-mystification strategy. This is a manner of teaching that is helpful for students because it offers them a way of making sense of a complex and confusing world. It is a method of analyzing an issue, considering the merits of an argument and forming an opinion on the basis of critical analysis.

As an essentially inductive process it is student centered, and the teacher's role is primarily that of a monitor or resource person. In this way the teacher's bias is less of a concern. The risk of public concern over teaching a controversial issue is addressed because the strategy is itself a demonstration of fair consideration. As an inquiry method it provides teachers a framework for classroom activity which discourages one-sided argument or ill-informed opinion.

The De-mystification Strategy: A Framework for Teaching Controversial Public Issues

The teaching strategy for controversial public issues is based on four steps or elements. Each of these provides students a set of questions which gives them a number of ways of looking at an issue as well as a sound basis for making a judgement.

1. What is the issue about?

Where controversy is concerned, the question of what the issue is about is not as simple or obvious as it may appear. The point here is to identify the key question over which there is a controversy. Virtually every controversy turns around three types of questions: those relating to values — What should be? What is best?; those relating to information — What is the truth? What is the case?; and those relating to concepts — What does this mean? How should this be defined? In short, what

is this controversy about: values, information or concepts? By responding to these questions, students begin an analysis of an issue which identifies the nature of the controversy. In doing this, students can fairly quickly determine the heart of the issue. The primary value of this element of the strategy is that it helps students get past some of the frustration that can be experienced in trying to understand an issue. It also gives them a chance to analyze an issue dispassionately before any consideration of the merits of a case.

2. What are the arguments?

Once students have determined what the issue is about or the nature of the controversy, the second element of analysis considers the arguments supporting the various positions on the issue. The key concern here is determining just what is being said and whether there is adequate support for the claims being made. This step is largely analytical in that it calls for some determination of the content of an argument. It is also judgmental to a degree. It is at this step that students can begin judging the validity of a position on a controversial issue.

If students have determined that the controversy surrounding an issue involves information, then they should ask questions about the information available or provided. Is there adequate information? Are the claims in the information accurate? Is the information appropriate to the issue? Are the sources primary or secondary? In general, are the conclusions presented in the argument reasonable given the information? Most controversial issues are about values, and there are critical questions students can ask about the values stated or employed in an argument. Specifically, what criteria are being used to make a judgement? In general there are two, moral and prudential. Moral criteria for judgement are based on a concern for how all people will be affected. Prudential criteria are those that are concerned mainly with how I or my group will be affected. Other questions students can use to test the acceptability of values

claims are well known and quite universal in application.

They are:

How would you like that done to you?

What if everybody did that?

Are there any situations where you would feel different or disagree with this value?

These questions give students a set of criteria for making judgments which can take them beyond relativism and, because of their universal application, can help students to reflect on the validity of dogmatic positions.

If the controversy is one which seems to involve issues of definition, meaning or concepts, then students should try to determine if the arguments presented use meanings or definitions that are clear. Also they should test to see if meanings are used consistently or if they are appropriate and used in a proper context.

3. What is assumed?

Once students have considered the arguments in an issue, the critical question becomes what are the assumptions or what is taken as self-evident in the presentation of arguments. It is at this stage that crucial matters of principle are employed to determine the validity of a position. This framework or process has at its heart a fundamentally important aspect and that is that there is no values relativity.

It is not true that any opinion, position or point of view is acceptable or legitimate. If assumptions taken to justify an argument are based in prejudice, if attitudes behind arguments are ethnocentric, racist or parochial, then these assumptions are grounds for criticism and reduce the legitimacy of an argument.

The question for students to pose is, what are the assumptions behind the argument? Is it based on a prejudice or some other attitude which is contrary to universally held human values such as those set out in the United Nations Declaration of Human Rights?

A second element students can use to evaluate assumptions or what is “behind” an argument is the voice of the argument. Who is saying this? Are they “insiders” or “outsiders”? Insiders may have particular information and interests which could give an argument a certain shape or orientation. If the voice is that of outsiders, do they know the issue or is being an outsider an advantage in this case since they have no special interest? Often the assumptions behind an argument can best be tested by hearing views of both insiders and outsiders.

Once the arguments have been analyzed and the assumptions scrutinized the final step has to do with how the issue or the arguments pertaining to it are presented or manipulated. The final question in the process then tries to help students judge the quality of the information they are receiving.

4. How are the arguments manipulated?

This is the stage of the process when questions are asked on the politics of the issue. This step is particularly important for students because it can help them understand how information can be used to influence opinion.

To determine how an argument is being manipulated students must first determine who is involved and what are their particular interests in the issue. What is the rationalization for their position? What are their reasons for taking the position they advance? By considering these questions students begin to see how information can be selected, emphasized or ignored according to its value to various positions on an issue. The degree to which the parties involved are acting in self-interest and use information only to support that interest could affect the legitimacy of a position. On the other hand, a strongly supported position or one with strong moral reasons could add credibility to an argument.

A growing contemporary concern is the role of media in controversial issues and how media can engage in argument manipulation. It is very important for students to have an appreciation of how media are involved in issues. Media literacy has become an essential survival skill as the influence of the media increases. The question for students to address is, how can the media both reflect and create reality? To what extent on any given controversial issue is the media either creating the issue or manipulating the arguments?

Argument manipulation is usually accomplished through such strategies as scapegoating, false analogies, extreme examples, and others. The degree to which media or advocates of a position rely on such strategies is an indication to students of the validity of an argument. Detecting such tactics gives students a useful tool for assessing an argument and making a judgement on an issue.

An Application: First Nations' land claims

If we take a controversial issue such as First Nations' land claims and apply this four-part strategy we can highlight the teaching and learning opportunities. First Nations land claims, or the more general topic of indigenous people rights, can be a hot issue. Classrooms could easily become verbal war zones if a discussion were simply an airing of views (or an exchange of ignorance). But when students start at the first step of the strategy — a consideration of the issue and a clarification of the type of issue — they engage in an analysis which gives them greater understanding and can move the discussion beyond an exchange of prejudice or misinformation. In the case of First Nations' land claims, students could learn much by defining the types of issues involved. The question, for example, of the reliability of information or the controversy over who is to be believed is as much a part of the controversy as the values question, who is right or what ought to happen.

This consideration alone could be a revelation which would help students realize the complexity of the issue and could lead them to evaluate their prejudices. Similarly an analysis of the arguments presented by the various parties involved in the conflict would provide an opportunity to question firmly held conclusions. Students might, for example, find that many of the criteria used to justify certain actions are essentially prudential or based on self-interest. If this enhanced their perspective on the issue, how might their opinion be affected?

Certainly questions relating to assumptions behind the arguments presented by the two sides provide innumerable opportunities for analysis. Enquiries regarding ethnocentric perceptions, racism or parochialism could give students considerable insight on the merits of the various arguments. At the same time this aspect of a consideration of the conflict would provide the crucial element in teaching any issue, which is the determination of legitimacy on the basis of principles.

Like any controversial issue, land claims can be an object lesson in argument manipulation and the role of the media. Indeed, the role of the media in the manipulation of arguments in this issue could be inspiration for a whole series of lessons on media literacy. First Nations' land claims is in certain respects an easy issue to which to apply the "demystification strategy." Other issues may not as readily fit the strategy or have such clearly defined sides. Nevertheless this issue serves as a good example of how teachers can take a complex and controversial issue and have their students study it in a way that helps them clarify their views, critically analyze the information they receive and form an opinion based on universally acceptable principles. At the same time it is a legitimate process of inquiry and a straightforward and defensible teaching technique.

About the Author

Pat Clarke is director of the Professional Development division of the British Columbia Teachers' Federation in Vancouver, British Columbia. An earlier version of this article appeared in Green Teacher 31, December 1992-January 1993.

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Global Morning: A Consumer Awareness
Activity: An Eye-opening Lesson for
Secondary Students on the Implications of
Consumerism.
Mary Gale Smith

Consumer goods link North Americans to all parts of the world. Generally we tend to be passive consumers, buying what we want or what we have been persuaded to buy, without much thought to the consequences of our choices. This activity is designed to make people aware of the extent of global interdependence and the costs in human, environmental, social, and economic terms.¹ Often global problems seem overwhelming and people feel powerless and unable to take action. The objective of this exercise is to encourage globally responsible consumer action.

This activity requires four facilitators. One reads the “Global Morning” story, stopping whenever there is an asterisk (*). The second facilitator reads from the expanded script starting with the word “Stop”. The third facilitator locates the countries or places mentioned by the second facilitator on a map with a pin or tack. The fourth facilitator connects the pins by winding a string or piece of yarn from each pin back to the home country.

Script for Facilitator One

I awoke this morning at seven o’clock to the ringing of my alarm clock. *

I padded across my warm rug,... *

...pulled on a track suit, laced up my cross trainers and went for my morning run. *

Returning home, I showered and cleaned up. *

Then I dressed quickly in my favorite cotton shirt. *

While my coffee perked, I sliced a banana over my bran flakes, spread peanut butter on my toast, then sat down to eat breakfast. *

Shortly after 8:30 I grabbed my new sweater, *

... left home and drove to a nearby gas station. *

While driving to work/school I slipped a tape of my favorite music into the cassette deck to make the trip more enjoyable. *

In just a few hours of my life I have consumed raw materials from most parts of the world and used products sold by many of the world’s major multinational and transnational corporations. I have depended on the rest of the world. I have made global connections. *

Script for Facilitator Two

I awoke this morning at seven o’clock to the ringing of my alarm clock.

Stop! You have encountered the global. Your clock is a product of the Sony Corporation, based in Japan. The clock was assembled in a Sony plant in Brazil from component parts produced in Japan, Mexico and West Germany. It was shipped from Brazil to Canada in a Greek-owned ship manufactured in Sweden, licensed in Liberia and staffed by a Portuguese crew.²

I padded across my warm rug, . . .

Stop! Your warm carpet was made in India in a carpet industry that largely uses bonded child labor. In theory these children are working to pay off a loan made to their parents, but in reality the children are slaves because the terms of the loan make it a debt that can never be repaid. The

children are also used because of their nimble fingers, keen eyesight and ability to sit in the same position for hours. Frequently such working conditions lead to leg and back deformities, water retention in the knees, swelling or infection in the fingers, breathing problems, lung infections, and tuberculosis. The children are exploited because they are the cheapest labor available.³

... pulled on a track suit, laced up my cross trainers and went for my morning run.

Stop! You are now wearing the global. Your track suit was probably made in an export processing zone in the Philippines by women working in factories which directly contravene Article 23 of the UN Declaration of Human Rights, the right to just and favorable conditions of work. These women work long hours for extremely low wages under a quota system in conditions that include crowding, insufficient air circulation, exposure to health risks such as chemicals and fibers in the air, physical abuse, and few breaks for attending to physical needs. If they complain they are fired or worse.⁴ Your training shoes may have been made in Mexico where as many as five to ten million children work illegally. The toxic fumes from gluing soles to the shoes causes the children's noses and eyes to run continuously. The toxic wastes from the plants and raw sewage from the lack of sanitation, coupled with the absence of housing, electricity and schools makes life very difficult.⁵

Returning home, I showered and cleaned up.

Stop! Some of your shower products are made by either Proctor Gamble or Bristol Meyers, both U.S. multinationals. Proctor Gamble, with Kimberly-Clark, another multinational, controls 80% of the disposable diaper market in the U.S. These plastic disposables raise many serious questions. They can remain intact for up to 500 years and little is known about the health effects of tossing diapers still

containing urine and feces into landfills. They are an example of our penchant for using disposable products that are more expensive and more harmful to the environment than re-usable products. The Bristol Meyers company is involved in production of infant formula, a breast milk substitute which the company has marketed in the Third World by donating it to hospitals. The morality and legality of this practice is questionable. If breast feeding is stopped, the production of breast milk ceases, making the mother dependent on the costly formula which she may mix with contaminated water or dilute to make it last longer. These practices often result in disease and death.⁶

Some of your shower products are also products of The Body Shop, a company that is committed to social responsibility and is constantly encouraging the cosmetics industry to re-evaluate the way in which it operates.⁷

Your toothbrush was made by the Gillette Co. which used to have plants in Montreal and Toronto. The fate of Gillette Canada provides a good example of interference by multinational corporations with their subsidiaries abroad. There are good indications that the Canadian subsidiary was deliberately bled for capital to shore up Gillette Co. from potential takeover bids in the United States. This left Gillette Canada with huge losses, forcing worker layoffs and eventual shutdown.⁸

Then I dressed quickly in my favorite cotton shirt.

Stop! Again you are wearing the global. Your shirt started in the cotton plantations of El Salvador, Central America, where workers pull cotton for one to two dollars a day under the hot sun. They are exposed to pesticides, often applied improperly, and they have no access to medical care. The cotton is then shipped to the U.S. In South Carolina the cotton is spun and woven into long sheets of fabric by the low-wage textile workers of Burlington Mills, the largest textile company in the U.S. At

this stage, a retailer, such as the Sears Company, who will eventually sell the dress or shirt, buys the cloth. Sears ships the cloth to Haiti where it is distributed to small sweatshops where women textile workers, paid by the number of dresses they produce, earn about three dollars daily.⁹

While my coffee perked, I sliced a banana over my bran flakes, spread peanut butter on my toast, then sat down to eat breakfast.

Stop! You are now eating the global. The peanuts came from Senegal, the coffee from Colombia. The sugar may have come from the Dominican Republic, but more likely it is a domestic product. The banana came from Honduras who export to Canada so that they can buy tractors. However, the trade is weighted heavily in our favor. In 1982, it took 25 tons of bananas to purchase one tractor. Banana-producing countries receive only fourteen cents of every dollar that we spend on bananas. The bulk of the revenue goes to large foreign-owned corporations.¹⁰

Canada, like the United States, imposes duties on roasted coffee and cocoa powder, but in their unprocessed form coffee and cocoa can freely cross borders. This system ensures that the supplying country loses out on profits. A lot more money is made by food processors in wealthy countries than by the farmers who supply them.¹¹ Coffee also has environmental consequences for the country of origin. Washing the coffee beans causes severe river pollution.

Sugar, peanuts and coffee are examples of cash crops which have taken over the land previously used in Third World countries for subsistence crops, dramatically altering the local food consumption patterns, always for the worse.¹²

Your cereal is a product of Canada and the milk you poured on your cereal came from a local dairy which has returned to producing milk in reusable

glass bottles. In choosing these local products you are supporting local farmers and avoiding the environmental costs of long distance transportation.

Shortly after 8:30 I grabbed my new sweater.

Stop! Your new sweater is a product of the Patagonia company and is made out of old plastic pop bottles. This company undertook a review to determine the environmental cost of the clothing they were producing. They found that everything they made pollutes in some way. In searching for a better way they came across a company that takes old plastic pop bottles, cleans them, melts them down and extrudes them into fibers that can be spun into yarns. This process means that less plastic ends up in landfillsites.¹³

I left home and drove to a nearby gas station.

Stop! Now you are driving the global. Your car is a Ford Escort. The parts of your car come from at least twelve different countries. For example, the glass and the radio come from Canada, the cylinder head, carburetor, and headlights are made in Italy, the starter, alternator, and windshield washer pump in Japan, the battery and mirrors in Spain, and so on.¹⁴ You buy your gas from Shell, an Anglo-Dutch transnational which is the world's second largest. The price you pay for that gas is largely influenced by the decisions of the oil-producing countries belonging to OPEC, who have played a significant role in the development of a global economic system.¹⁵ While driving to work/school I slipped a tape of my favorite music into the cassette deck to make the trip more enjoyable.

Stop! That tape was produced in Bangkok, Thailand, in a factory where most of the workers are girls as young as nine years old who are paid a monthly salary of \$43.¹⁶

In just a few hours of my life I have consumed raw materials from most parts of the world and used

products sold by many of the world's major transnational or multinational corporations. I have made global connections.

Stop! What are the implications of these connections?

Debriefing

Questions for Discussion:

1. How do your consumer decisions have an impact on the lives of others? Explain.
2. How do consumer decisions affect our lives?
3. What kind of assumptions do we hold about making purchases? (Do we usually assume that we have been a good consumer if we have done some comparison shopping and chosen the best buy? Do we assume that it is good to buy? that material possessions are important?) What values form the foundation of these assumptions? What are the social implications and economic implications of our consumer purchases? Should we consider these when we make a purchase?
4. What does it mean to be a globally responsible consumer? Who can afford to be globally responsible consumers? Is it an ethical obligation to be a globally responsible consumer? How could we change our consumer habits to make them more globally responsible? What should be done about the effects of consumerism? What should be done about the unequal distribution of wealth and resources? about the exploitation of women and children? about agri-business, cash cropping, extensive use of pesticides, etc.?

Brainstorm Questions to Ask Before Making a Purchase

Environmental: Example: Did producing it contribute to pollution of the environment or draw

excessively on non-renewable resources? Consider transportation and packaging as well as production.

Economic: Example: Do I need it? Did the producers get a decent return for their labor? Who is profiting and who is losing out? What is the effect on the external debt situation?

Social: Example: Does it involve child labor? Has advertising it undermined value systems and altered lifestyles? Does the product or system enhance the quality of life for the individual or society using it?

Legal: Example: Does the company respect trade union rights? Is it being "dumped" on other countries?

Health: Example: Does the product damage your health? Has its production caused ill health to workers?

Brainstorm Suggestions for Action

The following list of actions has been compiled from a variety of sources.¹⁸

- * support alternative trading organizations
- * buy locally
- * buy less, live more simply, be agents of healthy change, support, join, or start citizen groups on the environment or social justice
- * give and invest with thought, support socially and globally responsible organizations and investment
- * boycott companies and countries which act unethically; buy from co-operatives and small businesses at home
- * increase your knowledge by researching the products you use

- * penalize pollution by buying clean, environmentally friendly products
- * buy from co-operatives and small businesses in the Third World
- * learn to question your consumer choices
- * write letters to companies informing them of your choice not to purchase their product and explaining why

Assessing Action

Each of the actions suggested could be examined for their consequences to self and others. Finally the actions are assessed by testing:

- * Would this action be appropriate if it were you in this circumstance? (Role Exchange Test)
- * If one or more conditions is changed in the posed problem, would it make a difference to your decision? (New Case Test)
- * Can we take a larger principle and see if all cases can be subsumed under that principle? (Subsumptions Test)
- * What would happen if everyone did this? Would it still be acceptable? (Universal Consequences Test)(19)

End Notes:

1. This activity is a modification of "A Day In My Life" by Graham Pike and David Selby, *Global Teacher Global Learner*, (London: Hodder and Stoughton, 1988), pp. 287-89.
2. Pike and Selby, *Global Teacher Global Learner*, p. 288.

3. Linda Peterat, *Work: Children, Women, and Men in Families*, (Ottawa: Canadian Home Economics Association, 1991), pp. 22-23; and Moira Farrow, "By buying that oriental rug, you might be helping to enslave a child," *The Vancouver Sun*, March 8, 1992, p. B2.
4. Lorraine Gray, director, *The Global Assembly Line* (video), Educational TV and Film Centre, 1986.
5. John Gershman, "Trading freedom. How free trade affects our lives, work, and environment," *Food First Action Alert*, (San Francisco: Institute for Food and Development Policy, Fall 1991).
6. Ben Corsen, Alice Tepper Marlin, Jonathan Schorsch, Anita Swaminathan and Rosalyn Will, *Shopping for a Better World*, (New York: Ballentine, 1990). See also John Elkington and Julia Hailes, *The Green Consumer's Supermarket Shopping Guide*, (London: Victor Gallancz, 1989); and Joan Helson, Kelly Green, David Nitkin, and Amy Stein, *The Ethical Shopper's Guide*, (Peterborough, Ontario: Broadview Press, 1992).
7. Philip White, *The Supermarket Tour*, (Toronto: Ontario Public Interest Research Group, 1990), p. 36.
8. Pete McMartin, "Queen of the Cosmetics denies she's involved in fashion industry," *The Vancouver Sun*, October 13, 1993, p. A3. 9. Linda Peterat, *Work: Children, Women, and Men in Families*, p. 47.
10. Philip White, *The Supermarket Tour*, p.15.
11. Rupert Taylor, ed., *Food. Canada and the World* 57:2 (1991), pp. 14-31.

12. Linda Peterat, Food Security and Staple Foods and Food Forms: Choices, Changes and Challenges. (Ottawa: Canadian Home Economics Association, 1991).
13. John Flinn, "Want to be ultra-chic? Then try the sweater that's simply garbage," The Vancouver Sun, September 21, 1993.
14. N. Harris, N., "Halfway to Liberation," New Internationalist, 204 (1990), pp. 18-20.
15. Pike and Selby, Global Teacher, Global Learner, p. 289.
16. Linda Peterat, Work: Children, Women, and Men in Families, p. 16.
17. Linda Lusby, The new consumerism. International Development Connections. (Ottawa: Canadian Home Economics Association, March 1991).
18. For example: David McConkey, Choices: A Family Global Action Handbook, (Brandon, MB: Star Printing, 1987); Philip White, The Supermarket Tour; and S. Shaw, "Shopping for the planet - The green consumer," New Internationalist, January 1990, pp. 4-23.
19. These tests have been used extensively by the Association for Values Education, University of British Columbia, and are found in Food Security by Linda Peterat, (Ottawa: The Canadian Home Economics Association, 1991).

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Got a Spare Planet?

Based on

Excerpt from *Our Ecological Footprint*

By Mathis Wackernagel and William Rees from
Green Teacher, Dec. 1995 – Jan. 1996

Updated by Dahlia Chazan, Redefining Progress,
January 2004

* * *

A generation of Americans has grown up recycling what used to be trash. Effective environmental education programs in American schools deserve significant credit for this change. While important, an even greater shift in ecological awareness is necessary. Humanity's growing demand on natural resources and its consequent production of waste are liquidating the planet's stocks of 'natural capital.' This depletion is no longer limited to local deforestation, urban sprawl, fishery collapses or water shortages, but has taken on global proportions. In aggregate, humanity's demand may already exceed the regenerative capacity of the biosphere. A transformation towards sustainability will require citizens to be equipped with tools and concepts that relate the personal and the political to the environmental, economic, and social dimensions of sustainability.

The Ecological Footprint is just such a tool - a scientific, peer-reviewed measure of the impact of human activity on the global ecosystem. It is both great science and great metaphor. Housed at Redefining Progress, it is a powerful tool for shifting sustainability from the abstract to a specific measurable goal, from a wonky word to a story that the next generation can be part of creating. The Footprint moves sustainability education forward by inviting participants into humanistic and scientific inquiry, by building relevance to science, math, and humanities

education, and by linking knowledge to action. The Footprint can contribute mightily to raising a generation of Americans cognizant of the shadow we cast on the Earth and committed to making a difference.

What is an Ecological Footprint?

Ecological Footprint analysis is an accounting tool that enables us to estimate the resource consumption and waste assimilation requirements of a defined human population or economy in terms of a corresponding productive land area. Typical questions we can ask with this tool include: How dependent is our study population on resource imports from "elsewhere" and on the waste assimilation capacity of the global commons? Will nature's productivity be adequate to satisfy the rising material expectations of a growing human population into the next century?

To introduce the thinking behind Ecological Footprint analysis, let's explore how our society perceives that pinnacle of human achievement, "the city." Ask for a definition, and most people will talk about a concentrated population or an area dominated by buildings, streets and other human-made artifacts (this is the architect's "built environment"); some will refer to the city as a political entity with a defined boundary containing the area over which the municipal government has jurisdiction; still others may see the city mainly as a concentration of cultural, social and educational facilities that would simply not be possible in a smaller settlement; and, finally, the economically-minded see the city as a node of intense exchange among individuals and firms and as the engine of production and economic growth.

No question, cities are among the most spectacular achievements of human civilization. In every country cities serve as the social,

cultural, communications and commercial centers of national life. But something fundamental is missing from the popular perception of the city, something that has so long been taken for granted it has simply slipped from consciousness.

We can get at this missing element by performing a mental experiment based on two simple questions designed to force our thinking beyond conventional limits. First, imagine what would happen to any modern city or urban region – Seattle, Mexico City or London – as defined by its political boundaries, the area of built-up land, or the concentration of socioeconomic activities, if it were enclosed in a glass or plastic hemisphere that let in light but prevented material things of any kind from entering or leaving – like the “Biosphere II” project in Arizona. The health and integrity of the entire human system so contained would depend entirely on whatever was initially trapped within the hemisphere. As currently run, virtually any modern city would cease to function and its inhabitants would perish within a few days. The population and the economy contained by the capsule would have been cut off from vital resources and essential waste sinks, leaving it both to starve and to suffocate at the same time! In other words, the ecosystems contained within our imaginary human terrarium would have insufficient “carrying capacity” to support the ecological load imposed by the contained human population. This mental model of a glass hemisphere reminds us of humankind’s continuing ecological vulnerability.

The second question pushes us to contemplate this hidden reality in more concrete terms. Let’s assume that our experimental city is surrounded by a diverse landscape in which cropland and pasture, forests and watersheds – all the different ecologically productive land-types – are

represented in proportion to their actual abundance on the Earth, and that adequate fossil energy is available to support current levels of consumption using prevailing technology. Let’s also assume our imaginary glass enclosure is elastically expandable. The question now becomes: how large would the hemisphere have to become before the city at its center could sustain itself indefinitely and exclusively on the land and water ecosystems and the energy resources contained within the capsule? In other words, what is the total area of terrestrial ecosystem types needed continuously to support all of the social and economic activities carried out by the people of our city as they go about their daily activities? Keep in mind that land with its ecosystems is needed to produce resources, to assimilate wastes, and to perform various invisible life-support functions. Keep in mind too, that for simplicity’s sake, the question as posed does not include the ecologically productive land area needed to support other species independent of any service they may provide to humans.

For any set of specified circumstances—the present example assumes current population, prevailing material standards, existing technologies, etc.—it should be possible to produce a reasonable estimate of the land/water area required by the city concerned to sustain itself. The total ecosystem area that is essential to the continued existence of the city is its *de facto* Ecological Footprint on the Earth. The Ecological Footprint of a city will be proportional to both population and *per capita* material consumption. To accurately reflect consumption patterns, the Ecological Footprint must also include all land required by the defined population wherever on Earth that land is located. Today’s cities and whole countries survive on ecological goods and services appropriated from natural flows or acquired through commercial trade from all over the

world. The Ecological Footprint therefore represents the corresponding population's total "appropriated carrying capacity."

Appropriated carrying capacity is another name for the Ecological Footprint. 'Appropriated' signifies captured, claimed or occupied. Ecological Footprints remind us that we appropriate ecological capacity for food, fibers, energy, waste absorption, etc. In industrial regions, a large part of these flows is imported.

By revealing how much land is required to support any specified lifestyle indefinitely, the Ecological Footprint concept demonstrates the continuing material dependence of human beings on nature. For example, the Ecological Footprint of an average American, that is, the amount of land required from nature to support a typical individual's present consumption is 24 acres. This is roughly comparable to the area of eight city blocks. The Ecological Footprint of individuals and whole economies will vary depending on income, prices, personal and prevailing social values as they affect consumer behavior, and technological sophistication, such as the energy and material content of goods and services.

So what? —The global context

The Ecological Footprint of any population can be used to measure its current consumption and projected requirements against available ecological supply and point out likely shortfalls. In this way, it can assist society in assessing the choices we need to make about our demands on nature. To put this into perspective, the ecologically productive land "available" to each person on Earth has decreased steadily over the last century. Out of a total area of 125 billion acres, only about one quarter of the earth's surface, or 31 billion acres, produces the

biocapacity needed to support human life. This means that in 1900, with a global population of 1.5 billion, there were approximately 20.6 acres of biologically productive space per person. Today's population of 6 billion means that there are only 5.2 acres of such land for each person. And this space includes wilderness areas that probably shouldn't be used for any other purpose.

At the same time, the land area "appropriated" by residents of richer countries has steadily increased. The present Ecological Footprint of a typical American is 24 acres. Indeed, if everyone on Earth lived like the average American, we would need at least five such planets to live sustainably. Of course, if the world population continues to grow as anticipated, there will be 12 billion people by 2050, for each of whom there will be approximately 2.3 acres of ecologically productive land, assuming there is no further soil degradation.

Such numbers are even more telling when used to compare selected geographic regions with the land they actually "consume." For example, the community of Ojai Valley, in Southern California, has just over 27,500 inhabitants. With an average Ecological Footprint of 27.8 acres, the total footprint for Ojai Valley requires an area of approximately 765,000 acres. Ojai Valley thus depends on an area about 12 times larger than the 65,000 acres of land contained within its boundaries for food, forestry products, carbon dioxide assimilation and energy.

The United States as a whole has about 13 acres of biologically productive land per person, meaning that we "consume" nearly twice the area available to us. Similarly, Holland has a population of 15.8 million people, each with a footprint of just under 12 acres. Although Dutch people consume less than North Americans on average, they still require about 6 times the available land within their own

country for food, forest products and energy use. In other words, the ecosystems that actually support typical industrial regions lie invisibly far beyond their political or geographic boundaries.

Afghanistan, in contrast, has the second smallest measured per capita Ecological Footprint on the planet. Their population of over 21 million uses an average of 0.95 acres per person. Conditions in the region (0.78 acres of productive land available per person), however, force them to import resources to meet even this tiny footprint. Gabon consumes an average of just 2.12 acres per person, despite a total of 28.7 acres available per person. Unfortunately, this biological surplus is most likely not being saved as natural capital within the country, but is exported, primarily to industrial regions that are running ecological deficits.

A world upon which everyone imposed an oversized Ecological Footprint would not be sustainable – the Ecological Footprint of humanity as a whole must be smaller than the ecologically productive portion of the planet's surface. This means that if every region or country were to emulate the economic example of Ojai Valley or the Netherlands, using existing technology, we would all be at risk of global ecological collapse.

* * *

What can we make of present international development objectives in light of these findings? The primary goal articulated by every major development organization is to raise the developing world to present First World material standards. The U.N.'s Brundtland Commission on Sustainable Development, for example, argued for "more rapid economic growth in both industrial and developing countries" and suggested that "a five- to ten-fold increase in world industrial output can be anticipated by the time world population stabilizes some time in the next century."

Let's examine this prospect using Ecological Footprint analysis. If the present world population requires at least 33 billion acres to sustain its activities, a five- to ten-fold increase would correspond to a total productive land requirement of 168 to 337 billion acres (assuming the use of present technology). Thus, to accommodate *sustainably* the anticipated increase in population and economic output of the next four decades we would need five to eleven additional planets. The only alternative, if we continue to insist on economic growth as our major instrument of social policy, is to develop technologies that can provide the same levels of service with at least six to thirteen times less energy and material. This is indeed a daunting task considering that the energy consumption of average households in industrialized countries is still increasing. One thing is certain, however: we cannot sustain development on phantom planets!

The notion that the current lifestyle of industrialized countries cannot be extended safely to everyone on Earth will be disturbing to some. However, simply ignoring this possibility by blindly perpetuating conventional approaches to economic development invites both eco-catastrophe and subsequent geopolitical chaos.

To recognize that not everybody can live like people in industrialized countries today is not to argue that the poor should remain poor. It is to say that there must be adjustments all around and that, if our ecological analyses are even close to correct, continuing to use economic development models that emphasize growth will actually hit low income communities around the world the hardest.

Ecological Footprint analysis not only assesses the sustainability of current human activities, it is also effective in building public awareness and assisting decision-making. It is not about "how bad things are." It is about humanity's

continuing dependence on nature and what we can do to secure Earth's capacity to support a human existence for all in the future. Understanding our ecological constraints will make our sustainability strategies more effective and livable. Ecological Footprint analysis should help us to choose wisely, which we think is preferable to having nature impose a choice of its own.

You can start this process by calculating your own Ecological Footprint at <http://myfootprint.org/>. Warning: The results your answers produce may disturb you. In a few reported cases, the users' mental well-being was affected and some serious thinking was induced. You can also learn more about Ecological Footprints and view materials and initiatives related to sustainability education on Redefining Progress' website: www.rprogress.org.

Redefining Progress has initiated work to build on existing momentum to bring the Ecological Footprint concept into K-12 classrooms across the country. We are working with several partners around the country to first develop curriculum materials and then provide teachers with training in how to use the materials. If you are interested in hearing more about this work as it develops, please contact us via the website or email sustainability@rprogress.org.

Ecological Economics: A New Paradigm for Economics Education

by Susan Santone

Oil spills are good for us!” declares a high school student to an assembly of parents and civic leaders. “And so are crime and divorce!”

The girl’s provocative statements prompt uneasy laughter from the crowd as they realize that she is right — oil spills, divorce, and crime *are* good news when measured in the purely monetary terms of the Gross Domestic Product, the “character” played by the girl in a thought-provoking skit.

The student’s presentation followed a unit on ecological economics, an emerging discipline bringing fresh ideas to old debates about growth vs. the environment. Ecological economics (aka “eco-eco”) tests conventional economic theories against the science of ecology. By acknowledging a simple fact — that the economy exists within, not apart from, the environment — eco-eco forces us to rethink some long-held assumptions.

Consider, for example, the GDP, arguably our most important economic indicator. When the GDP is up, the assumption is that “things” are good. When it’s down, policymakers scramble to jump-start it. As the student’s skit made clear, the GDP rises anytime money is spent. So when it comes to oil spills, divorce, and other “bads,” the GDP sees only the financial benefits — the timber sales, clean-up costs, and legal fees. The negative environmental and human impacts of these activities, such as resource degradation and social decay, are ignored.

Moreover, the GDP dismisses the environment’s life-sustaining services by simply not counting them. While bees, trees, and wetlands pollinate and purify to the tune of \$33 trillion per year (Costanza et al, 1997), the GDP completely ignores the value of these vital services. Of course, the point is not to suggest that nature is only as useful as the dollars we can attach to it, but rather to show how our most influential economic tools fail to acknowledge it. Thanks to this selective accounting, decision-makers cheer each rise in the GDP while simultaneously ignoring the erosion of the environmental and social capital on which the economy ultimately depends.

Because it exposes the links among economic choices and their environmental and social impacts, eco-eco offers a systematic, thorough, and ultimately more useful paradigm for understanding and solving interconnected problems. As an instructional approach, eco-eco offers meaningful opportunities to address key knowledge, skills, and values in the Michigan Curriculum Framework. The following paragraphs will demonstrate how teaching eco-eco can achieve this. The activities described can be found in the instructional resources listed at the end of the article.

Resources and Needs

Economics is fundamentally about allocating resources to meet needs. To make this large concept accessible to students while linking it to ecology, teachers can begin with two fundamental questions: *What do we need for a quality life?* and *What resources do we need to meet our needs?*

To answer the first question, students as young as third grade can brainstorm and categorize human needs. This sparks a class discussion on priorities, the differences between needs and wants, how desires are shaped, media and cultural influences, and related topics. Next, students can create concepts maps to illustrate the resources needed to support these needs. A concept map made by a group of third graders, for example, illustrated how good health is dependent on nutritious food, productive soil, clean waterways, workers, and other resources linked as interdependent systems.

These activities provide an opportunity to introduce or review basic concepts including renewable vs. non-renewable resources and different kinds of capital (human, human-made, and natural). Most importantly, the concept webs illustrate two vital roles played by ecosystems: providing resources for all we use and absorbing all the wastes we produce. As students explore in subsequent activities, nature is limited in its ability to perform both of these roles. This central concept, one of the cornerstones of ecological economics, also reflects the standards on ecosystems, resources, and human impact on the environment.

Resources and Economic Production

When presented from an eco-eco perspective, the concepts of production and consumption can help students understand the links between economic and natural systems. To begin, students can create timelines of a product's "life story" from resource extraction to final disposal. A timeline for a sport shoe, for example, extends 200 million years into the past (the origins of the oil in the vinyl) and thousands of years into the future (the time it will take for plastic to break down in a landfill).

Next, students can explore the environmental impacts of manufacturing and the challenges for industry. To explore this, teams of students can "manufacture" placemats from paper and paint with the aim of creating as little waste as possible. Throughout the simulation, teams are awarded points for using production techniques that minimize waste and "pollution" (sullied water) while still creating an attractive and useful product.

Students can apply this experience by researching some of the cutting-edge approaches to manufacturing now in use by major companies including Ford, Interface, and 3M. For example, 3M has saved millions of dollars and reduced waste by eliminating unnecessary packaging. The Interface carpet company has gone even further and is eliminating the concept of waste by making all its new carpet from old, ground-up floor covering. This "waste = food" approach to production mimics nature's use of wastes as food. Once students understand the costs and benefits of various manufacturing practices, they can develop a list of environmentally-preferable purchasing criteria and create peer-education materials to advocate for responsible consumer action. Websites, brochures, and presentations on the impacts of our economic choices are just a few of the many ways students can demonstrate and communicate their knowledge to a real audience in an authentic context. Units such as this not only engage students, they also provide a rich opportunity to address key content and skills, including business choices, scarcity, consumer behavior, inquiry, higher-order thinking, decision-making, and problem-solving.

Policies and Economic Choices

Investigating a popular teen-age activity — driving — can begin a lesson on the incentives and policies that so powerfully influence economic choices. First, have students generate the price (the dollar amount they pay) of owning and operating a car

(their own or a “dream car”). Then, ask students to generate other *costs* of driving – in other words, the environmental and social impacts they don’t pay for (carbon emissions, wear on roads, pollution, health care, etc).

By learning that many of these costs are absorbed by the public, students come to understand that driving — and many other activities – are artificially cheap. This provides an introduction to the economic concepts of subsidies, incentives, and their impacts on choices.

Students can next analyze examples of actual policies in the school or community, evaluate their intended and unintended costs and benefits, and write a position paper to suggest changes based on principles of equity, accountability, fairness, or other criteria. A high school student, for example, researched the district’s purchasing policies for paper and, upon discovering that environmental impacts were not among the criteria, advocated that the district increased to 25% its use of post-consumer recycled, non-chlorine bleached paper. Project such as these provide opportunities for authentic assessment on language, communication, research, analysis, and other key skills.

Indicators and Measurement

Economic measurement is another concept easily accessible through ecological economics. Students can begin by taking a closer look at the strengths and weaknesses of the GDP. First, have students identify the social, environmental, and economic impacts of various activities including crime, volunteering, commuting (as opposed to walking), or growing vegetables (instead of buying them).

Students quickly discover that crime and other “bads” generate economic activity and thus add to the GDP even though they are clearly detrimental to society. Likewise, the obvious environmental and health benefits of walking are considered “worthless” in the eyes of the GDP because, unlike driving, no money is spent. This contradiction calls question the emphasis placed on the GDP as a barometer of national well-being and sets the stage to examine other types of indicators.

Take, for example, the Genuine Progress Indicator, a tool developed by economists to more accurately

measure our combined economic, environmental, and social well-being (Redefining Progress). These indicators are gaining increasing attention from governmental leaders. The Canadian House of Commons, for example, introduced the Canada Well-Being Measurement Act (CWBMA) in April, 2000. The CWBMA aims to establish the environment and the community as valid goals alongside the economy by developing indicators for “the economic, social and environmental well-being of people, communities and ecosystems in Canada.” These examples demonstrate how citizens and civic institutions can work for positive change.

To apply their knowledge of indicators in the community, students can use local data on health, transportation, the environment, or other categories, to create a community “report card.” This activity provides another opportunity for students to use primary source while strengthening skills in inquiry, research, communication, decision-making, and problem-solving.

Conclusion

Ecological economics provides an accessible entry point to investigate some of today’s most important issues, bringing economics to life while motivating students. The eco-eco approach enables educators to integrate the standards by placing them in the context of important questions. Students acquire, integrate, and apply knowledge in authentic situations — just as they’ll need to do in their role as citizens and workers. Who ever thought economics could offer so much?

Endnotes

Constanza, Robert et al. “The Value of the World’s Ecosystems Services and Natural Capital.” *Nature*, Volume 387, May 1997, pp. 253-259.

Data on the Genuine Progress Indicator is available from Redefining Progress, <http://www.rprogress.org>.

Instructional Resources

- *The Shape of Change: A Curriculum for Building Strong Communities and a Sustainable Economy.* This series of high school units addresses sustainable development and ecological economics through inquiry-

based instruction, integrated content, and real-world applications. Available from Creative Change Educational Solutions. <http://www.creativechange.net>

- **The Paper Trail: Connecting Economic and Natural Systems.** This unit for grades 7-12 uses the lifecycle of paper to explore systems thinking, life cycle analysis, manufacturing, full cost accounting, and other topics. From the Sustainability Education Center, New York City. <http://www.sustainabilityed.org>
- **Multiple Units on Ecological Economics:** Download teacher-created units on ecological economics for grades K-12. Units meet multiple standards through hands-on methods, authentic assessment, and challenging content. Funded by the US Department of Education in partnership with the Cobb County, GA schools and the Center for a Sustainable Future. <http://csf.concord.org/esf>

Websites on Ecological Economics

- **Articles on Sustainable Economics:** Assorted articles can be found at this site. <http://www.context.org/GUIDES/econ.htm>
- **Businesses for Social Responsibility:** A non-profit organization working to promote sustainable business practices. Contains case studies and examples of “best practices.” <http://www.bsr.org>
- **Carbohydrate Economy:** A nonprofit research group focusing on the transition to plant-based energy systems and manufacturing. Site includes current policies and practices from around the country. <http://www.carbohydrateeconomy.org>
- **Coop America:** A non-profit organization working on sustainable business issues. Contains links to other sites on green investing and responsible consumerism. <http://www.coopamerica.org>
- **Council of Canadians:** This site contains suggestions for humane trade policies, based on the UN Convention for Human Rights. <http://www.canadians.org>
- **Dow Jones Sustainability Index:** An index of companies that meet a rigorous set of criteria for sustainable business practices. Lists industry-specific surveys for assessing sustainability. <http://indexes.dowjones.com/djsi/index>
- **Ecological Economics On-line Course:** Offered by Tufts University, these on-line courses cover both macro and micro aspects of ecological economics. You need Adobe Acrobat to download the materials; this free software is available on this site. <http://www.tufts.edu/gdae>
- **Economic Policy Institute:** Research institute that focuses on domestic and global economic issues, including sustainability. <http://www.epinet.org>

- **Environomics:** Links to documents and organizations relevant to ecological economics. <http://www.environomics.org/index.html>
- **Friends of the Earth:** Involved in efforts to democratize economic globalization. Their ‘Green Scissors Report’ provides details about subsidies for mining, timber, etc. <http://www.foe.org>
- **Institute for Local Self-Reliance:** A nonprofit research group promoting local economies and self-reliant communities. <http://www.ilsr.org>
- **International Institute for Sustainable Development:** Canadian research organization tracking global negotiations in major policy areas. Scholarly, in-depth writing. <http://www.iisd.ca>
- **International Society for Ecological Economics:** Based at the University of Maryland, this institute focuses on ecological economics research and publications. <http://kabir.umd.edu/>
- **“Natural Capitalism”:** Paul Hawken’s article— a good introduction to sustainable economics— is reprinted on the Mother Jones web site. http://www.mojones.com/mother_jones/MA97/hawken.html See also <http://www.naturalcapitalism.org>
- **Natural Step:** A global movement to align business practices with laws of natural systems. One of the most important movements in sustainability. <http://www.naturalstep.org>
- **Redefining Progress:** A research institute that developed the Genuine Progress Indicator as an alternative to the GDP. The site contains information on the Ecological Footprint and environmental taxes. <http://www.rprogress.org/>
- **Sustainable Business:** Providing news, resources, insight, and inspiration to accelerate momentum toward a green economy. <http://sustainablebusiness.com>

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Planning and Conducting Community-Based Research for Elementary Level School Teachers and Children

Dr. Peter Higgs

Introduction

A significant change in social studies education reached our schools beginning with the publication of the **Michigan Curriculum Framework**¹ in 1996 and the subsequent assistance to teachers of the State provided by Social Studies Consultants in the Department of Education². Two new ideas important for social studies are embedded in the Michigan Curriculum Framework. First, the **Framework's** Standards for Teaching and Learning encourage teachers to move away from exclusive use of textbooks for Social Studies and toward helping children to make more connections to the world beyond the classroom. Second, the Social Studies Curriculum Framework for Michigan includes three process strands, Inquiry, Public Discourse and Decision Making and Citizen Involvement, which mandate that students investigate their world as social scientists would, by using scientific thinking to identify issues and to solve problems that lead to workable solutions.

What Is A Community-Based Research Project?

Community-based research is a way for teachers, students and their parents to learn how to be responsible citizens by investigating real community issues and problems, making policy recommendations regarding solutions and helping to implement the recommendations they have had a part in formulating. Best of all, such research can be done in the school communities in which children and their families live.

A Research Structure For Teachers And Students

There are a few essential elements for teachers to consider when developing a community-based research project. First, if teachers at a given later grade level (four, five or six) plan and execute a project together, it is easier than working alone. Second, because such a project is likely to be new to many schools, advanced public relations is essential. The best public relations must involve the Principal and later the Superintendent in smaller districts or a subordinate senior administrator such as a Director of Curriculum and Instruction or grant writing coordinator in larger districts. Once general approval has been obtained, parents of the children to be involved must be informed. They can also be asked for their assistance; parents and increasingly, grandparents, can be very helpful on field trips. The latter can sometimes add anecdotes from their own experiences to history-based projects. In addition, involving the parent community in this aspect of their children's education can be good public relations for teachers and the school district at large.

Once preliminary groundwork has been established, teachers must then decide on an appropriate community-based project in which to involve the students. Choice of project begins with consideration of several factors: (1) Is it "doable" (i.e. convenient to the school, appropriate to the school district's social studies curriculum, considers the age of the children? Can costs be covered?) (2) For which project idea will it be easiest to obtain evidence either to support an hypothesis or to answer one or more research questions? (3) How much time will the project take both in terms of the number of class periods and also to obtain and process enough information to make the effort worthwhile? (4) Are there legal and/or security issues involved (e.g. copyrights, access to information, children's safety)?

Overall, this process works best if teacher groups conduct the research in two phases: first, teachers

conduct the research and then help their students to conduct the same study.

Phase I -The Teacher Research

The goals of the teacher research are as follows: to,

1. Learn about classroom inquiry methods by conducting basic social science research,
2. Participate in and reflecting upon some real world experiences related to the social sciences, which could serve as elementary level teaching and authentic assessment activities,
3. Present their findings and their recommendation for the resolution of a community problem to a select audience comprising other teachers, school officials and parents of children most likely to involved in Phase II.
4. Collect and organize data as a reference for their students to whom they will teach the same research process (Phase II) that the teachers have completed in Phase I.

Next, teachers must decide on an appropriate community-based project in which to involve the students.

Making a teacher research team

In order to keep the project manageable, it is better that no more than two classes work on the same project idea. This sets a reasonable limit on the number of children who will likely visit the same site in the community.

Finding and describing the situation, problem or issue.

In deciding on an appropriate topic, teacher groups may first choose to contact civic organizations and business agencies to find out which local issues concern them. Topics may also be found by perusing past editions of local newspapers, newsletters and webpages of local



Figure One. A sawmill in Clare County, Michigan: finding evidence of the 19th and early 20th Century logging industry. From a photograph in the Clarke Historical Library.

civic and social organizations, followed by visits and interviews. In many towns there are repositories of information that have been saved by local historical groups and governments. For example, the Gladwin Historical Society in Gladwin, Michigan has preserved some original log structures and the site of a railroad station at the eastern end of town.

Public records offices are also valuable sources of information. Cemeteries can help teachers and students reconstruct the history of their community by tracing the dates at which families lived and died in the area. Family names from cemetery records and grave markers can provide clues to the cultural evolution of the area. Platt books and deeds filed with local records offices can also provide clues. In the Central Michigan area, the Clarke Historical Library at Central Michigan University is a source for much primary documentation from the area. Local libraries also collect information about the communities they serve. Senior citizens often have many stories to

tell about their involvement with their communities, especially if they are members of a family of longstanding in the area. In addition to providing interesting personal and anecdotal information, they may also be willing to share personal artifacts and primary historical sources such as photographs and journals with researchers.

Given this background, the teacher groups should brainstorm a list of topics related to their community. Content area categories or perspectives below list some suggestions suitable for later elementary students:

1. History
 - a. Old hotels and homes (houses in town, farmhouses) and schools (e.g. one-room “common schools”)
 - b. Railways, railway stations, inland ports
 - c. Prominent citizens and their families
2. Geography
 - a. Rivers as transportation
 - b. The Northwest Ordinance of 1785 and its effects on the local community.
 - c. The zoned community.
3. Civics
 - a. Public issues (e.g. skateboarding in town, locating traffic signals, improving the voting process)
 - b. Making villages, towns and cities.
4. Economics
 - a. Downtown Development Authorities
 - b. Aboriginal businesses (e.g. The bathhouse in Bay City, flour and feed mills, general stores)
 - c. Exploiting natural resources (e.g. Perrier and Mecosta, Dow and salt, furniture and logging, beavers and the fur trade)
 - d. Community festivals (Highland games, maple syrup, potato, mint, music)
5. Anthropology and Sociology
 - a. Native American tribes and culture
 - b. Immigrant populations
 - c. Religious groups (Amish, Mennonites, monasteries, mosques, temples, churches)
 - d. The African American Experience.

Structuring the research

Research proceeds in seven steps. The first step is the collecting background information. Having

identified likely sources of information about a situation, an issue or a topic, the team can then become selective about deciding which material to use and which to set aside.

The second step is arriving at a place where the teacher can state a hypothesis or write questions to be answered. Some time should then be spent deciding on the specific questions to be answered or hypotheses to be formulated about the area and materials they have identified. This is a key step in the investigative process, not only because it expresses the groups’ opinions about the relative importance of their topics but also because it will determine the direction, scope and methodology of the research itself.

The third step involves choosing a suitable research method. In order to verify an hypothesis or answer research questions, one or more research methods must be chosen. The methods chosen depend on the data required to answer the question or to prove the hypotheses.

The fourth step involves the teacher collecting and analyzing the data. Once the sources for answering research questions have been identified and appropriate methodologies selected, data can be collected. The larger teacher group can be split up at this point according to the type of data to be captured. Pairs of people are best for this work as two people are often less intimidating to public officials than larger groups. If there are several different types of data to be collected, time is saved by encouraging different people to tackle different tasks (e.g. interviewing, library research, site surveying, etc.)

Teachers should be sure to plan sufficient time for data analysis such as tabulating responses to questionnaires, sorting primary historical source material and labeling or photographing artifacts.

The fifth step involves formulating conclusions and making recommendations. In order to formulate valid conclusions and recommendations from their research, teachers must be certain that their conclusions and recommendations are derived from the data that has been collected, follow accurately from and are justified by the data.

The sixth step is the writing of a report and displaying the project's findings. Once the data has been analyzed and interpreted, teachers can complete their report and prepare to display their work. The purpose of this research is to draw attention to the serious issue that they have identified and investigated in their community. With the report and display finished, they will also have the background with which to support their classes who will complete the same research as they did. They will also have materials at hand to interest parents in assisting with the work their children will be doing and building support for the project with school officials.



Teachers display their research

A Note of Caution: The time factor

A concern that many teachers may have about conducting community-based research is finding

the time to do it. Experience has shown that it does take time; moreover, the more authentic the project, the more time it takes. However, in the lower grades (K-2), much of the research can be done in the home and school, with family and family history and artifacts. For school-related projects, local libraries, district archives; long-serving administrative and clerical personnel can also be collaborators. In some cases, school buildings themselves as well as school grounds can be sources of social science information. Playgrounds have been found to be archeological sites³ and school buildings, examples of historical trends in architecture.⁴

In lower elementary grades teachers can do a project each term, both teacher research and field work with students. However, for later elementary grades the Fall Semester can be used by teachers to collect sources of information for children to use in the spring.

Once teachers have completed their research, they are ready to work with their students on the project. The teachers now have the information and know the process for guiding students to the same or similar ends that they themselves have reached. Then they can provide the support and guidance to ensure that the experience for both students and their families is both enjoyable and educative.

Phase II-Children Become Social Scientists

The ideas that follow are intended to engage students in the research that the teachers have just completed. Their ideas are formatted as lesson plans which divide the work into manageable proportions. By way of an example, the "Castle Hotel" in St. Louis, Michigan was chosen because of the reference made to it in the *Mt. Pleasant Morning Sun*⁵ The Hotel, actually a large house, took four years to build in the later half of the 19th Century. It was completed in 1884 and has been occupied continuously since that time. The house has been sold a number of times, the last time in

1957 when it was purchased by Orwell and Naomi Church. The Churches daughter and son-in-law, Colleen and Tim Boyer, now manage the house and are it restoring it to as much of its original state as can be determined, while at the same time converting it to a wedding chapel.

After finding information in local newspaper archives, most notably those of the Gratiot County Herald, the Mt. Pleasant Morning Sun and the Clarke Historical Library at Central Michigan University, a group of teachers posed a question to answer as follows: Will the conversion of this historical home into a business have a positive impact on the community of St. Louis? The teachers searched the library for materials about the house and attended chamber of commerce meetings in which the future of the house was discussed. However, discovered that survey research, asking people questions, was most likely to help answer their policy question. They developed a questionnaire and asked questions of the owner of the house and interviewed numbers of St. Louis residents by telephone. The overwhelming response was that of accepting that restoration of the house should continue and that its conversion into a business would have a positive impact on the community of St. Louis.

Teachers' data was analyzed and the results posted to graphs and tables. The results confirmed what the interviewers had discovered and questionnaires revealed. From this beginning, the teachers were then able to prepare to teach fourth or fifth graders the process that they themselves had just completed. Their planning comprised the following lessons. Each lesson shown below is one of several in a unit of lessons designed to guide students through the field-based research process.

Lesson One - Background research and statement of the problem.⁶

Little House in the Big Woods: Finding out about old homes

Benchmarks

I. Historical Perspective, (Comprehending The Past And Analyzing And Interpreting The Past)

IV. Economic Perspective (Individual And Household Choices)

V. Inquiry Perspective (Conducting Investigations)

Lesson objective: Learners will be able to:

- Collect background information about an historical house, compare its features with a modern house and, from the information,
- Suggest some solutions to a problem about the site on which the historical house sits.

Materials

- Laura Ingalls Wilder, **Little House in the Big Woods** New York, Harper & Brothers, 1932.
- Drawing paper
- Crayons
- Pencil or pen
- Notebook

Instruction

The teacher will use this lesson as an introduction to the study of old houses. It is a classroom activity intended to introduce the research unit.

Students are first paired. The teacher reads the first chapter of Wilder's book, **Little House in the Big Woods** to learners and asks them to stop her when she reads the passages about how the "little house" is constructed. S/he explains that one of the pairs of students is to draw the part of house as they hear it read, while the second member of the

team is to draw the same feature on the house that they themselves live in.

When they are finished with the drawing, the pairs of students compare and contrast the features of both the historical and the modern houses, recording the similarities and differences on a sheet of notepaper.

Next, the teacher will ask students the following questions:

1. What do you think happens to houses when they get old.
2. What has happened to the old houses in the neighborhood where you live?
3. Can you think of any famous houses that are old? Are they still standing or have they fallen down or been removed?
4. Why are some old houses still standing, while others have disappeared?
5. Laura Wilder's little house in the big woods was once located in the State of Wisconsin. It's a famous house. Now it is gone. What might have happened to it?

Finally, the teacher gives the students the following problem to solve. Each pair of students is to discuss the problem and try to solve it:

Suppose the little house in the Big Woods is still standing in Wisconsin. It is no longer in the woods but is now in a farmer's field. A developer has purchased the farm and with it the "little house". He has obtained a permit from the county in which the farm is located to build many more new houses on the site. However, the little house will be torn down even though it is famous: few people want to live in a log cabin any more and no one will buy a brand new house if an old shack sits next to it.

Should the developer be allowed to do this to the historic Wilder house, or should the cabin be protected? Moreover, if the cabin is left standing, should it be turned into a museum to attract visitors and make a profit?

Practice

Student could suggest other problems and solutions associated with old houses, not only in their communities but also at the national level (e.g. The White House, Gracie Mansion, the Biltmore Estate, etc.)

Assessment

Assessment of students who have participated in this lesson will be based on the Holistic Feature Scoring for Conducting Investigations suggested by the Michigan Department of Education. The table for determining student scores follows these lesson outlines.

Other lessons to follow the above introduction, could involve students, their teachers and, perhaps some parents, searching for the oldest homes in their community and locating background information about them.

Next, students are taught how to collect various types of information relevant to the question they have posed, (e.g. library research, field trips, interviews) and then helped to collect their data from essentially the same sources that the teachers used.

**Lesson Two - Collecting data
Interviewing Community Residents**

Benchmarks

- I. History Perspective** (Analyzing and Interpreting the Past)
- V. Inquiry** (Information Processing, Conducting Investigations)

Lesson objective(s)

-Learners will prepare questions to ask appropriate community members in order to answer the main research question: Do you think the development of the Church-Boyer house into a business will have positive benefits for the City of St. Louis?

Pattern of Instruction

Divide the student and adult volunteers into groups. Assign one group to search for the historical evidence of the history of the old house. Have a second group conduct interviews in person, while a third group does telephone interviews.

1. Decide whom to interview (e.g. the owners of the historic house, a telephone interview of a sample of city residents). Prepare questions appropriate for a face-to-face interview. Prepare five or six questions suitable to ask a random sample of community residents over the telephone.
2. Make an appointment for students to interview individuals whom it is believed will help to answer the project's central question. Select a time and place to make phone calls. Parents and students can make calls from home for this activity.
3. Decide on a way to record the answers.
4. Ask the questions. Students can take turns, each asking one or two.

**Lesson Three - Analyzing the Data
Making Sense Out of Research Data**

Benchmarks

- V. Inquiry** (Information Processing, Conducting Investigations)

Lesson Objective: Learners will:

- Summarize the data they have collected.
- Use charts, table and maps to display an analysis of the data they have collected.

Pattern of Instruction

Earlier lessons can serve the purpose of teaching fifth graders to summarize their responses to simple questions such as, How old are you? Are you a boy or a girl? What is your favorite color? Responses can be recorded in columns and summed.

In this lesson, teachers and students will first tabulate the data they have collected. In the case of the research done on the Church-Boyer house in St. Louis, the data were organized as shown in Table 1 below. The questions were formulated to elicit one of two or three choices: Yes, No Don't Know or male-female responses



Lesson Four – Stating conclusions and making recommendations

Benchmarks

VI. Public Discourse and Decision Making

(Identifying and Analyzing Issues)

VII. Citizen Involvement (Responsible Personal Conduct)

Lesson objectives Learners will:

- Formulate a conclusion from the information they have collected about the Church-Boyer House in St. Louis, Michigan,
- Design a plan of action which will contribute to the preservation of the historic house in St. Louis.

Pattern of Instruction

Teachers and students will collect all of the information that they have gathered about the Church-Boyer House in one place to make it easier to discuss the nature of various subsets of the information that they have collected: Once they have discussed their data, they will then answer their research question: Do you think the development of the Church-Boyer house into a business will have positive benefits for the City of St. Louis?

As part of this process the teacher will remind the class of various opinions which may have been expressed about the topic, namely that transforming the house into a business might lessen its value as an historic site, or that commercialization of a prominent physical feature in the community means that the profit motive has superceded the value of respect for tradition. Or that, indeed, the transformation of the house into a business will benefit the house and community by improving business for everyone and providing funds for the continued regular maintenance of a fine old home.

Next, the teacher will suggest to children that they might wish to contribute something to the community in which they conducted their research. For example, if they agree that the restoration of

old houses is a good thing they may wish to assist a local historical society in their preservation and restoration efforts. Or they may even want to try to develop a student local history club to find old sites to continue to study.

V: Assessing Students' Work

Students' research can be readily assessed by using the Holistic Scoring Guide for Conducting Investigations: Grades 3-8, which is included in the document, Authentic Assessment of Social Studies, referred to earlier.⁷ Although Curriculum Framework Perspectives V, VI and VII are not yet being assessed as part of the Michigan Education Assessment Program, the table (See Table below that lists the criteria for assessment remains valid for this real world research project.

Conclusions

The author believes that community-based research meets a number of needs with respect to both the State of Michigan's teaching and learning standards and the applicable perspectives and content standards of the Michigan Curriculum Framework. With respect to the former, engaging

school children in research in their communities provides a perfect setting in which to involve them in the real world, past and present. It also allows them to explore important topics in depth and can encourage them to reflect on timely issues of vital concern to themselves, their neighbors and communities. Furthermore, it allows them to discuss these issues and to act on real problems in addition to experiencing the simulations that teachers may be able to establish for them in the classroom.

With regard to the relationship of community-based research to the Michigan Framework Content Standards and Benchmarks, local settings provide the best venues for combining the educational

features of asking social science questions, searching for answers, making conclusions and developing policy suggestions for remedying associated community problems. The community also provides many opportunities for teachers to combine the teaching of content and skills from many subjects taught in the elementary grades.

Bibliography

Todorov, Karen R., and Brousseau, Bruce. Authentic Assessment of Social Studies. Michigan Department of Education, Lansing, 1998.

Larkins G., M. L Hawkins and A. Gilmore. "Trivial and non-informative content of elementary social studies: A Review of primary texts in forum series." Theory and Research in Social Education, 15, (Fall, 1997): 299-311.
Maxim, George W. Dynamic Social Studies for Elementary Classrooms, 7th Edition.

Michigan Department of Education. Curriculum Framework. Lansing, Michigan, 1996. Michigan Department of Education's Michigan Social Studies Content Standards Classroom-Based Performance Tasks, 9-02150: <http://www.michiganepic.org>.

Mitchell, L. S. Young Geographers. New York: John Day, 1934.

(Footnotes)

¹Michigan. Curriculum Framework (Lansing, 1996).

²For example, see Todorov, Karen R. and Brousseau, Bruce Authentic Assessment of Social Studies, Michigan Department of Education, Lansing, 1998; Michigan Department of Education's Michigan Social Studies Content Standards Classroom-Based Performance Tasks, 9-02150: <http://www.michiganepic.org>.

³ The author once surveyed the grounds of the U. S. Bureau of Indian Affairs High School at Ft. Wingate, New Mexico. The Fort Wingate area was once the ancestral home of both the Zuni Pueblo and the Navajo Nation. The Fort was originally an old cavalry post. There are over 600 archaeological sites on the 22,000-acre installation.

⁴ See the PBS film, "Schools Inside Out".

⁵ Adam Jackson, "Historic home's a lively landmark," Morning Sun, February 14, 2000, p. 1.

⁶ The lesson ideas which follow have been adapted from the work of the following teachers: Melissa McNeil, Jaimie Meddau, Tamia Smith and LuAnn VanSickle.

⁷ *Ibid.*, p. 25

Table 1. Holistic Scoring Guide for Conducting Investigations: Grades 3-8

Points	Description
4	In order to receive a 4-point score, the response must: pose a question that supports the issue under investigation, gather and analyze information, construct answers supported with evidence, reports results
3	In order to receive a 3-point score, the response must: pose a question that supports the issue under investigation, contain at least 2 of the remaining 3 elements
2	In order to receive a 2-point score, the response must: pose a question that supports the issue under investigation, contain at least 1 of the remaining 3 elements
1	In order to receive a 1-point score, the response must: pose a question that supports the issue under investigation
0	In order to receive a 0-point score, the response will show not evidence of any of the element

Once a Social Studies Teacher—Always a Social Studies Teacher Lillian Mellen Genser

For most years of my professional life I served as a social studies teacher for the Detroit Public Schools, a volunteer at the Center for Peace and Conflict Studies at Wayne State University in Detroit, and the program director at the Center. In 1970 I was appointed as Director of the Center and served until I retired in 1990. I continue to work as a consultant and to create new peace education materials. Several programs I initiated are still ongoing and can be replicated: The World Pledge and Study Guide for the 21st Century; Visions of Peace and Human Rights through the Arts; a play, The Moon Belongs to Everyone; and Conflict Resolution in the School Environment.

The World Pledge

Sustainability of our ecological system requires a vision of the world as a whole with all of its constituent parts interrelated. I was prompted to use poetry to present complex ideas in simple form. I wrote a four-line verse incorporating those values I think are significant for sustainability and human survival.

“I pledge allegiance to the world
To care for earth and sea and air
To cherish every living thing
With peace and justice everywhere!”

Shortly after I wrote the Pledge I decided to put it into poster form and recruited a number of artists to add the visual dimension.

In 1999 Deanne Bednar, an art educator and environmentalist designed the current poster. The art surrounding the Pledge is illustrative of the ecological system including earth, sea, clouds, members of the human family, plants and animals. To expand understanding of the Pledge we produced a study guide* which explains the substantive ideas in the pledge together with a

bibliography and suggested activities. Albert Zack, former principal of Bentley High School in Livonia, retired librarian Helga Herz and Karen Bacsoni, librarian at the Purdy Library, WSU, contributed to the study guide. This year we updated the guide and included web sites, and an expanded list of activities and media works. Everett Keyser, trustee of the Cranbrook Peace Foundation and Pat Dobasenski, a teacher at the Pembroke School in Birmingham, Michigan also contributed greatly to the new edition now called the Study Guide for the 21st Century. Everybody and everything in the poster is joyous and happy. Even the rocks are smiling.

The posters and study guides have been distributed throughout the world in such places as Buenos Aires, Argentina, Rio de Janeiro, Brazil, China, Russia, Paris, France, England and most recently to a school on The Isle of Man.

Visions of Peace and Human Rights through the Arts is sponsored jointly by the Center for Peace and Conflict Studies and the Art Department of Wayne State University. The school activity is conducted by the Art teacher in cooperation with Social Studies. Since there is very little knowledge in our nation about the United Nations Convention on the Rights of the Child I conceived a program to inform teachers and students about the Convention which now serves as a standard for rights of children and responsibilities of States or Countries. This document has been signed and ratified by the majority of Nations throughout the world. Three Presidents, George H W. Bush, William Jefferson Clinton and George W. Bush have signed in support, but the United States Senate has yet to report it out of committee. Nonetheless it is now considered a “treaty” under International Law. The convention consists of 53 articles including children’s rights such as the right to live in peace, the right to a name, and the right to a decent environment, etc.

Following discussion during the art period, students individually or in small groups create a work of art expressing how they think and what they feel about the Right or Rights they have selected. They add a responsibility to each right, a responsibility that the student as an individual could carry out.

Participating teachers are given an abbreviated list of the Articles as a basis for discussion. The complete works by students from participating schools form the basis for an exhibit at the Swords Into Plowshares Gallery in Detroit, April 21st through July 31.

Those who wish to participate next year may e-mail Marilyn Zimmerman at Zimmerwoman@wayne.edu. Josephine Primeau is the 2002 recipient of the Lillian Genser Internship for Peace and Human Rights through the Arts and will conduct the project under the direction of Marilyn Zimmerman, Professor of Photography at Wayne State University.

The Moon Belongs to Everyone

Shortly after the Russians landed Sputnik and the American, John Glenn, landed on the Moon, I wrote the play, "The Moon Belongs to Everyone." The theme of the play is a bout conflict that arises over sovereignty in outer space, together with the nonviolent response vital to its resolution so that a global catastrophe may be averted. The play has been updated to conform with recent discoveries in astronomy. Through the combined talents of puppeteers and teachers the locale has been shifted to the Planet Mars. Karen Friedrich, chief puppet maker, Ann Steffy, Pat Wall, and Rob Papineau will perform the puppet show, now called "Mars Rocks" at the Wayne State University Planetarium under the Direction of Jeff Conn, College of Science and J. Scott Payson of the Department of Physics and Astronomy.

Cinematographers Pam Conn and Jeff Jones of 1 Arts, in cooperation with the College of Science at Wayne State University, are planning a video

version of the play. For further information regarding field trips, etc., e-mail Jeff Conn at jconn@sun.science.wayne.edu. The World Pledge, Peace and Human Rights and The Moon Belongs to Everyone carry out my conviction that the Arts can be a major force in helping us understand the problems highlighted in the programs.

Through social studies and the arts we not only can better understand the problems but we can create more viable solutions. Social Studies can emphasize content. The arts humanize us. Many years ago I experienced living proof. One day I received a call from the Principal of Moore School, a Detroit public school for troubled and maladjusted boys. He requested that we come and speak to the students about Conflict Resolution. I had attended the Moore School as a child when it was an elementary school so I was eager to return. Dudley Weeks, Assistant Director of the Center, who also played the guitar, accompanied me to the school. What I saw horrified me. There in the very auditorium where I had taken part in so many programs was now bedlam. About 15 boys were placed seats apart throughout the auditorium. A teacher armed with a paddle stood behind each one. I winced every time I heard a whack. The students were in complete disorder shouting epithets and threatening curses while the teachers barely contained them in their seats. Dudley Weeks and I exchanged looks. We silently agreed that I would not speak. After we were introduced the boys continued speaking out and laughing loudly with a few threatening us. I was the only woman in the room and believe me, I was frightened. Dudley tuned his guitar. We tried to pretend nothing was happening, so Dudley, ignoring the threats, went up on the stage—the very stage where at age 12 I played Joan of Arc.

The whacks continued with the young men making fists and cursing us. Dudley Weeks, in a soft voice, started to sing an anti-war song, "Where have all the Flowers Gone". It took about one minute into the song—suddenly the boys quieted down. They

were rapt in their attention. A few had their eyes closed. You could have heard a pin drop. When he came to the end they applauded and asked for more. He sang a few more songs. Our fear evaporated.

The boys, now very much in control, applauded. A few even whistled. The Principal thanked us and we left. I shall never forget the looks on those boys' faces. For a few moments they were humanized. Where else in the curriculum can one's feelings, frustrations, joys and hopes be expressed?

*The World Pledge and Study Guide for the 21st Century

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Free on-line Resource Specifically
for Michigan Teachers:
Helping Your Students Create a More
Healthy, Habitable, and Equitable world
for All Beings

Debra Rowe, Ph.D.

<http://www.urbanoptions.org/SustainEdHandbook/>

Want to teach your students to care about their social and physical environment? Want to improve your students' MEAP scores? Want to spice up your classroom? See how this free web site's curricula satisfy Michigan education standards and make **lesson plans easier!**

You can find this on line ***Sustainability Education Handbook*** at <http://www.urbanoptions.org/SustainEdHandbook/>. The handbook has free lesson and activity plans, lists of teacher oriented web sites, and downloadable curricula **about how to create a more humane and environmentally healthy society. All these materials are related to state education standards via a simple chart so you can easily integrate the ideas into your existing curricula and lesson plans.**

The free web site has wonderful quotes and lists of discussion questions to use in any classroom. These can be easily integrated into many class activities and assignments. Help students become active citizens who care about making a positive difference for society. There are a variety of topics in the on-line handbook, including quality of life, citizenship, ecology, energy, ethics, economics, bioregionalism, population, air and water pollution, technology, consumption, wildlife habitats, distribution of natural resources, and community action. The web site has easy to use learning activities, strategies and stories of how people have made a difference, and a chart to relate all of this to state education standards.

Help your students get excited about their school work. Research funded by the Pew Charitable Trusts shows that when teachers use the environment as a theme, student performance increases and classroom management problems decrease. The study of sustainability offers a rich opportunity for students and teachers to connect with their planet, the study of social studies, their community, their environment, and each other. Sustainability-related activities can also connect social studies, math, science, language arts and other subjects into active, efficient, meaningful, and useful learning experiences. These learning activities can provide students with a sense of purpose and better prepare them to solve today's complex challenges.

On the most fundamental level, the idea of living 'sustainably' refers to the notion that one's everyday actions and practices can help produce a more healthy, habitable and equitable world for all beings. The Smithsonian Institute's traveling exhibit this year referred to Buckminster Fuller as one of the most famous scientists in his study of the future. Buckminster Fuller joined many other natural and social scientists when he wrote "...humanity now has the opportunity for the first time in all history to operate our planet in such a manner as to support and accommodate all humanity at a substantially more advanced standard of living than all humans have ever experienced and sustain that standard of living through all the forward days of history". By embracing sustainability as a vital topic within the classroom, we can help students internalize the potentials of a higher quality of life for all, and the role they can play in making this happen.

Teaching sustainability isn't effective when taught through single module lessons that get lost in the massive content presented to students. Sustainability is inherently interdisciplinary and requires the involvement of all social studies teachers since it is part of the underlying paradigm of how we see the world and the future. Since the

topics of sustainability relate to all academic areas, it is most effective to integrate sustainability themes throughout all courses of study, but the area of social studies is a high priority.

The handbook was funded by the State of Michigan's Office of Consumer and Industry Services. The Michigan Energy Center Network received the grant and created the web site. The Michigan Energy Center Network (MECNET) boasts a diverse array of programs, staff, and demonstration facilities that provide a significant contribution to sustainability education in Michigan. Members of MECNET include: Urban Options, Upland Hills Ecological Awareness Center, Oakland Community College's Environmental Systems Technology Program, Western Michigan University and Recycle Ann Arbor. The Urban Options Center in East Lansing, Upland Hills Ecological Awareness Center in Oxford and Recycle Ann Arbor are all demonstration facilities with programs available in a variety of sustainability topics for school field trips.

Have fun exploring at <http://www.urbanoptions.org/SustainEdHandbook/>.

About the Author:

Debra Rowe, Ph.D. created and teaches interdisciplinary course projects that reduce student apathy and create scenarios of an environmentally sustainable and more humane society. Dr. Rowe is national Coordinator of the Higher Education Network for Sustainability and the Environment. Dr. Rowe has been on network TV news and radio stations as an energy and futuring expert. Dr. Rowe received her Ph.D. in Business in 1991, her M.A. in Psychology in 1989, and her M.B.A. in Business in 1988 from the University of Michigan in Ann Arbor; Debra's Bachelor's degree is from Yale University in 1977.

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Call for Manuscripts

The *Michigan Social Studies Journal* invites manuscripts for the Spring, 2005 edition **Integrating Economics into the Social Studies to Promote Economic Literacy**

The Michigan Council for the Social Studies invites educators to submit original articles and lesson plans on the theme, "Integrating Economics into the Social Studies to Promote Economic Literacy for the Spring, 2005 issue of the *Michigan Social Studies Journal*."

We welcome original, unpublished articles on teaching the history, culture, geography, government or politics surrounding the social studies connections to economics. Lessons, teaching units, annotated bibliographies, book reviews and web site reviews are also invited.

Types of Articles The Editorial Board of the Michigan Social Studies Journal welcomes articles of value to its readers. Of particular interest are manuscripts and graphic materials on such topics as: Dissemination of knowledge designed to promote the teaching and learning of social studies about:

- ◆the disciplines of civics, economics, geography, and history and current issues
- ◆the integration of the fields of social studies processes of inquiry, public discourse and thoughtful, reasoned decision making pre-kindergarten through university levels.
- ◆Research on social studies content, methods, models, curricular materials.
- ◆Productive classroom programs and/or experiences. Articles on the status of social studies education in local, regional, state and national levels and in other nations.
- ◆Information about resources in classrooms.
- ◆Critical reviews of books, films, computer programs and other media related to the social studies.
- ◆Discussion of current public policies on education.
- ◆Point-counterpoint submissions (different authors presenting opposing views on particular issues).
- ◆Articles, graphics, and other creative social studies related materials and projects by students.
- ◆Articles related to teacher education, staff development, supervision, and other in-service programs for social studies professionals.
- ◆Original lesson plans related to the Michigan Curriculum Framework for the Social Studies. Lesson

plan should include all necessary materials to be taught by another.

Manuscript Guidelines Length: Normally articles between 500 and 1500 words are accepted. On special topics longer manuscripts may be submitted. **Copies:** Two copies of the manuscript must be submitted. **Styles:** Article should use either APA or MLA Style. References and endnotes should be kept to a minimum but should contain complete citations. **Preparation:** Manuscript should be typed double-spaced on 8 1/2 by 11 inch paper with margins of at least one inch all around. Manuscripts **MUST ALSO BE SUBMITTED** on computer disc. Word Processing must be Microsoft Word in Macintosh or Windows 95/98/00 format. **Graphics:** Contributors are encouraged to send copies of appropriate graphics, charts, drawings and/or black and white photographs (digital photos in "JPEG" are preferred) with their manuscripts. Any copies of illustrations, which are submitted, will not be returned.

Criteria for Selection of Manuscripts Manuscripts shall be referred by competent refers. Publication shall depend on such factors as:

- ◆Suitability for classroom teachers.
- ◆Adherence to the tenets of scholarship.
- ◆Clarity of writing.
- ◆Value to the various constituencies of the social studies. Relationship to the Theme

Responsibility for Content of Articles The Editorial Board of the Journal and the Michigan Council for the Social Studies Executive Board do not accept responsibility for the views expressed by the contributors.

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