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## Leadership for equity and adequacy in education

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### ABSTRACT

Equity has become a central principle in educational policy and leadership around the world. However, there is a wide range of interpretations of equity and what it means in education. In this article we explore different definitions of educational equity from policy and leadership perspectives. Our aim is to give an operational definition of equity in education to overcome vague interpretations and better guide the development of educational leadership for more consistent approaches to improving equity in education. We argue that equity in education should refer to equity of educational outcomes and incorporate both an individual and a social group aspect. We then claim that equality of outcomes is more relevant to comparisons between social groups than individuals, and we call that social equity. In current literature one or the other aspect has been adopted as an equity objective, but it appears combining the two elements is much less common. This dual objective is unique in the discussion around what equity in education means and how it could guide educational policymaking and leadership.

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## Introduction: the leadership dilemma

All children have a right to high quality education. This basic principle is stated in international agreements and national education laws. UN's Sustainable Development Goals expect that the member states 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (United Nations 2015). More recently, UN's World Social Report stresses 'the importance of universal access to quality education to break the intergenerational cycle of growing inequality and promote inclusive development (United Nations 2020, 148). Sadly, that the UN concludes, 'the education system has often served to reinforce inequality rather than help to level the playing field' (United Nations 2020). Even the OECD that is a members-only economic club of the wealthiest countries believes that fair and inclusive education is desirable for various reasons: 'Everyone has a human right to

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develop their capacities and to participate fully in society', the OECD (2021) informs its members.

Whereas children's right to education is commonly considered as a basic human right as is clear in the abovementioned UN documents, this right manifest itself differently from country to country. In Australia, for example, the Alice Springs (Mparntwe) Education Declaration (Council of Australian Government, 2019, 5) states, that 'all Australian Governments will work with the education community to provide all young Australians with access to high-quality education that is inclusive and free from any form of discrimination'. Furthermore, Section 16 of the Constitution of Finland stipulates that everyone has the right to basic education free of charge, and that the authorities shall 'guarantee everyone equal opportunity to receive other educational services in accordance with their ability and special needs, as well as the opportunity to develop themselves without being prevented by economic hardship' (Finlex n.d.). Although very similar in their intent and spirit, these two formal statements lead to very different interpretations in policy and leadership practice.

In early 2020 the world was shocked by the COVID-19 pandemic that disrupted education as we knew it by sending 1.7 billion children out of their schools and into their homes to learn remotely for several months. This global health crisis questioned many traditional rules and structures that have organised the work of schools in the past (Sahlberg 2020). It also exacerbated pre-existing social and educational inequalities and made them more visible to policymakers and citizens as well. Based on the early findings (OECD 2020c; UNESCO 2020) from evaluations and research around the world, it seems like education systems that had prior to the pandemic invested in preventing negative consequences of inequalities in education, and that had more flexibility to arrange schooling in practice, are able to cope better with the external shocks caused by the coronavirus. Therefore, the post-pandemic education policies and leadership practices, most probably, will address more directly those inequalities than before. Understanding what equity in education means and how it is linked to the performance of education system is becoming critically important.

Often, however, focus on education policies that aim to serve different students in general does not take adequately into account the differences in opportunities to learn of all children. Since the landmark study about equality of educational opportunities led by James Coleman (Coleman et al. 1966) in the United States it has been a commonly held view that the variation in students' academic performance is closely linked to their family backgrounds, much more than curriculum, teaching, leadership or other quantifiable in-school characteristics. Research on school effectiveness that has emerged since the 1970s and school improvement movement since the 1980s have revealed better understanding of the factors associated with student achievement in school and how to turn less-effective schools to perform better. Regardless of much deeper and broader researcher-based knowledge about how

different factors explain variance in students' measured achievement in school, the interrelated nature of excellence and equity of education outcomes has remained a controversial topic in education policy and practice.

Since the launch of the OECD's Programme for International Student Assessment (PISA) in the year 2000 equity in education has become a common theme in national education policies (OECD 2012, 2018c; Schleicher 2018). After early 2010s when the OECD published its first systematic cross-country analysis of the association between excellence and equity in education, the OECD's evidence-based reminder to education reformers has been that 'the highest performing education systems across OECD countries combine quality with equity' (OECD 2012, 37). As a consequence, and often affected by the pressure to enhance social mobility through education, education policies in OECD countries aim to maximise excellence and minimise inequities of education outcomes. Still, in many system-level policy and leadership debates the assumption is that educational inequality is a necessary condition for higher quality education outcomes. In other words, to improve the quality of academic achievement of the entire education system requires toleration of greater variance of measured student outcomes due to parental choice or other selection mechanisms to different pathways in the education system. This is the leadership dilemma for both policymakers and school leaders.

The validity of the theory of change in national school reforms that assumes that educational excellence comes with a cost of inequity has now been tested using large-scale international datasets (OECD 2018c; Parker et al. 2018; Pfeffer 2015). For example, Parker and colleagues (Parker et al. 2018) used data from five consecutive cycle of PISA starting year 2000 to explore how changes in national average PISA scores and changes in inequality were associated over time. Rather than using OECD's economic, social and cultural status (ESCS), that is commonly used in analysing PISA data, their analysis included a composite index for relative variance that consisted of (1) a measure of the amount of between school ability stratification (intraclass correlation coefficient), (2) a measure of absolute variance in achievement as the distance between the 95th and 5th percentiles, (3) a constructed Gini index of achievement, and (4) a degree of movement from the median to the tails of the distribution from one PISA cycle to the next (relative polarity). The conclusion was that 'a negative relationship exists between average academic excellence and inequality.' (Parker et al. 2018, 855). Although it is not clear if this relationship is directional, it increases the importance of conceptual understanding of what equity in education means and why it is a necessary concept in education policymaking that aims to improve the overall performance of education systems.

### **Conceptions of educational equity**

Refocusing education policies and leadership on equity as has happened across the OECD countries will have little real impact on education systems

performance unless policymakers and school leaders have much better common understanding of what equity in education means and why it is an important part of leading the system. Educational equity is often attached to the 'raising the bar and closing the gap' principle that has occurred in many system-level strategies aiming at improving educational performance of all schools (Hargreaves and Shirley 2012; Fullan and Gallagher 2020; Harris and Jones 2019b). Successful leadership to address existing inequalities in all education systems requires a closer look at the conceptual aspects of equity in education.

The purpose of this article is to give an operational definition of equity in education to overcome vague descriptions and interpretations found in education policy discourse and in leadership practice. This is necessary to better guide the development of education policymaking, especially as it relates to equity and its implementation by school leaders and achieving consistent approaches to improving equity in education.

The concept of equity in education has been much debated over a long time involving various interpretations. A number of overlapping and inter-related principles such as fairness, inclusion, social justice and non-discrimination are invoked in discussion of how school education should be distributed in societies. Much of this discussion has centred on the notion of 'equality of opportunity' in education. It is a term which has many interpretations and has long been a subject of philosophical debate (Rawls 1971; Sen 1992; Roemer 1998; Anderson 1999; Dworkin 2000; Roemer and Trannoy 2016; Scanlon 2018). While this debate cannot be reviewed in detail here but will be discussed briefly below, it has generally failed to provide a clear and precise guide as to what equity means for the practice of school education policy, how it can be assessed, and how progress in improving equity can be measured. As Bøyum (2014, 858) observes 'this philosophical debate has largely proceeded in splendid isolation from actual education policy.' Our aim, therefore, is to clarify equity in education as a practical concept to guide education policy development, and school management and leadership practices.

The idea of *equality of opportunity* has long captured the imagination of people striving for a more egalitarian education system and increased education opportunities for those previously excluded from extended schooling. Traditionally, it has been interpreted as providing all students with the equal opportunity to pursue their talents and aspirations. It has a strong meritocratic element in that the quality of education provided should not be dependent on a student's gender or their social or ethnic background. Equally talented children should have an equal opportunity to succeed in education and life, irrespective of their home background.

However, the concept of *equality of opportunity* is indeterminate – it is difficult to compare education opportunities in the way height, income or

age, for example, can be compared (O'Neill 1976, 275–276). This difficulty has resulted in a variety of interpretations, most notably such as equal access to education, equal instruction for all students, equal resources for all students, and equal outcomes for all students.

Removing obstacles to school education to ensure equal access is a common interpretation of equality of opportunity. For example, the OECD has interpreted equality of opportunity as removing obstacles to the development of innate ability and talent (Bøyum 2014, 864). Under this approach, what degree of equality or inequality of opportunity is just and reasonable is indeterminate. It sets the limited education goal of reducing inequality. It does not require any particular level of achievement for all students, and it is consistent with accepting continuing wide inequalities in outcomes between students from different social backgrounds and, therefore, also with continuing large disparities in access to positions of wealth, social status and power in society.

Most importantly, it ignores the significance of social hierarchies in producing and structuring ability and talent. It is much easier for well-off, well-educated parents to foster ability and talent than it is for more disadvantaged or for the poor. In this context, equality of opportunity means equal chances to become unequal and is therefore a recipe for continuing inequality. At best, it allows a small minority of the disadvantaged to enter the realms of wealth, status and power. Inequality is thereby legitimised as the natural order of things.

The appeal of 'equal opportunity' is that it abolishes social privilege as the criteria for access to high incomes, high status occupations and influence. Formally, no-one is barred from these positions. However, it serves to mask continuing privilege because it is children from families with the financial, education and cultural resources behind them or with position and power in the society that benefit the most. As Dianne Reay notes, meritocracy is a myth and a fantasy because there are clear winners who are rewarded for their privileged class background; meritocracy is 'the educational equivalent of the emperor with no clothes ...' (Reay 2017, 122–123). Moreover, Satz (2007, 630) argues that equality of opportunity creates an aristocracy of the talented, but in reality, it makes for a continuing aristocracy of the well-off. The rights of the talented are elevated above those of the non-talented in a meritocracy. Michael Sandel (2020) calls it the 'tyranny of merit'. Markovits (2019, x, 130) says that meritocracy has created a 'new aristocracy' or 'caste order' based on educational inequality: 'Education assumes the role in meritocracy that breeding played in the aristocratic regime ...'. Furthermore, Piketty (2020, 711) observes: '... it was the survival instinct of the upper classes that led them to abandon idleness and invent meritocracy, without which they ran the risk of being stripped of their possessions by universal suffrage'. It is what he calls a *justificatory narrative* designed to justify existing inequalities (Piketty 2020, 712). Finally, as Lipsey (2014, 37) observes, 'Equality of opportunity, when combined with gross inequality of outcome, is the worst possible recipe for a

harmonious society'. This is exactly what we have witnessed in many education systems during the past two decades.

A much stronger concept of equality of opportunity in education is equality of outcomes for all children. Equality of outcomes would ensure equal access to further education, high-paying occupations and high status or influential positions in society. However, equality of outcomes is readily dismissed as unrealistic, impractical and a denial of individual choice and responsibility. Individuals vary in their abilities, talents, interests, aspirations and effort, and it should not be expected that they will achieve the same education outcomes. As some egalitarian advocates concede '... no one – not even the most hardcore egalitarian – insists that outcomes ought to be equal' (Koski and Reich 2007, 616).

The dilemma between equality of access and equality of outcomes can be resolved by adopting a dual equity objective. Equity in education should refer to equity in outcomes and incorporate both an individual and a social group aspect. First, from an individual perspective, equity in education outcomes should mean that all children receive an education that enables them to fully participate in adult society in a way of their choosing, i.e. an *adequate education*. Second, equity in education should mean that children from different groups in society because of their gender, class, race, ethnicity and domicile achieve similar education outcomes to ensure non-discrimination. Equality of outcomes is more relevant to comparisons between social groups than individuals, that is, *social equity*.

In current literature one or the other aspect as an equity objective has been adopted, but it appears that combining the two elements is much less common. Accordingly, this dual objective appears to be unique in the discussion around what equity in education means. Next, we discuss these two components of equity in education and why they matter.

### An adequate education for all

The first principle of equitable education is that all children receive at least a minimum level of education that gives them the capacity to function as independent adults and to participate effectively in society. This principle is also sometimes called inclusion (OECD 2018c; UN 2017). It means that all children have the right to high quality education that equips them with the knowledge, understandings and skills to create their own meaning in the world, to choose their own path in society as adults and to take an active part in shaping the development of society. This is a matter of justice for all individuals.

Amy Gutmann (1987, 136–137) calls this minimum level of education the *democratic threshold principle* and says that democratic societies must consider how best to guarantee 'all children an adequate education'. Similarly, Koski and Reich (2007, 612) state:

... we take the following claim to be uncontroversial: In a modern society, there is an absolute level of educational attainment below which individuals will be dysfunctional and lack necessary capabilities for self-development, civic participation, and economic sufficiency. Similarly, in a modern society, there is an absolute level of educational attainment below which social growth will be stunted. In this respect, absolute levels of education, up to some adequate threshold, matter a great deal.

The concept of an *'adequate education'* has long been a feature of discussion about the education needs of students in the United States and has been at the centre of a series of court cases that began in the 1970s and continue to the present day (Ladd, Chalk, and Hansen 1999; Schrag 2003; Rebell 2009, 2016). Court cases have been initiated in nearly every state in the United States largely based on provisions in state constitutions that guarantee all students an adequate, a thorough and efficient, or a sound basic education.

Generally, an adequate education is taken to mean a minimum education outcome or standard expected for all children (Minorini and Sugarman 1999; Anderson 2007). Brighthouse refers to it as the level of education required for children to have a flourishing life as adults (Brighthouse 2006; Brighthouse et al. 2018). Alternatively, it could be set as a proportion of the highest performing individuals rather than an absolute standard (Koski and Reich 2007). However, an absolute standard seems more relevant and meaningful in terms of what is needed for full participation in adult society. The OECD defines the minimum level of proficiency for 15-year-olds (Level 2) in PISA in reading literacy the following way:

Level 2 marks the point at which students have acquired the technical skills to read and can use reading for learning. At a minimum, these students are able to identify the main idea in a text of moderate length, find information based on explicit criteria, and reflect on the purpose and form of texts when explicitly directed to do so. (OECD 2019c, 17)

Full participation in modern society demands at least completion of upper secondary school, that is 11–13 years of formal schooling, or some equivalent. The OECD has adopted this level of achievement as an adequate education for all students (OECD 2012). It says that completion of upper secondary education is the 'minimum educational attainment level for successful labour-market integration' (OECD 2018a, 72). Some argue that completion of secondary schooling is no longer an adequate education and that some form of post-secondary education is required (Carnevale, Gulish, and Strohl 2018). Nevertheless, failure to complete secondary education, as about 19% of young people across OECD (2020a) countries don't, places serious limitations on what people can accomplish in their lives. The OECD warns:

School failure penalises a child for life. The student who leaves school without completing upper secondary education or without the relevant skills has fewer life prospects. This can be seen in lower initial and lifetime earnings, more difficulties in adapting to



rapidly changing knowledge-based economies, and higher risks of unemployment. (OECD 2012, 3)

Achievement of this minimum standard of education also implies that students should make satisfactory progress through their school years. Students who do not make satisfactory progress are at risk of not completing secondary education. Therefore, simply making upper secondary education compulsory (e.g. New South Wales in Australia in 2010 and Finland in 2021) doesn't guarantee any improvements in educational equity and attainment or employment rates without proper investments in fixing educational inequalities before upper secondary education.

The content and purpose of an adequate education matters. The resources necessary to achieve an adequate education for all cannot be determined without a clear statement of the purpose, goals and content of an adequate education. The United States court cases have variously determined the content of *an adequate education* as the capacities needed for citizenship and work, specific capacities and skills that all children should acquire and state education standards (Koski and Reich 2008; Rebell 2016). In Australia, the Alice Springs (Mparntwe) Education Declaration defines the purpose of education by setting specific outcomes: All young Australians should become confident and creative individuals, successful lifelong learners, and active and informed members of the community (Education Council 2019).

There is an extensive literature from Dewey to the modern day from which to determine the breadth of an adequate education (Dewey 1966; Goodlad 1979; Rose 2009; Brighouse et al. 2018). It should include access to a broad curriculum covering traditional academic subjects, broad vocational skills, citizenship education, arts and music education, physical education, and so on. It also should include general cognitive skills, such as information processing skills, ability to concentrate, reasoning and thinking skills, auditory and visual processing skills. However, the purpose of education is more than formal learning and cognitive outcomes. Non-cognitive skills such as conscientiousness, perseverance, locus of control, planning and organisational skills and interpersonal skills are important outcomes from schooling for all students. That is one reason why current efforts to define equity in education by three academic subjects (reading, mathematics and science) as the OECD does falls short in having a whole-child perspective as a reference in determining adequate education in broader terms.

The curriculum must also serve *all* students to provide an adequate education for all. Too often the curriculum serves the interests of the dominant groups in society and ignores the minority groups and the most disadvantaged (Apple 1990, 2000; Delpit 2006; Rahman 2013). To be equitable, the curriculum must address cultural differences in increasingly multicultural and socially complex societies. The cultures of the least advantaged must be recognised

and incorporated into the actual curriculum and pedagogical practices (Moll et al. 1992).

The goal of adequacy in education applies to children with disabilities as much as any other children. Assessment of needs and the funding requirements to achieve what is an adequate education requires a detailed investigation for different groups of children with disabilities and special educational needs. For example, severely cognitively impaired children are not always able to complete mainstream secondary education. What is an adequate education in such circumstances is difficult to judge. Therefore, the principle should be that children with disabilities and severe special educational needs should have access to the same education opportunities as other children as far as possible. This is the basic principle in inclusive education. In most severe cases, education should at least enable them to participate in community life, as Anderson (2007) suggests.

### The cost of inequity

It is in society's interest, we argue, to ensure that all children receive an adequate education. Social waste is incurred, and individual harm is done if some children do not receive it. This means that human talents that could contribute to society are not recognised or fostered. A foundational premise of equitable education is that all children have talents that can and should be realised and advanced through schooling. By failing to recognise and develop those talents through an adequate education, society incurs lost opportunities for its own advancement and human development that, in turn, is often associated to growing inequalities in societies. These include higher youth unemployment, lower earnings, lower productivity and economic growth, higher health care and crime costs, reduced tax revenues and higher welfare expenditure that are all well reported in research literature (Belfield and Levin 2007; Levin 2009; Wilkinson and Pickett 2009, 2018).

OECD data show that employment rates are higher amongst those who complete secondary school than those that fail to do so. In 2017, the employment rate across OECD countries was 76% for adults with an upper secondary or post-secondary non-tertiary qualification compared to less than 60% for those who have not completed upper secondary education (OECD 2018a). The unemployment rate was almost twice as high for those who have not completed upper secondary education: 15% compared to 8% for those with upper secondary or post-secondary non-tertiary education.

Educated workers are the foundation of economic growth and prosperity. Higher levels of education are associated with higher productivity and lifetime earnings. Increased years of schooling have contributed significantly to economic growth across many countries in the last century (Barro and Lee 2015). Large disparities in school outcomes are also a measure of the potential to improve workforce skills and productivity (Goldin and Katz 2008).

There is extensive evidence that extended years of schooling is strongly associated with better health and longer lives including evidence of a causal connection, although this is not the case for all population groups (Lleras-Muney 2005; Cutler and Lleras-Muney 2006; OECD 2013a, 2016a; Galama, Lleras-Muney, and van Kippersluis 2018; Kaestner, Schiman, and Ward 2020). Other studies show a causal connection between increased education and reduced property crime, which constitutes the vast majority of crimes (Lochner 2010, 2011; Machin, Marie, and Vujić 2011; Bell, Costa, and Machin 2016, 2018). People who fail to achieve an adequate education are also more likely to be reliant on government welfare payments (Waldfoegel, Garfinkel, and Kelly 2007; Lamb and Huo 2017). Education is expensive but lack of it often becomes even more costly to individuals and the society.

Staying longer at school has a dual impact on government budgets. It delivers higher tax revenue through increased employment and earnings while reducing the call on government expenditure on health, crime and welfare. For example, one study has estimated that the annual lifetime government saving for each additional high school graduate in the United States to be US \$209,200 in 2004 figures (Levin and Belfield 2007; Levin 2009). An Australian study also found high costs in government services associated with failure to complete secondary school (Lamb and Huo 2017).

The net economic benefit of increasing secondary school completion rates is significant. One study estimated the net present value economic benefit of reducing the drop-out rate by half in the United States at US\$45 billion at 2004 prices (Levin and Belfield 2007; Levin 2009). In Australia, one study estimated that lifetime social cost of the drop-out rate at AU\$50.5 billion in 2014 prices (Lamb and Huo 2017), and another study showed that by closing the student achievement gap between urban and non-urban parts of the country, Australia's GDP could be increased by 3.3%, or \$56 billion (Holden and Zhang 2018).

In addition, there are other substantial non-pecuniary gains for individuals from extended schooling including greater work satisfaction, making better decisions about marriage and parenting, less likelihood of engaging in risky behaviour, more social interaction, lower levels of depression and greater self-esteem (Heckman, Humphries, and Veramendi 2017). Non-pecuniary gains from an extra year of schooling may be as large as the earnings gains to individuals.

The health of a democracy depends in no small part on the level of education of its citizens. Completion of secondary school also contributes to a better-informed citizenry which, in turn, supports a democratic society. Many studies of political behaviour have found that individuals with higher education participate more in political activities than individuals with lower education (Dee 2004; Moretti et al. 2004; Lochner 2011; Mayer 2011; OECD 2013a). One recent study in the United States found that completing secondary school increases the

probability that an individual will vote by 15 percentage points (Heckman, Humphries, and Veramendi 2017).

Provision of a threshold level of education for all children would provide some protection against vast inequalities in education outcomes and its consequent effects. However, adequacy in education is not a sufficient condition for equity in education. As many authors have recognised, achieving adequacy in education is consistent with large inequalities above the threshold. For example, Koski and Reich (2007, 553) write that 'Ensuring an adequate education for all can lead to increasing equality, but ensuring adequacy is also fully consistent with increasing inequality above the specified threshold.' They go on saying, that 'Adequacy is insensitive to inequalities in educational inputs or outcomes above the specified performance level sought for all students' (Koski and Reich 2007, 572).

The extent of inequalities above the threshold, of course, depends on where the threshold is set. A high threshold will result in less inequality than a low threshold. However, sole focus on achieving an adequate education for all ignores differences in education outcomes between rich and poor and between majority and minority groups. That is, it ignores social inequality in school outcomes and its consequences.

### Social equity in education

Social inequality in education remains a feature of modern society with significant differences in education outcomes according to social class, gender, race and ethnic background in many countries. For example, the results from OECD's 2018 PISA study show large and often growing achievement gaps between wealthier and disadvantaged, and between immigrant and non-immigrant students (OECD 2019a). A recent study found strong and robust evidence of increasing achievement gaps between high and low socio-economic status (SES) students over the past 50 years across the majority of 100 countries examined (Chmielewska 2019). Analysis of the latest PISA data in Australia revealed that achievement gap between the top and bottom socio-economic quartiles of students is almost one standard deviation (i.e. 100 points), or equivalent about three years of schooling (ACER 2019). A similar trend has been evident recently in Finland where the relationship between student's socioeconomic factors and educational performance has become stronger. It has affected more the lower-performing students than those doing better at school (Sahlberg 2021). Sole focus on adequacy ignores these social differences in education outcomes and their economic, social and political consequences for various groups of disadvantaged students.

As we mentioned earlier, it is unreasonable to expect in education policies or in school leadership strategies that all children will achieve the same education outcomes because, as individuals, they have a range of abilities and talents

which lead to different choices in schooling. However, it is reasonable to expect that these different abilities and talents are distributed similarly across different social, ethnic and gender groups in society. Phillips (2004, 18) writes:

It makes sense to start from the expectation that all groups would normally be distributed in roughly equal proportions along all measures of social activity: to expect, therefore, an equality of outcome, and to take any divergence from this as a reasonably safe indication that opportunities are not yet equal.

Repeated claims that there is proof of racial or social differences in intelligence based on genetic differences have been refuted (Lewontin, Rose, and Kamin 2017; Gould 1996; Fish 2002). Indeed, Neil Risch, one of the world's leading geneticists, says that it is virtually impossible to assign genetic causes to group differences in traits such as intelligence or other behaviours because of the confounding between genetic and social/cultural factors (Coates 2013). Scepticism 'regarding our ability to find genes (if such genes exist) underlying group differences in behavioural traits such as intelligence seems warranted' (Mountain and Risch 2004, 548). These days, few would argue that differences in educational outcomes between social groups, such as the lower educational outcomes for Indigenous students in Australia as compared to those of children of European ancestry are likely to be genetically determined. Similarly, there is no reason to believe that the children of poor families are innately less intelligent than those of privileged, well-off families.

As we have written earlier, equity in education demands similar school outcomes for students from different social groups that, historically, have been discriminated against in terms of education outcomes. It is about aggregate outcomes for different social groups. It means similar average results and a similar range of results for major social groups.

Social equity in education would not be achieved even if all students gained the minimum education threshold. Average outcomes of students from high socio-economic status (SES) backgrounds could still be much higher than minority and low SES students, for example, even though all students in the latter groups achieved the minimum standard. Minority and low SES students could be clustered just above the minimum standard while high SES students are clustered well above the standard. Student outcomes would still not be free of differences arising from different backgrounds and outcomes for minority and low SES students would not necessarily match the outcomes of other students.

Even similar average outcomes between students from different social groups are not a sufficient condition for social equity in education because the range of outcomes for minority and lower SES students could be much larger than that for higher SES students. It is unlikely that absolute equality in the distribution of outcomes between students from different social groups can be expected or achieved in practice because of the variety of social and economic factors that strongly affect these outcomes (Haertel 2013).

However, it is possible to set an expectation that the distribution of outcomes should be similar and that this would be a just social outcome.

A further issue to be considered is that broad groups that are historically discriminated against in education comprise sub-groups where there are also large differences in achievement. For example, large achievement gaps exist in many countries between immigrant students from different countries (OECD 2018b). In the United States, there is large variation in the performance of students from East Asian countries compared to students from Latin American, Middle Eastern and African countries (Schwartz and Stiefel 2011). In Australia, there are large differences in school results between Indigenous students in remote and urban areas (ACARA 2018; ACER 2019).

These disparities indicate social inequity just as much as the disparities between low and high SES students, or between black and white students, and they complicate the challenge of improving social equity. Similar outcomes for immigrant students compared to non-immigrant students may be achieved by raising the achievement of East Asian and European students while achievement continues to lag for other sub-groups. Similarly, parity between males and females may be achieved by focussing on improving the results of high SES females and neglecting low SES females.

The links between low education achievement and economic, social and political outcomes discussed above translate into differences in these outcomes between social groups. Lower school completion rates and achievement amongst working class and students of colour result in lower rates of university participation and completion, higher levels of unemployment, greater welfare dependency, lower life expectancies and health outcomes, and lower political participation than students from more privileged backgrounds. For example, there are large gaps in university completion rates between advantaged and disadvantaged groups which translates into socio-economic segregation in the labour market where students with less-educated parents are much less likely than students with tertiary-educated parents to be working in skilled jobs (OECD 2018c). Similarly, low education achievement amongst disadvantaged groups contributes to lower life expectancy and generally lower health outcomes than for high socio-economic status families (CSDH 2008; WHO 2013; Marmot 2015; Harris, Fetherston, and Calder 2017; Zajacova and Lawrence 2018).

Such social inequality in education matters because it contributes significantly to the social reproduction of privilege and disadvantage. It hardens social divisions and social hierarchies. Countries whose educational systems exhibit more social inequality tend to have higher income inequality, less social mobility and more rigid social classes (Jerrim and McMillan 2015; Schmidt 2016; OECD 2017). As one study concluded: '... education is one of the mechanisms through which economic advantage is transferred from one generation to the next' (Mendolia and Siminski 2017, 9).

High income families can invest more in the education of their children from early years of their lives which in turn leads to higher rates of participation in highly paid, high status occupations and positions of power, higher earnings and generally higher social outcomes such as better health. Education is seen as a positional good by the well-off and they use their resources to ensure the most privileged access (Halliday 2016; Brighouse et al. 2018).

Moreover, they may use their political influence to block the provision of quality public education for all to limit competition for desirable occupations and status or to provide more and better human and material resources for schools attended by their children. The latter is a feature of many school education systems around the world where high SES schools are provided with more and better qualified teachers, educational materials and physical infrastructure (OECD 2016b, 2019b, 2020b; UNESCO 2020; World Bank 2018). These resource gaps are strongly associated with large achievement gaps between lower SES and higher SES students (OECD 2013b). The outcome is structured social inequality in education reproduced over generations, as Major and Machin (2018, 87–88) claim:

Far from acting as a leveller, the education system has been exploited to retain advantage from one generation to the next. Individuals from wealthy backgrounds acquire higher qualifications that pave the way for higher earnings. Existing inequalities are transmitted and magnified across generations. Social mobility falls ...

Widening inequalities in income and inequalities in education reinforce each other in an endless feedback loop from one generation to the next.

As Atkinson (2015, 11) observes more generally:

Inequality of outcome among today's generation is the source of the unfair advantage received by the next generation. If we are concerned about equality of opportunity tomorrow, we need to be concerned about inequality of outcome today.

Differential access to education blights a democratic society. There is no society of equals where a minority monopolises high education outcomes by virtue of their income and wealth. In a democracy, education outcomes should not depend on students' family background and parents, power, position or wealth. A 'democratic education should both express and develop the capacity of all children to become equal citizens' regardless of their social background (Gutmann 2009, 409–410). Eliminating social inequality in education should become a major priority for governments. 'Indeed, the highest performing education systems across OECD countries are those that combine quality with equity', as the OECD (2012, 37) has repeatedly concluded.

### **Social equity and adequacy as complementary policy goals**

A central function of school leadership is to contribute to the implementation of education policies and regulations. When educational equity is becoming



increasingly important in education policies around the world, it is paramount that both policymakers and school leaders have shared understanding what equity means and how to set educational goals can best be achieved. Social equity and adequate education are complementary goals in education policies that aim at improved overall education system performance. Many authors distinguish between adequacy and equity (Koski and Reich 2007; Baker and Green 2009). Furthermore, Berne and Stiefel (1999, 22–23) wrote:

To us the most useful distinction between adequacy and equity concepts is the focus on sufficient and absolute levels in adequacy and on relative levels or distributions in equity ... The definition of adequacy begins with the idea of adequate performance by students, which requires specifications of performance in various kinds of output dimensions. But we believe that it is conceptually most useful to maintain the distinction between absolute levels (adequacy) and relative distributions of levels (equity).

It is surprising that adequacy has not yet been considered to be part of educational equity. First, it is a matter of fairness, justice and equity that all children receive an adequate education. Secondly, ensuring that all children did so would do much to reduce inequity in education outcomes. Unquestionably, achieving an adequate education for all would be an improvement towards greater equity in education, as Brighouse and colleagues have argued (2018, 53):

Whatever our conception of adequacy, raising the achievement of those at the bottom of the achievement distribution up to the level deemed adequate, with no change in what happens at the top of the distribution, would concomitantly make the overall distribution of achievement more equal.

On the other hand, authors who subscribe to an interpretation of equity as equalising outcomes between major social groups ignore the goal of adequacy. For example, for O'Neill (1977) all that matters is that the distribution of outcomes is similar between social groups. She says that substantive equal opportunity 'seeks to eliminate inter-group differences, but not to alter intra-group differences' (183). There is no concept of a threshold level of education for all which does alter intra-group differences. Similarly, Kodelja (2016, 21) ignores adequacy as an equity goal by confining the egalitarian conception of equality of opportunity to bridging the gap between social groups:

Significant differences between the success of the most successful and the least successful individuals within the same social groups are not important if there are similar differences in other social groups as well.

Equity should have regard to both the minimum levels of achievement expected for all students and the relative distribution of outcomes between different social groups. There is a difference between adequacy and social equality, but they are not mutually exclusive goals. Rather, they are complementary. As Brighouse and Swift (2009) argue, justice in education demands both adequacy and equality.



A dual goal of equity in education is eminently justifiable. It does not require any levelling down of education or equal education outcomes for all. It guarantees a threshold level of education for everyone and a fair or equitable distribution of the benefits of education for all social groups. It should be central to the objectives of public education and leadership of all schools. Moreover, it sets the framework for policy making at the system and school levels, and a clear measurable approach to assessing progress towards achieving equity in education.

## Discussion

Educational inequity described in this article is not just an issue in some countries, it is a growing global challenge that has been recently recognised by major international organisations, for example World Bank (2018), OECD (2019b), UNESCO (2020) and United Nations (2020). In order to shed more light on this issue, Patel and Sandevur (2019) analysed various international data found larger learning differences between most- and least-developed countries than previous estimates have suggested. Applying their translations to microdata and matching students' socio-economic status to moments of the global income distribution they revealed that students with the same family income perform significantly better if they live in wealthier countries. In other words, these findings mean that it is better be a poor student in a rich country than a rich student in a poor country. In a big picture, country and family are equally strong predictors of students' educational performance in school. This is an important note to school leaders who aim to be part of the growing campaign for more equitable schooling.

While this is not the place to set out a detailed education policy agenda or suggest any school leadership solutions to enhance equity in education, the basic principles are clear for both purposes. We suggest five principles of which first two refer mostly to education system level management and leadership and the rest primarily to school leadership.

First, education policies must proceed in conjunction with economic and social policies designed to reduce inequality. Research shows that inequality and excellence in education have a negative association between one another. Since 2012 the OECD has repeatedly concluded using international large-scale student assessment data from its member countries that successful education systems simultaneously pursue equity and quality of educational outcomes. Disadvantage is constantly reproduced in society through poverty, low incomes, unemployment, lack of affordable housing, poor health, inadequate access to early childhood services and education and other factors. Schools are in a constant battle against the reproduction of inequality and poverty in society. Since the out-of-school factors explain majority of variation in students'

achievement in school, their efforts must be supported by economic and social policies to reduce growing inequality and poverty.

Second, education policies must be directed at providing the financial, human and physical resources to achieve an adequate education for all and investing in greater social equity in outcomes. This *positive discrimination* in allocating resources to schools means more funding directed at disadvantaged students and schools to enable them to employ more teachers, better qualified teachers, student welfare professionals and the educational materials and infrastructure necessary to better support the learning of these students (Silliman 2017). Whenever positive discrimination policies exist, school leaders must be well prepared to turn additional resources into impactful practices in their schools by investing these resources mindfully.

Third, the design of curriculum, pedagogy and assessment must recognise and reflect the cultures of disadvantaged students and minority groups as well as provide access to the broad range of knowledge and skills for all students. When educational performance in school is defined by student's test scores in small number of academic subjects (e.g. literacy and numeracy), that often amplifies inequalities by excluding other abilities or talents as factors of success. In brief, greater equity is often linked to broad-based curriculum, wider range of teaching methods used to teach that curriculum and use of student assessments that cover different aspects of cognitive and social outcomes in education, in other words, whole-child education.

Fourth, parent participation in schooling and the learning of their children is fundamental to improving attendance at schools and outcomes for students from disadvantaged backgrounds. This includes providing avenues for families to have a voice in the formulation of school, regional and national education policies.

Finally, student engagement and wellbeing in school are positively linked to the quality and equity of education outcomes. It is important, therefore, to enhance students' active role in planning, implementing and evaluating teaching and learning in school. Student voice, especially in secondary schools, can be an important driver in enhancing every students' ownership of teaching and learning and thereby strengthen inclusiveness at the school level. Positive engagement in school education can contribute to all students' wellbeing in school.

International evidence suggests that it is possible to reduce the negative correlation between social disadvantage and student achievement. School leaders have a role to play in this. Harris and Jones (2019a) argue that in order to keep schools doing that requires school leaders to exceed 'normal efforts' to perform beyond expectations. Leading for equity, according to Harris and Jones (2019a, 393), is to create 'cultural harmony and reciprocal community trust is a major task for school leaders who tackle inequity wherever and whenever they encounter it'. But schools cannot fix inequities in education alone.

Achieving social equity and an adequate education for all are challenging goals, especially in the context of the extent of income and wealth inequality in modern societies. But no society can be called a democracy while some social groups are discriminated against in the provision of education or, indeed, in the provision of other public services such as health and social protection. Equity in education as the fundamental education policy goal is important not only for economic reasons but it is a moral imperative especially in those countries that have made a promise to give all their people a fair go.

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No potential conflict of interest was reported by the author(s).

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## References

- ACER. 2019. *PISA 2018. Reporting Australia's Results*. Vol. 1. *Student Performance*. <https://research.acer.edu.au/ozpisa/35/>.
- Anderson, Elizabeth. 1999. "What is the Point of Equality?" *Ethics* 109 (2): 287–337.
- Anderson, Elizabeth. 2007. "Fair Opportunity in Education: A Democratic Equality Perspective." *Ethics* 117 (4): 595–622.
- Apple, Michael. 1990. *Ideology and Curriculum*. 2nd ed. New York: Routledge.
- Apple, Michael. 2000. *Official Knowledge*. 2nd ed. New York: Routledge.
- Atkinson, Anthony. 2015. *Inequality: What Can be Done?* Cambridge: Harvard University Press.
- Australian Curriculum, Assessment and Reporting Authority (ACARA). 2018. *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2018*. Sydney: ACARA.
- Baker, Bruce, and Preston Green. 2009. "Conceptions, Measurement, and Application of Educational Adequacy and Equal Educational Opportunity." In *Handbook of Education Policy Research*, edited by Gary Sykes, Barbara Schneider, and David Plank, 438–452. New York: Routledge.
- Barro, Robert, and Jong-Wha Lee. 2015. *Education Matters: Global Schooling Gains from the 19th to the 21st Century*. New York: Oxford University Press.
- Belfield, Clive, and Henry Levin. 2007. *The Price We Pay: Economic and Social Consequences of Inadequate Education*. Washington, DC: Brookings Institution Press.
- Bell, Brian, Rui Costa, and Stephen Machin. 2016. "Crime, Compulsory Schooling Laws and Education." *Economics of Education Review* 54: 214–226.
- Bell, Brian, Rui Costa, and Stephen Machin. 2018. *Why Does Education Reduce Crime?* Discussion Paper No. 11805. Bonn: Institute of Labor Economics.

- Berne, Robert, and Leanna Stiefel. 1999. "Concepts of School Finance Equity: 1970 to the Present." In *Equity and Adequacy in Education Finance*, edited by Helen Ladd, Rosemary Chalk, and Janet S. Hansen, 7–33. Washington, DC: National Academy Press.
- Bøyum, Steinar. 2014. "Fairness in Education – A Normative Analysis of OECD Policy Documents." *Journal of Education Policy* 29 (6): 856–870. doi:10.1080/02680939.2014.899396.
- Brighouse, Harry. 2006. *On Education*. New York: Routledge.
- Brighouse, Harry, Helen Ladd, Susanna Loeb, and Adam Swift. 2018. *Educational Goods*. Chicago: University of Chicago Press.
- Brighouse, Harry, and Adam Swift. 2009. "Educational Equality Versus Educational Adequacy: A Critique of Anderson and Satz." *Journal of Applied Philosophy* 26 (2): 117–128.
- Carnevale, Anthony, Artem Gulish, and Jeff Strohl. 2018. *Educational Adequacy in the Twenty-First Century*. New York: The Century Foundation.
- Chmielewska, Anna. 2019. "The Global Increase in the Socioeconomic Achievement Gap, 1964 to 2015." *American Sociological Review* 84 (3): 517–544. doi:10.1177/0003122419847165.
- Coates, Ta-Nehisi. 2013. Race, Intelligence, and Genetics for Curious Dummies. *The Atlantic*, May 23. <https://www.theatlantic.com/national/archive/2013/05/race-intelligence-and-genetics-for-curious-dummies/276154/>.
- Coleman, James, Ernst Campbell, Carol Hobson, James McPartland, Alexander Mood, Fredrick Weinfeld, and Robert York. 1966. *Equality of Educational Opportunity*. Washington, DC: Government Printing Office.
- Commission on the Social Determinants of Health (CSDH). 2008. *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health*. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization.
- Council of Australian Governments. 2019 Alice Springs (Mparntwe) education declaration. Canberra : Education Council.
- Cutler, David, and Adriana Lleras-Muney. 2006. *Education and Health: Evaluating Theories and Evidence*. NBER Working Paper No. 12352. Cambridge, MA: National Bureau of Economic Research.
- Dee, Thomas. 2004. "Are There Civic Returns to Education?" *Journal of Public Economics* 88 (9–10): 1696–1712.
- Delpit, Lisa. 2006. *Other People's Children: Cultural Conflict in the Classroom*. New York: The New Press.
- Dewey, John. 1966. *Democracy and Education*. New York: The Free Press.
- Dworkin, Ronald. 2000. *Sovereign Virtue: The Theory and Practice of Equality*. Cambridge, MA: Harvard University Press.
- Education Council. 2019. *Alice Springs (Mparntwe) Education Declaration*. Melbourne: The Education Council.
- Finlex. n.d. *The Constitution of Finland*. <https://www.finlex.fi/en/laki/kaannokset/1999/en19990731.pdf>.
- Fish, J. M. 2002. *Race and Intelligence: Separating Science from Myth*. Mahwah: Lawrence Erlbaum Associates.
- Fullan, Michel, and Mary Jean Gallagher. 2020. *The Devil is in the Details. System Solutions for Equity, Excellence, and Student Wellbeing*. Thousand Oaks: Corwin.
- Galama, Titus, Adriana Lleras-Muney, and Hans van Kippersluis. 2018. *The Effect of Education on Health and Mortality: A Review of Experimental and Quasi-Experimental Evidence*. NBER Working Paper No. 24225. Cambridge, MA: National Bureau of Economic Research.

- Goldin, Claudia, and Lawrence Katz. 2008. *The Race Between Education and Technology*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Goodlad, John. 1979. *What Schools Are For*. Bloomington: Phi Delta Kappa Educational Foundation.
- Gould, Stephen Jay. 1996. *The Mismeasure of Man*. New York: W.W. Norton.
- Gutmann, Amy. 1987. *Democratic Education*. Princeton: Princeton University Press.
- Gutmann, Amy. 2009. "Educating for Individual Freedom and Democratic Citizenship: In Unity and Diversity There Is Strength." In *The Oxford Handbook of Philosophy of Education*, edited by Harvey Siegel, 409–427. Oxford: Oxford University Press.
- Haertel, Edward. 2013. *Reliability and Validity of Inferences About Teachers Based on Student Test Scores*. Princeton: Educational Testing Service.
- Halliday, Daniel. 2016. "Private Education, Positional Goods, and the Arms Race Problem." *Politics, Philosophy & Economics* 15 (2): 150–169. doi:10.1177/1470594X15603717.
- Hargreaves, Andy, and Dennis Shirley. 2012. *The Global Fourth Way: The Quest for Educational Excellence*. Thousand Oaks: Corwin.
- Harris, Ben, Hazel Fetherston, and Rosemary Calder. 2017. *Australia's Health Tracker by Socio-Economic Status, Australian Health Policy Collaboration*. Melbourne: Victoria University.
- Harris, Alma, and Michelle Jones. 2019a. "Leading for Equity." *School Leadership & Management* 39 (5): 391–393. doi:10.1080/13632434.2019.1669788.
- Harris, Alma, and Michelle Jones. 2019b. *System Recall. Leading for Excellence and Equity in Education*. Thousand Oaks: Corwin.
- Heckman, James, John Eric Humphries, and Gregory Veramendi. 2017. *The Non-market Benefits of Education and Ability*. NBER Working Paper No. 23896. Cambridge, MA: National Bureau of Economic Research.
- Holden, Richard, and Jessie Zhang. 2018. *The Economic Impact of Improving Regional, Rural & Remote Education in Australia*. Sydney: UNSW Gonski Institute for Education.
- Jerrim, John, and Lindsey McMillan. 2015. "Income Inequality, Intergenerational Mobility, and the Great Gatsby Curve: Is Education the Key?" *Social Forces* 94 (2): 505–533. doi:10.1093/sf/sov075.
- Kaestner, Robert, Cuiping Schiman, and Jason Ward. 2020. *Education and Health Over the Life Cycle*. NBER Working Paper No. 26836. Cambridge, MA: National Bureau of Economic Research.
- Kodelja, Zdenko. 2016. "Equality of Opportunity and Equality of Outcome." *C-E-P-S Journal* 6 (2): 9–24.
- Koski, William, and Rob Reich. 2007. "When Adequate Isn't: The Retreat from Equity in Educational Law and Policy and Why It Matters." *Emory Law Journal* 56 (3): 545–617.
- Ladd, Helen, Rosemary Chalk, and Janet Hansen. 1999. *Equity and Adequacy in Education Finance*. Washington, DC: National Academy Press. <https://doi.org/10.17226/6166>.
- Lamb, Stephen, and Shuyan Huo. 2017. *Counting the Costs of Lost Opportunity in Australian Education*. Mitchell Institute Report No. 02/2017. Melbourne: Mitchell Institute. <https://doi.org/10.4226/80/591e74a01d950>.
- Levin, Henry. 2009. "The Economic Payoff to Investing in Educational Justice." *Educational Researcher* 38 (1): 5–20. doi:10.3102/0013189X08331192.
- Levin, Henry, and Clive Belfield. 2007. "Educational Interventions to Raise High School Graduation Rates." In *The Price We Pay: Economic and Social Consequences of Inadequate Education*, edited by C. R. Belfield and H. M. Levin, 177–199. Washington, DC: Brookings Institution Press.
- Lewontin, Richard, Steven Rose, and Leon Kamin. 2017. *Not in Our Genes: Biology, Ideology and Human Nature*. Chicago: Haymarket Books.

- Lipsey, David. 2014. "The Meretriciousness of Meritocracy." *The Political Quarterly* 85 (1): 37–42. doi:10.1111/j.1467-923X.2014.12062.x.
- Lleras-Muney, Adriana. 2005. "The Relationship Between Education and Adult Mortality in the United States." *Review of Economic Studies* 72 (1): 189–221. doi:10.1111/0034-6527.00329.
- Lochner, Lance. 2010. *Education Policy and Crime*. Working Paper No. 15894. Cambridge, MA: National Bureau of Economic Research.
- Lochner, Lance. 2011. *Non-production Benefits of Education: Crime, Health, and Good Citizenship*. NBER Working Paper No. 16722. Cambridge, MA: National Bureau of Economic Research. DOI 10.3386/w16722.
- Machin, Stephen, Olivier Marie, and Sunčica Vujić. 2011. "The Crime Reducing Effect of Education." *The Economic Journal* 121: 463–484. doi:10.1111/j.1468-0297.2011.02430.x.
- Major, Lee Eliot, and Stephen Machin. 2018. *Social Mobility and its Enemies*. New York: Penguin Random House.
- Markovits, Daniel. 2019. *The Meritocracy Trap*. New York: Penguin Random House.
- Marmot, Michael. 2015. *The Health Gap: The Challenge of an Unequal World*. London: Bloomsbury.
- Mayer, Alexander. 2011. "Does Education Increase Political Participation?" *Journal of Politics* 73 (3): 633–645. doi:10.1017/S002238161100034X.
- Mendolia, Silvia, and Peter Siminski. 2017. "Is Education the Mechanism Through Which Family Background Affects Economic Outcomes? A Generalised Approach to Mediation Analysis." *Economics of Education Review* 59: 1–12. doi:10.1016/j.econedurev.2017.05.001.
- Minorini, Paul, and Stephen Sugarman. 1999. "Educational Adequacy and the Courts: The Promise and Problems of Moving to a New Paradigm." In *Equity and Adequacy in Education Finance*, edited by Helen Ladd, Rosemary Chalk, and Janet Hansen, 175–208. Washington, DC: National Academy Press.
- Moll, Luis, Cathy Amanti, Deborah Neff, and Norma Gonzalez. 1992. "Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms." *Theory Into Practice* 31 (2): 132–141. doi:10.1080/00405849209543534.
- Moretti, Enrico, Milligan Kevin, and Oreopoulos, Philip. 2004. "Does Education Improve Citizenship? Evidence from the U.S. and the U.K.." *Journal of Public Economics* 88 (9-10): 1667–1695.
- Mountain, Joanna, and Neil Risch. 2004. "Assessing Genetic Contributions to Phenotypic Differences Among 'Racial' and 'Ethnic' Groups." *Nature Genetics* 36 (11): 548–553. doi:10.1038/ng1456.
- OECD. 2012. *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*. Paris: OECD Publishing.
- OECD. 2013a. What are the Social Benefits of Education? *Education Indicators in Focus* 10. [http://www.oecd.org/education/skills-beyond-school/EDIF%202013-N°10%20\(eng\)-v9%20FINAL%20bis.pdf](http://www.oecd.org/education/skills-beyond-school/EDIF%202013-N°10%20(eng)-v9%20FINAL%20bis.pdf).
- OECD. 2013b. *PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices (Volume IV)*. Paris: OECD Publishing.
- OECD. 2016a. "How are Health and Life Satisfaction Related to Education?" *Education Indicators in Focus*, No. 47. Paris: OECD Publishing.
- OECD. 2016b. *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*. Paris: OECD Publishing.
- OECD. 2017. *PISA 2015 Results (Volume III): Students' Well-Being*. Paris: OECD Publishing.
- OECD. 2018a. *Education at a Glance 2018: OECD Indicators*. Paris: OECD Publishing.
- OECD. 2018b. *The Resilience of Students with an Immigrant Background: Factors That Shape Well-Being*. Paris: OECD Publishing.



- OECD. 2018c. *Equity in Education: Breaking Down Barriers to Social Mobility*. Paris: OECD Publishing.
- OECD. 2019a. *PISA 2018 Results (Volume I): What Students Know and Can Do*. Paris: OECD Publishing.
- OECD. 2019b. *PISA 2018 Results (Volume II): Where All Students Can Succeed*. Paris: OECD Publishing.
- OECD. 2019c. *PISA 2018: Insights and Interpretations*. Paris: OECD Publishing.
- OECD. 2020a. *Education at a Glance. Education Indicators*. Paris: OECD Publishing.
- OECD. 2020b. *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*. Paris: OECD Publishing.
- OECD. 2020c. *Education Responses to COVID-19: Implementing the Way Forward*. OECD Education Working Papers No. 224. <https://www.oecd-ilibrary.org/docserver/8e95f977-en.pdf?expires=1603939238&id=id&accname=guest&checksum=8A9F271DC938786026BFC5D3170DE737>.
- OECD. 2021. *The Education GPS. The World of Education at Your Fingertips*. <https://gpseducation.oecd.org/revieweducationpolicies/#!node=41746&filter=all>.
- O'Neill, Onora. 1976. "Opportunities, Equalities and Education." *Theory and Decision* 7 (4): 275–295.
- O'Neill, Onora. 1977. "How Do We Know When Opportunities Are Equal?" In *Feminism and Philosophy*, edited by Mary Vetterling-Braggin, Fredrick Elliston, and Jane English, 177–189. Totowa: Rowman & Littlefield.
- Parker, Philip, Herbert Marsh, John Jerrim, Jiesi Guo, and Theresa Dicke. 2018. "Inequity and Excellence in Academic Performance: Evidence from 27 Countries." *American Educational Research Journal* 55 (4): 836–858. doi:10.3102/0002831218760213.
- Patel, Dev, and Justin Sandevur. 2019. *A Rosetta Stone for Human Capital*. [https://scholar.harvard.edu/files/devpatel/files/rosetta\\_stone.pdf](https://scholar.harvard.edu/files/devpatel/files/rosetta_stone.pdf).
- Pfeffer, Fabian. 2015. "Equality and Quality in Education. A Comparative Study of 19 Countries." *Social Science Research* 51: 350–368. doi:10.1016/j.ssresearch.2014.09.004.
- Phillips, Anne. 2004. "Defending Equality of Outcomes." *Journal of Political Philosophy* 12 (1): 1–19.
- Piketty, Thomas. 2020. *Capital and Ideology*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Rahman, Kiara. 2013. "Belonging and Learning to Belong in School: The Implications of the Hidden Curriculum for Indigenous Students." *Discourse: Studies in the Cultural Politics of Education* 34 (5): 660–672. doi:10.1080/01596306.2013.728362.
- Rawls, John. 1971. *A Theory of Justice*. Cambridge, MA: Belknap Press.
- Reay, Diane. 2017. *Miseducation: Inequality, Education and the Working Class*. Bristol: Polity Press.
- Rebell, Michael. 2009. *Courts and Kids: Pursuing Educational Equity Through the State Courts*. Chicago: Chicago University Press.
- Rebell, Michael. 2016. "Ensuring Adequate Funding: The Role of the Courts." In *Learning from the Federal Market-Based Reforms*, edited by William Mathis and Tina Trujillo, 507–524. Charlotte: Information Age Publishing.
- Roemer, John. 1998. *Equality of Opportunity*. Cambridge, MA: Harvard University Press.
- Roemer, John, and Alain Trannoy. 2016. "Equality of Opportunity: Theory and Measurement." *Journal of Economic Literature* 54 (4): 1288–1332. doi:10.1257/jel.20151206.
- Rose, Mike. 2009. *Why School?* New York: The New Press.
- Sahlberg, Pasi. 2020. "Does the Pandemic Help Us Make Education More Equitable?" *Educational Research for Policy and Practice*, 20 (1): 11–18. doi:10.1007/s10671-020-09284-4

- Sahlberg, Pasi. 2021. *Finnish Lessons 3.0: What Can the World Learn from Educational Change in Finland*. New York: Teachers College Press.
- Sandel, Michael. 2020. *The Tyranny of Merit*. New York: Penguin Random House.
- Satz, Debra. 2007. "Equality, Adequacy, and Education for Citizenship." *Ethics* 117: 623–648.
- Scanlon, Thomas Michael. 2018. *Why Does Inequality Matter?* Oxford: Oxford University Press.
- Schleicher, Andreas. 2018. *World Class. How to Build a 21st-Century School System*. Paris: OECD Publishing.
- Schmidt, William. 2016. The Role of Schools in Social Inequality. *Worlds of Education*, October 10. [https://worldsofeducation.org/en/woe\\_homepage/woe\\_detail/4881/the-role-of-schools-in-social-inequality](https://worldsofeducation.org/en/woe_homepage/woe_detail/4881/the-role-of-schools-in-social-inequality).
- Schrag, Peter. 2003. *Final Test: The Battle for Adequacy in America's Schools*. New York: The New Press.
- Schwartz, Amy Ellen, and Leanna Stiefel. 2011. "Immigrants and Inequality in Public Schools." In *Whither Opportunity? Rising Inequality, Schools and Children's Life Chances*, edited by Greg Duncan and Richard Murnane, 419–441. New York: Russell Sage Foundation.
- Sen, Amartya. 1992. *Inequality Reexamined*. Cambridge, MA: Harvard University Press.
- Silliman, Mikko. 2017. *Targeted Funding, Immigrant Background, and Educational Outcomes: Evidence from Helsinki's "Positive Discrimination" Policy*. Working Papers 134. Helsinki: Institute for Economic Research.
- UNESCO. 2020. *Global Education Monitoring Report. Inclusion and Education: All Means all*. Paris: UNESCO.
- United Nations. 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: United Nations.
- United Nations. 2017. *Right to Education. UN's General Assembly, 72nd Session*. New York: United Nations.
- United Nations. 2020. *Inequality in a Rapidly Changing World. World Social Report 2020*. Department of Economic and Social Affairs. New York: United Nations.
- Waldfogel, Jane, Irwin Garfinkel, and Brendan Kelly. 2007. "Welfare and the Costs of Public Assistance." In *The Price We Pay: Economic and Social Consequences of Inadequate Education*, edited by C. R. Belfield and H. M. Levin, 160–174. Washington, DC: Brookings Institution Press.
- Wilkinson, Richard, and Kate Pickett. 2009. *The Spirit Level: Why More Equal Societies Almost Always do Better*. London: Allen Lane.
- Wilkinson, Richard, and Kate Pickett. 2018. *The Inner Level: How More Equal Societies Reduce Stress, Restore Sanity and Improve Everyone's Well-Being*. London: Allen Lane.
- World Bank. 2018. *World Development Report 2018. Learning to Realize Education's Promise*. Washington, DC: The World Bank.
- World Health Organisation (WHO). 2013. *The Economics of the Social Determinants of Health and Health Inequalities: A Resource Book*. Geneva: WHO.
- Zajacova, Anna, and Elizabeth Lawrence. 2018. "The Relationship Between Education and Health: Reducing Disparities Through a Contextual Approach." *Annual Review of Public Health* 39: 273–289. doi:10.1146/annurev-publhealth-031816-044628.