A study evaluated the effects of an innovative parent involvement model. Nine school systems in Indiana were selected by the funding agency to use the Transparent School Model, which uses computer-based voice messaging technology to allow teachers and parents to exchange information with the efficiency and convenience of time displacement. At the end of each school day, a teacher writes a short script and records a 1-minute message over the telephone. The message is stored in computer memory and is available to any parent for the next 24 hours. After introducing the model to school personnel and providing staff training, the researchers evaluated the process and outcome variables over a period of 2 years. The results of analysis revealed high variability in the implementation level and teacher use of the model. Teachers who adopted and used the model with professional enthusiasm had better results than those who simply accepted the innovation but engaged in "passive resistance." Results suggest that attempts to innovate in parent involvement should include a carefully crafted implementation procedure that assures rich information and involvement of all the interested parties--administrators, teachers, and parents--before major changes are undertaken. (AA)
INNOVATIONS IN PARENT INVOLVEMENT:

ISSUES OF IMPLEMENTATION AND FIDELITY TO A MODEL

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Abstract

This paper explores the effects of setting up an innovative parent involvement model in schools where school personnel had relatively little role in the initial decisions. Nine schools in three school systems in Indiana were selected by the funding agency to use the Transparent School Model. The model is the original plan using computer-based voice messaging technology to improve teacher/parent interaction. After introducing the model to school personnel and providing staff development training, we evaluated process and outcome variables over a period of two years. There was high variability in the implementation level and teacher use. Fidelity to the model was directly related to the level of parent involvement.
Innovations in Parent Involvement: Issues of Implementation and Fidelity to a Model

During the 1990-91 school year, a major parent involvement initiative was started by the Lilly Endowment in the state of Indiana (Lilly Endowment, 1992). Four national models were chosen for implementation and evaluation. There were more than forty schools in a dozen school systems in the project. One of the national programs selected was the Transparent School Model (Bauch, 1989, 1990). The Transparent School Model calls for the use of computer-based voice-messaging technology so teachers and parents can exchange information with the efficiency and convenience of time displacement. At the end of each school day, a teacher writes a short script and records a one-minute message over the telephone. The message is stored in computer memory and is available to any parent at any time for the next 24 hours. When a parent calls the "hotline" number, they select a teacher's voice mailbox and listen to information about the day's curriculum, methods, special learning events, student home learning expectations and parent education suggestions. The technical system also can place automated outcalls to parents with information that must be delivered rapidly and efficiently.

Model Implementation

Before the Indiana project started, the Transparent School Model had been selected and installed in about 400 schools in 25 states. Appendix A includes a brief executive summary of the model and a chart describing the
preferred implementation schedule. Our experience with many of these schools had produced a body of knowledge and insight about optimal conditions for implementation and use. In schools where these ideal conditions were present, the model was having rather stable and predictable effects. One of the most salient additional conditions of the most successful schools was their enthusiastic seeking of the model and a high level of administrative and teacher commitment.

We had collected baseline data from 42 schools before we implemented the model ("Baseline Data," 1992) and found that the average teacher in these K-12 schools had about 2.1 parent contacts per day. We used this statistic to estimate level of teacher/parent contacts after the school began using the model and found interaction increases of 800% and more. In those schools where they implemented the model correctly and fully, at least half of the parents called every day to listen to teacher messages. This level was adopted as a standard or target when we presented the model to prospective school users. High fidelity to the model was defined by the following conditions:

-- each teacher will write a script and record a high quality message for parents every school day
-- the school will promote the model to parents and routinely encourage parent use
-- school personnel will use strategic outcalls to systematically increase parent calling rates
-- administrators will support the model, encourage regular teacher use and supervise the quality of teacher messages.

It was our experience in working with dozens of schools that these
conditions were not difficult to meet when the model had been appropriately introduced to school personnel. A critical element of this introduction included a carefully-planned half-day staff development workshop to help teachers in applications and expected outcomes of the model.

**The Indiana Project**

When the Transparent School Model was selected by the Lilly Endowment, a grant was made to cover the implementation and evaluation. A third-party consulting firm was employed to select the schools and we eventually received a list of nine schools in three school systems that were to use the model. In retrospect, we learned that the schools were identified by central-office administrators. The principals were then told that they would receive about $11,000 in equipment, full funding of extra phone lines, staff development and evaluation services. Principals received very limited information about the functions of the model and there were no initial agreements or commitments made. *Classroom teachers had virtually no involvement in the decision.* In several of the schools, teachers were not even told about the project until the day of the staff development.

There was also variability in the staff development event. In one school system, the ideal conditions were met. Teachers left with an accurate understanding of their roles and relatively high enthusiasm. In a second school system, the workshop was preempted by bad weather and only a few representatives from each school attended. In the third school system, the workshop was the first time teachers heard about the project. This workshop was also scheduled two days before the teachers were to
take a strike vote, and emotions against administrative decisions were at an all-time high.

**Personnel Changes**

Another local condition that influenced model acceptance and operation was the administrative structure. When school systems were first approached by the consultant group, they nominated a central-office administrator to be the local coordinator. Their responsibilities were assigned in addition to their existing assignments. Two of these people changed positions within the first year of the project, and were replaced by others who had no knowledge of the history or concept. Three of the nine principals also changed positions during the first year. The new principals were faced with an innovative program that they had no role in selecting or implementing.

**Reflections**

The installation of this innovative parent involvement program expected a small but quite different teacher role for successful implementation. It rarely takes a teacher more than five extra minutes to write a script and record the daily message for parents. But summarizing the day's instruction and translating it into a one-minute message is a new experience.

It is also clear that this project is a classic example of a "top-down" decision with little or no teacher involvement at the introduction or decision points. Fullan (1994) stated:

Small- and large-scale studies of top-down strategies (whether employing voluntary or mandatory methods) have consistently demonstrated that local implementation fails in a vast majority of cases. (p. 186).
Fullan goes on to discuss the largest relevant study, where he reviewed federally-sponsored innovative programs selected by the school administration in 293 sites. The found that even when adoption of the innovation was voluntary on the part of the administration, districts took on the project for opportunistic rather than substantial reasons. This scenario is exactly like the Indiana project. School systems were approached by a remote third party and invited to participate with limited information but the promise of some sophisticated, new technology. There was virtually no involvement of the eventual participants - the classroom teachers and the parents who were to receive the benefits of the model. This situation, plus the uncontrollable circumstances of the staff development workshops, left actual implementation up to the individual teacher.

The Vanderbilt staff made every attempt to remedy these conditions, trying to increase teacher commitment and system use. For example, we offered two different cash "mini-grants" to the schools so they could develop promotional and parent-orientation materials. We gave each principal a clear Lucite (Transparent) telephone as a symbol of the project in the school. We sent print materials to the schools and made revisits to the schools that missed the initial workshops. In these latter visits we showed teachers the advantages of using the technical system for their routine parent communications and the results they could expect. But we were facing some difficult obstacles. Firestone and Pennell (1994) did an extensive review on teacher commitment, and said that teacher participation in the decision process is a major factor in the way teachers accept and use innovations. The absence of teacher participation in the
Indiana project was an existing condition that was very difficult to manage. The variability of fidelity to a model from school to school has also been noted by Bob Slavin while implementing the "Roots and Wings" curriculum model (Rothman, 1993).

An Evidence Sample

Our initial evaluation scheme for the Transparent School Model in the nine Indiana schools focused on a range of variables. We sampled parent usage rates, parent attitudes, homework completion rates and conducted a summative analysis of school-wide achievement test scores. As we observed the relatively low rates of fidelity to the model, we added teacher attitude, principal survey and teacher usage-rate evaluation. We offer three pieces of evidence to explore the relationship between fidelity to the model and "success" of the innovation.

When we asked teachers for their reactions to the model at the midpoint of the project, teacher responses varied by the level of implementation in the local school. In schools where teachers had drifted away from regular use (and therefore parent use was very low), attitudes were decidedly negative. But in schools where the overall commitment was higher, attitudes were more positive and more teachers wanted to continue. This was our first hint of a negative spiral effect; when teachers did not record quality daily messages for parents, parents reduced the frequency of their calls. When teachers saw that fewer parents were calling, they were discouraged and were less likely to comply with the expectations of the model.

A second indicator of the effects of high or low fidelity to the model is somewhat indirect but appears to be important. We sampled about 20%
of the parents in all the schools on parent attitudes and found that the frequency of parent calling had a strong, clear influence on their attitudes. Parents who called three or more times per week to hear teacher messages had the most positive attitudes. When frequency of parent calling dropped to seldom or never, their attitudes slipped from neutral to the negative range. This seems consistent with conventional wisdom about parent involvement; that rich and frequent communication between home and school has positive effects (e.g., Moles, 1993).

A third indicator of the relationship between fidelity and outcomes can be seen in the effect that teacher daily recording rates has on parent calling rates. In the Transparent School Model, as in most other strategies for parent involvement, the frequency and richness of communication between teacher and parent is of critical importance. When parents have exactly the information they need to support their child's learning at home, the more likely this increased involvement will produce the desired results. In the model, we look for at least half of the parents to call every day and listen to the daily teacher messages.

The technical "hotline" systems retain statistics on rates of teacher recordings (how many teachers record a new message each day) and on parent usage (how many parents call to hear messages per day). The expectation for teachers is to record a new message every day that describes what was taught, how it was taught, home learning expectations and suggestions to parents for managing and supporting the child's learning. A new message every day is critical. When parents call and hear old messages or find that there is no information recorded for that day, they are frustrated and discouraged. This results in less frequent calling.
When teachers notice that fewer parents are calling, they feel that their efforts are not worth the result and reduce their commitment to the model. This downward spiral is very difficult to reverse once it is established.

The graphic below relates teacher recording rates (the percentage of teachers who record a new message every day) and parent calling rates (the percentage of parents who call every day). Four schools are represented; all had modest fidelity to the model and the parent usage rates track the levels of teacher recordings. Although not a central issue in this paper, it should be noted that two of these four schools were compared to demographically-matched schools and showed significant gains in overall achievement on a standardized test.
Summary
The apparent relationship between fidelity to the model (in this case the frequency of teacher recording) and parent response seems clear. If teachers adopt an innovative model and use it with professional enthusiasm, it is more likely that the expected model outcomes will result. If a school simply accepts the innovation but engages in what one principal called "passive resistance," the power of the model is diluted. Top-down decisions made without the active and effective involvement of the actual program participants (teachers and parents) are doomed to difficulty and eventual failure. The waste of human and economic resources is not justified. Attempts to innovate in parent involvement should include a carefully crafted implementation procedure that assures rich information and involvement of all "stakeholders" before major decisions are made. Commitment is unlikely without this participation, and commitment is a critical element of the success of any model.
References


