

What Is It Like to Be a Guinea Pig? Teacher Experiences in a Randomized Controlled Trial

Elizabeth Autio
Kari Nelsestuen
Education Northwest

Paper presented at the Annual Meeting of the American Evaluation Research Association
April 2014

The demand for more rigorous research in education has increased the number and intensity of studies conducted in schools. Yet the voices of teachers who participate are missing from the literature. We examined the experiences of 115 teachers in a randomized controlled trial. The majority of treatment and control teachers were pleased to be part of the study. More than the study's monetary incentives, treatment teachers valued the free professional development and opportunity to contribute to the research base. Control teachers looked forward to receiving the training after data collection ended. The assessment burden and classroom observations were the most common complaints. Findings have implications for researchers conducting applied research in schools, particularly those utilizing a control or comparison group.

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305A100583 to Education Northwest. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.

This paper describes the experiences of teachers who participated in an Institute for Education Sciences-funded randomized controlled trial (IES grant #R305A100583). Teachers were asked to describe what was positive and negative about their participation, and their levels of satisfaction with study participation after two years of participation. These questions were intended to illuminate the reasons why teachers decide to participate in and engage with a study, why they remain in it, as well as factors that were challenging and might dissuade their engagement.

Perspectives

In the past 15 years, the demand for rigorous research in education has increased substantially. Educators are increasingly asked to consult research evidence when purchasing new curricula, making decisions about professional development, and adopting specific instructional strategies in the classroom. Resources such as the What Works Clearinghouse are designed to provide educators with easily accessible, digestible information that summarizes what we know about effective programs and practice.

For these reasons, discussion around rigorous studies tends to (appropriately) focus on the merits of the methodology and the results. At the same time, it is important to remember that these studies are conducted in real life settings with real people. Recruitment and retention of these individuals is critical to the success of any study. It is particularly salient for randomized controlled trials (RCTs), the “gold standard” of research designs, in which participants must acquiesce to random assignment. Attrition by unhappy participants from an RCT can potentially undermine the validity of the results and prevent a study from meeting WWC standards.

What is the experience of educators involved in experimental and other types of studies? Their voices are missing from the literature. Existing literature focuses on participant recruitment (Harrington et al., 1997; Befort et al., 2008; Ji et al., 2008) and, in the public health field, the impact of study incentives (for example, Guyll et al., 2003). However, nothing has been published regarding how teachers experience their participation as subjects in a study, and in an RCT in particular. We address this gap by using the opportunity of a four-year RCT to collect data on teachers’ perspectives about their participation. Specifically, we ask about the experiences of educators who participate as subjects in studies: what they enjoyed or did not enjoy about the research process, their concerns and frustrations, and the perceived value of participation. Such feedback can inform recruitment, data collection, and retention activities for other education studies.

Methods

The data used for this study are part of a large RCT examining the efficacy of Project GLAD (Guided Language Acquisition Design) in fifth-grade classrooms of 30 Idaho schools. Project GLAD is a K–12 instructional model consisting of 35 strategies designed for teachers who have a significant number of English learners (ELs) in their mainstream classrooms (Brechtel, 2001). It is one of a handful of programs referred to as “sheltered instruction” that have become increasingly popular methods of addressing the needs of such classrooms in recent years.

Thirty Idaho schools and 115 fifth-grade teachers participated in the study over the 2011–2012 and 2012–2013 school years. Schools were randomly assigned to one of two conditions: 15 to treatment, in which they received seven days of Project GLAD professional development and six follow-up coaching sessions, and 15 to control, in which they engaged in business as usual. Project GLAD professional development was provided to teachers in the control condition in 2013–2014, a delayed treatment design.

Data collection in both treatment and control classrooms included administration of one student assessment in the fall and three in the spring of each year (reading, writing, and science). These assessments were given by participating teachers to their students in addition to others mandated by the district or state. Second, both groups were observed by researchers five times over two years. Third, teachers were asked to complete surveys (once a month for teachers in the treatment condition and once a year for teachers in the control condition). Finally, treatment teachers were also interviewed four times over two years.

In exchange for data collection, we provided several incentives. Teachers received a cash card for every survey they completed (\$30 for monthly treatment condition surveys or \$60 for the annual control condition survey). Teachers also received up to \$300 in credit at amazon.com per year for classroom materials and supplies to thank them for the time it took to administer the student assessments. Teachers also experienced non-monetary benefits, such as the opportunity to receive continuing education credits for participating in Project GLAD professional development. At the school level, we provided a \$1,000 stipend per year upon successful completion of all of the study activities. Finally, the study paid for all Project GLAD training, as well as substitutes to cover teachers' time out of the classroom.

During the two years of the study, we had low levels of attrition, losing only one school due to teacher turnover and a handful of teachers (18) to moves, retirement, or grade-level changes.

Data Sources

Surveys were conducted once a month with teachers in the treatment condition and once annually with teachers in the control condition, over a period of two years. The treatment survey was administered online via surveygizmo, while the control survey was administered via paper and pen in Year 1 and online in Year 2. The majority of survey items asked about specific instructional practices. For the purposes of this investigation, we added two questions. First, we asked teachers in both conditions the degree to which they agreed with the statement "I am pleased that my school is part of the Project GLAD study" on a Likert-type scale. Second, we asked teachers in the control condition "What have you liked and disliked about being part of this study?" This question was asked in an open response format. Response rates were 98% for the treatment and 100% for the control survey.

Interviews were conducted in person with teachers in the treatment condition at four points: twice in Year 1 and twice in Year 2. These interviews included questions related to their experience in the research study, specifically we asked: "How do you feel about being part of the research study? What do you like about it? What don't you like about it?" and "What has it been like to be part of a research study?"

Video footage of three teachers who were part of the treatment group was gathered at the conclusion of the second year of professional development. This video includes footage of teachers using the Project GLAD instructional strategies, as well as participating in an informal interview designed to capture teacher voice regarding the intervention as well as experience in the study. The video includes responses to the question, "What was it like to be in a research study?"

Results and/or Conclusions

In both the treatment and control groups, the majority of teachers were positive about their participation: 90% of treatment and 70% of control teachers said they were pleased that their school was part of the study (Table 1). However, treatment and control teachers had different reasons for their satisfaction.

First, treatment teachers voiced favorable experiences with the professional development and coaching provided; they appreciated the training and opportunity to learn new strategies. They also had very positive impressions of the intervention itself (Table 1). For control teachers, anticipating the training was the most frequently mentioned “like” about participation at the end of the second year.

Second, almost half of treatment teachers thought the overall experience of being in a study was positive. They used words like “enjoyable,” “exciting,” and “cutting edge” to describe why they were pleased to be part of the study. Some also mentioned that they liked being part of a study that would benefit education. In contrast, very few control teachers described similar perceptions.

Third, many treatment teachers said that they appreciated the way the study had increased their accountability for implementing the program. For example, the monthly surveys served as a reminder of what Project GLAD strategies they should consider trying in their classroom. Since control teachers were not yet trained, none of them mentioned this as a reason.

Finally, a small number of both treatment and control teachers specifically mentioned the incentives, which totaled hundreds of dollars over the two years, as a reason they enjoyed study participation.

For both treatment and control teachers, the primary complaint was the assessment burden. Teachers were unhappy with both the amount of assessment (three assessments, including a multiday writing task) and the timing of spring assessments (during other state and district testing windows). A much higher proportion of control teachers than treatment teachers voiced complaints about the assessments.

A second aspect of the study that some teachers found challenging was the classroom observations conducted by researchers. Almost 1 in 5 control teachers said the observations made them “uncomfortable” and that it was frustrating not to know what sort of data researchers were collecting, nor to get any feedback after the observation. Only a small number of treatment teachers shared this sentiment.

Despite the amount of logistics required for participating in the study—administering assessments, completing surveys, attending professional development, listening to webinars, scheduling site visits—only one treatment teacher and two control teachers mentioned logistics as a problem.

Significance

Our findings have implications for researchers who are conducting any kind of study for the school setting, and particularly for those employing experimental or quasi-experimental designs in which a control or comparison group does not immediately receive the intervention. By developing a better understanding of teachers’ experience as study subjects—their concerns, the perceived value and benefits—we can bolster recruitment and retention efforts. There are also implications for educators as they make decisions about participating in studies; understanding what research conditions other teachers perceived positively and negatively can help them make informed choices about participation.

During the two years of data collection, we believed that the incentives were the critical factor in recruiting teachers, retaining teachers, and securing high response rates. The incentives undoubtedly were a contributing factor, yet they were mentioned by only a handful of participants when asked why they liked being part of the study.

This suggests that participation in research is about more than monetary reward, and that more money will not always mean stronger engagement with the study. While incentives certainly are important to

demonstrate appreciation for participants' time, we found that teachers' biggest decisions about participation revolved around other factors. Primary were the desire for the intervention, the alignment of the intervention with their needs, and, for the treatment group, their high regard for the professional development and coaching that they received. The treatment group also was motivated by the idea that they were contributing to the research base; that they were on the "cutting edge" and part of something "bigger than themselves."

For the control group, anticipation of receiving Project GLAD professional development in the future was the primary motivating factor. When designing studies that include control or comparison groups, researchers should therefore consider approaches such as delayed treatment designs in which control participants receive the intervention at a later date. If our control group had received incentives but was not eligible to attend professional development down the road, it is possible that fewer schools would have agreed to sign up for the study, that we would have lost participants after randomization, and/or that we would have had higher attrition.

Finally, with the increased national focus on using evidence-based practices in education, it is essential that teachers feel good about not only using research, but being part of research. It is therefore important that teacher participants feel that it was worthwhile, that they were respected, that they were fairly compensated, and that it was a good use of their precious classroom time.

Table 1
Teacher Feedback on Study Participation, Year 1

	<u>Treatment (n=41)</u>	<u>Control (n=50)</u>
I am pleased that my school is part of the Project GLAD study.	90%	70%
I would recommend the Project GLAD training to other teachers.	100%	n/a
I would recommend the Project GLAD demonstration to other teachers.	97%	n/a
My Project GLAD consultant has really helped me improve my implementation of Project GLAD.	97%	n/a
I would recommend Project GLAD to other teachers.	90%	n/a
I think Project GLAD is an effective instructional model for all students.	90%	n/a

References

- Befort, C., Lynch, R., James, R.L., Carroll, S.L., Nollen, N., & Davis, A. (2008). Perceived barriers and benefits to research participation among school administrators. *Journal of School Health, 78*(11), 581–586.
- Brechtel, M. (2001). *Bringing it all together: Language and literacy in the multilingual classroom* (Rev. ed.). Carlsbad, CA: Dominie Press.
- Guyll, M., Spoth, R., & Redmond, C. (2003). The effects of incentives and research requirements on participation rates for a community-based preventive intervention research study. *Journal of Primary Prevention, 24*(1), 25–41.
- Harrington, K.F., Binkley, D., Reynolds, K.D., Duvall, R.C., Copeland, J.R., Franklin, F., & Raczynski, J. (1997). Recruitment issues in school-based research: Lessons learned from the High 5 Alabama Project. *Journal of School Health, 67*(10), 415–421.
- Ji, P., DuBois, D.L., Flay, B.R., & Brechling, V. (2008). “Congratulations, you have been randomized into the control group!(?)”: Issues to consider when recruiting schools for matched-pair randomized control trials of prevention programs. *Journal of School Health, 78*(3), 131–139.