Why are some national systems of education more equitable than others?

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Abstract:

Some national systems of education are considered more equitable than others. Equity can be measured along three main dimensions: the strength of the association between students’ social origins (socio-economic status, ethnicity, etc.) and educational outcomes, the degree to which educational outcomes vary between schools, and the size of the gap between high- and low-achieving students (i.e., the “achievement tail”). Previous studies have shown that selective and differentiated educational systems are generally more inequitable than non-selective and comprehensive ones. Nevertheless, some comprehensive systems are less equitable than some selective ones, suggesting that a constellation of social, demographic and educational factors may influence the equity of any given national system of education. This paper uses data from the Programme for International Student Assessment (PISA) to evaluate educational equity in selected Organization for Economic Cooperation and Development (OECD) member countries. It then attempts to explain national differences in educational equity by examining a variety of social, demographic and educational factors. Based on previous research and theory, it is hypothesized that the most equitable educational systems have non-selective and comprehensive secondary schools that are similarly funded and resourced, and exist in societies that have low levels of poverty and group-based inequality. These factors (among others) are integrated into a matrix so that patterns can be more easily seen and compared.

Keywords: Educational equity, comparative education, education policy
Why are some national systems of education more equitable than others?

Introduction

Researchers, policy makers and the lay public in democratic societies generally agree that students should have similar educational opportunities. All students should have access to a quality education, regardless of where they live or how much money their parents earn. Equality of educational opportunity is important because it can provide a level playing field for educational outcomes. In a democratic society, most people would agree that a student’s educational outcomes should be determined by their ability and effort. This means that equality of educational outcomes is not possible since students are unique individuals with different levels of ability and motivation. But accepting that equal outcomes are not possible does not mean that policy makers should not pay close attention to differences between student outcomes. Differences in outcomes due to student ability and effort are acceptable and even commended in meritocratic democracies. On the other hand, differences in outcomes that are due to factors over which students have no control, such as their parent’s educational qualifications, occupation, or financial resources, should be minimized. Thus, educationalists strive to find ways to reduce inequalities in student outcomes based on group differences (gender, immigrant status, socio-economic status, etc.), while accepting that differences between individual students will always exist.

Research has shown that some educational structures or policies can exacerbate group-based inequalities of educational outcomes. For example, we know that sorting students by perceived ability into different educational tracks within schools or even into different educational institutions strengthens the association between socio-economic status and educational outcomes. For this reason many countries have adopted a comprehensive secondary system of education, wherein all students study at the same type of institution (e.g., “high school”). Even in comprehensive secondary systems, however, the association between student SES and educational outcomes is higher in some countries than in others, suggesting that other factors are at work.

This paper examines equity of educational outcomes in a range of countries and provides a typology of equity in national systems of education. Four measures are used to measure equity of educational outcomes. In addition, various characteristics of educational systems are included in the analysis as well. The aim is to compare the equity of educational systems in OECD countries, and then see if equity is associated with particular educational policies or structures. For example, can we say that equitable systems of education tend to share certain characteristics? Demographic and other societal factors are also included in the analysis since they may be associated with educational equity. As Blossfeld and Shavit (1993) found, educational equity can be influenced more by larger political or social policies than by educational policies. In their comparative study of thirteen countries, they found that access to higher education improved only in a few countries that had implemented government welfare policies to equalize living standards. Educational policies, on the other hand, were found to be largely ineffective in reducing inequality in access to higher education.
The main data source for this paper comes from the Organization for Economic Cooperation and Development (OECD). The OECD analyses and disseminates information about a range of policy issues in developed countries, including education policy. They issue reports about education in individual countries (the so-called Education at a Glance series), as well as comparative reports about specific themes (e.g., funding for higher education in member countries). Since 2000, the OECD has also conducted an international assessment of student achievement, called the Programme for International Student Assessment (PISA). PISA tests 15-year old’s literacy in maths, reading, science and problem-solving in all OECD countries as well as some other non-member countries. It is administered every three years, with each cycle including approximately 40 countries and 250,000 students.

The OECD issues a main report for each PISA cycle, and most participating countries issue reports for their own results as well. The OECD has also issued some themed comparative reports using data from PISA. The PISA reports are rich sources of information about not only student achievement but also the large range of student, school and system factors that might explain it. Scattered throughout the PISA reports are discussions of educational equity. One of the aims of this paper is to integrate these various discussions into a cohesive discussion about equity across national systems of education. The main source of data for this paper is the OECD’s PISA 2003 report (OECD, 2004). The demographic data included in the analysis comes from a variety of secondary sources and datasets.

This article examines equity in national systems of education in terms of differences in student outcomes, as measured by mathematics achievement scores on PISA 2003. In other words, we are measuring equity as the extent to which the math achievement of 15-year olds varies within a country. Other measures of equity, such as access to higher education, are not included. To streamline and focus the analysis, I only use one measure of student outcome (math achievement) rather than all of the other PISA subject areas. I chose math achievement because it has been shown to be less strongly associated with social class than reading (OECD, 2004). In future analyses I could include other subjects, but for the purpose of this article achievement in one subject is sufficient. The paper uses four measures for assessing inequality in student outcomes: the strength of the relationship between student SES and achievement; the amount of variation of student achievement explained by differences between schools; the size of the gap between high- and low-achieving students (also known as the “achievement tail”); and the percentage of students who perform at low levels.

Taken together, these four equity measures can be seen as the “dependent variable”, i.e. the variable that we are trying to understand, explain or predict. The paper also includes “independent variables”, i.e. variables that may be able to explain or predict the dependent variable. These variables might help explain why some countries have more equitable student outcomes than others. The paper includes two groups of such variables: 1) demographic and social variables and 2) system variables related to the structures of education. The demographic and social factors include measures about the level of poverty, income inequality and immigration with the society. The analysis also includes characteristics of educational systems, such as the degree of privatization, selectivity and school
choice. All of these variables have been found, or have been suggested, to have an influence on equity of student outcomes. A more detailed discussion of these variables is included in a later section of the paper.

The main approach taken in this paper is to create a typology of equity in national educational systems in a sample of countries that have participated in PISA. The sample will include countries that potentially exhibit different degrees of equity, as well as different demographic contexts. The equity measures for each country, along with a range of educational and social policies that characterize each educational system and its larger social context, are compiled into a table to allow patterns to be seen. A separate table ranks the countries from most to least equitable along each equity measure. Finally, all four equity measure rankings are averaged to create an overall equity rank and score. The aim of the analysis is to: 1) show which countries are more equitable than others, and along what equity dimensions; and 2) include a range of predictor variables to facilitate emerging understanding about why some countries are more equitable than others.

### Inequality in National Systems of Education

This paper uses four measures to evaluate inequality within and across national educational systems. First is the strength of the association between student socio-economic status (SES) and student achievement, as measured by math achievement on PISA 2003. To what extent does student SES explain variance in student achievement? A common aim in democratic societies is to reduce the influence of SES on a student’s educational outcomes. Democratic societies generally support the ideal of meritocracy, wherein a student’s educational outcomes are based on their efforts and abilities rather than their parent’s occupation, educational background or financial resources. Yet student SES has a significant influence on student achievement and is one of the largest predictors of educational achievement and attainment. The goal, then, is to reduce its influence. Some countries have been more successful at meeting this goal than others. A major aim, therefore, is to determine what factors can reduce the influence the SES on student achievement.

The second measure of inequality used in this paper is the degree to which variance in student outcomes can be explained by differences between schools. No two schools are ever completely alike, but in some countries differences between schools are much greater than in other countries. Large differences between schools are problematic from an equity perspective for three related reasons. First, when some schools have markedly better outcomes than others, which school a student attends can have a large influence on future life chances, including further educational opportunities. By necessity, this means that some students are getting a significantly better education than others. Secondly, when some schools are considered to be markedly better than others, the school that a student attends is often determined by the family’s cultural, social and financial resources. As getting into the “right” school often requires significant cultural and financial resources, privileged students are better able to secure access. Conversely families with fewer resources are likely to be shunted into one of the “worse schools.” This can deepen the segregation of students from different social backgrounds into “good” and “bad” schools, which may benefit privileged students but often disadvantages
underserved students. And this leads to the third problem: large differences between schools often lead to increased school segregation by student SES, which in turn is associated with lower student educational outcomes for students concentrated in the lower SES schools. Research has consistently shown that the socio-economic composition of a school has a substantial influence on an individual student’s achievement (Coleman et al., 1966; Rumberger & Palardy, 2005). For example, a student at a higher SES school will typically have a higher PISA score than the same student would have at a lower SES school (OECD, 2004; Perry & McConney, in press). In some countries at least, this association between school SES and academic achievement is similar for all students, regardless of their individual SES (Perry & McConney, in press). In summary, variations in student outcomes that are associated with differences between schools are highly problematic because they reduce equality of opportunity for less advantaged students, and thereby reinforce group-based differences in student outcomes.

The third measure of inequality used in this paper concerns the achievement tail. Across the globe, the performance of privileged students tends to be similarly high, with little variation across countries. On the other hand, the performance of less privileged students varies much more cross-nationally. In some countries, students from lower SES backgrounds do better than comparable students in other countries. The result is that the gap between high and low achieving students varies across countries. In some countries, this gap is quite large, while in others it is relatively small. This means that some countries are better able to support their lower performing students, with the result that these students have higher outcomes. A large achievement tail suggests that only some students are getting adequate support. Conversely, a small achievement tail suggests that schools and perhaps the larger society are making strong efforts to reverse the negative influences of social class, gender or ethnicity on educational outcomes.

The fourth measure of equity shows the percentage of students who are performing at the lowest levels of proficiency. PISA groups student performance into 6 proficiency levels. They then report the percentage of students at each proficiency level, plus those that fall below the lowest proficiency level, Level 1. Students are thus grouped into 7 bands of proficiency for each country. The percentage of students who perform at the highest proficiency level, Level 6, does not vary widely across countries. In most countries, schools are able to cater to highly motivated and able students. The percentage of students who perform at the lowest proficiency levels, however, varies widely across countries. Some countries’ educational systems are much better able to cater to underserved, marginalized or less able and motivated students than others. In these countries, only a small percentage of students perform at low proficiency levels. By contrast, in other countries the number of low-performing students is very high, suggesting that their educational systems are not successfully meeting many students’ needs.

In summary, an equitable educational system is one in which all students, regardless of their social class, place of residence, gender or ethnicity, perform to their potential. Moreover, equitable educational systems cater to all students and are able to support strong outcomes for most of their students. In terms of the equity measures used in this paper, equitable educational systems ensure that academic achievement is not strongly associated with a student’s gender, social
class or other ascriptive characteristic, that the school that one attends does not make a substantial difference in terms of educational outcomes, and that at-risk students are adequately supported so that the gap between low- and high-achieving students is reduced and the number of low-performing students is minimized. It is likely that only a few countries are equitable on all four of these measures.

**Social, demographic and educational factors behind equity**

Many factors can possibly influence the equity of student outcomes within a given country. Some of these factors are related to the ways in which schools are organized, administered and funded. Collectively we can think of these factors as related to educational structures and policies. This paper includes the following education-related variables: the structure of secondary education (comprehensive or differentiated), the academic selectivity of school admissions, the degree of school choice, and the percentage of students that attend private schools. Research has shown that these educational features can shape equitable student outcomes within a country (OECD, 2005), and certainly many researchers have suggested or theorized that market trends such as privatization and school choice have the potential to reduce equity (see for example Gewirtz, Ball, & Bowe, 1995; Lauder & Hughes, 1999; Walford, 1996).

Other factors, however, can influence equity of outcomes within an educational system. As Blossfeld and Shavit (1993) showed, educational policies were actually ineffective in reducing inequality in access to higher education in thirteen countries. Rather, the only countries that were able to improve access were those that had implemented welfare policies to reduce poverty. This study therefore includes some larger social and demographic factors that might influence educational equity, including the size of the country’s population, immigration rates, poverty rates and income inequality. Two of these social variables (poverty and income inequality) are directly related to Blossfeld and Shavit’s findings about the relationship between poverty and educational inequality. Other researchers have also suggested that countries with lower levels of income inequality tend to have more equitable student outcomes (Willms, 1999). The other two variables, size of population and immigration rates, are sometimes mentioned when explaining why some countries seem to have more equitable outcomes than others. For example, the US’s poor overall performance and large achievement gaps are sometimes explained, at least in the lay media, by its large and heterogeneous population, while Finland’s success is perceived to be due in part to its small and homogenous population.

**Findings**

Table 1 provides measures for the four equity measures alongside measures about the social and educational context for the twelve countries included in the sample. Data for the four equity measures comes from PISA 2003, while data for the four social and four educational context variables comes from PISA 2003, the CIA World Factbook, and a secondary source by Förster & d’Ercole (2005). In Table 2, the countries are ranked from most to least equitable along each of the four equity measures. I then create an overall equity score that is an average of the four
separate equity rankings. For example, Finland’s overall equity score is 5 because it ranked #2 on the first equity measure and #1 on the other three equity measures. The lower the overall equity score, the more equitable is the educational system.

Before discussing the patterns seen in the tables, I will first explain some of the less obvious variables.

Column 9 of Table 1, income inequality in the larger society, is shown here by the Gini coefficient, a common measure of income inequality. It is a ratio of the amount of income that the wealthiest individuals earn compared to the least wealthy. Perfect equality would be represented by 0.0, while perfect inequality would be represented by 1.0. The most unequal countries in the world, such as Brazil, have Gini coefficients around .6-.7. The lowest income inequality in the world is found in Scandinavia and former communist European countries.

In column 12 of Table 1, secondary school systems are sorted into two categories: comprehensive and differentiated. Additionally, the length of the gymnasium, the academically selective institution that prepares students for university studies, is noted. In countries that have a 3-year gymnasium, compulsory education lasts 9 years and takes place in a comprehensive institution (i.e., one in which all students attend). The gymnasium is a post-compulsory educational institution for students considering university education, especially in the arts and sciences. Students seeking employment or further study in the vocations or some professions typically attend different institutions in these countries.

Column 11 in Table 1, the percentage of students in private schools, includes students that pay fees as well as those who do not. In some countries, such as the Netherlands, almost all private schools are publicly funded and do not charge fees. On the other hand, most private schools in Australia receive public funds but they all charge fees. Thus, attending a private school in the Netherlands is potentially accessible to all regardless of the family’s financial resources, but in a country like Australia this is not necessarily the case.

Column 13 in Table 1, school selectivity, is a measure of the academic selectivity of secondary schools. The percentage reported is for students that attend schools where the principals consider student academic records very important for admission to the school.

Column 14 in Table 1, school choice, is a proxy measure for the degree of school choice available to families. The column shows the percentage of students that attend a school where the principals considers local residence very important for admission to the school. In countries where this percentage is high, we deduce that most students attend their local school and conversely school choice is not widespread.
<table>
<thead>
<tr>
<th>Country</th>
<th>Mean math score, PISA 2003</th>
<th>% variance in student performance explained by student SESa</th>
<th>% Variance in student performance explained by differences between schools b</th>
<th>Achieve- ment tail (point difference between students at 25th and 75th percentiles c</th>
<th>% of students performing in bottom third proficiency levelsd</th>
<th>Inhabitants (in millions)e</th>
<th>% of population living in povertyf</th>
<th>Income inequality (Gini coefficient)g</th>
<th>Net migration rate (per 1,000)h</th>
<th>% in private schoolsi</th>
<th>Type of secondary school system (C=comprehensive; D=differentiated)</th>
<th>School Selectivityj</th>
<th>School Choicek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>524</td>
<td>13.7%</td>
<td>22%</td>
<td>132</td>
<td>32.9%</td>
<td>21.1</td>
<td>11.2%</td>
<td>30.5</td>
<td>6.34</td>
<td>33%</td>
<td>C</td>
<td>8%</td>
<td>41%</td>
</tr>
<tr>
<td>Canada</td>
<td>532</td>
<td>10.5%</td>
<td>15%</td>
<td>119</td>
<td>28.4%</td>
<td>33.2</td>
<td>10.3%</td>
<td>30.1</td>
<td>5.62</td>
<td>6%</td>
<td>C</td>
<td>13%</td>
<td>75%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>516</td>
<td>19.5%</td>
<td>50.5%</td>
<td>136</td>
<td>36.7%</td>
<td>10.2</td>
<td>4.3%</td>
<td>26.0</td>
<td>0.97</td>
<td>7%</td>
<td>D; 4-8 yr gym</td>
<td>51%</td>
<td>23%</td>
</tr>
<tr>
<td>Denmark</td>
<td>514</td>
<td>17.6%</td>
<td>13.1%</td>
<td>125</td>
<td>36.0%</td>
<td>5.5</td>
<td>4.3%</td>
<td>22.5</td>
<td>2.49</td>
<td>22%</td>
<td>D; 3 yr gym</td>
<td>4%</td>
<td>59%</td>
</tr>
<tr>
<td>Finland</td>
<td>544</td>
<td>10.9%</td>
<td>3.9%</td>
<td>115</td>
<td>22.8%</td>
<td>5.2</td>
<td>6.4%</td>
<td>26.1</td>
<td>0.73</td>
<td>7%</td>
<td>D; 3 yr gym</td>
<td>3%</td>
<td>67%</td>
</tr>
<tr>
<td>Germany</td>
<td>503</td>
<td>22.8%</td>
<td>58%</td>
<td>146</td>
<td>40.6%</td>
<td>82.4</td>
<td>8.9%</td>
<td>27.7</td>
<td>2.19</td>
<td>8%</td>
<td>D; 7-8 yr gym</td>
<td>24%</td>
<td>55%</td>
</tr>
<tr>
<td>Japan</td>
<td>534</td>
<td>11.6%</td>
<td>61%</td>
<td>138</td>
<td>29.6%</td>
<td>127.3</td>
<td>15.3%</td>
<td>31.4</td>
<td>na</td>
<td>27%</td>
<td>C</td>
<td>88%</td>
<td>30%</td>
</tr>
<tr>
<td>Korea</td>
<td>542</td>
<td>14.2%</td>
<td>42%</td>
<td>127</td>
<td>26.2%</td>
<td>48.4</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>58%</td>
<td>C</td>
<td>57%</td>
<td>31%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>538</td>
<td>18.6%</td>
<td>54.5%</td>
<td>137</td>
<td>29%</td>
<td>16.6</td>
<td>6.0%</td>
<td>25.1</td>
<td>2.55</td>
<td>77%</td>
<td>D; 6 yr gym</td>
<td>70%</td>
<td>7%</td>
</tr>
<tr>
<td>Norway</td>
<td>495</td>
<td>14.1%</td>
<td>6.5%</td>
<td>127</td>
<td>44.5%</td>
<td>4.6</td>
<td>6.3%</td>
<td>26.1</td>
<td>1.71</td>
<td>4%</td>
<td>D; 3 yr gym</td>
<td>na</td>
<td>74%</td>
</tr>
<tr>
<td>OECD average</td>
<td>20.3%</td>
<td>33.6%</td>
<td>139</td>
<td>42.5%</td>
<td>45.8%</td>
<td>30.1</td>
<td>11.5%</td>
<td>30.3</td>
<td>0.99</td>
<td>36%</td>
<td>C</td>
<td>3%</td>
<td>72%</td>
</tr>
<tr>
<td>Spain</td>
<td>485</td>
<td>14.0%</td>
<td>17.2%</td>
<td>120</td>
<td>47.7%</td>
<td>40.5</td>
<td>11.5%</td>
<td>30.3</td>
<td>2.92</td>
<td>6%</td>
<td>C</td>
<td>16%</td>
<td>79%</td>
</tr>
<tr>
<td>US</td>
<td>483</td>
<td>19.0%</td>
<td>27.1%</td>
<td>132</td>
<td>49.6%</td>
<td>303.8</td>
<td>17.1%</td>
<td>35.7</td>
<td>2.92</td>
<td>6%</td>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a (OECD, 2004, p. 397); % of variance in student mathematics performance explained by student SES
b % Total variance in student mathematics performance between schools
c Difference in mean score on math between students at the 25% and 75% percentiles; Table 2.5c, p. 356
d % of students performing below Level 1, at Level 1 and at Level 2 proficiency (out of 6 proficiency levels); Table 2.5a, p. 354
f Data from 2000; (Förster & d’Ercole, 2005, pp. p. 72-73)
g Measure of income inequality, whereby 0.0 = perfect equality and 1.0 = perfect inequality; data from 2000, (Förster & d’Ercole, 2005, pp. p. 61-62)
i (OECD, 2004, p. 253)
j (OECD, 2004, p. 417). Percentage of students in schools where principals consider student academic records as necessary or high priority for admittance to the school.
k (OECD, 2004, p. 417). Percentage of students in schools where principals consider student location of student residence as necessary or high priority for admittance to the school.
### Table 2: Country Ranks on Equity Measures

<table>
<thead>
<tr>
<th>Mean math score</th>
<th>Overall Equity Rank (average rank across 4 measures)</th>
<th>% variance in student performance explained by student SESa (low to high)</th>
<th>% Variance in student performance explained by differences between schools b (low to high)</th>
<th>Achievement tail (point difference between students at 25th and 75th percentiles c (low to high))</th>
<th>% of students performing in bottom third proficiency levelsd (low to high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland (544)</td>
<td>Finland (5)</td>
<td>Finland</td>
<td>Finland</td>
<td>Finland</td>
<td>Finland</td>
</tr>
<tr>
<td>Korea (542)</td>
<td>Canada (10)</td>
<td>Finland</td>
<td>Norway</td>
<td>Canada</td>
<td>Korea</td>
</tr>
<tr>
<td>Netherlands (538)</td>
<td>Denmark (22)</td>
<td>Japan</td>
<td>Denmark</td>
<td>Spain</td>
<td>Canada</td>
</tr>
<tr>
<td>Japan (534)</td>
<td>Korea (22)</td>
<td>Australia</td>
<td>Canada</td>
<td>Denmark</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Canada (532)</td>
<td>Australia (23)</td>
<td>Spain</td>
<td>Spain</td>
<td>Korea / Norway</td>
<td>Japan</td>
</tr>
<tr>
<td>Australia (524)</td>
<td>Norway (23)</td>
<td>Norway</td>
<td>Australia</td>
<td>Australia</td>
<td>Australia</td>
</tr>
<tr>
<td>Czech Rep. (516)</td>
<td>Spain (24)</td>
<td>Korea</td>
<td>US</td>
<td>Australia / US</td>
<td>Denmark</td>
</tr>
<tr>
<td>Denmark (514)</td>
<td>Japan (31)</td>
<td>Denmark</td>
<td>Korea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway (495)</td>
<td>US (36)</td>
<td>US</td>
<td>Netherlands</td>
<td>Netherlands</td>
<td>Norway</td>
</tr>
<tr>
<td>Spain (485)</td>
<td>Czech Rep. (37)</td>
<td>Czech Rep.</td>
<td>Germany</td>
<td>Japan</td>
<td>Spain</td>
</tr>
<tr>
<td>US (483)</td>
<td>Germany (44)</td>
<td>Japan</td>
<td>Germany</td>
<td></td>
<td>US</td>
</tr>
</tbody>
</table>
Equity across National Educational Systems

- As measured by the overall equity score, the 12 countries in this sample can be put into 4 groups:
  - Finland and Canada have the two most equitable education systems as averaged across the four equity measures.
  - After the top group is a gap, then a group of 5 countries that have a similar equity score: Denmark, Korea, Australia, Norway and Spain.
  - After a sizeable gap comes the third group of 4 countries: Japan, Netherlands, US, and the Czech Republic.
  - The fourth “group” comprises Germany, which ranks far enough behind the 3rd group to be considered separately.

- The percent of students who score in the bottom two proficiency levels (column 6 on Table 2) is a very strong predictor of overall mean country score (column 2 on Table 2); the countries are ranked in almost the same order, other than a few countries that move up or down slightly. The countries that have the highest mean mathematics score on PISA are those that are able to lift a large number of students out of the lowest proficiency levels.

- Income inequality within the larger society does not appear to be strongly associated with equitable student maths achievement in OECD countries. It is plausible that high levels of income inequality would be associated with high levels of educational inequality. Yet the association is not neat, especially with the low to moderate levels of income inequality seen in many OECD countries. For example, Germany, Netherlands and the Czech Republic all have low levels of income inequality, yet have inequitable educational outcomes. Canada has higher income inequality than all of these countries (slightly higher than the OECD average), yet more equitable educational outcomes.

- Similarly, low levels of poverty within a society do not guarantee equitable educational outcomes. Two of the most inequitable countries, Germany and the Czech Republic, both have very low rates of poverty. And Japan (and presumably Korea) are moderately equitable with higher than average poverty rates.

- High performing countries tend to be equitable ones, but again, this is not a neat association. Some high performing countries are only moderately equitable (e.g., Netherlands, Korea, Japan), while some equitable countries are low performing (e.g., Spain or Norway). It is unlikely, however, that a very inequitable country could be high-performing.

- Academic selectivity in school admittance policies in compulsory education is strongly associated with inequitable outcomes, but not necessarily overall performance. Japan, Korea and the Netherlands are good examples here. Likewise, lack of academic selectivity does not guarantee equitable outcomes, as shown by the US case.
• Some equitable countries have a differentiated system of secondary education with selective gymnasia (Finland, Norway, Denmark); the key is to delay entry into different institutions until after compulsory education.
• High performing, highly equitable countries (Finland and Canada) share the following: low to average levels of poverty, low to average income inequality, comprehensive schooling for compulsory education and related to this, low levels of academic selection and low to moderate levels of school choice.

Conclusion

The findings of this study show that a simple solution to achieving high-performing, equitable student outcomes does not exist. As the case of Norway shows, it is not enough to be small, homogenous, rich and egalitarian, with an educational system characterized by low levels of privatization, school differences, school choice, and academic selectivity. On the other hand, it is unlikely that a country that is none of these things could be high performing and equitable. High performing and equitable educational systems tend to have some things in common, but the parameters are fairly broad and open. For example, we can probably say that high levels of income inequality are not likely to promote educational equity, but that moderate levels can be tolerated. Finally, it would appear that a constellation of factors interact with each other in ways that can either promote or reduce equity of outcomes for students. The good news is that countries do not have to be “perfect” on all counts - i.e., have low levels of poverty or income inequality or abolished academically selective schools. But it does appear that the more of these things they can achieve, the greater the likelihood of achieving high performance and high equity in student outcomes.
References


