Insisting on equity: A redistribution approach to education

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Emphasis on educational efficiency, or accountability, with all its claims towards institutional improvement, has left the question of educational equity unanswered. Contemporary policy, particularly in Western nations, focuses largely on raising aggregate test scores while the greater society sees a steady increase in economic inequality. It is the purpose of this article to trace the current increase in inequality through income and wealth distributions, and argue that educational equity should also be a priority for all nations. Part one of this article gives both quantitative and qualitative examples of growing economic inequalities, and posits reasons why this is detrimental to human society. Part two provides evidence that an equitable redistribution approach to education may serve as part of an answer to these problems. Part three addresses counterarguments to these assertions, and describes how education alone cannot solve the question of equity.

Educational equity, funding, wealth and income inequality, economics, redistribution

INTRODUCTION

Working Toward a Definition of Equitable Education

In order to identify what is meant by 'equitable education' it is first necessary to distinguish it from a more common phrase: 'equal education.' Indeed, the two terms are often used interchangeably, as their technical definitions are similar, yet subtle distinctions arise in their implications. Equality, as it applies to education, implies sameness in all aspects; that is, it implies sameness in funding, curriculum, participation, and any other measure one could think of. Equal education means the same education for all.

For schools within a society to be equal, they must presently have (and always have had in the past) equality in three measurements of education: inputs, outcomes, and participation (Gylfason and Zoega, 2003). In other words, an equal state of affairs in education requires pre-existing conditions of equal funding, the same resources (monetary and technological), the same quality of teachers, the same quality instruction, the same number of years of instruction, and the same social outcome (social chance) of education.

It is clear that education is not the same (or equal) in all of these areas in any given society; there exists no nation that can lay claim to a completely equal distribution of education and human capital. Thus, there are some individuals who are at a disadvantage, who are on the losing end of this unequal distribution. In the United States, for example, a school district that pays its teachers \$77,000 per year will attract better and more educated employees than a district that pays \$36,000. A district that provides its children with a yearly education worth \$22,000 is bound to have greater access to meaningful technology and more resources than a district that provides an education worth only \$8,000 (Kozol, 2005). It is not enough that each child has access to free schooling.

Education in many developed nations **is** equal in that all students have the opportunity to attend some school through a certain amount of years, but attending school does not ensure an equal education. Moreover, if a district cannot even afford sanitary conditions for its students, how can it be expected to deliver the same instruction as a new, state of the art, resource-rich facility? How can students begin to take in this instruction, when their most basic needs (safety and health) are not being met?

Here, then, at the place where equality in education has failed and inevitably left behind those who are poor and who cannot gain access to quality schooling, is the case for equity. Equity carries with it a sense of justice and fairness as opposed to sameness. It takes into consideration that past circumstances may not have been equal, and implies just action is needed to restore fairness into the situation. It is equity, not equality, that suggests targeting poorer schools and districts with extra funds and resources may be necessary to "even the playing field."

Equity speaks for honesty and integrity. It speaks to a system that needs to target those who start at a disadvantage through equitable redistributive policies. Equity is not equality, but that is its goal.

Equity as a Human Right

The assertion of educational equity as a human right is neither new nor original, but it is essential in formulating educational policy and has great implications, as this paper demonstrates. In a 2004 working paper, Kannan and Pillai describe three distinct generations of human rights (Kannan and Pillai, 2004). The first generation constitutes pre-twentieth century civil (or political) rights. Social and economic additions, such as the right to medical care, employment, food and shelter, came subsequently. The third generation of rights, 'cultural rights', includes the preservation of language, cultural institutions, and practices. Uniquely, the second generation rights are often portrayed as 'goals', rather than rights. Thus they are separate, not immediately binding, and only progressively realised. In fact, the European Convention on Human Rights of 1950 excluded them altogether, and the United Nations opted to include them in a separate treaty instead of the *Universal Declaration of Human Rights*¹. Naturally, this led to objections of granting welfare rights the status of human rights (Kannan and Pillai, 2004).

Kannan and Pillai rightly argued that welfare rights, such as an adequate standard of living, primary health care and public education, were closely related to the right to life. Individuals could not be free unless they were free from illness, have adequate access to food for survival and education for mental development. This view of welfare rights as civil rights has become increasingly dominant in the current landscape of literature (Sunstein, 2001). Nobel Prize winner (1998) Amartya Sen advanced this argument by distinguishing between availability and accessibility of social welfare. To Sen, goods, services, information, value, justice, recognition, and respect were not truly available unless they were made accessible through adequate purchasing power. Thus, individuals were free only to the extent that they had an unlimited "capability set" (1992). In this light, income deprivation is seen as a capability deprivation, which in turn, is a human rights violation.

If the definition of human rights includes welfare rights, and welfare rights include education, it follows that educational inequality of any kind is a human rights violation. Education begets an informed, rational choice of capabilities, which goes a long way towards determining freedom and well being (Kannan and Pillai, 2004; Sen, 1992, 1999). What was more, universal human rights, which included welfare rights, were not subject to popular or universal consent. If this were so, human rights might cease to exist altogether (Sen, 1999). One needs only to consider a few

¹ Please see the *International Covenant on Economic, Social and Cultural Rights*, adopted and signed by the United Nations General Assembly on 16 December, 1966, and enforced on 3 January, 1976.

international treaties to realise the universality of human rights is now taken as a given in modern society².

With education defined as a right to welfare, welfare rights defined as human rights, and human rights clearly defined as "universal, indivisible, interdependent and interrelated" (UNESCO, 1994), this article now turns to the problems posed by growing inequalities in the economic distributions of modern societies.

PART I – GROWING ECONOMIC INEQUITIES

Historical Background

Until quite recently, common economic thought held that, to a certain extent, prevalent inequality in a market system was good for economic growth. This was due in no small part to Kaldor's historically significant hypothesis (1956): namely, that the marginal propensity of the rich to save and invest was greater than that of society's poor. In this theory, an economy's GDP was directly linked to the amount saved and invested. Therefore, it would be beneficial to instil mechanisms that inhibited income equality; it would be beneficial, economically speaking, to have an unequal distribution of wealth and income. A concentrated distribution would also ensure a greater amount of new industry and project development, as these endeavours required large sunk costs that wouldn't be available to a more equitable distribution. Furthermore, from an incentives point of view, a concentrated distribution was good in that it showed the worker that output or success depended largely on observable input (Mirrlees, 1971). In this scheme, individuals had greater incentives to work hard.

Such thought was bolstered and moralised by Kuznet's hypothesis, put forth in a famous 1955 article³, which stated that inequality was an essential and unavoidable result of economic growth, but would eventually peter out. Thus, a natural so-called 'trickle-down' effect would be seen in income and wealth inequalities in developed nations, justifying the earlier stage of inequality. Since there was a natural economic trend for inequality to fall, there was little need for government assistance or aid. This hypothesis largely explained the decrease in inequality from the 1930's to the 1970's in the United States to levels lower than both Great Britain and Sweden (Aghion, Caroli, and Garcia-Penalosa, 1999).

Current Trends

Though Kuznets' hypothesis was essentially granted the status of economic law, it did not have sufficient evidence to support its claims, (HRSDC, 2000), nor did it explain the rise of inequality in several developed nations since the 1970s. Since that time, income and wealth inequality has grown to such an extent that the top five per cent of the income bracket own 59 per cent of all the wealth in the United States (Wolff, 2003). In other words, the top five per cent own more wealth than the rest of the United States does collectively. Measured by the GINI coefficient⁴, in which

² Please see the *Universal Declaration of Human Rights* (United Nations, 1948), specifically Articles 1 and 2, and the UNESCO Declaration of the 44th Assembly (UNESCO, 1994).

³ Kuznets' article was entitled "Economic Growth and Income Inequality" and was printed in the *American Economic Review* (1955).

⁴ The GINI coefficient is a calculation of the distribution of income within a society on a scale ranging from 0.00 (perfect equality) to 100.0 (perfect inequality). Specifically, it calculates the extent to which an economy's income distribution (graphed as a 'Lorenz Curve') deviates from a hypothetical line of perfect equality, and is expressed as a percentage of the maximum area under that line (UNDP, 2003). GINI coefficients can be calculated for both income and wealth distributions. In 2003, the United States recorded a GINI (income) of 40.8, significantly above the top five most equally distributed countries (all which have GINI indexes hovering around 25.0), and tying its income distribution with that of Turkmenistan (US Bureau of the Census).

100 is the highest possible level of inequality, this wealth distribution registers 86, almost perfectly unequal. When the data are broken down by race, Wolff finds that the "average African-American family has about 60 per cent of the income of the average white family. But the disparity of wealth is a lot greater. The average African-American family has only 18 per cent of the wealth of the average white family" (Wolff, 2003).

Perhaps more disturbing is the persistence of child poverty in developed nations despite the doubling and redoubling of per capita incomes since the middle of the twentieth century (UNESCO, 2000). This finding, based on conditions in the world's richest countries, is particularly troubling to traditional economic thought, for if Kuznets is correct, and inequality in fact falls with the rise of per capita income, the problem of poverty should not be as pervasive as it is⁵. In fact, the report found that 47 million children, or one in every six, from OECD countries were living below their country's poverty line (UNICEF, 2001). In the study's own words:

The persistence of child poverty in rich countries undermines both equality of opportunity and commonality of values. It therefore confronts the industrialised world with a test both of its ideals and of its capacity to resolve many of its most intractable social problems.

According to the study, this persistence was not due to the ongoing debate surrounding differing measures of poverty. To be true, no matter which measure was used, either absolute or relative, the top six best performing countries remained the same: Sweden, Norway, Finland, Belgium, Luxembourg, and Denmark. These countries were among the world's wealthiest, and yet they had found a way to combine a high degree of equity and economic development. In other words, policy could have an affect on inequality and child poverty did not have to persist in the numbers that it did.

Traditional economic theory would perhaps not deem this a problem, as inequality (even instances of poverty) is considered instrumental for higher economic growth patterns. However, this conclusion is hindered by several implications, based both on recent empirical data and popular sentiment. The first is a moral implication: many people object to such high levels of inequality and access to well being within their society (Wolff, 2003). Green, Preston and Sabates (2003) affirm that persistent inequality at the present time is one of the factors contributing to societal tension and lack of cohesion.

Second, unequal economic distributions correlate to other unequal distributions in resources, educational achievement, and benefits. More equal societies tend to have more equal distributions of human capital, leading to a much more educated workforce. Unequal societies have just the opposite: a workforce that is not as well prepared and consequently not as productive (Wolff, 2003). Wolff also states that aggregate educational achievement suffers in a nation with grand disparities in educational access, as opposed to more equitable societies (2003). To this end, a recent study highlights the existing educational gap between English Language Learners and their English speaking peers in California. The vast majority of English Language Learners, who, in California's case, tend to be immigrants from Mexico and significantly poorer, are more likely to

⁵ This is based on a UNICEF study entitled *Child Poverty in Rich Nations*, which uses the measure of relative poverty as opposed to absolute poverty. Debate exists on which measure is best, and the two give differing answers as to the pervasiveness of poverty, but UNICEF defends its decision for several reasons. First, relative poverty is the most widely used measure of poverty, and thus provides the best opportunity for comparison; only the United States uses a measure of absolute poverty, which is then converted to differing currencies and incomes. Second, the definition of absolute poverty was developed in the 1960's based on the dollar amount of an adequate diet, multiplied by three. However, changes in the cost of living have resulted in the cost of an adequate diet no longer constituting one-third of an adequate income. Third, the effect of poverty in its absolute form is not the main concern; instead, it is the daily-perceived contrast of the way of lives of a country's poor.

receive fewer educational resources and achieve lower results than English speaking children (Gandara, Rumberger, Maxwell-Jolly, and Callahan, 2003). According to the study, this gap manifests itself as unqualified teachers for English Language learners, an inferior curriculum with less time to cover it, inferior facilities, invalid assessment instruments, and segregation from their peers.

The third implication of a concentrated income and wealth distribution is hampering economic performance and growth. A growing body of respected research literature questions Kaldor's hypothesis, and depicts inequality as negative for economic growth (Aghion et al., 1999; Alesina and Rodick, 1994; Perotti, 1993, 1996; Persson and Tabellini, 1994). Together, these empirical studies site two potentially positive effects of redistribution in a market economy. The first, an 'opportunity enhancing effect' states the lowest investment of the rich is not productive and gives decreasing returns. The investment productivity made by the poor, on the other hand, is relatively high, yet they are unable to invest beyond their limited endowments. Thus, if the lowest investments of the rich were redistributed to the poor, productivity would increase, creating an obvious benefit for the poor, an insignificant change in wealth for the rich, and a net benefit for the economy (Aghion et al., 1999). The second, a 'positive incentive effect', claims that high levels of inequality produce inefficiencies, in that there is an inverse relationship between the number of individuals with low incomes and the amount of effort put forth in the workplace (Aghion and Bolton, 1997; Banerjee and Newman, 1993). Again, redistribution does not negatively influence the production of the rich so much as it positively influences the production of the poor, resulting in a net gain.

Finally, it is important to note that all of the studies cited in this section, excluding Kaldor and Kuznets, favoured a redistribution of resources from the wealthiest individuals to the poor. Such a policy proves a beneficial force for both the individual and the greater society in which it rests, by freeing the capability set of the poor, promoting access to fundamental resources, and conditioning greater economic growth. In section two, this paper describes how this can be done through education.

PART II - EDUCATION AS AN ANSWER TO ECONOMIC INEQUITIES

Despite the ingrained traditional economic thought, this article points to numerous studies that cite new patterns in growth and inequity, and link more equitable economies with higher rates of growth. Barro (2000) found that inequality retarded growth in poor countries, a finding directly opposed to the traditional hypotheses. Garcia-Penalosa (1995), too, found that inequality in rich nations reduced growth, as it increased the number of poor who could afford neither to invest nor to save. More studies demonstrated the growth hampering effects of income and wealth inequalities in light of market imperfections, thus making a case for redistribution (Aghion, Caroli, and Garcia-Penalosa, 1999; Galor and Ziera, 1993).

Recently, Gylfason and Zoega (2003) has extended the assertions above to test the relationship between human capital, or education, and economic growth. By comparing cross country data on GINI coefficients, GDP, GNP, government educational expenditures, and length of basic education, they are able to observe a similar relationship between human capital and growth. Though other authors discount the potential role education plays in growth analysis by claiming diminishing returns (Aghion et al., 1999), Gylfason and Zoega emphasise the 'dual effect' of education expenditures (2003). Consider, for a moment, a redistributive policy of human capital in a society that has a concentrated wealth and educational distribution, taking monetary resources from the elite and giving them to the less educated. Such a 'Robin Hood' approach is justified, as spending monetary resources on those less educated generates more human capital than if that same amount is spent on the education of the elite. It follows, then, that the improvement of schools providing basic education, at the expense of elite funding, enhances both equality and

human capital. Now the question arises: what does this scheme do to growth? Gylfason and Zoega see two growth inducing effects (2003). In the first, education's increase in human capital leads to an increase of physical capital and gives the nation a greater net propensity to save and invest. In the second, this increase in human and physical capital, along with the heightened educational level of the country, produces more requests for progressively equitable conditions; a virtuous circle and greater demand for equity is created, which in turn increases growth even further.

The previous claims flow from patterns Gylfason and Zoega observe in cross national data, which seem to support the view that inequality goes with less investment and smaller growth. When comparing GINI indexes, GDP and GNP, a rise in a country's GINI coefficient by 12 points correlates with a drop in both GDP and GNP by 1.5 per cent and 1.0 per cent, respectively. The ensuing two findings, however, are perhaps the most significant for this paper, as they directly implicate a correlation between education, growth, and inequality. Gylfason and Zoega find that an increase in educational expenditures, expressed as a percentage of GNP, correlate with a drop in GINI coefficient and a rise in economic growth. Specifically, a rise of one per cent in GNP in educational spending correlates with a drop of 2.3 points on the GINI scale, and a three per cent rise in GNP spending correlates with an economic growth increase of one per cent. Not surprisingly, the authors also find that an increase in years of boys and girls' schooling correlates with a GINI decrease and increase in growth. What is surprising, though, is that as little as a one year increase in girls' education correlates with a decrease in the GINI coefficient and an increase in economic output.

Two conclusions can be drawn from these data, both of which are important in terms of educational and economic policy. First, economic growth varies inversely with inequality. Second, of three measures in education (input, outcomes, and participation), all are inversely related with inequality, and economic growth varies directly with these three indicators. While recognising that correlations do not necessarily imply causation, these findings give credit to the assertion that efforts to raise aggregate and individual levels of human capital have an impact on the societal level (Gylfason and Zoega, 2003). Indeed, education seems likely to encourage economic growth by increasing and improving human and physical capital.

Put together, Gylfason and Zoega's findings advocate a redistribution approach to education. The equitable distribution of educational spending is an underlying assumption in their conclusions; without this their correlations fall away. To use an extreme illustration, a country that increases its GNP educational expenditures, but gives 95 per cent of it to half of its school districts and only five per cent to the remaining half is not likely to see a corresponding decrease in GINI coefficient. More realistically, imagine a country that increases its GNP expenditure and gives an equal monetary amount to each school district. Such a country inspection to see a decrease in the GINI coefficient and a rise in economic growth. However, if that country has districts that are wealthier than others, the ensuing situation is the same; there is an inflated resource level across all districts, but a funding gap remains. The only possible way to beget a decrease in GINI levels and an increase in economic growth is to increase GNP educational expenditures in accordance with an equitable redistribution approach that targets districts behind the funding gap.

In order to raise levels of human capital to a more equitable level and potentially impact economic growth, education must be equitable in all three measures proposed above. Inputs, outcomes, and participation must be equitable, or human capital continues to be a concentrated distribution. If efforts to raise human capital are unequal, if there are any community pockets left untouched by educational reform, it is unavoidable that the ensuing human capital is not equitable. Such a situation does nothing to alleviate the current one. In order for positive effects to be seen, educational reformers must insist on a redistribution scheme as outlined above.

PART III - COUNTERARGUMENTS AND SYNTHESIS

Counter arguments to this paper's position run along a few distinct lines: (a) the recent growth of inequality and particularly poverty; (b) the assertion that inequality is bad for economic growth; and (c) the increase of education (or human capital) as influential to economic growth. The first contention, the increase of poverty and inequality, is often a case of differing measurements. The United States uses an absolute measure of poverty, wherein poverty is defined as a family living below a certain set income, whereas the rest of the world, UNICEF, UNESCO, and the World Bank use a measure of relative poverty. Here, poverty is defined as a family living with less than 50 to 60 per cent of the nation's average income. The two measures provide dissimilar numbers of poverty stricken families and individuals in a given country and paint different pictures of societal inequality. The United States, in particular, suffers a true fall from grace in the switch from an absolute to a relative measure of poverty (UNICEF, 2001). Relative poverty is important because most often it is not the physicality of starvation that affects the poor, but the relative chasm of difference that separates them from their peers, and does not allow them to live within their society's modern framework of the so-called 'good life' (UNICEF, 2001). The stigma of poverty stays with them.

Many modern studies have sighted income and wealth inequalities as bad for economic growth. However, others argued against this conclusion, such as Forbes (2000), who found a positive relationship between inequality and economic growth, forming the second counterargument. Forbes' findings, would be thrown into question by the findings of an earlier study (Aghion et al., 1999). These authors would challenge her analysis on the basis that her sample population was excessively small, and was of greater significance. In addition, they challenge that there was little evidence behind Forbes' so-called 'lag structure,' or her assumption that inequality today affects economic growth in five years. Last, in order to obtain a positive coefficient between inequality and growth, Forbes restricted data to countries listed in the 'high quality' subset posited by Deininger and Squire (1996). Aghion et al., (1999) on the other hand, showed the criterion used to construct this subset was inappropriate, and that there was no reason to exclude other countries.

Most significantly, the study that this article so heavily draws on in the first part (Aghion et al., 1999), argued that increasing human capital did not necessarily work to decrease inequality. To the authors, educational investment yielded decreasing returns, and its effects on inequality differed greatly depending on the society and the system of education. For example, the United Kingdom and the United States reacted to more human capital by firing the less skilled workers and hiring those with greater skills. Japan and Germany, however, emphasised experience and tended to promote from within. In these cases, an increase in human capital might increase job skills and preparedness, but nations then turned to a different emphasis in the hiring process, namely, 'experience'. Equitable education and an increase in human capital might cause an emphatic shift from educational attainment to experience, but there was still a similar amount of inequality. There was a different cause with the same net effect.

CONCLUSION AND RECOMMENDATIONS

It is not intended, by addressing counterarguments to this article's position, to somehow weaken the assertion that education is an essential part of addressing societal inequities. Instead, the arguments are useful to highlight another aspect relevant to this topic: though education may be a tool, it is not the only tool, and in some cases certainly not the sharpest, to cut across the woven fabric of inequality within societies. The correlations between education, economic growth, and income and wealth distributions do not prove that education is the root cause of all positive effects in these categories, but they do show that equitable education is associated with them. In considering social well being and the potential benefits it brings to a nation, the most important question is not whether education or income equality is a stronger factor. The most important

conclusion is that **both education and income equality** may have an effect on societal well being. Education plays a part in the alleviation of societal maladies. It is not the only part by any means, but it is part of the web of correlations that could provide a more egalitarian, more efficient, more cohesive society for future generations. Current trends are pushing the other way: there is less cohesion (Green et al., 2003) and more inequality (Aghion et al., 1999; Gylfason and Zoega, 2003; Wolff, 2003). These trends do not exist in a vacuum, rather, they are interrelated. So, too, educational policy is not meant to exist in a vacuum. The best policy, then, is then to synthesise findings in educational, social, and economic research and cooperatively to combat inequities.

In conclusion, it is essential to remember that education must be equitable in three aspects: inputs, outcomes, and participation. If it fails to be equitable in any of these, its potential positive returns are effectively annulled. Equity is the key. Equity addresses inequalities in its educational outcomes through redistribution, provides more equal opportunities to an egalitarian income and wealth distribution, is good for economic growth, and increases societal cohesion (Green et al., 2003).

Raising aggregate test scores and average educational achievement do not by themselves have these effects; raising mean scores do not address inequities that plague today's societies. If scores are raised without an ethos of equity and redistribution, achievement gaps betweens classes and races will still persist (Gandara et al., 2003). Politicians and leaders can cite statistics that illustrate that scores are rising, but if they do not address inequities, their people will not listen. It does not matter what statistics say, because the more influential stigma of relative inequality remains as a distasteful moral problem for some, and a pervasive glass ceiling for others. Statistics, whether they are rising or falling, whether they are deemed good signs or bad, only matter in so far as they affect the lives of individual citizens. Therefore, high standards and high aggregate test scores must be sought after in conjunction with the eradication of inequities through education expenditure redistribution.

This article ends by providing several recommendations, based on evidence described above, for future education policy and research.

- 1. Nations, their citizens, academics, and policy makers must insist on educational equity in three aspects (inputs, outcomes, and participation), not just raising mean levels of achievement. This can and should be done while keeping standards for educational instruction and curriculum high.
- 2. If equity is seen as a 'goal' in education and is not present from the beginning, it is much more difficult to attain later. As noted, there are many contemporary forces pushing toward rising inequities. If equity is not present at the beginning, it is seen as peripheral and not essential. Thus, inequity slowly but surely becomes accepted by society's constituents as the *status quo*, effectively turning a nation into a nation of exclusion.
- 3. Measures of educational equity must be improved. The United States boasts a GINI educational index of 15.8, which is relatively close to perfect equality. However, educational outcomes are by no means equal across the country, mainly because of funding inequities. The upshot is that students from wealthy backgrounds have a much superior education than students from poor backgrounds. Future educational equity measures must take this into account.
- 4. This paper encourages more research into the potential benefits of redistribution in human and physical capital within nations (rich and poor). It may in fact turn out that such policies benefit both aggregate knowledge and educational equity. Policy, then, must be reformed to fit these findings. Here, the studies of Scandinavian economies have a great deal of knowledge to offer.

5. Last, this paper encourages a continuing dialogue on the importance of equity, at both the academic and societal levels. More than lip service, this dialogue is a vital part of a democratic society and must be taken seriously by everyone, from citizens to policy makers. Inequity affects whole societies sociologically, economically, politically and philosophically, but its effects are most palpable and devastating to the individual. It is time they are given adequate voice.

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