

Breaking Down the Gold Standard of Education

Robert Karaba

New Mexico Highlands University
1700 Grande Ct.
Rio Rancho, NM 87124
U.S.A

Abstract

For many educators and policy makers Herbert Spencer's famous question, "What knowledge is most worth knowing? has been answered, seemingly by default: education is about increasing a student's cognitive capability as measured by their performance on standardized tests, so that economic development may occur. That economic development can occur either nationally or individually (through social mobility). This paper reviews and combines the recent empirical evidence for the connection between standardized test scores and both individual social mobility and national economic performance. Counter intuitively, whether test scores cause, predict, or at a minimum correlate to one's individual social mobility and/or a nation's economic performance is highly questionable. The paper concludes suggesting we rethink the central aim of education as increasing performances on standardized tests.

Keywords: PISA, economic growth social mobility, democratic education

Breaking Down the Gold Standard of Education

For many educators and policy makers Herbert Spencer's famous question, "What knowledge is most worth knowing? has been answered, seemingly by default: education is about increasing a student's cognitive capability as measured by their performance on standardized tests, so that economic development may occur.

TIMMS and PISA are now viewed as the gold standards of education. The relative standing of each nation on these assessments is automatically equated with a quality education in each nation and consequently, the nation's future competitiveness in the global economy. (Zhao, 2012, p. 33)

In other words, the primary goal of public education is economic, and the performance indicator (how this goal is operationalized) is via standardized test scores.

Today's "knowledge economy" has updated human capital theory from schooling's purpose as creating industrial workers to creating a workforce "in which most jobs are supposed to be inexorably bound up with theoretical/academic knowledge" (Bittlingmayer, et. al., 2016, p. 297). Cognitive development is seen as the key factor in developing a labor force to fuel economic success, and standardized tests are the proxy measure (Komatsu & Rappleye, 2017). Thus, it appears reasonable to equip future workers with standardized academic knowledge. And that standardized academic knowledge is measured, internationally, mainly by PISA (Programme for International Student Assessment).

In addition to a nation's economic development, education is also seen as the predominate way to enhance individual social mobility (aka. social fluidity). In the mid-19th century Horace Mann proposed education as the *Great Equalizer*. He asserted that "Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men (sic), the balance-wheel of the social machinery" (Mann, 1848, as quoted in Isseks, 2017, p.51). In other words, despite your social origins, education is the best means of moving out of poverty. From Mann through the industrialization of the United States (U.S.), U.S. common sense believes the more education, the more income, individually. Thus, if we provide educational access and opportunity to all, then we can "rake through the rubbish" and social class becomes a true meritocracy; Those that do well in school and achieve a high level of education will be separated from the others and establish their rightful and appropriate socio-economic position; thus, education is the "balance-wheel of the social machinery."

Thus, "the purpose of school, according to many, is to get a good job or career. This aim, while important, is essentially private—aimed at promoting economic gain for individuals, families, companies, and by default, the nation" (Knight Abowitz, 2013, p. 13). Knight Abowitz elucidates the common notion that public schooling's main purpose is to increase the chances of one's social mobility, and, as a byproduct, help the nation's economy.

The belief in Horace Mann's conception of education as the *Great Equalizer* is an assumption deeply rooted in U. S. culture and beyond. Teachers commonly use enhancing students' careers as the reason for students to pay attention, and the relevance of education in general. Principally, people see the key benefit of getting a public education as promoting one's individual station in life, i.e., social mobility.

The latter clause of Knight Abowitz's quote portends to the previously mentioned connection to more social goods from a national economic perspective. This paradigm conceives public education's role as one of allowing for the smooth functioning of the market and for a nation to compete and win in the global economic game by creating a ready supply of skilled labor (good workers) that can then become the demander of goods and services (good consumers).

Whether it be individually, for furthering one's career, or nationally, for helping a country win the global economic game; today, public schooling's role is considered primarily for economic purposes, and economic rationality is the main justification used for investments in public education.

This line of thinking relies on the assumption that standardized test scores predict, if not cause, economic growth; both individually and nationally. Internationally, since Mann's pronouncement, there have been many increasingly complex sociological, empirical studies done on the relationship between education, and both individual social mobility and national economic performance. Recent research, counterintuitively, calls into doubt both premises; more current evidence is dubious at best and harmful at worst. Thus, even if we accept that the main aim of public education is for economic purposes; whether test scores cause, predict, or at a minimum correlate to one's individual social mobility and/or a nation's economic performance is highly questionable.

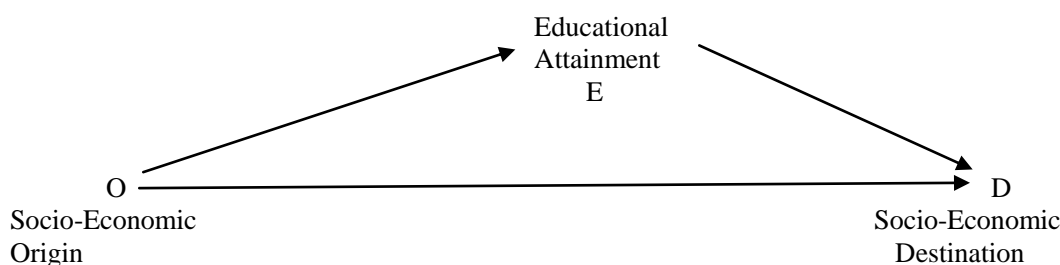
Education and Individual Social Mobility—Empirical Evidence

Many of the fore mentioned empirical studies regarding the connection between education and individual social mobility (such as, Breen, 2010; Pfeffer & Herzl, 2015; Sturgis & Buscha, 2015) have framed the field with the triadic variables of socio-economic origin (O), educational attainment (E), and socio-economic destination (D); in other words, the connection between one's initial socio-economic status (O), what educational level that person has achieved (E), and where one ends up, class-wise (D). In Breen's (2010) words,

A common approach to the study of social reproduction is to examine the relationship between the social class position held by an individual, and the social class that his or her parents occupied when the respondent was growing up...For analysts of social mobility, education is one of the major channels through which intergenerational class reproduction occurs, and so educational inequality is chiefly important because of how it might effect inequalities in social mobility chances, or in other words, how social fluidity might be driven by educational fluidity. (p. 367)

Pfeffer and Hetzel's (2015) helpful diagram maps the way this triad (146) is examined.

Figure 1. The mobility triad



Breen's influential study focuses only on one link in this chain, between O and E, because, according to Breen, "The underlying process is relatively straightforward; *given that education is the most important single determinant of class position*, then, if educational attainment comes to depend less on class origins, the link between class origins and class destination will also weaken" (Breen, 2010, p.368, emphasis added). Thus, it is assumed E causes D, that is, educational attainment determines class position. However, the last link in this triadic chain is open to debate and more current studies question this assumption and illuminate its limitations (Pfeffer and Herzl, 2015; Sturgis and Buscha, 2015; Giannakaki, et.al., 2018).

But for now, as their titles attest, **Educational Expansion and Social Mobility in the 20th Century**, (Breen, 2010), **How Has Educational Expansion Shaped Social Mobility Trends in the United States** (Pfeffer and Herzel, 2015) and **Increasing Intergenerational Social Mobility: Is Educational Expansion the Answer?** (Sturgis and Buscha, 2015) national policies of educational expansion were most often employed in the 20th century to try and disrupt the connection between socio-economic origin (O) and educational attainment (E) (Breen, 2010). Using the language of the diagram, the hypothesis is that educational access, via national education expansion policies, weakens the link between O and E, which in turn weakens the link between O and D. In other words, it was thought that expanding educational access to a broader segment of the population (such as increasing the compulsory age to attend school) will increase the social fluidity of its citizens.

Breen analyzes this hypothesis by examining the O and D of birth cohorts in Great Britain, Sweden, and Germany. He uses these countries because of their varied levels and trends in social fluidity (Breen, 2010), and their varied politics which lead to varied social policies, with “Britain as a liberal regime, Sweden as the archetypal social-democratic regime and Germany as the prime example of the continental/ conservative welfare regime” (p. 365). Although he found educational expansion promoted greater social mobility in all three countries, he found the “increasing equality of condition in society as a whole” to be a strong determinate as well. For example, Sweden’s educational expansion policies eliminated tuition in secondary and tertiary schools, supplied free school meals, healthcare, books, and educational materials. As a result, the social fluidity of Sweden was much higher than that of Britain, which had a differentiated system of schools, including private ones. “Within such a selective system of sponsored mobility educational expansion seems to have occurred without the same degree of equalization as in Sweden because working class children were not disproportionately the beneficiaries of educational reforms” (p. 382). Thus, the social structure itself is a strong influential determinate on the prospects of social fluidity within a given society.

Pfeffer and Herzel (2015,) and Sturgis and Buscha (2015,) add to Breen’s research. All three empirically analyze countries’ policies on educational expansion and their effect, or lack thereof, on social mobility. All are empirical studies about the relationship between a nation’s educational expansion, individual educational attainment, and social mobility; with Pfeffer and Herzel’s adding an analysis of the U.S., and Sturgis and Buscha’s adding analyses of England and Wales. All reveal that the empirical evidence of educational expansion policies on individual social mobility shows the story to be complex, contextual, and at best, uncertain.

Pfeffer and Herzel (2015) analyze these connections from U.S. data for cohorts “over the entire 20th century for men” (p. 144) and conclude, “Like others before us, we have shown that educational expansion alone is poor policy when aimed at decreasing class inequality in education, which has persisted quite stubbornly” (p. 164). From the UK perspective, Sturgis and Buscha (2015) conclude,

Reforms which increase the stock of education in a society have long been held by policy-makers as key to improving rates of intergenerational social mobility. Yet, despite the intuitive plausibility of this idea, the empirical evidence in support of an effect of educational expansion on social fluidity is both indirect and weak. (p. 512)

To summarize these studies, in more socialist countries, educational expansion policies had a greater effect on social mobility. In more individualistic, capitalistic countries, social mobility was much less impacted by educational expansion policies. In countries like the U.S. it was far more likely one ends up in the same socio-economic class that one starts in, i.e., social reproduction.

In the twenty-first century, there has been a more direct link between ever-pervasive test scores and individual social mobility, for educational attainment has meant less about expanding educational access and more about the equalization of learning outcomes (Giannakaki, et.al., 2018). For example, individualized student support to help with individual gains on standardized tests, and data driven leadership that focuses on the data of test score performance, are now popular means in schools. Yet,

despite hope generated by opportunities to openly compete for upward mobility in modern capitalist societies, empirical evidence shows that people’s fates remain strongly tied to their parents’ status (Lee & Solon, 2009; Chetty, et. al., 2014; Clark, 2014; Piketty, 2014) and that investing in education to improve one’s social position is, at best, questionable” (Giannakaki, et.al., 2018, p. 194-195).

It is much more probable that economics affect how well one does on standardized tests, rather than test scores affect how well one does economically. Social reproduction prevails. Mann’s articulation of the most common conception and ambition for education; education as the *Great Equalizer*, does not work in advanced capitalist societies like the U.S. In the U.S., The *Great Equalizer* is more likely a myth, an American dream.

Education and a Nation's Economic Development—Empirical Evidence

As stated earlier, cognitive development is seen as the key factor in developing a labor force to fuel economic success in the “knowledge economy,” and this theoretical/academic knowledge is measured internationally by the PISA test. Some studies go “so far as to claim a causal relationship between cognitive capacities and economic growth” (Bittlingmayer, et. al. 2016, p. 299) such as Hanushek’s & Kimko’s (2000) claim that international math and science tests have a direct influence on economic growth. “They confidently assert that ...policies successfully improving students’ achievement test scores will lead to higher rates of national economic growth” (Komatsu & Rappleye, 2017, p. 168). If standardized test scores generate economic growth, and if education’s primary function is for economic purposes, then educational policies and practices that home in on standardized test scores makes perfect sense. Yet, like the Horace Mann myth, the notion that test scores cause, if not predict, a nation’s economic performance has dubious empirical evidence.

For example, the highly proclaimed National Conference of State Legislature’s (2016) No Time to Lose report uses just these international test scores, namely PISA, as the measure of a “world-class” education, which presumably leads to economic development. For one, the No Time to Lose reports absolutely no evidence linking PISA scores with a country’s (or state’s) economic performance. Still, “Earlier uncertainties about how education works, how it impacts society, and how to best allocate scarce resources are being quickly replaced by contemporary certainties that raising test scores will result in higher levels of economic growth (GDP)” (Komatsu & Rappleye, 2017, p. 166). Hence, current educational policy is formed using this assumption.

However, current empirical evidence does not bear out this assumption. Earlier studies (Hanushek & Kimko, 2000; Cheung and Chan, 2008) touted the connection between test scores and economic growth. These studies are countered by further research and analyses (Bittlingmayer, et al. 2016, Yu, DiGangi, & Jannasch-Pennell, 2012, and Zhao, 2012) which demonstrate the problems with the earlier studies and claims. For example, Komatsu and Rappleye (2017) critique the statistical analysis of Hanushek and Woessman (2015). They point out that Hanushek and Woessman over emphasize the assumptions of “statistical significance” by using only the p-value, instead of a combination of other statistical tests; for example, the further exploration of R^2 and their respective scatter plots.

What really matters in this debate is the explanatory power of test scores, that is, how much of the variation in economic growth is explained by the variation in test scores. This is assessed by the coefficient (R^2), not p. (Komatsu & Rappleye, 2017, p.172)

Using the same data set as Hanushek and Woessman (H&W), and with T representing nations’ test scores, and G representing growth in GDP, Komatsu and Rappleye’s analysis revealed “the R^2 values for all periods were almost zero for 1990-2010 and 1995-2014, signifying that there are virtually no relationships between T and G” (p. 179). Thus, Komatsu & Rappleye conclude, “Combined, these two original studies do not simply challenge the key statistical claims advanced by H&W but invalidate them because *they utilise the same sample, dataset, and methods*” (p. 183).

Also using the exact same data set of international mathematics and science test scores and economic growth, Komatsu and Rappleye examined individual nations’ performances. Highly touted Finland, for example, raised its test scores by 57.8 points but had declining GDP growth for the period of 1990 to 2014, as well as Japan which had raised their scores by 89.6 points with a resulting decline in GDP for the same time period.

Komatsu and Rappleye,(2017) insinuate Hanushek, from Stanford’s conservative think tank the Hoover Institute, which promotes free enterprise, may have biased intentions. By only showing p test evidence and ignoring other statistical measures, they worry “the necessary corollary of such a strategy would be to propagate the notion that ‘education is for economic gain’ at the societal level and ‘learning is for personal economic success’ at the individual level” (p. 186).

Komatsu and Rappleye also point to other scholars’ critique of Hanushek and Woessman’s failure to control for factors other than test scores that could affect national economic growth (171). Similarly, Bittlingmayer, et. al (2016) convincingly argue that the current European PISA discourses grossly oversimplify the connection between test scores and the economic growth by aptly describing a bit more of this complicated relationship.

In this short paper there is not merely enough space to present the entire scope of differentiated arguments that have been put forth—in sociology and economics of education, in educational science proper, in macro-economics and policy analyses—on the true relationship between education and the economy. (p. 298)

Indeed, a country’s economic performance depends on several factors (Yu, et. al. 2012) and reducing a nation’s economic potential to how well future workers perform on academic standardized tests seems absurdly oversimplified.

Zhao's (2012) work also questions the link between test scores and labor productivity. He concludes there is no support for test scores as indicative of a country with a strong economy. In fact, for new business development, that is, entrepreneurship, the data reveals not only that there is no positive correlation between PISA/TMMS scores and economic development, but rather an inverse relationship.

For example, high-scoring countries on the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS) such as Singapore, Japan, Korea, and Taiwan scored much lower than Australia, the United Kingdom, and the United States in the category of perceived entrepreneurship capabilities of the Global Entrepreneurship Monitor survey in 2011... This *inverse relationship between test scores and entrepreneurship* does not necessarily mean high test scores caused the loss of entrepreneur capabilities or vice versa, but it does suggest that *education systems that produce good test scores more often than not have lower entrepreneurship activities and capabilities*. It also suggests the possibility that mechanisms that lead to higher test scores could lead to lower levels of entrepreneurship. (Zhao, 2012, p.11-13, emphasis added)

Most Asian educational "giants" in the PISA rankings, including China, Singapore, and South Korea have low rates of creativity and entrepreneurship. Zhao continues,

PISA scores may be the result of "forced excellence." More important, PISA scores have not been shown to positively affect entrepreneurship or other productive activities... This means that the higher PISA scores a country achieved, the less likely their people believe they have the capability to succeed in entrepreneurship and people are more afraid of failure. (Zhao, 2012, p. 111-113)

As the United States (US) envies and wants to create good test-takers like the Asian educational giants, the Asian giants want to emulate the US, fostering entrepreneurship and creativity which are thought to be greater contributors to a nation's economy. Zhao uses the likes of Bill Gates, Steve Jobs, and Hollywood, and the fact that these Asian countries have a dearth of comparables. Zhao concludes, "Thus it should be of little doubt that entrepreneurial capabilities may be a more worthwhile goal than test scores" (p.111).

Focusing on test scores as the way to improve economic competitiveness is, at best unproven, and at worst harmful. It ignores the complex nature in which 21st century economies grow. Yet, educational policies continue to aim at increasing TIMSS and PISA scores and further affirm the core status of math, literacy, and science. "The basics become the ultimate goal" (Zhao, 2012, p. 37). Accepting improvement on international test scores as a nation's chief measure of educational success is misguided. Even if education's primary aim is about improving economic conditions there is no clear empirical evidence that increasing academic test scores result in improved global economic performance.

If Not Test Scores, Then What?

Despite the dubious empirical evidence, the stories of education as the *Great Equalizer* and its primary social role as the development of human capital remain entrenched. The problem with these stories is that their dominance crowds out democratic ones. Some (Engel, 2000; Giroux, 2019) say that these capitalistic stories are antithetical to democratic aims; while others, most notably, the Nobel prize winner Amartya Sen (1999), suggest the limits of these stories and argue that economic interests are purely instrumental for more substantive intrinsic freedoms.

There is a longstanding critique of economic reductionism within educational realm, and I will not reproduce that here. Yet, it behooves us to be reminded that economic interests are only part, and not even the main part, of the story. As the Dalai Lama states,

An entire generation has been brought up with a certain mentality, with a certain way of life. So, when we think about the future, how to build healthy humanity, we really have to think about how we create a new generation of citizens with a different kind of mind-set. Here education really is the key...to educate children about the value of compassion and the value of applying our mind. (Lama, Tutu, & Abrams, 2016, p. 271-272)

Diane Ravitch also recaps,

The central aim of Finnish education is the *development of each child as a thinking, active, creative person*, not the attainment of higher test scores, and the primary strategy of Finnish education is cooperation, not competition. (Ravitch, 2012 as quoted in Zhao, 2012, p.111, emphasis added).

Education, has, at best, a checkered past when empirically verifying its effect on individual social mobility and a nation's economic performance. Equating a "good education" with scores on standardized academic tests is far from a guarantee of individual social mobility or a winning national economy. From the 20th century on, there is little to no proof linking either educational access or learning outcomes, in the form of test scores, to a person's individual social mobility. Of course, there are exceptions to the rule that are held up as exemplars of how the system works. The point is, they are a rarity, not the rule, especially in an advanced capitalist society such as the U. S. It is much more probable that schooling reproduces social position rather than promoting social fluidity. The same is true for the proposed relationship between PISA and a country's economic performance.

There is no empirical proof, in fact there is contradictory evidence, that PISA scores equate with a growing national economy. "What test scores predict best are other test scores. Their status as proxies for other forms of performance is dubious" (Eisner, 2003). Even if one conceives of the purpose in education as primarily economic, there is meager empirical evidence to show that education, as currently manifested in a race for improved test scores, has an effect.

More damaging is the critique of education as an instrument of economic purposes only. Stated succinctly, "Producing economic growth does not mean producing democracy" (Nussbaum, M. 2010, p. 15). Democratic education is more than just about getting a job and helping the national economy. Our parameters of educational success are narrowly economic; it is time to broaden our horizon. Education in a democracy is not primarily, or mostly, about economic development; it is equally, and perhaps foremostly, about human development.

History reveals that U.S. education has not always focused so intently on economics and test scores. David Labaree, as cited in Knight Abowitz (2013), describes this shift in our conception of the central role of public education as a "...fundamental change in the purpose of schooling—from a lofty political goal (training students to be citizens in a democratic society, perhaps to be president), to a practical economic goal (getting students ready to enter the workforce)" (p.12). Or, as a Muncie Indiana school board member lamented in 1929, "For a long time all boys were trained to be President...Now we are training them to get jobs" (Lynd, R., & H. Lynd. 1929, p. 194). Further back, Raymond Callahan cites a high school principal from the National Educational Association meeting in 1910 who explained that many were "forgetting that the purpose of education was to 'make men and women as well as engineers and ropestretchers'" (Callahan, 1962, as cited in Knight Abowitz & Karaba, 2006, p. 115).

Education is not naturally about vocation and economic purposes. "And it is well to remind ourselves that education as such has no aims. Only parents, and teachers, etc., have aims, not an abstract idea like education" (Dewey, 1916, p. 107). The question is not, what are the aims **of** education, but what are the aims **in** education.

Furthermore, the issue of aims in education is not a question of science, amenable to empirical study, but of morals, and the kind of society we choose to create. What we choose as the goals in education is a normative issue, an ethical decision. As a social science, education involves values. Rigor in the social sciences does not mean the absence of values or pretending they are not there, but rather being explicit with what those values are (Heifetz, 1994).

Politics are not neutral (Sandel, 2005), and neither is education (Carr & Hartnett as cited in Knight Abowitz & Karaba, 2006). The Finns, the progressive educational tradition, and even the Dalai Lama have two things in common that the market forces advancing PISA do not: candor and extended aims beyond test scores. All the forementioned are explicit in their intentions that a main aim of education is character building. They do not hide behind a façade of neutrality.

However, one way a capitalist society and culture regenerates itself is by making its ideas seem part of nature, and unchallengeable. For example, the idea that education is mainly about social mobility (i.e. the *Great Equalizer*) or supporting the national economy (i.e. human capital theory) seems natural, unchallengeable; that is just the way it is. Thus, economic rationality takes its place as the central discourse used for education, and its proxy, measuring academic knowledge by using standardized tests (Bittlingmayer, et. al., 2016), becomes seen as the natural aim of education.

Carr and Harnett (as cited in Knight Abowitz & Karaba, 2006) rhetorically ask, "Has the dominant educational discourse produced a distorted understanding of the purpose of general education by concealing its social and political function" (p.80)? Of course it has. Carr and Harnett continue:

To insist that questions like these be explicitly confronted not only *helps dispel the illusion that there can be a neutral discourse* through which educational issues can be debated in a non-political way. It also helps to explain why educational questions are always a particular expression of political questions about which existing patterns of social life ought to be reproduced and, conversely, why political questions about how society ought to be changed always give rise to educational question about the conception of education that a more desirable form of social life presupposes and requires. (emphasis added, p.80)

Dispelling the “neutral discourse,” in this case, refers to the more technocratic, capitalistic approach to education that dominates our culture today. Education is not naturally about economics only.

Yet, educational economic aims and its proxy of test scores hide behind a veneer of neutrality. The Organisation for Economic Co-operation and Development (OECD) touts PISA as the international measure of a good education. Yet, its very name, Organisation of Economic Co-operation and Development, reveals its bias toward a neoliberal worldview (Kuttner, 2018). The seemingly unbiased stance that education is commonsensically about doing well on standardized tests so that both individuals and nations do well economically promote a certain worldview and way of being in that world. Yes, economic issues are important for us individually and collectively, materiality matters. The problem arises when economic rationality is the only rationality employed.

When PISA and other standardized test scores are assumed as the key measure of education, we assume that public schools are primarily here to support the smooth functioning of the economy. Using PISA and other standardized exams as our educational lynchpin toward a greater economy will result in an even more advanced capitalistic society and culture than current manifestations. Focusing on improving tests scores does not address the more public, democratic functions of education. It ignores democratic values. When we accept, or choose, standardized test scores, such as PISA, as the predominant measure of our education system we are accepting aims which serve capitalism to the detriment of democracy.

We have the power to choose more democratic aims for our public schools, but it will take a large collaborative effort. Because we live in an advanced capitalist society, we should not be surprised that economic values and logic dominate the discourse of education and public schooling. But the relationship between culture and education is not a unidirectional one from culture to education, for what we choose to educate for can also impact the kind of culture and society we wish to create. "I believe that education is the fundamental method of social progress and reform" (Dewey, 1897). Educational aims can be focused on democratic values and beliefs if we choose those values and beliefs as our main way of living together. Capitalist ways of running society and education are challengeable. So, what should our aims in education be for democracy to progress? That is the question, or rather, should be the question.

If we truly want a democracy, we must intentionally educate for it. “To share in self-rule therefore requires that citizens possess, or come to acquire, certain civic virtues” (Sandel, 2005, p.10). What are those virtues? Many readers at this point may want a definite answer. There is a strong tradition and deep history in the thinking and practice of democratic education, both the aims and the curriculum and pedagogy that follow. Dewey (1916), Goodlad, *et. al.* (2004), and many others have articulated what virtues constitute a democratic citizen and what democratic education might look like. The point of this paper is not to re-present the long history of the thoughts and practices of democratic education, but rather to raise the issue of a lack of democratic education because of the dominance of economic purposes and its proxy, test scores. The conversation we need to have is not about the methods of how to achieve higher test scores. This conversation plays into the hands of the powers that be because it detracts from the more important issue of the aims of education (Giroux, 2019), and even the aims of economic growth. In other words, as Sen (1999) asks, economic growth for what? What kind of life?

Fostering a more democratic socio-cultural environment will require a different answer than focusing on test scores. For now, rather than accepting the status quo of the aim of increasing test scores, we must discuss educational aims for democratic purposes. There are alternative compelling aims in education beyond the questionable one of solely increasing academic test scores. It is time to engage in these conversations.

The task for educational leaders, as opposed to educational technicians, is to raise the issue of the aims in education, connect this issue to the kind of people and society we want to foster, decide on a goal, then determine measurements to gauge progress toward that goal. It must also be understood that even though the result of inquiry into aims of education will provide direction, this is a fluid, iterative process that is ever evolving.

The overemphasis on the practical, economic aims in education push more democratic aims off the table. These economic aims manifest in educational policies that strive for higher standardized test scores. At best, this paper questions our current focus on academic test scores and spurs interest in democratic education and what it may look like. What is imperative for our democracy to survive is the creation of space for democratic discourse. Educational leaders and policy leaders need to raise the issue and facilitate the discussion of a broader, democratic educational vision that includes human development, not just economic development.

References

- A Nation at Risk (April 1983). Retrieved from: <https://www2.ed.gov/pubs/NatAtRisk/risk.html>
- Bittlingmayer, U., Boutiuc, A., Heinemann, L. & Kotthoff, H. (2016). Jumping to conclusions—The PISA knee jerk: some remarks on the current economic-educational discourse. *European Education* (48) pp. 294-305.
- Breen, R. (2010). Educational expansion and Social Mobility in the 20th century. *Social Forces*, 89 (2), 365-288
- Callahan, R. (2006). Education and the Cult of Efficiency. In Knight Abowitz, K. and Karaba, R. (Eds.), *Readings in sociocultural studies in education* (pp. 113-118). Boston, MA: McGraw Hill Learning Solutions.
- Carr, W. and Harnett, A. (2006). Education and the struggle for democracy: the politics of educational ideas. In Knight Abowitz, K. and Karaba, R. (eds.), *Readings in sociocultural studies in education* (pp. 75-82). Boston, MA: McGraw Hill Learning Solutions.
- Cheung, H., and Chan, A. (2008). Understanding the relationships among PISA scores, economic growth, and employment in different sectors: a cross country study. *Research in Education* (80) pp. 93-105.
- Dewey, J. (1897). *My pedagogical creed*. Infed.org. <http://infed.org/mobi/john-dewey-my-pedagogical-creed/>
- Dewey, J. (1916). *Democracy and education*. New York: The Free Press.
- Eisner, E. (2003). Questionable assumptions about schooling. *Phi Delta Kappan* (May) pp. 648-657.
- Engel, M. (2000). *The struggle for control of the public schools: market ideology versus democratic values*. Philadelphia, PA: Temple University Press.
- Giannakaki, M, McMillan, I, and Karamichas, J. (2018). Problematising the use of education to address social inequity: Could participatory action research be a step forward? *British Educational Research Journal* 44(2) 191-211.
- Goodlad, J., Mantle-Bromley, C. and Goodlad, S. (2004). *Education for everyone: Agenda for education in a democracy*. San Francisco: Jossey-Bass.
- Giroux, H. (2019, July). CCCB Interviews. CCCBLAB.
<http://lab.cccb.org/en/henry-giroux-those-arguing-that-education-should-be-neutral-are-really-arguing-for-a-version-of-education-in-which-nobody-is-accountable/?fbclid=IwAR2m02HFrRiSodTOsctyyUWoCElxQcv0obgNgFYk6daRBaWi6bHdHRV3es0>
- Hanushek, E., and Kimko, D. (2000). Schooling, labor-force quality, and the growth of nations. *American Economic Review*, 90 (5), 1184-1208
- Hanushek, E. and Woessman, L. (2015). *The knowledge capital of nations: education and the economics of growth*. Cambridge, MA: MIT Press.
- Heifetz, R. (1994). *Leadership without easy answers*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Isseks, J. (2017). Hegemony of the “Great Equalizer” and the fragmentation of common sense: A Gramscian model of inflated ambitions for schooling. *Educational Studies*, 31 (1), 49-62
- Knight Abowitz, K. (2013). *Publics for public schools: legitimacy, democracy, and leadership*. Boulder, CO: Paradigm Publishers.
- Komatsu, H. and Rappleye, J. (2017). A new global policy regime founded on invalid statistics? Hanushek, Woessmann, PISA and economic growth. *Comparative Education* (Vol. 53. No. 2) pp. 166-191.
- Kuttner, R. (2018). *Can democracy survive global capitalism?* New York: W.W. Norton & Company.
- Lama, D, Tutu, D, and Abrams, D. (2016). *The book of joy*. New York: Avery.
- Lynd, R., and H. Lynd. (1929). *Middletown: A study in contemporary American culture*. New York: Harcourt Brace & World.
- National Conference of State Legislature (2016). No time to lose: How to build a world-class education system state by state. Retrieved from: <http://www.ncsl.org/research/education/no-time-to-lose-how-to-build-a-world-class-education-system-state-by-state.aspx>
- Nussbaum, M. (2010). *Not for profit: Why democracy needs the humanities*. Princeton, NJ: Princeton University Press.
- Pfeffer, F. and Hertel, F. (2015). How has educational expansion shaped social mobility trends in the United States. *Social Forces* 94 (1), pp. 1143-180.
- Sandel, M. (2005). *Public philosophy: Essay on morality in politics*. Cambridge, MA: Harvard University Press.

Sen, A. (1999). *Development as Freedom*. New York: Anchor Books.

Sturgis, P. and Buscha, F. (2015). Increasing inter-generational social mobility: is educational expansion the answer? *The British Journal of Sociology*. 66 (3), pp. 512-533.

Yu, C., DiGangi, S. and Jannasch-Pennell, A. (2012). A time-lag analysis of the relationship among PISA scores, scientific research publication, and economic performance. *Social Indicators Research* (107) pp. 317-330.

Zhao, Y. (2012). *World class learners: Educating creative and entrepreneurial students*. Thousand Oaks, CA: Corwin