

# Can Access to Information Increase Community Monitoring & Service Provision? Evidence from a School Intervention in Mexico

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Pre-Analysis Plan  
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## 1. Background

Misappropriation and leakage of public funds remains a major impediment to improve service provision for poor people in developing countries (World Development Report, 2004). As a solution, policymakers and academics have championed information as a tool to make citizens more effective advocates for their rights. While there is some evidence that information can reduce leakage of resources (Reinnika and Svensson 2003), and increase citizens' access to their entitlements (Banerjee et al. 2016), the success of these interventions depends on the willingness of a reformist government to disseminate relevant information. In contexts where government agencies do not disseminate information, or do so partially, Freedom of Information (FOI) laws could help citizens to learn about the "benefits and services they are entitled to and whether they are receiving the right amounts" (Banisar 2006, 7).

Growing anecdotal evidence suggests that FOI laws have helped poor people gain access to government-subsidized food programs, and education. Yet there is little systematic evidence of the causal relation between the right to information and public service provision (Darch and Underwood 2009). A notable exception is Peisakhin and Pinto (2010)'s study, which draws from a field experiment in India where a group of confederates were randomly assigned to submit an information request under the Right to Information Act shortly after filling an application for a ration card. Compared to the control group, confederates in the treatment group were more successful in getting a card, and their waiting times were substantially shorter. Although these findings are encouraging, it is unclear if they can be extended to contexts where the benefit to be accessed is not a private, but a public good.

We partnered with Mexico's National Institute for Access to Information (INAI), and the local NGO *Ciudadanos por la Transparencia* (CxT) to evaluate the effects of two interventions. In a first treatment arm, INAI and CxT conduct training sessions to encourage the use of the access to information system among parents with school-aged children in Mexico. During the training session, trainers describe the workings of the system, explain how to submit requests of information, and illustrate how the system works using as an example a federal transfer program, *Escuelas al Cien* (E100), which transfers resources to public schools in impoverished areas of the country with the objective of improving schools' infrastructure. After showing parents the publicly available information about the E100 program, and how to request additional information, trainers encouraged parents to demand accountability and to monitor the completion of the E100 works in their schools. In a second treatment arm, INAI and CxT disseminate information about E100, including the total amount of resources allocated to a school, the amount of resources disbursed, the progress of projects, and avenues

through which parents could request more information and demand accountability. The effects of these two treatment arms will be compared to a control group.

The study takes place in the state of Quintana Roo, Mexico. Our sample includes 100 preschool and primary schools, which have been allocated E100 resources, and are located in municipalities with low levels of criminal activity. Although federal resources have been allocated, there is a substantial delay in the implementation of the program. In March 2018, the program reported that in average 41% of the allocated resources had been disbursed to the schools in our sample, and 23% of the public works had been completed. From this group of 100 schools, 40 schools were randomly assigned to receive a training session, 20 schools were randomly assign to receive the information, and 40 schools were randomly assign to the control group. Out of the 40 schools receiving the training sessions, in 20 randomly selected schools the school principal was encouraged to attend the training session, and in the rest there was not such explicit encouragement. We used simple randomization to assign schools to the various experimental groups. In the schools assigned to receive a training session, CxT recruited 10 to 15 parents to participate in the session. In the schools assigned to receive the information, CxT distributed flyers to approximately 20 percent of the parents. At endline, we survey 15 parents per school in all our experimental groups. Hence, our sample will include 100 schools, and 1500 school parents.

## **2. Data Analysis Plan**

The objectives of the study are to assess whether the interventions motivate citizens to demand accountability from their schools, as well as to increase their access to services and programs to which they have a right. Broadly, we expect that the training and information interventions will lead parents to try to monitor the public resources allocated to schools, both in general and specifically with respect to the E100 program. To measure these outcomes, we will submit requests of information to measure if the relevant government agencies have received requests of information pertaining to the implementation of the E100 program in our experimental schools. In addition to formal information requests, we will examine – through survey questionnaires – whether parents interacted with the schools through other methods such as by reaching out to school principals or the PTA.

If monitoring of public resources by parents is successful, this may lead to an improvement of the school facilities and infrastructure. To measure these outcomes, we will collect administrative data of the E100 program, including the share of allocated resources that have been disbursed, and the progress of projects, if funded. We will collect this information 2 and 1 months prior to the intervention, as well as 2 and 4 months after treatment. Finally, with the endline survey, we will explore if the interventions influenced parents' evaluations of their school's infrastructure.

To estimate intent-to-treat effects of the interventions, we will begin our analysis specifying a difference in means test, or differences in proportions, comparing: 1) schools assigned to the training sessions versus schools assigned to control; 2) schools assigned to the information-only treatment versus schools assigned to control; 3) schools assigned to the training sessions versus schools assigned to the information-only treatment; and 4) schools assigned to the training session without the school principal versus schools assigned to the training session with the school principal. Next,

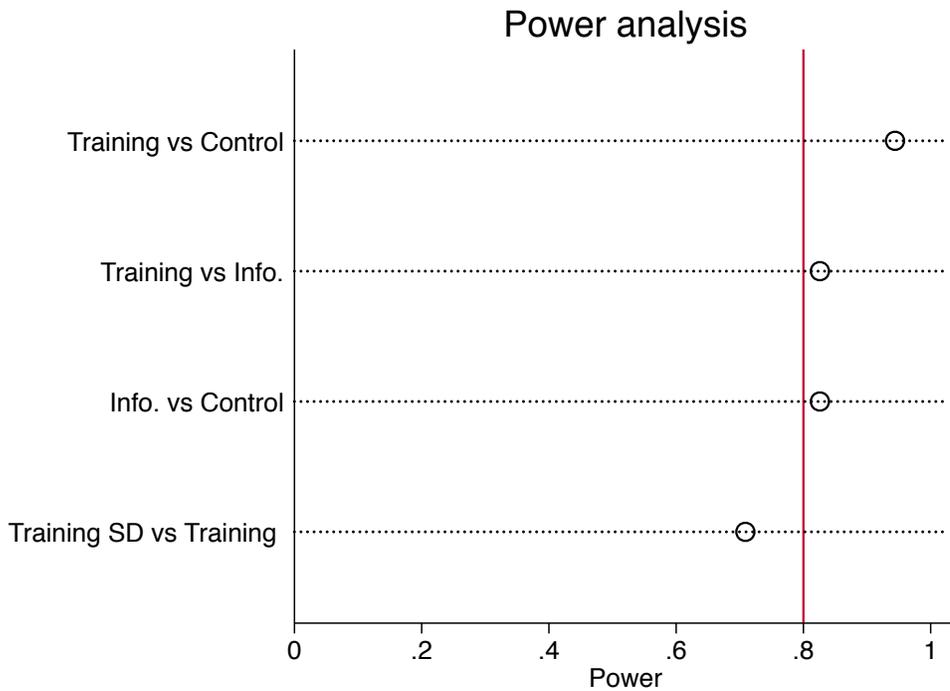
we will estimate treatment effects with difference-in-differences models when baseline measures of the dependent variables are available.

At the individual level, for the means (proportions) tests, we will average outcomes at the school level, and conduct the tests with the grouped data. Then, using the individual level data, we will estimate effects regressing outcomes on treatment dummy variables, using school fixed effects. We will report standard errors clustered at the school level, which is the unit of randomization, for individual outcomes. Hypotheses tests will be conducted using two-sided tests, and p-values from corresponding t-tests will be reported.

As mentioned, our plan is to estimate intent-to-treat estimates. However, we will also report compliance with assignment to treatment. In particular, in the training sessions we collected attendance data to record parents' participation and the presence or absence of the school principal.

## **2.1. Power calculations**

For our power calculations, we used two studies as benchmarks. First, for our school-level outcomes, we consider Reinikka and Svensson's (2003) study of local capture in Uganda. In their setting, an informational campaign reduced the "missing" funds allocated to schools by 0.4 standard deviations. Their dependent variable is roughly comparable to our dependent variable of disbursed E100 funds as a share of allocated total funds. We think our interventions are likely to be comparable in strength to R&S's (2003), and perhaps our training sessions are a stronger treatment. Because at the school-level we have 100 units, we will focus our analysis on the power of the difference-in-differences models, which will leverage the repeated measurement of the outcome variable. We assume a 95% confidence level, a correlation between baseline and endline outcomes of .7, and we take into account that we can measure the outcome three times before the intervention, and two times post-intervention. The following graph plots the power that each of our comparisons would have under these assumptions.



At the individual level, our benchmark is Banerjee et al. (2015)'s study of the effects of information on the amount of rice purchased. They find an effect size of 0.3 standard deviations. Our experiment will have 100 clusters (schools) with 15 school parents per cluster. We expect to get clusters to contain a very similar number of parents hence we assume a coefficient of variation of cluster size of 0.90. We also assume that school fixed effects will be predictive of the outcome, so we assume a baseline measure of adjustment of 0.80, and that the intra-cluster correlation is around 0.15. For a 95% confidence level and an effect of 0.3 standard deviations, we will be able to correctly reject the null hypothesis approximately 81 percent of the time.

## 2.2. Primary Outcomes

In the next section, we provide more details on our main outcome variables, measurement, and hypotheses.

### **H1: School parents in the training and information groups will exert more effort to monitor the use of public resources than the control group**

We will analyze if the training and focused information generate requests for information about the use of E100 resources by schools, and more generally about any issue. We will test for effects in the short (two months) and medium run (four months after the intervention). We will also investigate if interventions lead to more monitoring of the use of public resources through other methods – aside from just formal information requests. These measures will be captured through post-intervention surveys and will include measures such as reaching out to school principals, the school's oversight committee, or other local leaders regarding the management of school resources.

Outcomes:

- (1) Number of information requests about the use of E100 per school  
Source: Administrative data
  
- (2) Number of information requests about the use of E100 with a successful response by relevant government agencies  
Source: Administrative data  
Note: We expect to have access to administrative data detailing the relevant government agencies' responses to the information requests, if any. With this data, we will code the number of information requests with a successful response per school. "Successful" will be defined as a response from the relevant government agency that provides the requested information clearly to the parent.
  
- (3) Number of queries to INIFED's website about E100 per school.  
Source: Administrative data.  
Note: Although this information should exist according to our implementing partners, we are not sure if INIFED records and systematizes it.
  
- (4) Did respondent request any information about public services? About what? And to whom?  
Source: Endline survey  
**Survey Question:**  
In the past 6 months, have you requested any information about public services?  
If yes: you mentioned you recently requested information about public services.  
What exactly did you request the information about? (i.e. E100 program or some other issue or concern)  
And, to whom did you direct the request? (i.e. info request system, oversight committee, PTA, other local leader)

The working hypotheses are that both interventions will lead to more information requests about the E100 program and in general, and to more school parents reporting that they reached out to the school principal or the oversight committee to ask about E100 compared with the control group. We hypothesize that the training will have a larger effect than information alone given the intensity of the treatment and the close personal interaction with program implementers. We will also explore if the training sessions generate a larger effect when the school principal is invited to the session compared to when the school principal is not invited to the session. Analyses will be conducted in both the short (two months after the intervention) and medium (four months after the intervention) run. We expect larger effects in the medium run.

We suspect that the number of information requests could include many zeros. If this is the case, a linear regression may not be appropriate. Hence, we will also specify a negative binomial regression, and a zero-inflated model.

**H2: Interventions will increase the share of disbursed resources compared to the control group, particularly 4 months after treatment**

Outcome:

- (5) E100 disbursed resources as a share of total allocated resources.  
Source: Administrative data (INIFED public reports).

The working hypotheses are that both interventions will lead to an increase in disbursed resources as a share of total allocated resources compared to the control group. We hypothesize that the training will have a larger effect than information alone given the intensity of the treatment and the close personal interaction with program implementers. We will also explore if the training sessions generate a larger effect when the school principal is invited to the session compared to when the school principal is not invited to the session. Analyses will be conducted in both the short (two months after the intervention) and medium (four months after the intervention) run. We expect larger effects in the medium run.

Importantly, we will conduct two-sided tests to examine treatment effects. While our working hypothesis is that more information requests will add more pressure on schools to implement the E100 program more efficiently and effectively, there is the potential that in schools which are suffering severe delays in implementation, additional monitoring or increased oversight by parents may lead to pauses in implementation in order to assess what issues or problems are at the play. Given this possibility, we will conduct two-sided tests for analyses examining H2.

### **H3: Interventions will lead to faster progress towards completion of projects, particularly 4 months after treatment**

Outcome:

(6) INIFED's reported structural progress of E100 projects per school.

Source: Administrative data public (INIFED public reports).

The working hypotheses are that in the schools assigned to the training, and in the schools assigned to receive the focused information, there will be more progress towards completing the infrastructure works part of the E100 program than in the control group. In addition, we will assess if the effect of the training is greater than the effect of the targeted information alone. As before, we hypothesize that the training will produce greater effects than the targeted information-only treatments. We will also explore if the training sessions generate a larger effect when the school principal is invited to the session compared to when the school principal is not invited to the session. Analyses will be conducted in both the short (two months after the intervention) and medium (four months after the intervention) run. We expect larger effects in the medium run. Although we expect positive effects, additional monitoring or increased oversight by parents may lead to pauses in implementation in order to assess what issues or problems are at the play. Therefore, we will conduct two-sided tests similar to the analysis of H2

## **2.3. Heterogeneous Treatment Effects**

We will also be looking for various heterogeneous treatment effects.

### **H4: School parents with higher levels of literacy will exert more effort to monitor the use of public resources**

Moderator:

(7) Literacy levels of respondent (+ H1 outcomes)

Source: Endline survey

We have some theoretical priors that the intervention will be less effective among the ultra-poor and illiterate. We intend to measure literacy rates of parents via a post-intervention survey.

**H5: School parents whose children attend schools with greater delays with disbursement and implementation of project works will exert more effort to monitor the use of public resources**

Moderator:

- (8) The extent of program delays in schools (+H1 outcomes)  
Source: Administrative data public (INIFED public reports).

We hypothesize that the status at which the implementation works are will influence how parents respond to the intervention. Our assumptions are that we will find greater treatment effects for parents whose children attend schools which are experiencing greater delays with the implementation of the infrastructure works. Similarly, we expect greater effects for schools that have spent less of the allocated funds of the E100 program. These measures will be taken from baseline administrative data, which includes a continuous variable indicating the progress of the works. The theoretical prior for this hypothesis is that parents who have the most to gain – in that their schools are progressing at lower rates – will be more easily moved to action by the intervention compared to parents whose schools are more or less progressing on target.

**H6: Treatment effects will be lower in schools with higher ELF**

Moderator:

- (9) The ethnic diversity of the school in general  
Source: Administrative data from school (if available)

We will explore the extent to which the ethnic diversity of the sampled schools impede or augment treatment effects. At this point in time, we do not have available administrative data for this moderator. We will attempt to collect this information directly from school directors when our enumerators visit the schools for the endline surveys.

**2.4. Secondary Outcomes**

We will also investigate a series of secondary outcomes for which our theoretical priors are weaker, yet we believe that there is some evidence to suggest that the intervention may move these outcomes. These are outcomes that can either be intermediate outcomes that lead to more oversight by parents or also outcomes caused by the intervention itself that may or may not be related to subsequent behavior change. We remain agnostic about whether these are mechanisms or final outcomes for this analysis.

**H7: Interventions will increase levels of internal and external political efficacy of parents**

Outcomes:

- (10) Does respondent believe that they have the capacity to make a change if there was something they were unhappy about?

Source: Endline survey

**Survey Question:**

Would you say that you have a lot, some, a little or no influence in making your village/community a better place to live?

Would you say that you have a lot, some, a little or no influence over local government decisions that affect your village/community?

- (11) Does respondent believe that if they reached out to their representative with an issue or concern that they their demand will be addressed?

Source: Endline survey

**Survey Question:**

If there were an issue or concern regarding your children's school, how likely is it that the municipal government will do their best to respond to the issue?

We expect to see movement in the individual levels of internal and external political efficacy. *Internal political efficacy* is the belief and confidence of one's ability to understand and engage effectively in the political world. In other words, an individuals' belief that they are able to understand political facts and processes and that one feels they possess the capacity to influence politics successfully (Almond & Verba 1965; Balch 1974; Campbell, Gurin, & Miller 1954). If our interventions arm individuals with information and increase their knowledge about their rights as well as the process through which to exercise those rights, they may increase an individual's confidence and belief that they have the skills to make a difference. On the other hand, if individuals' efforts to inform themselves and monitor the use of public resources do not succeed, then this could hurt their sense of internal political efficacy. We also believe that the training and targeted information may influence one's external political efficacy. *External political efficacy* is the belief that one's representatives will be responsive to their needs and will work in the best interest of their constituents (Lieberman et. al. 2014; Converse 1972; Balch 1974; Craig 1979). As before, if our interventions trigger a positive chain of effects, this may lead to increases in external political efficacy. However, if individuals' efforts to inform themselves and monitor E100 resources are not productive, this may hurt their perceptions of external political efficacy.

**H8: Interventions will increase levels of coordination in the groups who received training**

Outcome:

- (12) How often does respondent interact with other parents of the school?

Source: Endline survey

**Survey Question:**

In the last week/month, how often have you interacted (talked/spent time) with another parent at your children's school?

Second, we will investigate whether the intervention leads to increased coordination among parents. We expect that we will only see changes in the training conditions given the underlying mechanisms. In the training treatment conditions, many different parents – who previously may not have known each other or their fellow peer's opinions about the state of the school works – come together to attend the intensive training sessions. During these trainings, parents are able to interact with one another, discuss the training material, the E100 program, and possibly what they intend to do after learning about their rights. In essence, parents in group trainings receive a public signal that other

parents are also receiving the same information, leading to a possible reduction of the cost of reaching out (Little 2016; Granovetter et. al 1983, 1986, 1988). Additionally, this interaction could lead to increased and prolonged coordination amongst school parents that could lead to increased monitoring. Parents may be more likely to reach out for information because they know others will also reach out.

### **3. *Project Timetable***

January 15, 2017. Finalize planning and logistics.

March 5. Baseline collection of administrative data.

April 18-May 10. CxT requests school principals' permission to conduct activities, and recruits parents for the training sessions.

May 16- June 2. Training sessions, and distribution of flyers with information

August. SMS text or visit when no phone number is available, reminding parents in treatment groups about their right to access information.

July 30: Endline collection of administrative data (approximately 2 months after intervention)

September 30. Endline collection of administrative data (approximately 4 months after intervention)

October. Endline survey