Boarding School Management (and PTAs) in China’s Poor Rural Areas

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on behalf of the REAP team
Around 2000: Ministry of Education launches “School Merger Policy”

Number of Elementary Schools in Rural China

1999: 450,000
2007: 270,000

Large centralized schools (located in the township / town) are supposed to replace the village “teaching outposts”
In theory, the new merged schools are supposed to have better facilities ... and better teachers ... in fact, there is change!
Despite good intentions of policy makers, a REAP field study showed that one of the most common complaints of parents about all services was about school mergers.
If not long commutes, students stayed in the classrooms ...  

However, in many schools there were no special facilities for boarding schools ... beds were made by pulling the desks together ...
In response: government launched boarding school construction program … this way children would not have to commute and they would have more adequate living facilities for the days that they were in school…
But, even after doing this, there still appears to be a missing component: very few schools have experience in managing students dorms.

What are the situation?

What are the consequences?
REAP’s recent study shows that attention to management of boarding schools is almost non-existent.

Percent of schools with full time manager

Only 5 percent of the boarding schools have full-time dormitory managers ....
Why am I so short?

World Health Organization (WHO) Height Standards

Boarding school students in rural areas are 9 centimeters shorter than the median height reference values set by the WHO. Non-boarding students are five centimeters lower.
Stunting---Percentage of students lower than the median height for WHO reference values by two standard deviations.

% of student with Z-scores < -2.00

Non-Boarding School Students (%) | Boarding School Students (%)

为什么我比别人矮？
One of potential solution of improving boarding school management:

Training of dorm managers
3-step approach to improve health and increasing school performance by enhancing dorm management

**Step 1**

BASELINE
(Testing for):
- Psych. Health
- Cognitive Skills
- Time Allocation
- Behavior**
- Nutrition / Health

Gather teacher perceptions

**Step 2**

THE INTERVENTIONS

New Protocol for Dorm Management – Teacher-run

5 treatment schools / ≈ 500 boarding students

**Step 3**

Evaluation
same as baseline

No intervention

5 control schools / ≈ 400 boarding students
Where did we collect the data?

Step 1a—doing baseline survey

We chose 10 schools in 3 counties and conduct the baseline survey...
Step 1b ---choose program schools

Location of the 10 treatment (●) and control schools (○) in Shaanxi Province

1. 韩岔中心小学
2. 石湾镇中心小学
3. 党岔中心小学
4. 南塔中心小学
5. 劳山中心小学
6. 东沟初级中心小学
7. 桥镇中心小学
8. 曹坪中心小学
9. 蔡玉窑中心小学
10. 宽坪完全小学
3 steps approach to improving health and increasing school performance by enhancing dorm mgt.

**Step 1**

**BASELINE:**
- Testing for:
  - Psych. Health
  - Cognitive Skills
  - Time Allocation
  - Behavior**
- Nutrition / Health

Gather teacher perceptions

**Step 2**

*Our project implementation*

Create a Protocol for Dorm Management – Teacher-run
And Train Dorm Managers

5 schools / ≈ 450 boarding students

No intervention

4 schools / ≈ 350 boarding students

**Step 3**

**Evaluation**

same as baseline

与基线一致
Training Curriculum

1. Registration to school
2. Morning
3. Dining
4. Morning Management (e.g., airing bedding; cleaning / sanitizing)
5. Nap Time
6. Afternoon Management (e.g., similar to am)
7. After School Play / Activities
   School days / Weekends
8. After dinner / before bed activities (both evening study hall +
evening hygiene)
9. Sleeping (Night Management)
10. Health Care
11. Training Managers
3 steps approach to improving health and increasing school performance by enhancing dorm mgt.

**Step 1**

BASELINE:
- Testing for:
  - Psych. Health
  - Cognitive Skills
  - Time Allocation
  - Behavior**
- Nutrition / Health

Gather teacher perceptions

**Step 2**

Our project implementation

New Protocol for Dorm Management – Teacher-run Training

5 schools / ≈ 450 boarding students

Evaluation

same as baseline

**Step 3**

No intervention

4 schools / ≈ 350 boarding students
Results:

the effect of boarding school management intervention
The decline in the incidence of reported illnesses after the boarding school management intervention

% decline

Control Group  Treatment Group
The difference of math score before and after the boarding school management intervention

Number of points increase
The difference of Chinese score before and after the boarding school management intervention

Number of points increase

<table>
<thead>
<tr>
<th></th>
<th>Control Group</th>
<th>Treatment Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>8</td>
<td>10</td>
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</tbody>
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Comparison between control and treatment groups after the boarding school management intervention.
The difference of anxiety index (anxiety test score) before and after the boarding school management intervention

说明培训后干预学校寄宿学生的对学习能保持更理性的态度
Summary:

- Boarding schools (like them or not) are the future venue of rural education … huge rise in the number boarders (more are coming) …

- But, despite the large amount of hardware improvements, there are still fundamental problems with boarding schools [for example: anthropometrics are worse for boarders …] … consequence: some of the most vulnerable children in China are living in boarding schools (it is an opportunity for intervention)

- And, our results show that there are, in fact, (relatively) simple interventions that can have significant effects on health, education and psychological health (we estimate that we could run training programs for US $3 dollars / child / year)
But, this is only part of the effort that NSDRC/REAP made under the boarding school management project

- RIGHT HERE in DAYU Elementary School (that is, the school we are at now), the Project Team also implemented a exploratory pilot project on PTAs

- Instead of having Prof. Shi talk (he is shy about speaking English) … he would like to invite you to watch a video that he and his team put together …
Summary

- Obviously, the PTA work in this school is extremely interesting …
- Even to most of us economists, who are committed to rigorous Impact Evaluation, there is little doubt that this project has had a huge impact in improving the educational environment in the school …
- Ford and NSDRC—and especially Dayu—should be proud of the job that they have done …
Big question: upscale or not
(not just PTAs)

• We need to be cautious at this stage, of course, not to advocate a large upscaling of PTA programs …

• In fact, literature is mixed on this. Especially in developing countries, PTAs have sometimes been shown to not only have little impact on mean test scores/grades, but, PTAs have been associated with rising intra-class inequality … the logic is easy to follow: the parents of the good students come and participate and the students’ educational performance increases, while parents of the poorer students are unable to or do not come and the scores of their children suffer (either from frustration or at least do not improve) …

• And, with one observation (Dayu) in this project, (like it or not) we do not know if PTAs are successful in China … was it the PTA program that improved Dayu’s educational environment? Or the dynamic Mr. Wang, the principal? Or one or two active parents (that may or may not exist in other schools)?
Future work

- REAP is only an advocate (and then a cautious one) when they can promote a program on the basis of evidence-based research … and, understanding the shortcomings of IEs like ours (e.g., was it context specific; etc.), REAP often proposes that upscaling itself should be gradual and evaluated along the way …

- So: PTAs? Or Other Interventions?

- PTAs at most should proceed cautiously … a next step would be a modest sized intervention in 5 or 10 or something like that number of schools (along with a rigorous IE)
Perhaps a more interesting … safer … future course …

Platform #2: “Best Buy Tool Kit” for Improving Educational Performance through Better Nutrition and Health

Module 1: Getting your vitamins and minerals; getting better grades
- Project 1: Health checkups for deficiencies
- Project 2: Multivitamins in Schools
- Proposed Project 3: Nutritional training for parents
- Proposed Project 4: School breakfasts / lunches

Module 2: Deworming tablets to improve health and education
- Project 1: WormCount 2010
- Proposed Project 2: Delivery of deworming medicines
- Proposed Project 3: Public Health/Sanitation Education

Module 3: Improving Sanitary /Living Conditions in Elementary Boarding Schools
- Project 1: Training boarding school managers in elementary schools

Module 4: Better vision; better performance
- Proposed Project 1: Testing; prescription and dispensing glasses for the nearsighted
- Proposed Project 2: Eyeglasses: promoting uptake thru better information

Also cost effective ➔ see proposal in your packet …
Health and Nutrition Best-Buy Tool Kit for Improving Educational Outcomes

Concept Note: Proposed Project in Sichuan Province

Local/Regional Department of Health
Department of Education
CDC

Rural Education Action Project (REAP)
REAP China Core Members: CAS; Northwest University, Xi’an; others
Freeman Spogli Institute, Stanford University

Multivitamins ➔ Eliminate Anemia ➔ $4/semester
Eyeglasses ➔ Correct Nearsightedness ➔ $8/year
Boarding School Mgt. Training ➔ Improve Sanitation/Living Conditions ➔ $3/student
Deworming Tablets (twice/year) ➔ Eliminate intestinal worms ➔ $0.3/year
Nutritional Training for Parents ➔ Raise nutritional status of children ➔ $2/family

Healthy, well-nourished child that feels better and performs better in school …. PRICELESS
Platform #3: Vocational Education Training (VET)

Module 1: Tuition Reduction to Expand Access

Proposed Project 1: Reducing tuition to expand access for the poor to Vocational Education Training

Module 2: Vouchers to Improve Choice

Proposed Project 1: Providing vouchers to enhance student schooling decisions and employment outcomes

Module 3: Counseling and Information on Educational / Employment Options

Proposed Project 1: Direct counseling on educational and employment options to improve student schooling decisions and employment outcomes

Proposed Project 2: Website / other dissemination

Module 4: Tracking Value-Added of VET

Proposed Project 1: Creating a value-added monitoring system for vocational schools

Proposed Project 2: Assessing the Impact of Value-Added Information on Vocational School Quality
Platform #4: Remedial Care in Education through Computer Assisted Learning (CAL)

Module 1: CAL in migrant schools (urban)
Deliver game-based remedial tutoring to migrant students during school.
Project 1: Math, 5th Grade
Projects: Math, English, Chinese, Grades 1-6

Module 2: CAL in boarding schools (rural)
Deliver game-based remedial tutoring after school for boarding students
Proposed Project 1: Math, 5th Grade
Projects: Math, English, Chinese, Grades 1-6

Module 3: CAL via mobile device
Proposed Project 1: Deliver game-based tutoring software to disadvantaged students via handheld devices.

Module 4: Internet Access - CAL and beyond
Proposed Project 1: Deliver game-based tutoring software to community and e-learning centers in disadvantaged communities.
Project 2: Provide open internet access in communities