SECONDARY EDUCATION AND SUSTAINABLE DEVELOPMENT

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Contents

Summary

At the current moment, standards and accountability are the lingua franca of secondary education throughout the world. At the same time, critiques of most secondary education systems around the world focus on the stringent accountability measures imposed by high stakes testing and the perceived need to compete successfully on international test measures such as the Trends in International Math and Science Study (TIMSS) and the Program for International Student Assessment (PISA). While understanding the degree to which international and national tests are used by governments as accountability measures is necessary in understanding the current state of affairs, it is short-sighted to focus only on testing and other accountability measures. The current themes of secondary schooling throughout the world - individual interest, competition, continued consumption, growth and development –are the keys to the current global market economy. The goals set out by this market economy come into direct conflict with the real needs of secondary education in a changing and globalizing world. To put it simply, the dominant goal of secondary education as human capital development is no longer feasible. If the survival of the planet is vital, it is necessary to change the emphasis in education from human capital development to one that promotes education from a more holistic perspective. In this regard, even though education in of

itself is considered to be the most important means to achieving sustainable development, thus far it appears that the impact of education for sustainable development (ESD) on education systems throughout the world has been minimal in affecting any real change. Barriers to the implementation of ESD include a lack of consensus on the definition of sustainable development, the breadth of ESD, the appropriation of the term to justify global market consolidation and neo-conservatism, and a missing sense of human agency connected to ESD. The human capability approach is posited in the final analysis as a promising complementary step in the implementation of ESD, as it encompasses the major tenets of ESD, is present-oriented, agency driven, and uses ESD practices to help people affect authentic change in their local surroundings.

1. Introduction

Over the years, parents across America have heard a lot of excuses…and oftentimes have seen little change. One year ago today, the time for excuse-making has come to an end. With the No Child Left Behind Act, we have committed the nation to higher standards for every single public school. And we've committed the resources to help the students achieve those standards…Accountability of results is no longer just a hope of parents. Accountability for results is now the law of the land. (Office of the Press Secretary, 2003 ¶ 26)

These words, taken from President George W. Bush's speech following the one year anniversary of the signing of the No Child Left Behind Act (NCLB.), represent a clear snapshot of the state of secondary education in the United States, and in much of the world today. Due in part to the increasing demands of the free market system throughout the world, standards and accountability have become the lingua franca of secondary education. Both the operation and gauge for success in schools are determined by the dominant educational goal of human capital development. While this idea is certainly not exclusive to the present era, there are two unique factors about its current use. One is its increased reliance on a corporate complement, and the other is its contradictory nature in an increasingly global economy. The series of events that have led to the current state of affairs have involved a lengthy and deliberate set of movements. These movements can be viewed in direct correlation to shifts in economic philosophy which established the current corporate-political relationship, and in turn, a particular view of the role of social institutions such as schools. Schools are now seen as corporate identities, governed by the bottom line rather than the interests of the students.

Today, critiques of most secondary education systems around the world focus on the stringent accountability measures imposed by high stakes testing and the perceived need to compete successfully on international test measures such as the Trends in International Math and Science Study (TIMSS) and the Program for International Student Assessment (PISA). While understanding the degree to which international and national tests are used by governments as accountability measures is necessary in understanding the current state of affairs, it is short-sighted to focus only on testing and other accountability measures. The current themes of secondary schooling throughout the world - individual interest, competition, continued consumption, growth and development –are the keys to the current global market economy. The goals set out by

this market economy come into direct conflict with the real needs of secondary education in a changing and globalizing world. To put it simply, the dominant goal of secondary education as human capital development is no longer feasible. While the twentieth century was characterized by the large-scale availability of living wage jobs and constancy of the skill sets necessary to obtain them, times have changed, but the primary aim of education has not. A requisite skill set no longer assures a well-paid, lifelong job. Schools, communities and nations are all under pressure to prepare a new type of worker for the Information Age, to help stem the erosion of the environment, and to improve the well-being of its citizens. These pressures call for a new goal for education.

Agenda 21, the landmark action plan issued by the United Nations at the Earth Summit in Rio de Janeiro in 1992 to deal with environmental issues of the 21st century, notes that "education is critical for promoting sustainable development" (UN, 1992 Chapter 36.3). The action plan goes on to say that education for sustainable development "should deal with the dynamics of both the physical/biological and socio-economic environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication" (UN, 1992 Chapter 36.3). While implementing the action plan of Agenda 21 would require a sea change in the policies, structure and curricula of most education systems, if the world is to be conserved as a healthy and livable place, individual needs and freedoms need to be examined in the context of local, national and global responsibilities. The emphasis on unrequited growth and human dominance over the environment threatens present and future existence, and points to the necessity of a change of focus in education from human capital development to sustainable human development. While the idealistic and prescriptive nature of education for sustainable development make it a distant ideal, the human capabilities approach to education, with its emphasis on human agency, holds great promise as a complementary and immediate approach in this transition period towards sustainability.

2. Major Issues in Secondary Education

Secondary education has long been neglected in the development of public education systems in many parts of the world. As many developing countries have made primary school attendance mandatory and have increased primary school enrollment rates to nearly universal coverage, the number of students seeking secondary education has grown enormously. Yet thus far the complexity of the issues involved in secondary education has kept secondary education policy at the periphery in many developing countries. The first complex issue is that, unlike primary education, secondary education has two major functions: to provide skills, knowledge, and technical training for those who plan on entering the labor force, and at the same time to prepare others to continue their studies on the tertiary level. Other issues involved in secondary education include access to schools, demand-side constraints such as the inability to pay for education, the quality of secondary schooling, and assessments. One other major issue is the question as to whether secondary schooling is "needed." In large part, the answer to this question revolves around the economic needs of the country, the social and cultural restraints on girls (See article Education Policy And Gender Issues: A

Sustainability Perspective in this Theme), and most importantly, the goals of education.(See article The Aims Of Education In An Age Of Stasis And Change in this Theme) By and large, the primary goal of education throughout the world is human capital development. Subsidiary goals may include education for citizenship, life-long learning, personal development, and in rare instances, environmental sustainability.

In an interesting twist, in the last decade or so, as standards and accountability have captured the hearts and minds of education decision-makers in the US and other "western" nations, many countries in the "east" have turned away from their emphasis on the same and are looking towards the US for ways to teach skills associated with "progressive" education, such as cooperative learning, critical thinking, creativity, and student-centered learning. However, the primary goal of education for both "east" and "west" continues to be human capital development.

2.1 International Differences in Assessments

In the United States, The No Child Left Behind Act (NCLB) has firmly established the importance of standardized tests in the classroom, as each state must create assessments to meet national standards. Many European nations have long histories of using standardized assessments. Reports and studies show that nearly all European countries use some form of standardized testing. In Great Britain, which served as the model for the current assessment system in place in the United States under NCLB, all students in non-fee-paying schools are tested in English and mathematics at the ages of 7, 11, and 14; students are tested in science at ages 11 and 14. In addition, all students attending British schools must take examinations in English, mathematics, and science, as well as several elective subjects at age 16. Students who pass these examinations, called the General Certificates of Secondary Education (GCSE), may choose to continue their education by preparing for other examinations, such as A-levels or The National Council for Vocational Qualifications. Students who fail the GCSE examinations may stay on at school to repeat the examinations the following year. Students cannot graduate high school until they pass the GCSE. In other words, the GCSE is the one high-stakes exam students take in K-12 schooling in Great Britain, unlike the US system, wherein the tests in grade 3 as well as those in grade 10 are high stakes – students who fail their third grade math and English tests cannot move to fourth grade. Germany and France have national tests for students of age 16 based on a uniform curriculum, similar to Great Britain, with the difference that in both of these countries students who fail the national exams can still graduate high school – in other words, the tests are medium stakes. In other European nations other criteria are also taken into consideration to determine pass/fail for students of age 16 (10^{th} grade). The Netherlands for instance counts standardized testing as only a portion of the student's overall performance.

In post-colonial Africa, many national education systems have kept their European roots. Studies have shown that the education system in Malawi, for example, is one that employs a curriculum centered on high-stakes testing. The Malawi education system is divided into primary, secondary, and tertiary levels. The primary level is from standards one through eight (or 8^{th} grade). Their secondary system is acknowledged as the 9^{th} year of education through the 12^{th} and three exams are given from a student's entrance to her

exit of secondary education. In the 8th grade, the Primary School Leaving Certificate Examination is the exam given to grant entrance into secondary school. Of the 161,786 students that take this exam, only 26.33% pass it and enter secondary school annually. This exam is critical because although the students who fail could enter into an alternative community school, such institutions are not nearly at the level of state schools that offer subsidized tuitions. By the 10th grade, the Junior Certificate Examination (JCE) determines whether or not students in Malawi will be allowed to continue their secondary schooling; 57% of students pass this exam annually. Passing this exam doubles as a working certificate for many blue collar jobs in the country. For the final exam, the Malawi School Certificate of Education (MSCE), a mere 18% pass the exam annually. This low passing rate coupled with the fact that the MSCE has become necessary for professional employment make the MSCE a major determinant in students' futures. For these reasons, critiques of the Malawi system are very similar to those critiques given to the United States' system - the curriculum has been compromised by an overarching emphasis on high-stakes exams.

Most interesting in assessment trends have been recent trends in Asian countries, specifically those countries whose students score highest on international tests. In 2003, the latest testing year for which international data is available for the TIMSS, students from the five Asian countries participating in this test (Chinese Taipei, Hong Kong, Japan, Korea, and Singapore) outscored students in all other 40 countries participating in both subjects areas - science and math – and in both grades in which the test is administered – fourth and eighth grades. Virtually the same holds true for the latest (2003) results of the PISA, an assessment that focuses on 15-year-olds' capabilities in mathematics literacy. Of the students in 39 countries who took this assessment in 2003, students in Hong Kong and Japan were among the top five performing countries. Despite (or maybe because of) the high scores achieved by students in Asian countries, many Asian nations want out of the high-stakes environment. For example, reports show that many Japanese education officials and citizens feel that Japanese students have not necessarily gained a higher understanding of the subject matter, but have just become very good at taking exams.

As a result of a national self-examination of its schooling pressures, Japan is undergoing changes by eliminating Saturday school and allowing schools some creative freedom in determining their own curriculum. Taiwan is undergoing similar changes that will see high-stakes tests play a diminishing role while other assessments such as essays and portfolios become more important. Even China is experiencing reform in its schooling standards. A 2007 report notes that Chinese education is attempting to incorporate critical thinking and leadership in their schooling methods.

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Biographical Sketch

Dr. Hilary Landorf is an Associate Professor of Social Studies/Global Education at Florida International University. Dr. Landorf's research focus is inclusive global education. She has written articles examining, modeling, and designing pedagogical strategies helpful in creating an inclusive global learning environment. She is known for her work in using the Universal Declaration of Human Rights as a touchstone document for the teaching and learning of inclusive global education. She has published articles on inclusive global education in journals such as *Theory and Research in Education*, the *Journal of Educational Administration*, *Social Education*, and *Teacher Education Quarterly*, and has contributed book chapters on topics as diverse as globalization and sustainability, and service learning.