InFo Vol. 12, No. 1 April 2009 pp. 18-37

FEATURE

Economic Wealth and Educational Issues: An International Comparison

Shawna Vyhmeister

Abstract: Poverty has long been associated with lower levels of school achievement within developed nations, as well as across nations. The level of economic wealth of a nation has also been found to be correlated with many aspects relating to education, such as funding, access, human resources, and literacy. This paper describes the educational scenario in four countries (Rwanda, Philippines, Argentina, and the United States)--one at each of the four levels of economic wealth as described by the World Bank--and develops a simple explanatory model including issues, problems, and programs. Data sources include personal published research, teaching experience, government documentation and international comparison data for each country.

Freire's classic (1970) work "Pedagogy of the Oppressed" has been followed up in the United States by a large amount of recent research on why students from lower socio-economic classes frequently do less well in school, even though they are equally as intelligent as their more wealthy peers. Some studies (see for example Anyon, 1980) have shown that what they are taught in their school actually prepares them to stay in their sociologically determined "place." The working class students are taught to obey instructions, whereas elite students in private schools are taught to work with ideas and to tell others what to do. A more recent study showed significantly lower teaching efficacy in lower income schools (Auwarter & Aruguete, 2008, p. 245). Suggestions for how to encourage academic improvement among this group have produced moderately positive results in some cases (see for example Kahlenberg, 2006), yet there is a long way to go toward resolving the problem. We have learned that children from an impoverished environment need to spend time in an enriched environment in order to "catch up," (Marzano, 2004; Ravitch, 1998) which

suggests that merely providing similar resources for such children at school is not sufficient—they need more investment than wealthier children if they are to have a chance at competing on a level playing field.

Having lived and worked overseas for many years, I have come to see these differences in educational programs and resources as relating to whole nations, not merely classes within a society. More developed nations generally have more resources to invest in education, and they frequently achieve higher success at educating their citizens, though this is by no means automatic. This study aims to look at variation in educational issues across nations with different levels of economic wealth. In developing nations, where a much greater proportion of the society is poor, the focus of the educational system seems frequently to be on teaching students to follow instructions, memorize answers, and be passive, rather than being leaders and thinkers—the very types of teaching schools in poor neighborhoods are accused of in wealthier countries. While some of this lack of educational innovation may be attributed to political structures within a country, it is certainly reasonable to associate this focus with the general wealth of the country, as research within developed nations has indicated.

How can we better understand the effects of poverty on the educational system of developing nations? What specific differences do we see between nations of different economic levels? This documentary analysis seeks to find relationships among economic wealth, current in-country educational focus, and the developed nation literature describing the effects of socioeconomic status (SES) on educational outcomes within a single country. If such a pattern of relationships exists, it could help us better understand and anticipate the educational challenges of any given nation based on SES level. If this connection can be established, it might also be possible to link the literature on educating the poor within the U.S. or other developed nations to the very real need for educating the developing nations of the world.

As a first step toward this understanding, this study will qualitatively compare countries at different SES levels with specific educational indicators such as literacy, dropout rates, government educational goals, and the current educational issues being addressed by the government and the media in each of the selected countries.

Related Studies

Much has been researched and written about the correlation between students' SES and academic achievement (see for example "social class 'defines,' 2003; Muller, Riegle-Crumb & Schiller, 2004; Hampden-Thompson & Johnston, 2006). This literature is divided into multiple categories, with some

studies focusing on the quality of teaching received in lower, middle, or upperclass schools (see for example Anyon, 1980; Auwarter & Aruguete, 2008), others focusing on the linguistic skills or other background factors of lower-SES students (e.g., Marzano, 2004), and yet other studies focusing on what works: success for all (Comer, 1988; Edmonds, 1979; Slavin, et al., 1994); resiliency (e.g., Waxman, Gray & Padron, 2003); economic integration (e.g. Kahlenberg, 2006); etc.

Most achievement research has been done in the United States, however, there is also a rich variety of studies from other parts of the world (see for example Polydore, 2001; Niles, 1981). When U.S. data on achievement by race, for example, is broken down such that SES is accounted for, the differences in achievement by race are greatly reduced, and disappear altogether at the lowest SES levels (Ferguson, 2002). Relatively recent international test results for both TIMSS (Third International Mathematics and Science Study) and PISA (Program for International Student Assessment) that include SES data have generated many more international comparative studies across participating nations (see for example NCES, 1999; 2003).

There is reason to believe, however, that conditions are at least somewhat different in developing countries than within the United States. Chiu's (2007) study found, for example, that family factors predicted academic achievement in 41 different countries, though the prediction was stronger in more developed countries. Many of the international studies focus on the achievement gap between urban and rural students. This "gap" is strong in many developing countries (UNESCO, 2005; Zhang, 2006), but varies according to national characteristics. In a European study (Elijio, n.d.), reading achievement was found to be positively affected by a rural school location in Anglo-Saxon countries, but negatively affected by it in Eastern Europe, whereas in Scandinavia, location was not a predictor of achievement at all. Many studies have gone beyond the rural/urban divide to examine the actual characteristics of the location that predict achievement. In Africa, for example, rural schools were found to have less funding, low numbers of textbooks, and a failure to follow the prescribed curriculum (Coleman & Clark, 1983). One study showed that access to books and materials was a higher predictor of achievement than SES in developing countries (UNESCO, 2005).

Every country has a range of SES levels, however, the proportions vary. Many developing countries have widely disparate income levels. Being poor also has much more drastic consequences in terms of child mortality in a poorer country (WHO, 2008) than in a developed country, with twice as many poor children dying in impoverished countries compared to the number of poor children who die in more wealthy countries. This difference in economic wealth between nations is also correlated with differences in education systems. Much of this is to be expected: based on Maslow's hierarchy of needs, as well as common sense, we know that those who are hungry or at war will not see much use for trigonometry, for example.

What remains to be done is to examine the nations of the world, to see if there is a pattern of development that can be seen. This pattern could then be compared with the wealth of studies done within the U.S., to see if some concepts that apply to a specific SES level within the U.S. could also apply to nations that are at a similar SES level.

Method

The World Bank has divided the nations of the world into four categories according to Gross National Income (GNI), the new term for GNP (The World Bank, 2008a). The four categories range from Low to High income (Middle is divided into Lower Middle and Upper Middle) (The World Bank, 2008b). The objective of this present study is to examine a sample country at each of these four levels, and to try to paint a picture of the issues and activities of schools at each level. While similar studies have been done comparing educational plans and activities across nations (see for example Bitoun, et al., 2006), this study combines GNI data and educational indicators in an attempt to characterize the different GNI levels into a simple model that explains the differences between educational needs and challenges in different parts of the world. While SES differences exist within every country, the focus here is on a weighted average (which the GNI provides) which will show differences between countries, rather than on differences within each country, of the 4-tier World Bank categorization of nations according to wealth, I have had the privilege of teaching for multiple years at the college and/or graduate level in one nation from each category. Given the additional insights my experience can add, I have chosen these nations where I have taught as examples of each category, to be used for analysis in this study. The purpose is to explore details from each of these four countries to try to better understand the ways that educational issues within a country vary with economic wealth.

This primary qualitative/documentary study draws data from multiple sources:

Government web pages

World Bank Education Statistics

Multiple other sources of educational statistics for comparison and to fill in missing data

Generic Research literature

Conversations within each country by government organizations and informed individuals, discussing plans, problems, solutions, educational needs

Newspapers and other media sources

Personal recollection and insight from having lived and worked in each country for a minimum of 4 years in each case

In a sense, this study is similar to a recent UNESCO study (Bitoun, et al., 2006) which analyzed the national educational policies and plans of 36 countries, looking for changes since the Dakar Conference (June, 2006). The analysis was done in a similar way, looking at government documents and actual activity, and often finding conflict between what was said and what was done. This current study is much smaller, but organizes the countries by SES, giving a framework from which to understand the "large diversity" which the Bitoun study found difficult to deal with.

Data

The countries selected for analysis in this study include one from each GNI group. They are described along with a selected list of education-related statistics in Table 1. As one would expect, as the GNI climbs, nearly all the educational statistics improve. Students are in school more years, the ratio of students per teacher drops precipitously, and literacy improves.¹ Note how the legal requirement for how many years a student must be in school also rises steadily with GNI. The most extreme variation, however, is in tertiary enrollment, which appears to be most affected by GNI in this sample.

One of the numbers that is the most unexpected in this table is the high school teacher/student ratio for Rwanda. While the elementary ratio is predictably high, the secondary ratio is far lower than for the Philippines. Part of this may be that Rwanda also has very low secondary enrollment, and over 40% of the students who do attend are in private high schools where they must pay tuition (Republic of Rwanda, 2006). Also worth noting is the average school life expectancy in the Philippines, which stands at under 12 years. Given that the Philippine system has only 10 years of education before college, this number actually indicates high school completion, and some college work. Other implications of having only 10 years of education before college will not be discussed in this present paper, but it is certainly suspected to affect the quality of college work that is done.

¹ Of course, there are many different ways of calculating literacy, which can yield quite different results and make it difficult to compare. In this case, I have reported all literacy results from the same source, so that if there is a bias in the way of calculating the result, at least all four countries will be biased in the same way.

	Rwanda	Philippines	Argentina	United States
Vorld Bank GNI Classification†	Lower	Lower Middle	Upper Middle	High
JNI	250	1,390	5,150	44,710
Adult Literacy (age 15+)	64.9%	92.6%	97.2%	99%**
Elementary Enrollment	78.7%	91.4%	98.5%	91.6%
Secondary Enrollment	13.9%††	60.4%	78.4%	88.2%
Certiary Enrollment	2.6%	28.5%	63.8%	81.8%
High school Graduation*		40%	54%	85%
Elem Stud/Tchr ratio	65.9	34.6	16.7	13.8
econd Stud/Tchr ratio	26.3	37.3	13.5	14.6
chool Life expectancy (yrs.)	8.5	11.7†††	15.2	15.7
Juration of Elementary	6	6	6	6
Duration of Secondary	6	4	6	6
Required years of school	6	7	10	12

Note. Adapted from The World Bank, Data & Statistics, EdStats, Country Profiles, (2008d), retrieved September 7, 2008 from http://go.worldbank.org/JVXVANWYY0

* Missing data supplied from the League of Filipino Students, 2008; Gorostiaga, Acedo & Xifra, 2003; U.S. Census Bureau, 2007.

** Missing data supplied from the CIA World Factbook, United States, retrieved September 7, 2008 from https://www.cia.gov/library/publications/ theworld-factbook/geos/us.html#People

[†] GNI categories from The World Bank, Data & Statistics, EdStats, *Country Groups*, (2008c), retrieved September 7, 2008 from http://go.worldbank.org/D7SN0B8YU0

†† Since high school is completed after 10 years, this number, though less than 12 years, includes the completion of high school.

††† Missing data supplied from MINEDUC, 2003, as cited in Rwanda, Ministry of Education, Position paper: Quality assurance in basic education, 2004, Retrieved September 7, 2008 from http://educationclearinghouse.nairobi-unesco.org/ docs/Rwanda_position_English.pdf

It is interesting that the Upper Middle and the High GNI sample countries have the most similar statistics. It seems that beyond a certain level of income, it makes less difference how much more is earned. The link between poverty and poor achievement is already well established, but recent research suggests that as long as the majority of students in a school are middle class, "their achievement does not decline" when poorer students attend the same classes. That is to say, poor students do much better in middle class schools than middle class students do in lower class schools. This is because "middle-class children are less affected by school influences (for good or ill) than low income children" (Kahlenberg, 2006, p. 52). This resiliency of the middle class may be what helps Argentina's results to be more like the U.S. results than like the Philippines, though they still face the urban/rural achievement divide typical of developing countries. It is possible that once a certain "critical mass" is achieved, educational achievement becomes less of a struggle. The differences are more clearly seen, however, when high school graduation data is added, where Argentina still performs more like the Philippines than like the U.S.

Table 2 contains the goals of each country as stated on the government education department web site, as well as a cross-section of the educational activities, commentaries from researchers and news reports, and stated concerns for the four countries included in this study. Though all four web sites were recently updated and had news items and information available on the front page, the web sites were found to increase in complexity according to the GNI classification. All have laudable goals for their country, but the words of the goals suggest a focus on more elementary issues of deeper concern at the lower levels of the GNI analysis. Notice the trend in single words taken from the governmental education goals of these four countries (in ascending order of GNI): illiteracy, equity, quality, and excellence. This shift in focus is illustrative of the differences in educational concerns documented in the rest of Table 2. All of the plans are laudable, however, there may be questions as to how many of them will truly be implemented. Exit exams are the most variable of all the measures. The US is just implementing what poorer nations are trying to get away from. But the clearest picture of the differences between nations comes from an analysis of some of the current problems being faced in education in each country. Quality materials and desks, and teacher absenteeism are concerns of the poorer countries, whereas concern for poor and minority student achievement rises as the masses have their basic needs cared for. Following is a more detailed description of each nation's educational issues, drawn both from documentary analysis and from personal experience.

Apri	Table 2 Selected Educational Indicators compared by GNI							
1 2009, Vol. 12, No. 1	Country Goals/Objectives (GNI Level)		Plans/Focus	H.S. Exit	Current Successes		Current Problems	
	Rwanda (Low)	The global goal of the Government of Rwanda is to reduce poverty and in turn to improve the well-being of its population. Within this context, the aim of education is to combat ignorance and illiteracy and to provide human resources useful for the socio-economic develop-ment of Rwanda through the education system (Republic of Rwanda, 2008).	Many planning documents, focusing on increasing the quality and relevance of education, reducing discrimination, improving access, education for peace and democracy, and health and literacy (Republic of Rwanda, 2003; 2004).	Exit exams are the only measure of quality—no interim measures. Lower secondary is now open access—not restricted, as before (Republic of Rwanda, 2006).	Improved fund students—now per year, up fro Schools now a receive money student enrolle progress on ind access and on in secondary exit knowledge, no (Republic of R 2006).	ing for 2500FRW om 300. ctually for each d. Good rreasing making exams about t cheating. wanda,	Students enter, but do not complete elementary school. Quality is not there. Weak preparation, little support for teachers in the field. Textbooks are 1 for 3 children, teachers often absent, curriculum revision work slow/non-existent (Republic of Rwanda, 2006).	
	Philippines (Lower Middle)	To provide quality basic educa- tion that is equitably accessible to all and lay the foundation for life-long learning and service for the common good. This mission statement is preceded by a vision statement including excellence in public service, love of country, empowerment, caring, responsiveness, enhancing learning, and reaching the less advantaged. (Republic of the Philippines, 2008b).	Curriculum reforms have increased teaching time in areas like math and language (SEAMEO Innotech, 2003) Plans to add a "bridge" program between ele- mentary and secondary, effectively lengthening elementary, slow down grade inflation, and im- plement the new basic curriculum ("Regaining," n.d.)	Students in elementary and high school are evaluated four times per year. Students wishing to continue to college must take a national college entrance exam.	Uniforms no longer required— an attempt to increase access for the poor. Teachers must hold a bachelor's degree.	Textbooks m lack richness Teacher abset Education spe countries (Ra 36 th of 38 cou ("Regaining," Lack of politi Only 30% of competencies ("Regaining," HS teachers of teach (50% ir (SEAMEO Ir	eet minimum curriculum, but and depth. nteeism is common. ending is less than most ya, 2008). untries in math scores ' n.d.) iccal support for real reform. grade 6 students mas-tered i math, science, and English ' n.d.). lid not major in the field they n math, 4% in physics) unotech, 2003)	

Country (GNI Level	Goals/Objectives	Plans/Focus	H.S. Exit	Current Successes	Current Problems	
Argentina (Higher Middle)	A quality education for all. This statement is followed by a 20-point list of objectives that includes working toward increasing high school completion rates, an increased role for the government in coordinating and legislating policy, better support for grou that are traditionally marginalized, better connectio with the world of work, better support for teachers, reading programs, etc. (translated /adapted from República Argentina, 2008).	Deeply committed to education, bu lacking in finances (Morris, 2008) Recent (1990s) reform gave financial and curricular responsibility HS to the provinces (but did not add funding) (Goros- tiaga, Acedo & Xifra, 2003) Grades 7-9 have been moved into P ⁸ the primary school, risking making the content simpler, but fewer ^{nns} students are dropping out. Education/culture suffered with economic crisis of the 90s and low funding still causes strikes/low quality.	t College entrance exams have been abolished Discussions about high school exit exams (now a decision of the province)— some say it won't help if teachers don't teach better.	World Bank s funding in 2004 for higher education reform	 Brain drain—college graduates are employed abroad, not at home. Long undergraduate degrees (5 yrs.) Teaching is not well paid; quality is going down Urban/rural inequity, especially at higher levels Proliferation of graduate degrees (Morris, 2008) Politics and traditions have kept reforms from having intended effects (Gorostiaga, Acedo & Xifra, 2003). Participation/decentralization is new (Pini & Cigliutti, 1999) Recent PISA scores ranked Argentina near low-est in math, science, reading (Bentancur, 2006) 2008 results show Argentina behind Chile and Mexico (de Vedia, 2008) 	
United States (High)	Promoting educational excellence for all Americans (U.S. Department of Education, 2008).	Focus on educating ALL regard- less of entry level or background. Sensitivity to not scoring well on international exams Data is now available from exit exams, international exams, etc., to guide reform (Zabala, et al., 2008) Most states require teacher certification exams	As of 2007, 26 states had high school exit exams in place, or in the pipeline (Zabala, et al., 2008)	HS dropout rates have reduced es- pecially for lowe SES students (La et al., 2008). More students ar taking college pr work in HS	Current tensions over NCLB, the government's effort to ensure r quality for all students ird Reading scores may be down since 1992. e Concern for achievement for poor ep and minorities	

Rwanda

Rwanda, like most of its African neighbors, has adapted much of its educational structure from Europe. The European system tends to be fairly exclusive, and Rwanda has traditionally practiced this to an extreme. For many years there was only one University in the country, with limited slots for high school graduates. High school was completed with an exam that only one in six passed, so very few students were qualified to go to college. Those who did go, however, had either paid bribes, or were, in actuality, extremely bright. Nowhere have I ever taught brighter, more receptive college students. Due to a lack of books and materials, elementary and secondary education tended to focus on a lot of memorization and storing up of information, but the mental development prepared them to learn well in college, though critical thinking skills were weak, and there was a certain amount of naïveté. Books were thought to contain truths, for example—if it was in print, it had to be a fact.

Since the civil war, Rwanda has been dealing with many child-headed households, depression, and other war-related issues. The new government, however, has made determined moves toward solving problems, and increasing the number of children in school. Gahakwa Daphrose, Rwanda's Minister of education supported a recent aid initiative to train teachers and reduce class size in the country by saying "This is exactly the right kind of partnership and intervention we need in Rwanda's education sector right now. Our biggest challenge now is not quantity but quality" (African Press Organization, 2008). The numbers are already improving, however, there is still much to be done. At least there are public plans that seem to be moving in the right direction (see for example Republic of Rwanda, 2004).

The Philippines

The Philippines has traditionally gotten a large number of its students through high school, but that only represents 10 years of education in the current system. Some have suggested that the educational system in the Philippines provides form, but not necessarily substance. "Students do not learn what they are supposed to in schools" ("Regaining an Educational," n.d., p. 1) is the complaint of many.

There is a large gap in the Philippines between those who have and those who don't. "Income distribution in the Philippines is substantially less equal than in most low and middle income countries in Asia," (The World Bank, 1995, p. 4). "Six out of 10 Philippine children are born to families who live near or below the poverty line, making poverty a major deterrent to child survival, growth and development" (U.N. Children's Fund, as cited in Kyodo News,

1998). Poverty may be part of what causes the difference between urban school quality and what passes for education in the provinces:

Nowhere is this low education quality more visible than in poor areas outside large cities and provincial capitals. And thus nowhere is it more critical to improve the coverage and quality of the education system than in the most impoverished parts of the country ("Regaining an Educational," n.d., p. 1).

In summer courses for teachers, I have seen firsthand the differences in teacher ability and preparation between urban and rural instructors. At a 2003 conference for high school teachers, I asked how many of them had access to the internet. In a room of perhaps 200 teachers, only 3 raised their hands. Everyone owns a cellular phone, however, and text messages are a functional local equivalent of e-mail.

Language issues also affect quality, and English is mandatory as the language of instruction, beginning in high school, whether or not students (teachers) are prepared for it. Sometimes it is not necessarily practiced as mandated. Elementary textbooks and other educational materials in English that I have personally examined here in the Philippines have tended to emphasize basic skills and minimal competencies, though government documents set much higher goals.

The Department of Education keeps track of educational statistics, which are available from their main web page (Rep. of the Philippines, 2008). This includes how many barangays (townships) do not have a school (currently 267, but greatly reduced from over 1000 just 5 years earlier). This report places the current Elementary completion rate at 71.7%, which is quite different from their reported 83.2% enrollment rate, and even more different from the enrollment rate of 91.4% reported by the World Bank (2008d).

What I see in this country is a pool of educated individuals, many who have traveled internationally and seen the way others live, who have ideas, and who speak out against the problems they see in the Philippines. This group may be a voice for change that is lacking in less developed countries.

Argentina

I never cease to be amazed at the amount of energy the Argentine people spend on trying to be as good as the developed world. There are seminars for every group imaginable, book fairs, upgrading, research, and a lot of good teaching and learning going on in the country. Or at least in and around the capital. The provinces have traditionally had much higher poverty rates, and much lower intellectual activity, but people everywhere read the newspaper, argue about politics, have access to television, etc. This is a country trying to

claw its way into the developed world. But over the last few years, government leadership has been unstable, corruption rampant, the currency needed to be unlinked from the dollar, which set off a series of devaluations, and there were a couple of bad harvests in a row. These are the sorts of things that separate the developed world from the developing world and leave Argentina with a lot of points in its favor, but still in a different league.

With a large (42%) high school dropout rate as late as 1997 (Gorostiaga, Acedo & Xifra, 2003), and financial difficulties at every level, decentralization became a way out. This placed the power to make educational decisions in the hands of those traditionally not empowered to do so. I recall interviewing an Argentine student about his views on language curriculum in 1996. He explained that curriculum was designed by the experts in the central government who knew what was really needed, and this was handed down to the provinces, schools, and everyone else—so why should I ask him about it? It was not his role to even think about what he should learn. This sort of belief is typifies a national attitude, and it has made the transition to more local control of schools difficult (see Pini & Cigliutti, 1999). In a recent newspaper article, de Vedia (2008) discusses the fact that Argentina fell in the rankings on the most recent Latin American international test results, and now ranks lower than Chile, Mexico and Cuba. This drop was also true on recent PISA results. He acknowledges that 2/3 of the students who scored low were from rural schools, but he also suggests that the negative attitude about the quality of education in the country has some reasons for existing.

The US

Since so many studies have been done on the U.S. school system, I will not spend a great deal of time reviewing it here. The system has some real strength, but also a lot of weaknesses. Repeatedly, their students measure below where one might expect on international comparisons of scores in math and science, and on other measures of scholarship. Studies show that parents are more satisfied with their children's progress than in other countries, even if those results represent less actual knowledge (Stevenson, Lee & Stigler, 1986). This lack of concern and failure to push students to do better (compare the number of hours Korean students, for example, spend being tutored outside of regular school hours) will keep U.S. students from being at the front of the pack forever.

Most important for this study might be the proportion of people who have something to say about what is going on. Issues relate to improving quality for those who are struggling to succeed, whether the government has a right to decide on local issues, which educational decisions should be allocated to the teacher and which to authorities further up the chain of command.

Conclusions

Comparing these four nations, some differences are immediately apparent. For one, to be poor in a low income nation does not mean the same thing for one's education as poverty in a high income nation (see Table 3). In a low income nation, poor students might be hungry, not have a school in their town, not have running water or medical care, or not have a qualified teacher. They might not have a book, or might have to share it with two other classmates. Their parents might be illiterate, not just slightly less educated than the norm. In a low-income nation, only about half of the children finish elementary school, and most of those who drop out are the poorest ones. In a high-income nation, though the patterns are similar (the poor and minorities don't do as well as the others), all the numbers are higher.

In general, all the countries in this study are already implementing reforms that are resulting in improvements in tangible outcomes like literacy, enrollment, and graduation rates, but each country has different challenges. Those specific challenges vary distinctly with economic wealth, and might be most similar in countries with similar SES patterns. The model suggested in Table 3 helps us understand some of the educational realities associated with differences in income level, but it should be tested against a much larger data set, to make it more robust. As it is, however, it can give us an idea of the educational issues faced at each level. These data suggest that studies published on students in poverty in a highly developed nation may not be all that effective to assist poor students in developing nations, because the issues they face may be entirely different. What they do show is a sort of continuum of issues that shift with the development of the nation, perhaps helping us better understand current educational needs in context, and better predict how those needs will evolve as a nation develops economically.

Table 3

Model of Current Educational Issues by GNI Level

	Low	Low Middle	High Middle	High
Literacy*	60%	90%	99%	
Gender Equity	More boys than girls in school			More girls than boys complete at all levels
Access		Focus on rural,	Focus on special interest groups and equity by race, income, etc.	
Level of focus	Elementary and Secondary	Secondary & Elementary	Secondary and Tertiary	All, but especially Secondary
Gov't Focus	Access, quality, facilities, teachers	Rural access, quality, curriculum	Quality, retention, rural students, decentralization	Minorities and poor, quality, accountability
Teacher ratio Elementary	1:50-60			
Meaning of	No books	Less	Less educated	Teachers don't
poor	No materials	teachers	parents	More likely to be students of color
	Not enough seats	Larger class size	May need to work to supplement family income Less access to technology	
		No computers		Focus on "basics"
	Could be hungry Lack of medical	care, clean		Less money for sports/music
	water, adequate s	shelter		

* Literacy figures here are actual world averages for countries with this classification (List of countries by literacy rate, 2008).

References

- African Press Organization. (2008, June 26). Education in Africa: New investment partnership to open door to education in Africa. Retrieved September 10, 2008 from http://appablog.wordpress.com/2008/06/26/education-in-africa-new-investment-partnership-to-open-door-to-education-in-africa/
- Anyon, J. (1980). Social class and the hidden curriculum of work. *Journal of Education*, *162*(1), 67-92. Retrieved from http://cuip.uchicago.edu/~cac/nlu/fnd504/anyon.htm
- Auwarter, A. E., & Aruguete, M. S. (2008). Effects of student gender and socioeconomic status on teacher perceptions. *The Journal of Educational Research*, 101(4), 242-246.
- Bentancur, N. (2006). Education reform and school performance. Some thoughts on the experiences of Argentina, Chile and Uruguay. *Cuadernos del CLAEH*, 93, 9-25. Translated by Lucía Colombino. Retrieved from http://socialsciences.scielo.org/scielo.php?script= sci_arttext &pid= S0797-60622007000100001&lng=pt&nrm=iso
- Bitoun, C., Derousseau, K., Françoise Du Pouget, F., Hagel, A., Sergeant, L., & Valderrama, A. (2006). An analysis of selected recent and current national education policies and plans. Paper commissioned for the EFA *Global Monitoring Report 2006, Literacy for Life*. Retrieved September 10, 2008 from http://unesdoc.unesco.org/ images/0014 /001459/ 145953e.pdf
- Zabala, D., Minnici, A., McMurrer, J., Hill, D., Bartley, A. P., & Jennings, J. (2007, September). *State high school exams: Working to raise test scores*. Center on Education Policy. Retrieved September 11, 2008 from http://www.cep-dc.org/document/docWindow.cfm? fuseaction= documentviewDocument&documentid=224&documentFormatId=3704
- Central Intelligence Agency. (2008, September 4). *The world factbook*. Retrieved September 7, 2008 from https://www.cia.gov/library/ publications/the-world-factbook
- Chiu, M. M. (2007). Families, economies, cultures, and science achievement in 41 countries: Country-, school-, and student-level analyses. *Journal of Family Psychology*, 21(3), 510-519.
- Coleman, A. B., & Clark, E. J. (1983). An analysis of the rural-urban balance for education in developing countries: A case study of Liberia. ERIC ED234976. Abstract retrieved September 9, 2008 from http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/ detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED234976 &ERICExtSearch_SearchType_0=no&accno=ED234976

- Comer, J. (1988). Educating poor minority children," *Scientific American*, 259(5), 42-48.
- de Vedia, M. (2008, June 21). Mala nota para la educación argentina: El país cae en un ranking regional. La Nación. Cultura. Retrieved from http://www.lanacion.com.ar/nota.asp?nota_id=1023357
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, *37*(1), 15-24. Retrieved from http://www.ed.utah.edu/ELP/CourseMaterials/Cori6010F06/effec.pdf
- Elijio, A. (n.d.). Reading achievements in urban and rural communities: Comparative analysis of the equity in education. Unpublished manuscript, Vilnius University, National Examinations Center. Retrieved September 9, 2008 from http://www.iea.nl/fileadmin/user_upload/IRC2006/ IEA_Program/PIRLS/Elijio.pdf
- Ferguson, R. F. (2002, November). What doesn't meet the eye: Understanding and addressing racial disparities in high-achieving suburban schools. North Central Regional Educational Laboratory. Retrieved September 9, 2008 from http://www.ncrel.org/gap/ferg/does.htm
- Freire, P. (1970). Pedagogy of the oppressed. New York: Continuum.
- Gorostiaga, J., Acedo, C., & Xifra, S. (2003). Secondary education in Argentina during the 1990s: The limits of a comprehensive reform effort. *Education Policy Analysis Archives*, 11(17). Retrieved from http://epaa.asu.edu/epaa/v11n17/
- Hampden-Thompson, G., & Johnston, J. S. (2006, April). Variation in the relationship between nonschool factors and student achievement on international assessments. U.S. Department of Education. Institute of Education Sciences. National Center for Educational Statistics, Statistics in Brief. Retrieved September 7, 2008 from http://nces.ed.gov/pubs2006/2006014.pdf
- Kahlenberg, R. D. (2006). Integration by income. *American School Board Journal*, 193(4), 51-52.
- Kyodo News International. (1998, July 27). Rich become richer, poor poorer in Philippines. *Asian Economic News*. Retrieved September 9, 2008 from http: //findarticles.com/p/articles/mi_m0WDP/is_1998_July_27/ai_50189087
- Laird, J., Cataldi, E.F., KewalRamani, A., & Chapman, C. (2008). Dropout and completion rates in the United States: 2006 (NCES 2008-053). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved September 11, 2008 from http://nces.ed.gov/pubsearch/ pubsinfo.asp?pubid=2008053

- Lam, Y. L. J. (2004). Factors for differential developments in organizational learning: a case for Hong Kong schools. *International Journal of Educational Development*, 24(2), 155-166. Retrieved from http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VD7-4BN0FS1-5&_user=5920161&_rdoc=1&_fmt=&_orig= search&_sort=d&view=c&_version=1&_urlVersion=0&_userid=5920161& md5=e84b358cb14b31a75bf7e7a07ff7739d
- League of Filipino Students. (2008). *LFS: Enrollment to drop due to crisis*. Retrieved September 11, 2008 from http://www.lfs.ph/2008/05/04/lfsenrollment-rate-to-drop-due-to-crisis/
- List of countries by literacy rate. (2008, August 29). In *Wikipedia, the Free Encyclopedia*. Retrieved September 9, 2008. from http://en.wikipedia.org /w/index.php?title=List_of_countries_by_literacy_rate&oldid=235080235
- Marzano, R. J. (2004). Building background knowledge for academic achievement: Research on what works in schools. Alexandria, VA: ASCD.
- Morris, B. E. (2008). Argentina—summary. Retrieved September 10, 2008 from http://education.stateuniversity.com/pages/62/Argentina-SUMMARY.html
- Muller, C., Riegle-Crumb, C. & Schiller, K. (2004). Race, social class, and academic achievement in US high schools. Paper presented at the annual meeting of the American Sociological Association, August 14, 2004, San Francisco, CA. Retrieved September 9, 2008 from http://www.allacademic.com/meta/p110025_index.html
- National Center for Educational Statistics. Institute of Education Sciences. United States Department of Education. (2003). *Mathematics achievement and socioeconomic status*. Retrieved September 9, 2008 from http://nces.ed.gov/surveys/international/intlindicators/pdf /2007006_mathachievestatus.pdf
- National Center for Education Statistics. Office of Educational Research and Improvement. U.S. Department of Education. (1999). *Highlights from TIMSS: Overview and key findings across grade levels*. Retrieved September 9, 2008 from http://nces.ed.gov/pubs99/1999081.pdf
- Niles, F. S. (1981). Social class and academic achievement: A third world reinterpretation. *Comparative Education Review*, 25(3), 419-430. Available from http://www.jstor.org/pss/1187261
- Philippine Center for Investigative Journalism. (2007, June 7). *i report: A nation of non-readers*. Retrieved September 7, 2008 from http://www.pcij.org/i-report//2007/literacy2.html

- Pini, M., & Cigliutti, S. (1999). The politics of participation in school reform. *Theory into Practice*, 38(4), 196-202. Available from http://www.jstor.org/pss/1477497
- Polydore, K. (2001). An input-output analysis of the achievement levels of secondary schools in Dominica. Conference paper, University of West Indies. Retrieved September 9, 2008 from http://www.cavehill.uwi.edu/ bnccde/dominica/conference/papers/Polydore.html
- Ravitch, D. (1998). *Is head start smart?* Democratic Leadership Council. Retrieved September 9, 2008 from http://www.dlc.org /ndol_ci.cfm?kaid=110&subid=180&contentid=1567
- Raya, R. (2008, May 26). Filipino families and government spending less on education. *BusinessWorld, Yellow Pad Column, pp. S1/4-S1/5*. Retrieved September 10, 2008 from http://www.aer.ph/index.php?
 Itemid=86&id=706&option=com_content&task=view
- Regaining an Educational Advantage Investing in the Philippines' Economic Future (n.d.). Retrieved September 10, 2008 from http://siteresources.worldbank.org/INTPHILIPPINES/Resources/ DB18-EducationPolicyNote-July13.pdf
- Republic of Rwanda. (2006, September 9). Assessment of the government's education strategy and financial framework, 2006-2015 for the Fast Track Initiative. Retrieved September 10, 2008 from http://www1.worldbank.org/education/efafti/documents/Rwanda_appraisal.pdf
- Republic of Rwanda. Ministry of Education. (2008). Ministry of Education home page. Retrieved September 9, 2008 from http://www.mineduc.gov.rw/
- Republic of Rwanda. Ministry of Education. (2003). Education sector policy. Retrieved September 10, 2008 from http://www.education.nairobiunesco.org/PDFs/keydocs/Rwanda_Education_Sector_ Policy_July_2003.pdf
- Republic of Rwanda. Ministry of Education. (2004). Position paper: Quality assurance in basic education. Prepared for the UNESCO Nairobi Cluster Consultation "Quality Standards and Quality Assurance in Basic Education," Nairobi, Kenya, 6 to 8 December 2004. Retrieved September 7, 2008 from http://educationclearinghouse.nairobiunesco.org/docs/Rwanda_position_English.pdf
- Republic of the Philippines. Department of Education. (2008a, May 12). *Fact sheet: Basic education statistics*. Retrieved September 9, 2008 from http://www.deped.gov.ph/cpanel/uploads/issuanceImg/factsheet2008(May12).pdf

- Republic of the Philippines. Department of Education. (2008b). Vision and mission. Retrieved September 9, 2008 from http://www.deped.gov.ph/about_deped/vision_mission.asp
- Republic of the Philippines. Department of Education. (2008c). *DepED orders*. Retrieved September 10, 2008 from http://www.deped.gov.ph /deped.asp?i=O
- República Argentina. Ministerio de Educación. Presidencia de la nación. (2008). Objetivos de la gestión educativa 2003-2008. Retrieved September 9, 2008 from http://www.me.gov.ar/objetivo.html
- Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO Innotech). (2003). Philippines. Retrieved September 10, 2008 from http://www.seameoinnotech.org/resources/seameo_country/educ_data/philippines/philippines1 5.htm
- Slavin, R. E., Madden, N. A., Dolan, L. J., Wasik, B. A., Ross, S. M., & Smith, L. J. (1994). 'Whenever and wherever we choose': The replication of 'Success for All' *Phi Delta Kappan*, 75(8), 639-647. Retrieved from http://www.successforall.com/_images/pdfs/whenever.htm
- Social class 'defines school achievement.' (2003, April 23). Guardian News and Media, retrieved from guardian.co.uk
- Stevenson, H.W., Lee, S. Y., & Stigler, J. W. (1986). Mathematics achievement of Chinese, Japanese, and American children. *Science*, 231(4739), 693-699. doi: 10.1126/science3945803
- The World Bank. Data & Statistics. (2008a). *Change in terminology*. Retrieved September 7, 2008 from http://go.worldbank.org/EQ2OS6HDX0
- The World Bank. Data & Statistics. (2008b). *Country Classification*. Retrieved September 10, 2008 from http://go.worldbank.org/K2CKM78CC0
- The World Bank. Data & Statistics. (2008c). *Country groups*. Retrieved September 7, 2008 from http://go.worldbank.org/D7SN0B8YU0
- The World Bank. Data & Statistics. EdStats. (2008d). *Country profiles*. Retrieved September 7, 2008 from http://go.worldbank.org/ JVXVANWYY0

- The World Bank. Country Operations Division. Country Department I: East Asia and Pacific Region (1995, November 13). *Philippines: A strategy to fight poverty*. Report No. 14933-PH.Retrieved September 8, 2008 from http://www-wds.worldbank.org/servlet/ WDSContentServer/ WDSP/IB/1995/11/13/000009265_3961019141900/Rendered/ INDEX/multi0page.txt
- U.S. Census Bureau. (2007). *Statistical Abstract of the United States: 2007*. Retrieved September 11, 2008 from http://www.census.gov/prod/ 2006pubs/07statab/educ.pdf
- UNESCO. (2005). *EFA global monitoring report*. Retrieved September 9, 2008 from http://www.unesco.org/education/gmr_download/chapter2.pdf
- United States Department of Education. (2008). Home page. Retrieved September 9, 2008 from http://www.ed.gov/index.jhtml
- Waxman, H. C., Gray, J. P., & Padron, Y. N. (2003, January 1). Review of research on educational resilience. *Center for Research on Education*, *Diversity & Excellence. Research Reports*. Paper rr_11. Retrieved September 9, 2008 from http://repositories.cdlib.org /crede/rsrchrpts/rr_11
- World Health Organization (WHO). (2008). *The World Health Report: Surviving the first five years of life*. Retrieved October 22, 2008 from http://www.who.int/whr/2003/chapter1/en/index2.html
- Zhang, Y. (2006). Urban-rural literacy gaps in sub-saharan Africa: The roles of socioeconomic status and school quality. *Comparative Education Review*, 50(4), 581-602. Abstract retrieved from Academic Search Premier database.

Shawna Vyhmeister, PhD Associate Professor, Department of Educational Studies Adventist International Institute of Advanced Studies Silang, Cavite, Philippines