



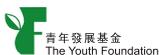
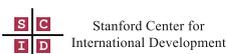
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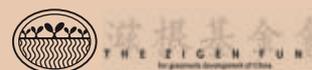


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Money for Matriculation: Conditional Cash Transfers to Reduce Junior High Dropouts in Rural China

REAP Brief #114





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Money for Matriculation:

Conditional Cash Transfers to Reduce Junior High Dropouts in Rural China



**Missing from the Classroom,
Missing Out on the Future**

Yanyan grew up in a poor, rural village in Shaanxi Province. She dropped out of junior high school to work for her cousin picking red dates for 250 RMB a month (about US\$35). After paying for rent and food, she sends the remaining monthly wage (about 100 RMB or US\$15) to her parents. The money helps them purchase medicine for her father's injured back and her mother's chronic headaches.

Haibin dropped out of school to look for work in a city 2000 kilometers away from his hometown. His father, Old Zhang, explained that Haibin had been contacted by a labor contractor outside of his junior high boarding school one afternoon. He was offered more money per month than Old Zhang had made in the previous three years. Old Zhang said that he was worried that his son was dropping out of school, but he did not object when his son insisted that he was "old enough" to make the decision.

Unfortunately, students who are missing from the classroom today are also likely to be missing out on their future. Whether out of necessity or choice, dropping out before completing junior high school education means Yanyan and Haibin may have trouble finding gainful employment in the future. As unskilled workers, dropouts primarily work in labor intensive, sweatshop-like factories. Although such low wage and low skill jobs may seem lucrative now, they will begin to disappear as China transitions to an economy characterized by higher wages. To pay high wages, factory owners need their workers to produce at high levels of productivity. Higher productivity jobs require basic skills like math, English, computing, and Chinese language.

In the context of a shifting industrial structure and rising wages, in 10 or 20 years children like Haibin and Yanyan may be unemployable. A student is unlikely to have much



of a future without command of basic skills for the workplace—skills such as math, Chinese language, and English—that a junior high and high school education provides.

Children like Yanyan and Haibin lead us to wonder: **just how serious is the dropout problem in China? What kinds of students tend to drop out? More importantly, why are they dropping out and what can be done to keep them in school, for their own future and for China's?**

25 Percent Dropout Rate in Poor, Rural China



Even though official statistics place the national dropout rate for junior high at two percent, this statistic may be misleading. First, as a national aggregate, this number does not reveal variation. Poor, rural areas are likely to have a far higher dropout rate. Second, published figures are likely to understate the problem. Principals and superintendents fear reporting junior high dropout rates because by law their students should be staying in school.

Given the uncertainty regarding the numbers of rural junior high dropouts, REAP set out to collect

data on the prevalence and causes of dropouts from poor, rural areas. The results we found were shocking: in our survey of over 7,800 students in 46 schools in four poor counties across two provinces in rural inland China, we found a 14.2 percent dropout rate for grades seven and eight. Assuming students continue to drop out at this rate between eighth and ninth grade, on average more than 25 percent of students who enter a junior high school in seventh grade will leave before grade nine. As dropouts, they will enter the workforce sorely lacking in the basic skills that will be needed to compete with better educated urbanites in coming years.

The dropout problem is therefore deeply troubling. If the junior high dropout rate REAP found is consistent across all other poor counties in China, there are roughly 600 thousand students dropping out of junior high school each year. This does not include the large numbers of students who drop out immediately after junior high and during high school—another phenomenon for which there is little reliable data. Those students who drop out during junior high school will be particularly impaired in their future job search.

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Who Drops Out?

The typical dropout...

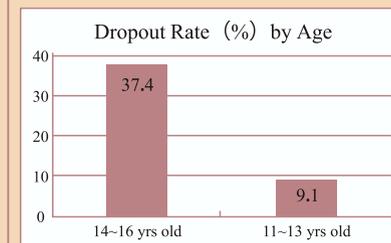


...comes from a poor family.



...has more than two siblings.

...has parents who did not graduate from primary school.



...is older than other students.



...helps the family take care of one or both parents who are chronically sick or permanently injured.

This girl dropped out to care for her parents, who have chronic illnesses.



...performs poorly on standardized tests.

...was held back at least one grade in primary school.



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Why Do Students Drop Out?

Troubled by this 25 percent dropout rate, REAP partnered with Zigen, an NGO with a long history of working in China's poorest areas, to understand why students drop out. We found four broad reasons: insufficient income, rising opportunity costs, poor academic achievement, and psychological/emotional factors.

Insufficient Disposable Income

One reason that students drop out is that their parents are too poor to pay for their schooling. In recent years the government has instituted subsidies and fee waivers that eliminate tuition and textbook fees and reduce costs for boarding students in public schools through grade nine. However, despite these reductions in costs, families are still typically responsible for transportation, extra books and school supplies, uniforms, and various other costs associated with schooling. Although a rural family may have assets, such as a house, vehicle, or livestock, these typically cannot be used to pay for the child's schooling, as the family needs them to get by. As such, when a household is poor, a child's schooling may not be the highest priority.

Families without two working parents are likely to be at particular risk of having their child drop out. Two wage earning parents can—in most cases—afford to send their child to junior high (though they may choose not to). However, if one of those parents gets sick, injured, or for another reason cannot earn an income, there is a much higher likelihood their child will drop out to help support the family.

Rising Opportunity Cost

Even if a family is not poor in an absolute sense, increasing opportunity costs associated with schooling can induce students to drop out. If a student can earn high wages without completing junior high school education, he/she or his/her family may consider future schooling unnecessary.

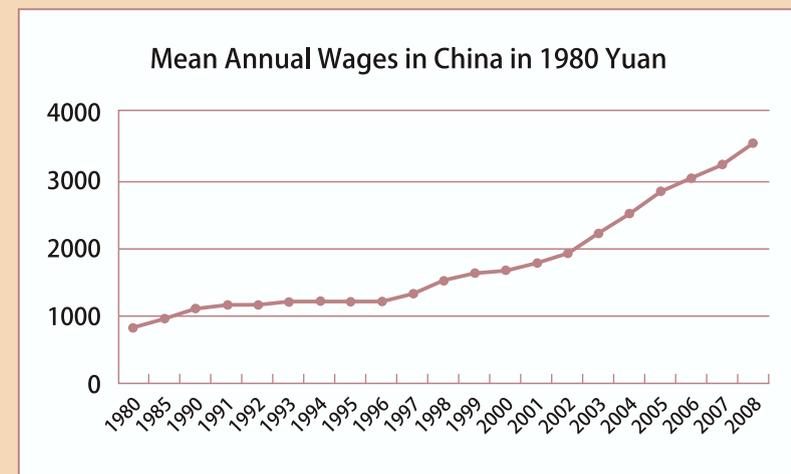
Some relevant factors make the choice to leave school and go to work easier to understand. First, recent labor shortages, especially in labor intensive industries, have increased wages even for low skill jobs. The average migrant worker's wage has risen to well over 1000RMB (US\$150) per month, which is equivalent to the average annual income for many rural farmers.

Second, the workforce is more mobile today than at any other time in China's history. Workers can easily migrate to areas with better paying jobs. Indeed, the migrant worker population in China is estimated to have exceeded 200 million in 2010. This increased mobility enables workers from nearly anywhere in the country to pursue higher paying opportunities in China's cities. These circumstances work to raise the opportunity cost of staying in school.

Finally, even if a child does not acquire a wage earning job, he/she may drop out simply to allow family resources to focus on a sibling's education. Dropping out to care for younger siblings or elderly family members is also often thought of as a valuable contribution to the family unit.



These posters are help wanted advertisements for factories, where labor shortages have been driving wages up over the past decade (as seen the graph below).



Poor Academic Performance in a Competitive Schooling Environment

Even if students believe that more education is tied to better life chances, those with low academic performance may drop out because they believe they cannot effectively compete for future educational opportunities. In other words, they see their personal returns on future education to be lower than dropping out and working. China has an extremely competitive educational system where students are routinely evaluated through standardized tests. Spaces in high schools and universities are limited, and only high performing students can attend. Taken together, these factors may encourage poorly performing students to seek employment rather than persist in a seemingly fruitless endeavor.

学校	语文	数学	英语	物理	化学	总分	平均分
三原中学	187	19394	76.67	45	23.94	0	0.00
富平中学	511	20405.5	75.47	135	28.55	0	0.00
合阳中学	242	17200	71.42	75	8.20	0	0.00
三原中学	187	18281	69.28	188	58.76	28	19.29
富平中学	511	27642	73.47	287	48.91	74	34.40
合阳中学	242	16200	66.95	67	27.89	18	7.44
三原中学	187	19292	52.24	36	19.27	0	4.86
富平中学	511	22981.5	42.41	52	19.18	0	0.99
合阳中学	187	19188.5	34.17	6	3.97	0	0.00
三原中学	187	18202	43.78	85	49.15	19	9.94
富平中学	511	20804	48.77	276	42.27	62	12.20
合阳中学	187	1718	38.28	42	27.91	2	1.32
三原中学	187	1785	37.34	78	38.89	18	9.94
富平中学	511	16287	31.91	124	24.27	16	3.13
合阳中学	242	1540	38.34	40	17.77	0	0.00

This poster lists the overall performance of a school's students in the provincial high school entrance examination. Sometimes a majority of the students in rural areas will fail standardized tests like this one. At this point, there is no option but to enter the workforce or one of China's lower quality vocational education programs.

Teacher Attitudes, Dramatic Events, and Other Psychological Factors

The competitiveness of China's school system can create other pressures that encourage students to drop out. Teachers have incentives to get as many students as possible into higher grades. Not all students, however, can make it. As a result, teachers—who often teach classes of enormous size (up to 50 or 60 or more students per class)—will often focus on the better performing students and pay little attention to the poorer performing students. There is little toleration of bad behavior, and expelling students is one way of getting rid of students without having them “count” as a dropout. Teachers can then focus more attention on the better students.

Students on the lower part of the educational performance distribution may react to poor treatment from teachers by dropping out. For example,

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a student who perceives his/her teacher showing favoritism may come to dislike school. Even if a student recognizes that schooling will lead to better future earnings, the drudgery of school may be too much to bear. Take the case of Liu Qingmei, who dropped out because a male teacher severely scolded her during a student meeting. Sometimes, these dramatic events so profoundly influence students that money is of secondary concern. As Liu says, “I would not go to school even if it were free because I hate the teachers!”

Toward a Solution to the Dropout Problem

Finding scalable and practical approaches to keep kids in school is one of REAP's core aims. Local governments in poor areas are often cash strapped, and therefore have trouble investing in schools or new schooling programs unless they can convince higher authorities to help pay for them. This serves to discourage local actors from experimenting with possible solutions, no matter how promising they appear. For this reason, REAP has partnered with NGOs, charitable organizations, and corporate responsibility offices to pilot measures that may turn out to help keep junior high children in school. As always, REAP is careful to design these measures so that if they are found to be effective they can be implemented on a larger scale in other areas in China.

What Has Been Done in Other Countries?

Instead of starting from scratch, we first looked at effective solutions to similar problems in other countries. One particularly promising approach to reducing dropout is a conditional cash transfer (CCT) program. Put simply, a CCT program will pay parents to keep their kids in school. The World Bank reports that more than 20 developing countries have implemented some type of CCT program in the areas of health, education or both. These programs have been most successful in Latin America. Since the mid-2000s CCT programs have spread to other countries around the globe.

A CCT program may reduce dropouts through several mechanisms. The promised cash serves as disposable income for the family, which can use the payment to keep the child in school. The payment can also reduce the opportunity cost associated with attending school for students who are on the verge of heading into the city to find a job. And finally, the payment may signal to parents and students that continued learning is valuable.

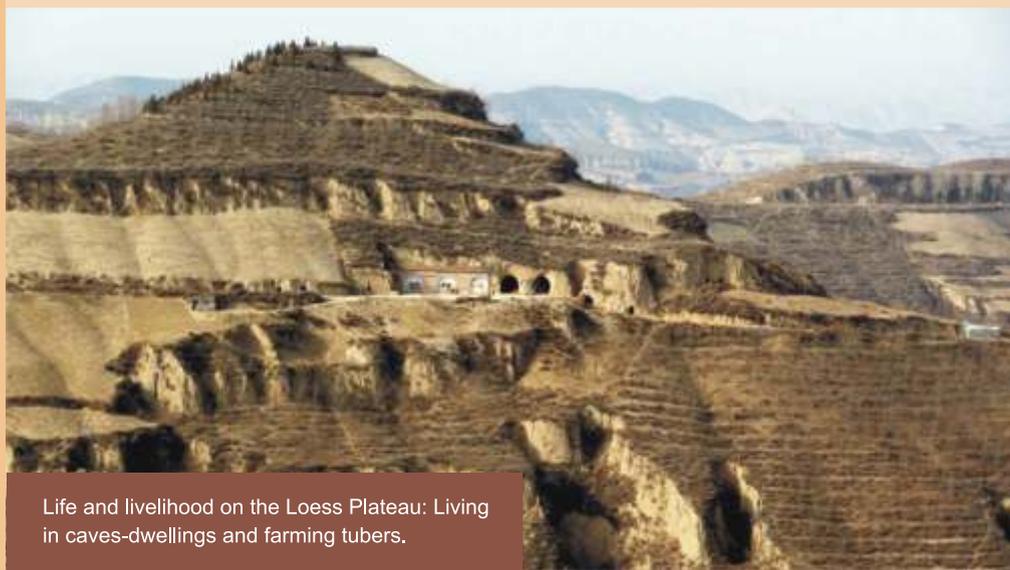
Because there is good evidence that CCTs work in other rural contexts, REAP decided to try a CCT a poor, rural area in China. Oddly, China has been absent from the list of countries that have experimented with CCTs as a way to improve educational outcomes.

You Can Receive 500 RMB Per Semester!

In partnership with Zigen, REAP rolled out a pilot CCT in program in a poor county in Shanxi Province. All ten junior high schools in the county participated in an initial baseline survey. There were a total of 1507 grade seven students in the sample schools. Focusing on students from poor families, we identified the 300 poorest grade seven students in the county. Half of these students' families were randomly selected to receive a 500 RMB (US\$75) per semester cash award if their child were still enrolled the following semester. The other 150 students were assigned to a control group and did not receive this commitment.



The study site is located in China's Loess Plateau.



Life and livelihood on the Loess Plateau: Living in caves-dwellings and farming tubers.

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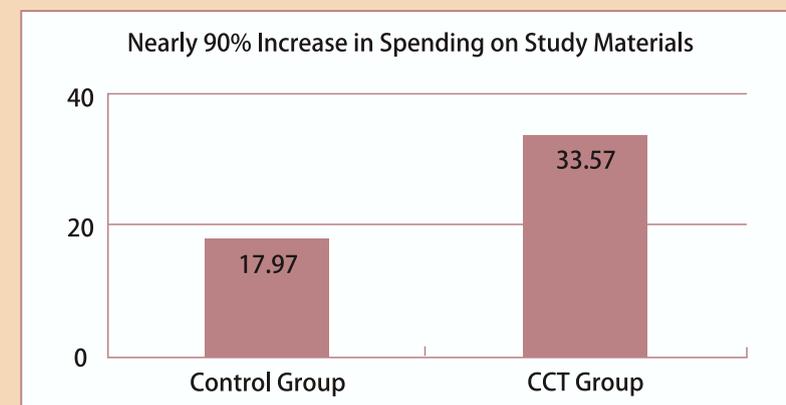
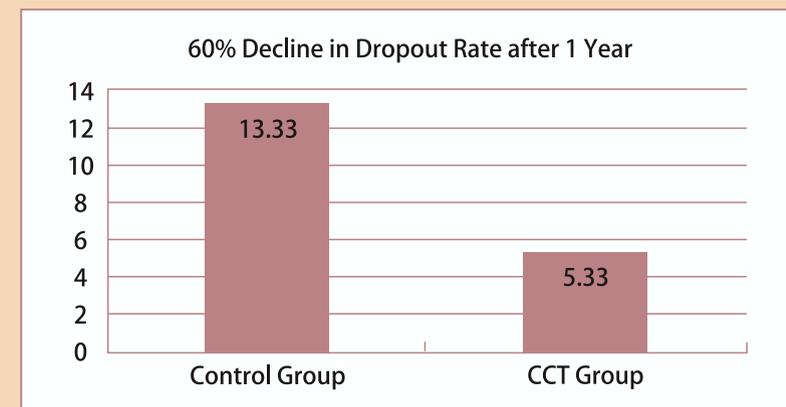


Reducing Dropout by 60%

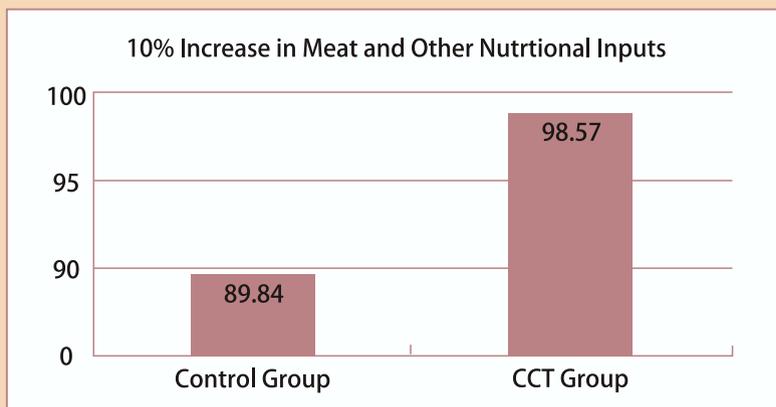
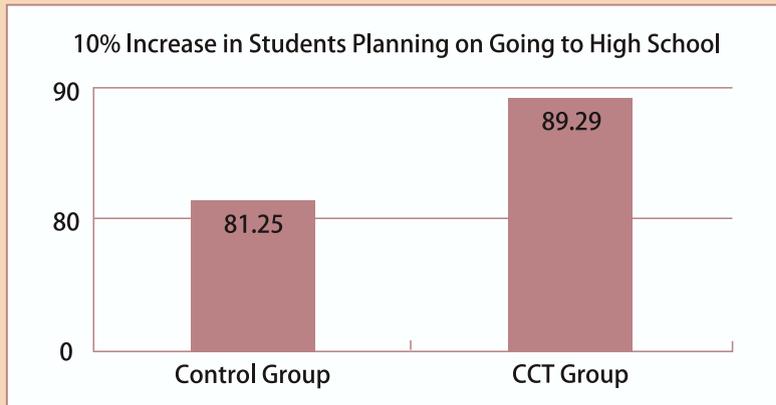
What was the result of the Zigen-REAP CCT pilot program? Just one year after its implementation, the group that received the cash transfer was 60% less likely to drop out, 90% more likely to spend money on study materials, 10% more likely to eat a more nutritious diet, and 10% more likely to report a plan to continue their education past junior high graduation.

Indeed, the students did not take these transfers lightly: take the story of Guo Huiwen, who called just two hours after her family received a cash transfer to express her thanks. Huiwen's family lives in a cave carved into a hillside on the Loess Plateau. The family was planning to have Huiwen drop out of school to work, so that they could better support her brother through junior high and high school. Huiwen told us, "Please tell whoever is giving this money that I am very thankful—now I can stay in school."

Is the reduction of dropouts shown in the study significant? Given that the students (and their families) received the equivalent of only one month's



factory wage for having stayed in school for an entire year (two semesters), the study's findings are certainly noteworthy. The intervention was especially influential among girls, younger students, and students who performed poorly academically.



As China modernizes, students who drop out will not be able to participate in the future economy.

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What Next Steps Can Be Taken to Reduce Dropouts in Rural China?

Dropping out of junior high is a serious problem in China. If one of every four students drops out of junior high schools in the poorest areas of rural China, 600 thousand children per year will miss out on future employment and upward mobility. Their communities and families likewise will suffer. More troubling, students who receive less care, come from poorer families, and have lower academic performance are typically those to drop out first. Yet these are the students who most need the stability and training provided through education. Ultimately, if these individuals have difficulty finding a job when they are in the prime of their working careers—in their 20s and 30s—they could choose to drop out of society by joining gangs or otherwise causing social problems in China.



As this slogan in the village encourages, "Finish junior high before you go to work."

However, REAP and Zigen's CCT study shows that at least one approach to reducing dropouts in rural China exists. The CCT program reduced dropout rates by 60% among the poorest students in the sample. Aside from dropout rates, the program also increased access to academic resources and improved nutrition among intervention students. Moreover, students with poor academic performance particularly benefitted from the program. Finally, the program is cost effective: it was easy to implement, required only one year to generate an impact, and each cash transfer cost only 1000RMB per year.

Although REAP's first CCT program appears to address the factors that cause some students to drop out, countering high opportunity costs and psychological factors requires new approaches. A modest amount of money was able to convince some poor families to keep their children in

school. The money also encouraged some poorly performing students to do better. However, psychological factors cannot be addressed by money alone, and high opportunity costs associated with increasing wages may still be convincing many students to drop out despite the offer of a modest cash transfer.

REAP's goal is to keep children like Yanyan and Haibin in school. Whether through cash transfers or counseling, our aim is to ensure that they—and the communities and families that depend on them—have a bright future.

Acknowledgements

REAP would like to gratefully acknowledge the collaboration of Zigen, a non-governmental organization working on a variety of education projects in rural China; the bureaus of education of each of the counties in the study; and the principals and teachers in the 46 schools in the study.

We would also like to give a special thanks to Jade Chien, Funden Wang and his wife (and their foundation, IET) and LICOS (KULeuven) for the financial and moral support.



For more information about the Rural Education Action Project's work on financial aid for poor rural students, and to learn about our many other projects to address rural education problems please visit:

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