Education: The Man Made Trap
What we have seen so far

- There are clear benefits of education, both monetary and non-monetary.
- These benefits are experienced even by those who complete just some more years of primary education (like in Indonesia)
What we have seen so far

- However, the quality of education is very poor: schools deliver little to the poor.
- And yet, it does not seem that difficult to improve quality a lot: Pratham’s programs show tremendous progress with high school graduates.

What could be going on?
Parents tend to believe that education is a lottery ticket:
- In Madagascar, 70% of parents thought that a secondary education could lead to a government job. In fact, 33% of secondary school graduates get one.

Parents tend to believe that returns to primary education are low, and returns to higher education higher
- Madagascar: 6% per year for primary education, 12% per year for secondary education, 20% for tertiary education
Madagascar: real and perceived returns to education

![Graph showing perceived earnings and actual earnings over time. The graph indicates a steady increase in both perceived and actual earnings as education level increases.](image-url)
Consequence of Elite Bias in Education

- The parents
- The teachers
- The students
The Parents

1. Parents believe that a little bit of education may not be worth the cost: unless the child can get enough education to get a lottery ticket, it is not worth it.
2. If they have several children, they may decide to treat them unequally: make sure that one gets enough education, even if this means that the other gets very little
Parents: Evidence

- Parents are sensitive to perceived returns to education when they make their education decision.
- In Madagascar, when they were shown the returns to education in a simple way, parents who were initially overestimating the returns reduced effort, and those who were underestimating increased effort.
<table>
<thead>
<tr>
<th></th>
<th>Without any degree</th>
<th>Primary school with CEPE</th>
<th>Lower secondary school with BEPC</th>
<th>At least high school with BAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>34 524 Ar</td>
<td>44 119 Ar</td>
<td>73 771 Ar</td>
<td>163 344 Ar</td>
</tr>
<tr>
<td>Male</td>
<td>47 637 Ar</td>
<td>60 877 Ar</td>
<td>101 793 Ar</td>
<td>225 389 Ar</td>
</tr>
</tbody>
</table>

Source: Calculations from the 2003 Household Survey
Parents: Evidence

- Parents discriminate between their children
  - In Burkina Faso, a study found that children are more likely to be in school if they do well on a cognitive test, but less likely if their sibling’s do well (conditional on their own cognitive score)
  - In Colombia, another study found that when some kids were given a conditional cash transfer to stay in school, other kids were less likely to attend.
Parents: Evidence

- Parents are sensitive to actual job opportunities that education open, but increasing the opportunity may actually increase inequality.
- Experiment in India (Robert Jensen): for 3 years, recruiters were instructed to recruit boys and girls who had English education for BPO centers.
The results of the BPO experiment

• The results
  ○ BPO recruitment increased girls education
  ○ No average effect on boys BUT unequal effect:
    ◆ Increase in education for boys whose parents said at baseline they wanted to send them to the city
    ◆ Decrease in education for boys whose parents said at baseline they wanted to keep them in the farm.
Consequence of Elite Bias in Education

- The parents
- The teachers
- The students
Teachers

1. Teachers will teach to the top of the class, even when the majority of the students cannot follow what is going on.
2. If teachers feel that the majority of their students are not “up to the mark” they will tend to blame the students, or the parents, and lose motivation: low effort.
3. It will be difficult to convince teachers to change their practices, even with training.
The Pratham experiments provide evidence in this direction:

- The program was effective in teaching all children, but teachers were not very interested in taking it up, except in the remedial summer camps.
- They can teach the basic, but they are not very interested to do it....
Teacher: The Evidence

- An experiment in Kenya provides clear evidence of most of these points (Duflo, Dupas, Kremer)
- 120 schools in Kenya were provided with an extra teacher to cut class 1 in two
  - In 60 schools teachers were randomly assigned to a class
  - In 60 schools, students were divided into 2 groups based on prior achievement.
- What do we expect to see if teachers tend to teach to the top: the story in picture
No Tracking: Student Ability and Teaching Level
Tracking: Low Student Ability and Teaching Level
Tracking: High Student Ability and Teaching Level
Expected results if teacher have elite bias

- Teachers would teach at a lower level in the bottom track, so closer to what the low ability children can understand: that will help them.
- In the top track, students will not benefit from better targeting however:
  - They will have better peers
  - The teacher may work harder because he now mainly has students he care about.
- So it is possible that everyone benefits from tracking.
The results: Effect on teacher effort

<table>
<thead>
<tr>
<th></th>
<th>All Teachers</th>
<th>Civil-Service Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Teacher in school</td>
<td>Teacher in school found in class teaching</td>
</tr>
<tr>
<td>Tracking School</td>
<td>0.041</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>(0.021)**</td>
<td>(0.039)**</td>
</tr>
<tr>
<td>Bottom Half x Tracking School</td>
<td>-0.049</td>
<td>-0.034</td>
</tr>
<tr>
<td></td>
<td>(0.029)*</td>
<td>(0.042)</td>
</tr>
<tr>
<td>Observations</td>
<td>2098</td>
<td>1782</td>
</tr>
<tr>
<td>Mean in Non-Tracking Schools</td>
<td>0.837</td>
<td>0.609</td>
</tr>
<tr>
<td>F test</td>
<td>2.718</td>
<td>7.693</td>
</tr>
<tr>
<td>Prob &gt;F</td>
<td>0.011</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Learning: Tracking is good for everyone

(1) Tracking School 0.138 0.175 0.191 0.18 0.078* 0.077** 0.093** 0.092* 0.07
(2) In Bottom Half of Initial Distribution -0.036 x Tracking School (0.07)
(3) In Bottom Quarter -0.044 x Tracking School (0.08)
(4) In Second to Bottom Quarter -0.014 x Tracking School (0.07)
(5) In Top Quarter 0.028 x Tracking School (0.08)

Initial attainment percentile 0.018 0.02 0.022 0.001*** 0.001*** 0.001***

Individual Controls no yes yes yes yes
Observations 5796 5282 5282 5282

Total effects on bottom half and bottom quarter
Coeff (Row 1)+Coeff (Row 2) 0.155
Coeff (Row 1)+Coeff (Row 3) 0.136
Students

- Students would easily get discouraged and demotivated when they stop understanding “school is not for me”
- They would be particularly sensitive to situations that reinforce the stereotypes that they are not good at school
Students: The evidence

- Huge student absenteeism: up to 30% student absence in Bihar! Part of this is due to other reason (work, health) but in many cases, students are just despondent

- “stereotype threat”: Low caste and high caste student were asked to solve mazes. Low caste students did more poorly when they full name (with caste) was announced publicly before starting the name
Discussion

What does all of this tell us we should do about education policy?