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Globalization and the Marginalization of Educational Purpose: Preparation of Workers and Citizens for the 21st Century and the Vision of Sustainable Futures

R.V. Farrell and Clifton Hamilton
Florida International University, USA

Abstract: Human capital development remains a primary goal of modern schooling. This paper raises questions concerning the link between global economic needs and school-based human capital development. The primary mission of preparing students for the workplace may weaken other educational missions vital in achieving a more sustainable future for humanity.

The current globalization trends in the world, which have resulted in an incredible standardization in the world market culture of products, images, activities, financial transactions, electronic information and amusements (Bates, 1993; Marginson, 1999), have also resulted in the continued and augmented work-related, economic focus of modern schooling. These globalization trends are also clearly universalizing the values of the industrial revolution, which support the consumption and production model of the West. In economic terms, this has resulted in the highest levels of growth and development (GNP) seen in human history. However, this happy fact is accompanied by the realization that if all humans lived at the consumer and producer levels of Americans (a mere 4% of the world's population) there would be a need for at least two new worlds for energy production and waste absorption (Wackernagel & Rees, 1996).

All educational means, including schools, are needed to raise human consciousness to respond to the sobering message regarding globalization, consumption and production of the above paragraph. However, it is the premise of this paper that the continuing focus on human capital development in schools limits our understanding of these issues by marginalizing other educational purposes better suited to prepare citizens to meet the challenges of the 21st century. Below, the question of whether school emphasis on human resource and human capital development is perpetuating an unsustainable way of life on a global scale will be explored. The last section of the paper will present an alternative curricular approach known as "Education for Sustainability" that is a more viable and sustainable way to prepare citizens to live and work in the future.

Globalization and Education: Human Resource Development and the New Economic Order

Schools are experiencing unprecedented numbers of programs that foster career/technical preparation and school-to-work initiatives in this contemporary era. The idea of "flexible thinking worker skills" is sweeping the United States and Europe, signaling a shift from mindless industrial revolution material production to information processing and flexibility in production. Desired flexibility in the work place still results in sales and profits, but production now will instantly respond to perceived wants and needs of consumers. In short, the production line, given flexible thinking workers, will now be able to give consumers almost immediately what they want, which will result in increased consumption. These new requirements of the work place are visibly influencing educational aims and purposes in schools around the world. As Thurow (2000) so aptly points out, "To participate in this new global economy, developing

countries must be seen as attractive offshore bases [by providing] relatively well educated workforces . . . " (p. 20). There are both positive and negative aspects to these developments.

There is nothing new about schools playing an economic role in society. Spring (2001) sees human capital development as the primary educational purpose of American schools in the 20th century, and according to some critics, like Gatto (1992), this emphasis has resulted in most students and parents believing that a good education means a good job, good money, and good things. However, there are also other aims and purposes of schooling. Character and citizenship education were popular in the 19th century and are regaining support in the current moment. In the liberal tradition of the United States, critical thinking was a primary educational purpose that is also gaining new support in the current global economic context. This support is a direct result of a changing technological and economic world. Schools no longer need to produce mindless factory workers for an industrial economy. Today, the need is for problem-solving team players who can compete in a world economy characterized by technology and the service industry (Reich, 1991). Theorists and educators have heralded critical thinking as an educational ideal for the 21st century, and people concerned with worker preparation see it as essential in problem-solving, decision making, multitasking and assessing in the workplace (Riddle, 1996). Rote learning and memorization are now considered anachronistic, and educational activities that promote critical thinking and problem solving of future workers are valued. The 21st century focus on human capital development builds on this premise.

The changing forces that shape evolving educational policy and purpose are complex in this global age. Certainly work force expectations, government policy, and universally promoted notions of social justice, national development, and economic progress of the last few decades have contributed to the formation of current policies and purposes (Davies & Guppy, 1997). As always, however, there is no universal agreement on educational direction, especially related to the use of schools in the spread of modernization and the western consumer/producer culture. Many educators believe that schools, especially secondary schools, have been and should be used to build modern nations (Fuller, 1991; Willinsky, 1998) and to develop human capital for a globalized economy and workplace by focusing on consumer relations, problem-solving, entrepreneurship and multitasking (Davies & Guppy, 1997). Still others view this emphasis on modernization and worker-related skills as reinforcing an unsustainable economic model that concentrates wealth into fewer hands and undercuts educational aims that would help promote a more sustainable world (Bowers, 1997; Fien, 1993; Orr, 1992; Smith, 1992).

Current school emphasis on the development of "flexible" work skills related to abstract and conceptual thinking, real world problem solving, and advanced communication abilities (Davies and Guppy) initially appears very promising. School programs with this purpose in mind are working their way across the United States and Europe as dozens of state departments of both education and labor are mandating school-to-work, tech-prep, and other vocational/career initiatives to meet global market demands. The Florida Department of Education's program for Technology Learning Activities emphasizes career awareness and real-world applications of academic skills, consumer knowledge, and the impacts and consequences of technology (Bouchillon, 1994). The National Goals Panel for School-To-Work lists several strategies that middle school teachers can utilize to make a student's transition from school to work less hazardous. They include emphasis on ways to help students become flexible, adaptable, independent, responsible and proficient in self-assessment (Benz, 1996). At the Fort Worth Independent School District's Applied Learning Academy, teachers collaborate with employers and community representatives to link instruction and the real world by developing project

driven, problem-solving learning experiences for all students (School-To-Work, 1997). On higher levels, the European Commission's advocacy of a learning society embraces educational goals of a broad knowledge-base connected to abilities and skills for employment and economic life (Spring, 1998) and the Secretary of Labor in the U.S. has indicated that middle school students are at an opportune age to learn fundamental skills for a variety of work places and jobs (School-to-Work). Concern for worker skills is essential, but a problem results when working contributes to over-consumption, over-production, and over-accumulation in a finite world.

School-based work-related programs now emphasize critical thinking and problem solving in the workplace and work activities. The assumption surely is that these characteristics will be transferred to other areas and concerns. However, critics of the approach that associates thinking and working see this focus as flawed in that schools are creating homogenized individuals who will unconsciously associate thinking and problem-solving with the context of work. Bowers (2000) articulates this point in his critical review of modern liberalism and its tenets, stating that modern liberalism (to be grouped with school-to-work initiatives, etc.) places "its emphasis on transforming skills, knowledge and relationships into commodities" (p. 59). His view underscores the way in which school-to-work initiatives, tech-prep programs, and other work-related endeavors package knowledge and problem-solving into the context of work and economy—ignoring and perhaps even negating the need for the current generation to think and problem-solve within more crucial contexts of ecological sustainability and cultural diversity.

Another flaw seen in the new emphasis on flexible worker preparation and human capital development is the false sense of preparedness given to secondary school students. Advocates of school-to-work and other such programs that develop "flexible skilling" see these efforts leading to employable skills and job placement. One only needs a short memory to remember the "brain drain" issues of manpower development of the 1960's and 1970's when educational production outpaced job placement. Job availability and employment structure are serious issues. Just what percentage of the workforce will need job-related higher level thinking skills? Rifkin (1995) raises serious questions about the employment of any more than a small percentage of high-skilled individuals in the current economy. Calliods (1994), in fact, has questioned the attempt of educational policy makers to predict future worker needs, claiming that the need for future skills cannot be accurately predicted. He goes on to state that "...an efficient system of continuing education must be organized and pre-employment education must lay an adequate foundation of general knowledge and transferable skills" (p. 254). This assertion is strangely reminiscent of Philip Foster's conclusion in the 1960's that the best vocational education in Africa was a liberal arts education.

The liberal arts, foundational knowledge and transferable skills referred to by Caillods and Foster are available in public and private schools in this society. Whether students want to take advantage of this availability, or the system wants to teach the liberal arts to all students, are other questions. It seems that many students do not want to take advantage, given alarms about student achievement and the incredible "waste of time" that occurs in America's 180 day school year. Aside from this, the question remains as to whether the current reemphasis on human capital development limits or marginalizes other educational aims that are vitally needed to promote and develop the conscientious, thinking citizens so desperately needed in the contemporary moment. In this regard, Hutchison (1998) asserts that "...by promoting the interests of business and private enterprise over other, more community-oriented concerns, such as citizenship education and local community-based decision making, [work-related curriculums] severely curtail the role that schools can play as critical spheres of public discourse" (p. 38). He

argues further that "streamlining curricula for the sole purpose of fulfilling labor market imperatives...severely curtail[s] the mandate of schools within a democratic society" (p. 39).

Many critics see the globalization of modern schooling with its emphasis on human capital development as spreading mindless Western consumerism and threatening to local sustainable cultures (Mabogunje, 2001; Norberg-Hodge, 1991; Quashigah & Wilson, 2001). Gatto (1992) calls for public schools to move away from "defining education as an economic good," (p. 67) and move towards schools which allow students the latitude to discover themselves and the meaning of life in a context not necessarily contingent on work, career, consumerism and economy. According to Gatto, a passion for life, work and play cannot be achieved through training for a future that is unpredictable, competitive, and exploitive of humanity and the earth. Low-paying jobs, and even high-paying jobs, based on a consumer/producer culture that is unsustainable, are not the answer. A much more reasonable approach would be to restore balance between humanity and habitat in order to conserve and preserve life. Such an approach, which involves teaching and learning for sustainable futures, is probably the biggest challenge humanity faces.

Teaching and Learning for Sustainable Futures

The debate continues as to whether the Western consumer/producer culture is sustainable. However, when the ecological footprint of the average American citizen is taken into consideration, the debate's conclusion seems fairly obvious. The ecological footprint of the average American, or the land area required to support this individual's material standard of living indefinitely, is calculated to be 5.1 hectares/person (Wackernagel & Rees, 1996). The average citizen of India requires 0.4 hectares/person. There are only 1.8 hectares of productive land per person in the world. These figures describe a very skewed world in which one billion people live a very satisfying life, but two billion live on less than \$2 dollars a day. Alarm over this reality has prompted the emergence of a new concept, sustainable development, to help restore a balance between human consumption and earth's capacity as a "natural resource."

This is not the place to trace the recent history of "sustainable development." Suffice it to say that the most well known definition of this concept surfaced in the 1987 report of the U.N. Commission on Environment and Development entitled *Our Common Future*. In this report, sustainable development was defined as "...development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43). As for "Education for sustainability," "education for sustainable development," and "education for a sustainable future," they are interchangeable. The concept of "education for sustainability" (EFS) has evolved over the last 20 years as a way to better prepare citizens for the 21st century. The basic argument is that modern schooling, with its emphasis on human capital and consumption, does not assure the development of the kind of citizen who is needed. In general, educators are unfamiliar with this concept unless they are affiliated somehow with environmental education. The primary concerns of American teachers continue to be high-stakes testing, national standards, accountability, and diversity.

Consensus in educational circles will be difficult to achieve on many of the ideas in EFS. Take, for example, the idea that EFS is an interdisciplinary educational transition. A number of individuals in Australia favor this notion, including Fien (1998), who writes that the goal of education for sustainability is "to develop the civic or action competencies that can enable all students and institutions to play a role in the transition to sustainability," thus embracing a societal vision that is "not only ecologically sustainable but also one which is socially,

economically, and politically sustainable as well" (p. 245). Just like environmental education, EFS is interdisciplinary in nature—a problem in a subject-focused school system. Sustainability demands multiple levels of understanding that bridge both the natural and social worlds of human existence. Due to this interdisciplinarity, some see EFS as an essential component in all subjects.

EFS is clearly a new vision and transition towards overcoming the school's role in perpetuating what are perceived to be unsustainable values. C.A. Bowers (1997/ 2000) is especially adamant in his call for educators to recognize how schools reinforce values that perpetuate the current "unsustainable" consumer/producer culture, the so-called digital phase of the Industrial Revolution. These beliefs and values include: (a) that humans are separate from and superior to nature (anthropocentrism and individualism); (b) that resources are free and inexhaustible (earth as a natural resource); (c) that technological fixes and product substitutions exist to solve all human dilemmas (technozoic focus); (d) that nature can absorb all human waste (earth as a convenient waste-sink); and (e) that material objects are the essence of self-actualization (materialism). The implications of these values and beliefs are challenging. EFS implies the interdependence of humanity and habitat, a recognition of the ecological crisis facing humankind, and the importance of environmental justice and human rights. Above all, it calls for a serious study of the accumulating evidence of a world biodiversity and cultural diversity crisis, which is epitomized in the concept of the Sixth Extinction (Eldredge, 1998). The rampant expansion of the human enterprise, in the form of the globalization of the consumer/producer model of the west, bears much of the blame for this current situation. The new path of EFS requires a shift in thinking away from the anthropocentric and anthropogenic, away from the individualistic and progressive values inspired by the Industrial Revolution. It requires the restoration of self-reliance and mutual support that have been undermined by the modern, scientific age. The two characteristics of growth and development, which epitomize modernity, above all must be replaced by a more balanced, steady-state economic existence (Daly, 1973).

There are many international and national efforts to integrate EFS into the formal educational process, far too extensive to be reviewed in this paper. However, one of the most integrated efforts to make available a curriculum based on EFS is UNESCO's multimedia program "Teaching and Learning for a Sustainable Future" (<http://www.unesco.org/education/tlsf>) Plug into it. You might be persuaded to join the ranks of those who see a crucial need for this educational change...

Schools, and their continued reinforcement of values that support the globalization of the West's unsustainable, consumer/producer lifestyle, are considered by many to be part of the "problem." This paper has begun to examine how the increased importance of human capital and human resource development in schooling contributes to this problem by marginalizing educational purposes that could perhaps foster higher levels of understanding and awareness related to more sustainable lifestyles and to the needs of future generations. Curricula that support "education for sustainability" are encouraged in raising human consciousness about this situation and to allow future generations to have a similar quality of life as present generations.

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