Effective Policies, Successful Schools: Lessons for the U.S.

October 12, 2020

#LearningInProgress
• **1.5bn** students were impacted by school closures
• **Remote learning** has become the lifeline for learning but doesn’t address the social functions of schools
• Access, use and quality of **online resources** amplify inequality
• **Accreditation** at stake
• Huge needs for **just-in-time professional development**
• Re-prioritisation of curricula and strategies for **re-opening** of schools needed
• But lots of highly **innovative learning environments** emerging
Present value of lost GDP due to Corona-induced learning loss (average 1/3 school year lost)

Source: Hanushek and Woessmann (OECD, 2020)
...can distinguish between fact and opinion, based on implicit cues pertaining to the content or source of the information.
Poverty need not be destiny.
PISA 2018: Learning time ≠ learning outcomes

Score points in reading per hour of learning time

Productivity

Learning out of school

Time in school

Intended learning time at school (hours)

Study time after school (hours)

Score points in reading per hour of total learning time

Country representatives:
- Finland
- Germany
- Switzerland
- Sweden
- Estonia
- New Zealand
- Japan
- Czech Republic
- Macao (China)
- Netherlands
- Ireland
- France
- Australia
- Norway
- Iceland
- Canada
- Belgium
- Slovenia
- Latvia
- Lithuania
- Luxembourg
- Portugal
- Slovak Republic
- Denmark
- Poland
- Hungary
- Singapore
- Austria
- United States
- Chinese Taipei
- Israel
- Croatia
- Korea
- Russia
- Bulgaria
- Greece
- Italy
- Turkey
- Chile
- Brazil
- Colombia
- Mexico
- Costa Rica
- Montenegro
- Peru
- Qatar
- United Arab Emirates
- Thailand
- Dominican Republic
What strategies will be used for school reopening? (Averages across 36 countries, May 2020)

Table 17

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive return of students (e.g. by age cohorts)</td>
<td>70%</td>
</tr>
<tr>
<td>Classroom based teaching and learning in shifts</td>
<td>60%</td>
</tr>
<tr>
<td>Hybrid model of distance and classroom based teaching and learning</td>
<td>50%</td>
</tr>
<tr>
<td>Return to normal scheduling and student attendance</td>
<td>20%</td>
</tr>
<tr>
<td>Student and teacher returns contingent upon results of antibody testing</td>
<td>10%</td>
</tr>
<tr>
<td>Classroom teaching conducted in schools’ outdoor spaces</td>
<td>10%</td>
</tr>
</tbody>
</table>
Remote learning – a reality check
Students’ online learning environment at home

OECD average

Fig V.9.1

- A link to the Internet at home
- A quiet place to study at home
- A computer for school work at home

Advantaged schools vs. Disadvantaged schools
An effective online learning support platform is available

The school has sufficient qualified technical assistant staff

Teachers are provided with incentives to integrate digital devices in their teaching

The number of digital devices connected to the Internet is sufficient

Effective professional resources for teachers to learn how to use digital devices are available

Teachers have the necessary technical and pedagogical skills to integrate digital devices in instruction

Teachers have sufficient time to prepare lessons integrating digital devices

The number of digital devices for instruction is sufficient

The availability of appropriate software is sufficient

Digital devices at the school are sufficiently powerful in terms of computing capacity

The school’s Internet bandwidth or speed is sufficient

The number of digital devices for instruction is sufficient

Percentage of students in schools whose principal agreed with the following statements

OECD average

United States

OECD average
## School guidelines and practices for the use of digital devices

<table>
<thead>
<tr>
<th>Statement</th>
<th>OECD average</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular discussions with teaching staff about the use of digital devices for pedagogical purposes</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Its own written statement about the use of digital devices</td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td>A specific programme to prepare students for responsible Internet behaviour</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>A specific policy about using social networks (e.g., Facebook) in teaching and learning</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>A programme to use digital devices for teaching and learning in specific subjects</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Its own written statement specifically about the use of digital devices for pedagogical purposes</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>Scheduled time for teachers to meet to share, evaluate or develop instructional materials and approaches that use digital devices</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>A specific programme to promote collaboration on the use of digital devices amongst teachers</td>
<td>50</td>
<td>60</td>
</tr>
</tbody>
</table>

Percentage of students in schools whose principal agreed with the following statements
School's written statements about the use of digital devices and reading performance

OECD countries

R² after accounting for GDP per capita = 0.13

R² = 0.23

R² after accounting for GDP per capita is not statistically significant

R² = 0.15

All countries/economies

Based on principals’ reports

Percentage of students in schools whose principal reported that their school has its own written statement about the use of digital devices

Average reading score

Percentage of students in schools whose principal reported that their school has its own written statement about the use of digital devices

OECD average

Higher reading performance

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330 350 370 390 410 430 450 470 490 510 530 550

OECD countries

B-S-J-Z (China)

Singapore

New Zealand

United Kingdom

Canada

United Arab Emirates

Thailand

Kazakhstan

Albania

Qatar

Bosnia and Herzegovina

North Macedonia

Moldova

Moldova

Montenegro

Serbia

Uruguay

Kosovo

Argentina

Brazil

Indonesia

Dominican Republic

Australia

Austria

Czech Republic

Iceland

Estonia

Japan

Mexico

Luxembourg

Korea

New Zealand

Belgium

Korea

Macao (China)

Japan

Portugal

Austria

Lithuania

Israel

Belgium

Russia

Ukraine

Switzerland

Brunei Darussalam

Malaysia

Albania

Singapore

Jordan

Kosovo

Kosovo

Montenegro

Colombia

Costa Rica

North Macedonia

Baku (Azerbaijan)

Panama

Georgia

Philippines

Dominican Republic

B-S-J-Z (China)

Moldova

Hong Kong (China)

Singapore

Moldova

Hong Kong (China)

Singapore
Aligning resources with needs
Shortage of material resources hinders learning

Mean index

Based on principals’ reports
Shortage of material resources in advantaged and disadvantaged schools

Mean index difference

**Advantaged – disadvantaged schools**

Greater shortages of material resources in **advantaged schools**

Greater shortages of material resources in **disadvantaged schools**

Based on principals’ reports
A lack of educational materials
Inadequate or poor quality educational materials
A lack of physical infrastructure
Inadequate or poor quality physical infrastructure

Change in reading performance associated with principals reporting that the school’s capacity to provide instruction is hindered to some extent or a lot by the following:

Before accounting for students’ and schools’ socio-economic profile
After accounting for students’ and schools’ socio-economic profile

OECD average

Based on principals’ reports

Educational materials include textbooks, ICT equipment, library, laboratory material, etc. Physical infrastructure includes school building, grounds, heating/cooling systems, lighting and acoustic systems, etc.
An more **equitable** allocation of material resources relates to **better** reading performance

Positive values indicate that principals of socio-economically advantaged schools are more concerned than principals of disadvantaged schools.

Based on principals’ reports

Strength of the relationship between the index of shortage of educational material and schools’ socio-economic profile

More shortages of educational materials in advantaged schools

Based on principals’ reports

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Average reading score

OECD countries

**R² = 0.32**

**R² = 0.24**

Fig V.5.11
Aligning resources with needs

Staff resources
Percentage of students in schools whose principal reported that the school's capacity to provide instruction is hindered to some extent or a lot by the following factors:

- A lack of teaching staff
- Inadequate or poorly qualified teaching staff
- A lack of assisting staff
- Inadequate or poorly qualified assisting staff

Significant differences between “a lack of teaching staff” (“a lack of assisting staff”) and “inadequate or poorly qualified teaching staff” (“inadequate or poorly qualified assisting staff”) are shown in a darker tone.

Based on principals’ reports.
Shortage of education staff in advantaged and disadvantaged schools

Fig V.4.2

Based on principals’ reports

More shortage of education staff in advantaged schools

More shortage of education staff in disadvantaged schools
Aligning resources with needs

Learning time
Learning time in foreign language lessons in advantaged and disadvantaged schools

Fig V.6.2

Advantaged – disadvantaged schools

More foreign language lessons in advantaged schools

More foreign language lessons in disadvantaged schools

United Arab Emirates Qatar
Philippines Singapore
Hong Kong (China) Portugal
Norway Jordan
New Zealand Jordan
Macao (China) Jordan
Hong Kong (China) Jordan
Portugal Jordan
Greece Jordan
Norway Jordan
New Zealand Jordan
Malta Jordan
Baku (Azerbaijan) Jordan
Brunei Darussalam Jordan
Chile Jordan
Peru Jordan

OECD average

United States Jordan
Serbia Jordan
United Kingdom Jordan
Romania Jordan
Slovenia Jordan
Chinese Taipei Jordan
Ukraine Jordan
Bulgaria Jordan
Thailand Jordan
Colombia Jordan
France Jordan

Bosnia and Herzegovina Jordan
Costa Rica Jordan
Germany Jordan
Belgium Jordan
Morocco Jordan
Hungary Jordan

Difference in learning time per week (hours)

Learning time in foreign language lessons in advantaged and disadvantaged schools
Study help after regular hours, by schools' socio-economic profile

Difference between advantaged and disadvantaged schools:

OECD average

United States

Better in disadvantaged schools

Better in advantaged schools

Based on principals’ reports

Table V.6.19
Students with access to a room for homework at school and reading performance

**OECD countries**

- R² = 0.29

**All countries/economies**

- R² = 0.38

Higher reading performance

More access to a room for homework at school
Students in schools where the staff provides help and reading performance

**OECD countries**

- **R² = 0.28**

**All countries/economies**

- **R² = 0.19**

- Higher reading performance
- More help from staff

![Graph showing the relationship between higher reading performance and more help from staff in schools, with OECD countries highlighted.

Fig V.6.17]
Reconciling flexibility and equity
Reconciling flexibility and equity

Public and private schools
Student enrolment in public and private schools

- Government or public schools
- Government-dependent private schools
- Government-independent private schools

%
Change between 2000 and 2018 in enrolment in public and private schools

PISA 2003 was used for countries and economies (marked with an asterisk) that did not participate in PISA 2000.
Reading performance in public and private schools

Difference in reading score between students in public schools and students in private schools (private-dependent and private-independent combined)

Public schools performed better

Private schools performed better

Score-point difference

Observed performance difference

After accounting for students’ and schools’ index of economic, social and cultural status

Fig V.7.4

Difference in reading score between students in public schools and students in private schools (private-dependent and private-independent combined)
Reconciling flexibility and equity

Selection
School selectivity and reading performance

Change in reading score when the principal reported that the factors are "sometimes" or "always" considered for admission to school

- 51% Student's record of academic performance (including placement tests)
- 42% Recommendation of feeder schools
- 31% Parents' endorsement of the instructional or religious philosophy of the school
- 58% Whether the student requires or is interested in a special programme
- 45% Preference given to family members of current or former students
- 59% Residence in a particular area

The percentage of students in schools where the factors are "sometimes" or "always" considered for admission to school is indicated next to each factor.

Based on principals’ reports

OECD average

Fig V.3.4
Ability grouping into different classes (some or all subjects)

- Percentage of students in schools whose principal reported that students are grouped by ability into different classes for some or all subjects

Fig V.3.6
Percentage of students in schools whose principal reported that students are grouped by ability in their classes for some or all subjects.
Ability grouping **within classes for all subjects and reading performance**

**OECD countries**

*Fig V.3.11*

R² = 0.09

R² = 0.23

Percentage of students in schools that group students by ability in their classes for all subjects

Based on principals’ reports
Ability grouping within classes for some subjects and reading performance

OECD countries

R² = 0.08

All countries/economies

R² = 0.18

Based on principals' reports
Evaluation and assessment
Collecting data on student outcomes in schools
Percentage of students in schools that systematically record students’ test results and graduation rates

Based on principals’ reports
Percentage of students in schools whose principal reported that achievement data are posted publicly

Fig V.8.6
Percentage of students in schools whose principal reported that the school seeks written feedback from students

Fig V.8.7
Building strong foundations
Students who had **not** attended pre-primary education

Percentage of students who had not attended pre-primary education or had attended for less than a year

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**Fig V.2.3**

The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS). A socio-economically disadvantaged (advantaged) school is a school in the bottom (top) quarter of the index of ESCS in the relevant country/economy.
Performance advantage of students relative to those who had less than a year of pre-primary schooling

- After accounting for students' and schools' socio-economic profile
- Before accounting for students' and schools' socio-economic profile

Number of years attended pre-primary education:
- One year
- Two years
- Three years or more

Score-point difference in reading for OECD average.
Thank you

Find out more about our work at www.oecd.org/pisa

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- PISA 2018 Results (Volume II): Where All Students Can Succeed

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Email: Andreas.Schleicher@OECD.org
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