ED 396 454 EA 027 708

AUTHOR Abelmann, Charles H.; Kenyon, Susan B.

TITLE Distractions from Teaching and Learning: Lessons from

Kentucky's Use of Rewards.

INSTITUTION Consortium for Policy Research in Education, New

Brunswick, NJ.

SPONS AGENCY Office of Educational Research and Improvement (ED),

Washington, DC.

PUB DATE Apr 96 CONTRACT R11G100007

NOTE 38p.; Paper presented at the Annual Meeting of the

American Educational Research Association (New York,

NY, April 8-12, 1996).

PUB TYPE Speeches/Conference Papers (150) -- Reports -

Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS Academic Achievement; Accountability; *Educational

Assessment; Elementary Secondary Education; *Incentives; Institutional Characteristics; Performance; *Program Effectiveness; Program

Implementation; *Rewards; *State Programs; *Teacher

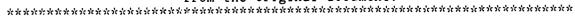
Motivation; Teacher Participation

IDENTIFIERS *Kentucky

ABSTRACT

If rewards are to be used as a school-reform tool, their formats must be more closely tailored to the organizational characteristics of schools and to the purpose of improving teaching and learning. This paper describes lessons learned from Kentucky's collective incentive system, the Kentucky Instructional Results Information System (KIRIS). The paper provides an overview of the history of reward programs in other states, discusses the general assumptions and conditions related to their implementation, and describes the background of Kentucky legislation and KIRIS (which was mandated in 1990 by the Kentucky Education Reform Act). The rest of the paper presents findings of case studies of three elementary schools and one high school in Kentucky that examined how the schools approached the distribution of rewards differently. The cases illustrate how the principles of reward programs and KIRIS practices are misaligned. The paper identifies six main challenges for state policy makers who consider using rewards as part of an incentive program to improve student performance: (1) involving teachers in the actual design process of the incentive program; (2) linking rewards to individual student progress; (3) resolving issues of fairness; (4) defining a clear link between the distribution of rewards and continued improvement of teaching and learning; (5) ensuring state justification and rationale for incentive programs; and (6) ensuring long-term stability of the incentive program. Three tables are included. (Contains 23 references.) (LMI)

from the original document.





^{*} Reproductions supplied by EDRS are the best that can be made

Distractions from Teaching and Learning: Lessons from Kentucky's Use of Rewards

Paper presented at the Annual Meeting of the American Educational Research Association New York, New York

April 12, 1996

By

Charles H. Abelmann Harvard University

and

Susan B. Kenyon

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

This work was funded in part by the Consortium for Policy Research in Education (CPRE), under Grant #R11G10007 from the Office of Educational Research and Improvement, U.S. Department of Education. The opinions expressed are those of the authors and not necessarily shared by CPRE, its institutional partners or the funding agency. Special thanks to the Prichard Committee assistance in collecting local news clippings.

Introduction

Given the persistence with which school policy makers try to make rewards schemes work, and the limited success of attempts thus far, each new program and the problems it demonstrates can contribute to the pool of knowledge about performance incentives. This paper attempts to contribute to that knowledge by drawing lessons from Kentucky's collective incentive system (Kentucky Instructional Results Information System - KIRIS). Building upon the history and experience of other state programs, the work begins by considering some general assumptions and conditions of reward plans. Our intention is to juxtapose those general concepts with problems emerging from Kentucky's implementation of KIRIS, in the hopes of identifying where the two are misaligned. Because we recognize that reward programs are politically popular and often inextricably linked to packages of reform money, we are interested in offering insight that might contribute to more effective plans in the future. If rewards are to be used as a reform tool, it is our belief that their format must be more closely tailored to the organizational characteristics of schools and in particular, to the purpose of improving teaching and learning. Repeated use of poorly designed performance incentive programs undermines the credibility of reform plans, their sponsors, and in some cases, even the schools themselves.

I. History of Rewards

Performance incentive programs for teachers have a long history in US schools, but are marked by few successful attempts at implementation. Whether conveyed as monetary bonuses such as merit pay, "ancillary" rewards like flex-time, professional opportunities, or improved employee benefits, the principle such measures have in common is that they are designed to elicit improved performance from teachers which it is assumed, will in turn, improve student outcomes. (Church and Heumann, 1986).

Reward programs take many forms and their popularity as a policy tool is not only influenced by, but also reflective of political, economic, and social conditions. In the late 1800s, for example, room and board compensation suited the barter economy of that time period, and provided a subtle, yet strong incentive to teach and live in conformity with community values.(Protsik 1995)(Kelly and Odden, September 1995). The early 20th century (up until the late 1930s) saw fairly extensive use of merit pay across the country, mirroring industrial models



. 2

of efficiency and the use of rewards for productivity. (Johnson 1984). The '30s and '40s, saw a decline in the implementation of teacher rewards and a majority of districts reverted to uniform salary schedules. (Murnane and Cohen, 1986). Then, in the 1960s rewards returned to popularity, at least in part as a policy response to competitiveness inspired by the launch of Sputnik, and a prevailing fear that American schools were lagging behind the rest of the world.

Fear of losing an international competitive edge intensified in the 1980s. Reports such as A Nation at Risk were interpreted by many as confirmation of the inadequacy of U.S. public education. This, plus a surge of Republican conservatism, gave rise to another wave of marketbased teacher and school improvement measures. A 1986 report from the National Governors Association, Time for Results, marked a shift away from concern for regulatory control, toward a new emphasis on performance results: "the governors are ready for some old-fashioned horse trading. We'll regulate less, if schools and school districts will produce better results." In its interest to achieve greater results, the NGA report also suggested rewards for schools that show education progress and consequences for schools that fail to perform. (NGA, 1986). In 1988, in an article looking at recent state education reforms and toward the future, Kirst suggested an alternative strategy to traditional regulation he called the "output performance strategy." The approach stresses "state payment for results based on an index of indicators that includes tests plus several other relevant outcomes." (Kirst 1988, p. 325) Several states passed rewards legislation during this period including: California's Education Improvement Incentive Program (1984-1987) which allocated funds for rewards to schools based on improved high school seniors' standardized test scores, (Cibulka, 1989); and South Carolina's School Incentive Reward Program (SIRP), which is based on comparison of five bands determined by SES composition, and provides collective rewards to the top 25 percent of schools in each band for supplies, equipment etc. (1984 -).

In the 1990s, more and more states began to look toward monetary incentives as an alternative to mandating certain input or process regulations. In addition to Kentucky which receives particular attention here, Florida, Indiana, Missouri, Pennsylvania, South Carolina, and Tennessee have also experimented with providing monetary awards to schools based on demonstrated performance (Firestone, 1994). Several cities including Dallas, Chicago, Charlotte, and Boston, are also operating rewards schemes of various dimensions. In each case, a number of critical questions have been addressed: 1. What cognitive and non-cognitive indicators should be used to measure performance? 2. Should a program correct for racial and SES bias? 3. Should

¹Little is known about the format of these programs and though districts at that time reported "merit pay" programs, it should not be assumed that they were the same as contemporary merit pay schemes.



collective or individual incentives be used? Chicago's program, for example, reflects these contemporary concerns insofar as it uses a "best practices" approach which seeks to highlight school successes in school-community relations in addition to traditional measures of student outcomes. (Bradley, Education Week, 1/17/96).

II. General Characteristics of Reward Programs

School incentive schemes vary. The most notable differences appear in the kind of teacher performance targeted for improvement, i.e., the basis of rewards; the way achievement is measured; the types of rewards conveyed - barter, monetary or ancillary; and most recently, the way in which rewards are distributed. In some cases school rewards are based on the relative standing of school performance to other schools, such as in South Carolina, and in other state systems, where rewards are determined by a school's improvement upon its own performance benchmarks.² Rewards might also be based on a schools performance against an absolute standard.³ Further, while some reward programs are voluntary, others are mandatory, whereby schools are automatically considered for rewards or sanctions. (Richards and Shujaa, 1990).

Murnane and Cohen, referring to merit pay plans, distinguish between two types of reward designs - "old" and "new". They characterize "old style" plans as those in which supervisors provide subjective evaluation of teachers based upon criteria such as class preparation, discipline, or time contributed to extracurricular activities. "New style" or "payment by results" plans are driven by more objective standardized student test scores. Up until fairly recently "new style" plans were fewer in number than the "old style" format.(Murnane and Cohen, 1986)(Bacharach, Lipsky and Shedd, 1984).

²An issue that is being given increasing attention relates to the fairness of systems that compare schools but have very different student bodies in terms of socio economic background. The issue has been framed as one of fairness (Clotfelter & Ladd, 1995). In a state like South Carolina that compares schools, one suggested solution has been to create comparison groups based on socio economic background. In Kentucky, schools are compared to themselves so it is not as great an issue. However, some argue that better performing schools are at a disadvantage because it is harder to improve against their own already higher standard (Firestone, 1994)

³South Carolina as part of its major reform initiative in 1984 began an incentive award program. School ranking is based on an examination of students' test performance related to his or her expected performance. Schools are rewarded based on their relative standing to other schools by comparing student achievement gains and certain non-cognitive indicators like attendance. Schools are compared to each other but to account for difference in student backgrounds, the state clusters the schools into different subgroups based on the socio-economic status of students

Another distinction among programs is the use of individual vs. collective incentives. Whereas merit pay has traditionally been awarded to *individuals* who distinguish themselves in some way, and as measured by tests or professional development, collective incentives schemes seek to motivate and reward groups of individuals, often based upon fewer and broader outcome goals. (Firestone 1994). The Kentucky Reward System, for example, resembles collective incentives used by businesses, where performance incentives are part of a pay structure. (Peck 1993). In the case of state education reform, the increasing use of such programs marks two important trends: 1) a greater attention to accountability of schools for student outcomes and 2) a new reluctance on the part of state policy makers to dictate specific regulation regarding how higher levels of performance are to be reached.

A discussion of the general theoretical assumptions of rewards follows immediately below. Further background on the Kentucky legislation and reward program is then provided. This is complimented by a review of news clippings from across the state during the four month period between the time schools were notified about rewards and the end of the school year, and by survey data provided by the Kentucky Department of Education. Four case studies follow this background information, depicting the experiences of specific schools and issues which arose as they implemented KIRIS. The paper concludes with discussion of the lessons to be derived from Kentucky's experience, and some suggestions regarding how those lessons might be incorporated into future rewards policy.

Incentives and Rewards: Assumptions and conditions related to their implementation.

The choice to establish teacher incentives demonstrates several general assumptions, most of which are also conditions of a promised reward acting as an incentive. The first of these is that those who implement incentives have determined that the participatory nature of incentives is somehow preferable to external mandates or coercive oversight. This choice may be based upon ethics, politics, available funds, theories of human nature or some combination of reasons. (Church and Heumann, 1989). The political unpopularity of intense regulation and oversight by local and state government alone, might be enough to motivate incentive plans, particularly when that disfavor is voiced by strong teacher's unions. Whatever its basis, the choice to install incentives implies a belief that highly regulatory arrangements are somehow inappropriate for schools or unlikely to achieve the goal, which in Kentucky's case is improved student outcomes. Incentives are, at least in theory, supposed to decrease oversight and regulation by turning an organizational



goal into an employee interest, thereby making it an employee priority requiring less bureaucratic control. When employees stand to personally gain from an organizational goal, they are likely to internalize that goal and perhaps even seek out and anticipate innovative ways in which to achieve it. Subsequent changes in behavior may be more rapid, lasting, comprehensive and efficient because they are the result of combined effort and an even trade. Intuitively, the idea of incentives seems like a fair deal struck between parties and in theory, offers a win-win proposition. This theory can only operate, however, when the incentive truly taps into employees' self-interest. This begs the question, what form must an incentive take in order to appeal to the personal interests of teachers? And, how do we determine when it is the prospective reward, rather than the threat of sanctions which is influencing employee behavior?(Church and Heumann, 1989).

The decision to implement cash teacher incentives indicates a second assumption -- that monetary, extrinsic rewards are viewed as an effective motivator to improve teacher performance. This is both an assumption and a necessary condition of monetary rewards acting as an incentive for change. Much has been written about the relative importance of intrinsic vs. extrinsic reward as a motivator for teachers. The dominant position on this issue states that be nuses and comparable benefits attract and retain new teachers, but do not influence classroom performance once teachers are on staff. (Odden and Protsik, 1995) (Brandt, 1990). While inadequate salary is consistently cited as a source of dissatisfaction among teachers, there is little evidence to indicate that more money would have a substantial effect on existing teachers' classroom performance. (Brandt, 1990). Clearly, however, those who design incentive programs believe that bonuses and rewards can improve teaching. Proponents of this position often point to the private sector and gainsharing models in industry in support of their position while opponents view the business world as a model incompatible with school culture.(Richards and Shujaa, 1990). Whatever actual formula of intrinsic and extrinsic values drives teachers, we can conclude that the use of monetary incentives reflects an assumption on the part of policy makers that there is some correlation between extrinsic rewards and performance, and that based upon this assumption, resources are directed to rewards as opposed to intrinsic factors such as school culture, teacher support, or professional advancement.

A third basic assumption associated with incentive plans is that lack of motivation on the part of teachers is preventing schools from performing at desired levels. This assumption implies disagreement with those who would argue lack of capacity and/or resources prevents the desired outcomes. It also suggests that somewhere in the policy making process, a conscious decision was made not to allocate funds to all schools for capacity building and resources, but rather to those that exhibit capacity and efficient use of resources. This does not necessarily mean that equal capacity among teachers is assumed, nor that resources are believed to be in ideal supply. It does.



however, imply that capacity and resources are viewed as adequate to allow for improvement, once motivation is bolstered by the chosen incentive. Another possible explanation for this motivation vs. capacity and resources choice may be what Susan Fuhrman describes as the skeptics' position, that is: "... inducements or incentives were used most often not because legislatures thought they were a better approach than mandates, but because funds were available only for activities in a subset of districts." (Fuhrman, 1994) This position might also partially explain the persistency with which rewards programs are attempted despite their dismal success rate.

A fourth general assumption associated with teacher incentive systems is that there is a direct relationship between the indicators selected, the people offered incentives, and the change desired -- in Kentucky's case, improved student outcomes. In other words, a rewards program only makes sense if it is believed to isolate reliable indicators of progress toward a goal, and if it rewards those responsible for bringing the goal to fruition. So, we can assume that policy makers who develop an incentive program select indicators thoughtfully and reward those they view as "effective levers on students achievement." (Cohen, 1996) These nested assumptions have implications both across and within schools.

The "across-schools" issue relates to measurement and the selected indicators of success. Any time we must select from a group of valid options, we necessarily discard some of our choices and maintain others. So, when policy makers must choose from among the many indicators of student progress, they make what at least appear to be value judgments about the importance of those indicators, by deciding which of them will have an ascribed dollar value. Actually, it may be that one indicator is more easily measured than another and not its perceived importance that makes it appealing to program designers, but the perverse effect is potentially the same. Some school successes go unrewarded because they are not recognized within the framework of a reward program. So, for example, a school which has made great strides in reducing student violence, or in community partnerships and mentorships might not be acknowledged by a city or state's reward structure. Essentially, any reward program will make a statement that one form of success is better than another, even if this is not an accurate or deliberate expression of policy makers' beliefs. It is not even necessary to have a position on the relative importance of various indicators to see the potentially negative side effects of rewarding some and not others. It is possible that some unmeasured success, improved parent involvement for example, is a prerequisite for a school to meet the test score requirements of a reward plan. Consequently, a plan that only measures scores might fail to acknowledge an essential step in the improvement process. Also problematic is the fact that indicators such as test scores cannot tell us what or who contributed to success or failure with any certainty. This is the crux of the "within - schools" issue.



We assume that policy makers are interested in offering incentives to all those who they believe have significant if not complete control over outcomes. If this is true, then by selecting teachers as the recipients of rewards, for example, we can assume that policy makers view teachers as the key leverage point in improving student outcomes. Given the practical difficulty of pinpointing accountability for student outcomes, and the complex set of relationships which influence teacher and student performance the issue of who gets rewarded for student success has been a predictable point of contention in Kentucky. In any organization where accountability is difficult to pinpoint, reward policies that select among groups within an organization incur risks such as overspending on one group which may be credited too heavily with success, and/or introducing disincentives for other participants who go unacknowledged. This issue receives attention in our discussion of the Kentucky schools' experience with distribution of rewards. Of related concern, is that teachers (and some school staff) are currently offered rewards based upon student improvement, but there is no similar incentive program offered to the students themselves who are arguably the primary agents of their own improvement.

In terms of equity, it is in no one's interest to reward undeserving individuals. Clearly, this defeats the purpose of incentive programs altogether. Ideally, therefore, programs must be designed in such a way as to recognize and reward fairly. Unfortunately, along with the difficulty in attributing credit for good outcomes comes difficulty in identifying those who have had little or no positive influence on outcomes. By choosing to isolate one group of people for incentive bonuses, both within and across schools, policy designers make a statement to all other participant groups that their contribution was less worthy of recognition than the selected group. It is important that this statement be deliberate, and based upon traceable evidence rather than availability of funds or ease of distribution. Given the complex nature of learning and the difficulty we face in isolating the causes of student success and failure, arbitrarily selecting any one group for a reward program -- teachers and not staff for example-- runs the risk of perceived inequity and its consequences such as damage to morale, school culture, teamwork etc.

A fifth assumption associated with monetary rewards is that there are sufficient and stable funds to maintain a credible incentive program, and that schools have the expertise to administer such a program without significantly disrupting their other programs and daily operations. These are broad assumptions with many and varied implications, several of which have been played out in Kentucky's experience. For example, where funds are insufficient or if there is a history of failure to distribute promised rewards, the incentive value of monetary rewards is lost. This was the case, as will be described more fully below, in some Kentucky schools where the failure of a previous \$300 bonus program was prominent in teacher's minds when introduced to another reward plan. And, as for schools' ability to administer a reward program, particularly one with



ij

few guidelines, the potential for negative impact on school morale and collegiality is significant. This too, was an issue among some of the Kentucky schools which qualified for rewards.

Kentucky Legislation and Rewards Program: Background and State Overview

The Kentucky Education Reform Act (KERA), passed in 1990, calls for a statewide system of rewards and sanctions for schools based on their performance to ensure that, "school(s) shall expect a high level of achievement from all students." The law required that the new system be implemented as early as the 1993-94 school year, and at the latest by the 1995-96 school year. An interim testing program was called for by the 1991-92 school year in order to establish a baseline for performance comparison.

This landmark legislation, calling for high achievement for all students, was the result of a law suit against the Governor, legislature, superintendent of public instruction, and the state board by 66 property poor districts and other education organizations that alleged the state funding formula was inadequate and inequitable. On June 9th, 1989, the Kentucky Supreme Court upheld a lower court's decision and declared the entire state system of schooling unconstitutional. The court ordered the state General Assembly not only to alter the funding mechanism of schools, but also to "recreate, reestablish a new system of common schools ..." that would assure "each child, every child ... be provided with an equal opportunity to have an adequate education." One of the most significant premises behind KERA is that schools would be held accountable for the achievement of students and would be eligible for rewards and sanctions dependent upon performance.

In 1994 the General Assembly authorized the distribution of \$26.1 million for rewards to schools and districts that had produced increases in student achievement between 1992-94 which exceeded the state goal for the school. In February of 1995, 480 schools, more than a third of all schools in the state, and 42 district offices were notified that they would be receiving awards. Potentially 14,100 teachers and administrators would benefit from these rewards.

Although KERA is systemic in its approach -- addressing pre-schools, ungraded primary programs, family resource centers, and an effort to decentralize decision making to school based councils -- this paper focuses on the rewards associated with the Kentucky Instructional Results



Information System (KIRIS) to better understand how incentives function in a high stake accountability system.

I. Kentucky Instructional Results Information System (KIRIS) - Methods of Measurement, Scoring and Rewards:

The Kentucky Education Reform Act (KERA) was very specific in defining what was meant by an adequate education for all children. The law was also specific in requiring that the State Board create and implement a state wide, primarily performance based high stakes accountability system. The law called for an interim testing program to begin by the 1991-92 school year "to assess student skills in reading, mathematics, writing, science, and social studies in grades four (4), eight (8), and twelve (12)."

As part of KIRIS, in 1991-92 every school was assigned a baseline index for accountability purposes based on the performance of those students tested. Students tested are assigned to one of four performance levels. The four levels are novice, apprentice, proficient and distinguished. The index assigned to each school represents a composite of six equally weighted component scores. Five of the parts correspond to cognitive factors including reading, writing, mathematics, social studies, and science and the sixth factor is a composite of non cognitive factors such as attendance, retention, dropout rate, and for high schools, a measurement of high school graduates transition to adult life. The cognitive factors are measured by using three distinct types of assessment -- performance events, portfolios and transitional items.

Performance events require students to apply their knowledge and skills to solve real-life problems. A small group of students are given a problem to discuss or solve and then individually work to either complete the task or write-up results. Portfolios are a collection of a student's best work over the academic year. The transitional test includes multiple choice items and a few open response items including an open-ended writing prompt. The non academic part of the index consists of indicators which the state believes either affect or reflect learning. KERA specified that these non-cognitive measures be included in the assessment.

Each school must demonstrate continuous improvement by meeting its own individual threshold every two years if it wants to assure no outside intervention. The model is premised on measuring schools every biennium for the next twenty years by which point all students tested in the state would be proficient. A school's baseline and subsequent threshold for evaluation is determined by attributing point values to each student tested based on his or her level of



performance. Each novice student is given a value of zero in the formula, an apprentice student is counted as .4, a proficient student as 1 and a distinguished student as 1.4. The threshold is determined by calculating the difference between the baseline score and the ultimate long term goal of 100. Each school is expected to reduce the gap every two years by 10 % for the next twenty years. For example a school with a 1992 baseline score of 30 would have a 70 point gap to overcome in the next twenty years. The short term target to be achieved is calculated by averaging the test results over the following two years of testing to see if the school had narrowed the gap by 10%, 7 points. Thus, the amount of growth required of a school is dependent upon its baseline score. Low-performing schools must have a greater amount of growth in the biennium than high performing schools. Based on where a school ends up in relationship to its threshold, it can qualify for awards or sanctions, what the state now calls assistance. Performance is broken down into the categories outlined in the following table:

Kentucky's Accountability System

School Status	Criteria	School receives award	
Rewards	1% or more above the threshold and 10% of novice students improve		
Successful	Average score for two years at or above the threshold	No action required	
Successful in Year Two	Average score not at or above threshold but second year score meets threshold	No action required	
Improving	Average score above baseline but below threshold	Improvement plan required	
In Decline	Average score falls below baseline Improvement Funds	Improvement plan Assigned Distinguished Educator	
In Crisis	5% or more below baseline	Improvement plan Improvement Funds Assigned Distinguished Educator Staff on probation Parents can transfer students into a new schools	

Although the design of the reward category requires that a school move 10% of its novice students to apprentice or higher, this is misleading in that the students tested are not followed from year to year. Thus, it is the collection of novices in subsequent cohorts that must improve. The "school in crisis" provision was suspended for the first biennium of the system's operation.

The total amount a school eligible for rewards can receive is calculated by taking the number of certified staff members working in the school on the last day of the second year of the biennium, and multiplying it by the individual reward amount. Certified staff includes all teachers, the principal, counselor, and librarian. Initially the maximum award amount was set as the amount that is 10% of the average teacher salary during 1993-94 in the five districts with the highest average teacher salary; this amounted to \$3,690. The minimum reward amount was set as 50% of the maximum; this amounted to \$1,845. A school with a base line score of 30 would have had to exceed its target, 37, by one point to earn the minimum reward and reached 47 to earn the maximum reward. In between 37 and 47 are 51 possible reward levels. The amounts for each of the levels had to be reduced due to the large number of schools that were eligible for rewards as there was a limited amount of available funds. On April 4th, after already announcing the schools that would be rewarded, the adjusted reward figures were released. Rewards for high performing schools would range from a minimum of \$1,301 to a maximum of \$2,602 for each certified staff member.

Although these figures were calculated to determine what lump sum to distribute to a school, the intent was not that this money would be distributed directly to the staff, but rather the staff would determine what to do with the collective lump sum.



13

II. Distribution of Rewards at School Sites Throughout the State:

There is no common experience in how schools that received rewards dealt with the task of distributing those rewards. Some schools were able to divide up the reward money with little or no difficulty; other schools faced serious problems in the process of dividing reward funds. The state law left it to certified staff to determine how to distribute the award money, but did not specify which certified staff from what year (s) should make these decisions. Certified staff include teachers, the principal, school counselors, and librarians. This ambiguity represented a significant challenge for some schools. The law does not specify whether the current certified staff should vote or those certified staff who were employed for a part or the complete duration of the biennium period on which the rewards are based. The state also gave no guidelines specifying how the funds should be distributed instead stating "certified staff members shall by the majority rule collectively decide on the ways the rewards funds shall be spent."

Schools were either rewarded or sanctioned based on the growth between cohorts. The State Department of Education's defense of his model has been a difficult and technical task.⁴ In part due to these technical issues, the most severe sanctions are on hold and more recently, KIRIS as a whole has been challenged, though unsuccessfully, in the Kentucky legislature. Regardless of these technicalities, the first round of the rewards provides important information based on implementation that should inform future policy talk and action. Though local teachers and administrators provided little input to the initial reward design, perhaps the local experiences in implementation might at least influence designers of future plans.

A number of challenges faced all schools that received rewards, some of which are described in the cases studies below. Which staff should vote on how to distribute rewards? Should only staff that worked in the school during the biennium vote? Should only current staff be allowed to vote? Should rewards go to staff that were present one or two years a_5o , but subsequently left the schools? Should teachers who worked in only one year of the biennium receive less than those who worked in two years? Should new staff be included in making choices about the rewards? Should new staff receive part of the reward? Should classified staff receive rewards? Should teachers in the grades tested get more than other teachers? Should teachers in grades above the assessment year, such as 5th grade teachers in elementary schools, be excluded from the rewards?

⁴The Kentucky State Department of Education should be complimented for its willingness to permit outside research and for its continual effort to improve the system.



Rather than face making these decisions, many educators seemed to want more direction than the state provided in regard to how to divide up the reward money. However, requests for guidance were in vain as the schools had to exercise their own authority. Schools choose many routes and paths in distributing funds. One school set aside \$3,000 for new furniture for the 4th and 5th grade classrooms. Another school set aside \$200 for an appreciation dinner for the bus drivers. An elementary school set aside a certain amount to establish a scholarship fund for the high school classes of 2000 and 2001, the students whose performance assured the school the reward

Comments to the press and researchers about how schools chose to divide the reward reflect the culture and philosophy of the school. In a report in the *Kentucky Post* (April 4) one principal discussed how there was no question that the funds would be shared among all staff and students commenting, "We've been together from the beginning in educating all children." One principal in a school that distributed the funds, although not equally, among faculty and staff commented, "We don't know who in this building has touched a kids life. Sometimes it's the cafeteria worker that would be the real reason why a kid performed well. Sometimes a secretary." (*Courier Journal*, Feb. 13) Comments of other principals reflect a very different type of school culture. One commented, "the reward system causes dissension in the ranks ... can't be handled by the faculty ... act like pirates who do not know how to divide the spoils ... who start to kill each other a cohesive faculty turned into selfish children."

In one school where certified staff voted to keep the bonus for themselves, a mysterious virus emerged among the classified workers who reported in local news report "this virus may continue the rest of the week." The sick workers attributed the "virus" not to the fact that the reward was not shared with them but rather that the students did not get anything from the reward money. A certified staff member told the reporter, "Money and greed has torn the unity of our school system apart." (Breathitt Co. Voice, Jackson, KY. 1995). The majority of schools opted to use their reward funds as bonuses for teaching staff.

The Kentucky State Department of Education conducted its own survey from April 20th to 24th to better understand the actual experience of the reward process. The Department selected a random sample of eight districts and asked three questions: 1) Where is your staff presently in the reward distribution process, 2) What major problem, if any have you encountered, and 3) What recommendations would your make to the Kentucky Department of Education for future disbursements. In total 74 schools responded to the survey and in 70 of the cases the principal was the point of contact. The department summarized the problems reported in responses to question two by collapsing them into eight different categories. The responses are provided in Table 2.



7.5

Table 2: Reported Problems with the Reward Distribution Process

Major Problem	# (%)		
No Major Problem Decisions on Disbursements Staff Morale/Hurt Feelings	32 (43%) 19 (26%) 7 (9%)		
Time Consuming/ Too Much Process/Deadlines Not Enough Regulations Speed of Disbursement	3 (4%) 2 (3%) 1 (1%)		
Not aware of the Implications Other	1 (1%) 9 (12%)		

(Data form Kentucky State Department of Education, Survey, April 20-24, 1995)

At the time that these results were collected, only 27% of the schools sampled had already voted to decide how to distribute the funds. Thus, although a high portion of the sampled schools reported having no problems with the rewards, the majority had not yet begun to determine what to do with the rewards. Some of the comments that comprised the "other" category include: the program "created a monster"; there is a "problem with teachers in control"; it shows that there are "greedy people"; and the program has "created added frustration." At the time of the survey, respondents expressed numerous suggestions for future disbursements. The most frequent suggestions related to designating reward distributions (32%) and providing more guidelines (19%).

Case Studies⁵

By reviewing the specific experience of three elementary schools and one high school that approached the distribution of rewards differently, the following cases document the varied responses of schools in deciding how to deal with rewards. They were deliberately selected to represent a range of experience from a relatively smooth process at Marshall Elementary to the very complicated and contentious series of difficulties at Sherman Elementary. The state gives schools great latitude in regard to the money they receive and how it may be divided and as might be expected, the schools' approaches to the process vary. Despite this procedural variance, however, the schools encountered many of the same problems in implementing their plans. The cases are arranged in such a way as to introduce new problems with each account, while also revisiting

⁵ Names of the actual schools described have been changed for the purposes of these case studies.



issues the schools have in common. Though only four schools are featured below, the problems they confronted are by no means limited to this group. The range of responses to KIRIS reflected by the cases is reinforced by news reports, survey data and lawsuits throughout the state.

I. Marshall Elementary

Marshall Elementary School exceeded its threshold of 37.7 by just over five points. This qualified the school to receive \$1,806 for each of the 32.3 staff on record with the state. The principal did not think the rewards motivated teachers but did say that neither he nor the staff wanted be at the bottom when they publish lists in the paper. He was unable to explain what contributed to the school's success. In response to a question asking him if he knew what he needed to do to continue the progress the principal said, "I think it's rather hazy, vague at this point in time."

The school waited for a state directive before making any decisions about how to distribute the reward. He kept thinking the state would come in and say this is how you distribute the funds. Such direction never came. He first interpreted the correspondence from the state to suggest that the staff from the second year of the biennium were the ones who should decide what to do. Later, however, the staff met and discussed the issue, and it was decided that old and new staff should be able to vote. He then formed a committee to which the staff could submit ideas as to how the funds might be distributed. It would be the job of the committee to try and group the suggestions and form a ballot of ideas for the staff to vote on. At first he asked for volunteers, but when no one came forward he asked a few people to serve. The committee received suggestions. In the end, a ballot was created through which the staff first needed to decide whether the money should only be split between certified staff or would it be shared with classified staff. Under the shared proposal, there were three choices each allotting a different percentage to classified staff. Initially bus drivers were included as part of the classified staff but later dropped. As the ballot was developed and refined, the staff met at least three times, discussing the different formulas that might appear on the ballot. In these meetings, it was determined that the portion given out would be pro-rated by the length of service to the school or by the amount of time given to the school by part time staff. New staff would vote but would receive no rewards.

The final ballot presented two choices: 1) All money will be distributed to all certified staff who were employed during the 92-93, and 93-94 school years on a pro rated basis and 2) The money would be distributed to certified and classified employees and presented in the same manner as in choice 1. All voters needed to select a percentage off the top that would go to the classified staff should choice 2 win in the vote. Thus for those that voted against the sharing of the funds they could then select the lowest percentage to be shared, 5%. Others might also have selected 5% of the sharing of the selected 5% of the sharing of the selected 5% of the selected 5% of the sharing of the selected 5% of the selected 5% of the sharing of the selected 5% of the sharing of the selected 5% of



16

or chosen the other two options -- 10% or 15%. In the end 9 people voted not to share the rewards and 29 people selected the option by which the funds would be shared. Of those who voted, 19 voted for 15%, 11 voted for 10%, and 9 voted for 5%. The principal was very happy to see that "the majority of the staff voted to reward those people who work in the building on a daily basis, and are close to the kids." However not everyone was so happy. The next day, according to the principal there was a sign posted in the staff lounge that read, "To all of you who felt free to give my money away: The next time your husband gets a bonus, I hope you can convince him to give 15% share of his bonus to the office boy and canteen boy." Beyond that note, the rewards presented few problems for the teachers or principal.

Other than the reluctance of staff to get involved in the decision making process and the one bitter response reflected in the teacher note, Marshall elementary did not face many problems in distributing the reward funds. Staff that had left the school were sent their portion of the allotted reward and the new staff understood why they were not included. Students received nothing, and the classified staff, excluding the bus drivers, were happy to receive 15% of the reward funds. Neither the rewards themselves nor the time consuming distribution process had any direct connection to issues related to teaching and learning. The principal and staff did not believe the reward had motivated any particular behavior. And, although he and the staff were keen to avoid sanctions, they could not explicitly explain how they had been successful or what they would do to continue their success.

II. Clarke Township High School

The principal of Clarke Township High-School was proud that his school's benchmark score was higher than every one of the surrounding county schools. The principal at first suggested he did not know what the threshold was that he needed to hit, but then let it slip easily out: "We needed to get to 50.7, but we got to 51.9 which qualified us as a category 8 school." He went on to explain that they "would have received approximately funding for about twenty-one hundred dollars per certified teacher. It of course didn't get funded in total. I think we ended up maybe being about eighteen hundred." In commenting about the notification of the reward he said, "Our staff was not very excited about the rewards. I do not think they motivated us a bit; As a matter of fact I think it was more of a hindrance to motivation than it was a help. They resented it ... They didn't look at the rewards or sanctions as a very professional way to deal with school improvement."



The teachers needed to decide who would vote on what to do with the rewards. In the first meeting the current teaching staff met and decided two things: 1) Certified teachers who were employed in the second year of the biennium would vote, and 2) The school would not do anything else until the money was actually received in the district. The principal explained this action because of a "a skepticism that money would ever be actually sent down to a local district." Some of the staff believed that the rewards would be legally challenged and that it would be "tied up" and others remembered the \$300 promise.⁶

After spring break, when the school received notice that the district had received the funds, the faculty met again. A committee was comprised of any faculty who wanted to participate and discuss options for presentation to the full faculty. Eleven out of 53 teachers volunteered to be on the work committee. The teachers met on their own until they were ready to present a proposal to the full faculty. The chairperson asked the principal what the state's guidelines were. He informed her "there were none." The principal did seek out some guidance and confirmed "there were no parameters established by the state in doing this."

The committee recommended that only staff members who had worked at the school during the two years of the test cycle, 1992-94, should qualify for awards. The committee suggested a formula based on a share for each year worked. If a teacher worked two years, she would receive two shares. The committee also suggested that a certain amount be set aside for classified staff that worked during the two years. No one could explain how this amount was determined. Ultimately, they decided upon a method similar to the Marshall Elementary School staff. They divided the amount reserved for classified staff into shares making sure that teacher aides and secretaries received more then custodians and cafeteria workers. The rationale for this was that they interacted more directly with students. Bus drivers would receive nothing. Six categories with corresponding monetary amounts emerged: 1) teacher one year, \$758, 2) teacher two years. \$1,516, 3) instructional aide/secretary one year \$175, 4) instructional aide/secretary two years. \$350, 5) cafeteria worker/janitor one year \$85 and, 6) cafeteria worker/janitor two years \$170.

For the few staff members who had left the school, they would receive a check in the mail. New teachers would receive nothing. The committee also suggested a fund for anyone who wanted to put funds back into the school. The faculty approved all of the committee suggestions in a secret ballot vote. Only one teacher voted against the plan. Teachers and non certified staff were

⁶In fact, several suits have been brought by individuals seeking to receive a portion of the rewards. In one district, a teacher who participated in preparing students for the KIRIS tests but left the district before rewards were distributed, is suing to obtain what she believes is her share of the school reward. Teachers in the school voted to exclude any staff not employed by the district when the state disbursed the rewards.



happy with the distribution strategy. A few teachers made contributions to the fund and as of June, no one was sure for what purpose the funds would be used.

The teachers at Clark Township never believed any reward would ever come and delayed deciding on how to distribute the reward until the cash actually arrived. Thus, their performance was not motivated by the potential reward. As the principal said, "you know whatever we did, and however hard we worked to be successful the fact that there were dollars available had no bearing at all." Staff, according to the principal, worked hard on the things they believed would increase results on KIRIS, but the effort was not because of the potential for a reward. The teachers helped students learn how to answer open ended questions. The school purchased the old KIRIS exams and used the questions as part of the instructional program. This behavior was motivated in part out of fear of the sanctions. As the principal commented, "KIRIS has also put the thought of being on sanctions ... or being a school in crisis and no one wants to be in that category." Thus, the incentive program in its use of sanctions did trigger changes in teaching and learning, but the possibility of a reward did little to motivate change and the actual receiving of the reward and subsequent distribution had no connection to core issues of teaching and learning.

III. Truitt Falls Elementary

Truitt Falls is located in a small rural community. The school has three hundred students in pre-K through 5th grade. In February, 1995, the school was notified that it would be receiving \$46,791. The year the baseline was determined, there were two sections of 4th grade students. The Base Line Index was 35. During the 1992-93 school year, the 4th grade classes were mixed with third graders. Although only the 4th grade students were tested, the up-coming 4th graders were exposed to an instructional system heavily influenced by the KIRIS assessment. In the first year of the biennium, the school scored exactly half of what it needed to meet its performance goal. The students tested in the second year of the biennium were already well familiar with the assessment system. In addition, in the second year of the biennium, there were three 4th grade classrooms with 17 students in each class. In the second year of the biennium, the school far exceeded the remaining distance they needed to go to meet the threshold. The school went from 42 to 54. Thus, the school not only met its threshold but exceeded it by 25%. The progress qualified the school for a level 33 reward -- based on its 21.93 teachers with each teacher assigned an award of \$2,133.65, the total reward for the school was \$46,791.

In seeking to explain why the school was able to make such a jump in the second year the principal commented. "The previous year [the first year of the biennium] we had grouped our



fourth graders with our third graders ... and those third graders ... went through the formal writing portfolios even though theirs weren't scored. They went through the preparation for KIRIS you know because we did open-ended responses with them ... We did performance events with them." Teachers were urged to focus more on process skills and writing.

The next year the school moved one fifth grade teacher to fourth grade creating three classes with an average teacher ratio of seventeen to one. The principal thus explained the success by having the students have the prior year's experience, smaller classes and what he described as just an "exceptional group of kids." He recognized that the school had responded to the assessment in making education decisions and commented, "we're reacting to the assessment in isolation instead of doing what's best for kids, and we have to decide if three/four is a good situation for kids or is it just good for the assessments." According to the principal, what was really measured in the first biennium is how well fourth grade teachers can prepare students for the KIRIS assessment. The principal attributed the reward to the small classes and familiarity of the 4th graders since they had been previously grouped with the 4th grade.

After the school was notified of the rewards, there were many informal discussions about the rewards. Staff that had left the school and part time staff who were associated with more than one school were all invited to a meeting. The new staff did not have to attend the meeting but were welcomed to attend. In the first meeting, the staff tried to brainstorm ways to decide how to distribute the money.

The principal had a lot of concern and anxiety about the whole distribution process and the effect it might have on school morale. He commented, "I personally and professionally had a lot of anxiety and a lot of concerns about the whole process from the beginning when we realized that each staff was going to be responsible for distributing the money." The principal expressed his concern that the process could undermine school morale and focus attention on issues that might undermine the school culture. As he explained "any time you give people the power to put money in their own pockets you create the potential for hard feelings." He went onto compare to the process to a non-educational process: "I mean if you've ever been involved with a will and its spouses and siblings -- these people love each other very much, but when you're talking about money it creates just a different situation that those people generally aren't prepared to handle, and that is why wills are important. Parents are encouraged to make them very specific." Since there were no clear directions, he felt that the purpose of the second meeting should be "to nail down a way to distribute the money and who to include in the final vote."

He was concerned that some teachers might be excluded from the rewards. Specifically, he recognized that certain teachers in his school, the 5th grade teachers in particular, had little to do



with 4th grade performance. However, he also felt that in many indirect ways they, like the rest of the staff, did contribute to the school. The principal commented that,

The 5th grade teachers had no direct impact on the 4th grade test scores, but they have impact on the school climate and the school culture which in turn has a great impact on the success of the school as a whole and in my mind that is what we are looking at ... when we are educating the kids we are talking about the people who bring them, the people who feed them and the people who have to clean the bathroom they use.

A second meeting was held to determine who would decide on how to distribute the funds. The new staff members who were not in the school over the previous biennium were again invited to the meetings but did not have to attend. The school staff decided that only those that had been at the school in the second year of the biennium could vote; this corresponded with the list supplied by the state department. Thus, the new teachers who chose to attend were non-voting participants. In the second meeting the principal shared his reservations about the reward process and explained how he "asked them to consider a process that would in [his] mind satisfy what their individual desires might be, but protect our school climate, our school culture, and school morale, and not put us in the position of saying well you know most fifth grade teachers did not have any impact on those scores."

The principal suggested that each person would be responsible for distributing their portion of the reward. Under the plan, an individual teacher might select not to share any of his or her reward or might distribute a portion or all of it across a number of different categories. As part of the plan, the teachers would determine what categories to create. The principal would then distribute a worksheet where teachers could designate, if they desired, a portion of their reward to any one category or combination of categories. The process would be confidential with only the director of finance at the central office knowing how teachers chose to act. The principal hoped that by following the plan, the rewards would "not undermine the school climate and would ensure that all stakeholders would get something." One potential pitfall the principal recognized was that. "some of the people who had the least amount to do with impacting those scores in many cases probably took more money, more as bonus, than those who had greater impact."

The staff who qualified to vote, those who had worked in the school during the second biennium, approved the proposed plan. However, before giving their approval, there was discussion to clarify that the amount designated for personal bonus would go directly back to the designee and not into a collective category called bonus and that would then be divided by the number of staff. There was also concern whether they could be taxed for the entire amount or only the portion they designated to themselves. The next step was to develop the categories. Any



2.1

teacher could propose a category and explain the rationale. Table 3 lists the categories that were developed along with the amounts that were in placed in each category.

Table 3: Categories developed by Truitt Falls staff to which they might contribute some of their bonus if they so chose.

Amount Given	% of Total
	85.75%
	4.00%
	1.08%
	.43%
	.43%
:	2.07%
	.64%
	.85%
	.21%
	1.28%
	.43%
	.64%
\$ 1020.00	2.18%
	\$40,121.88 \$ 1,873.00 \$ 506.80 \$ 200.00 \$ 200.00 \$ 969.92 \$ 300.00 \$ 400.00 \$ 100.00 \$ 600.00 \$ 200.00 \$ 299.40

The selection of categories reflected the philosophy of certain staff members. For example, one teacher wanted new teachers to be a category on the worksheet. The principal in portraying and endorsing the teacher's logic commented, "New teachers are part of our future. If we were writing the school improvement plan today, those teachers would be here and expected to the same amount of work."

After all the categories were set, teachers were given a worksheet to make their selections. I asked the princi, all how he made his selections. He explained how he went last. Before making his selection he asked the finance officer for a list of the totals in each category and used his "money to ensure that the categories looked appropriate." He explained how he wanted to make sure that no body was left out or that no situation was created that might damage the school culture. For example, he did not want there to be only \$20.00 in the pool as that would "hit on the same issue that I was trying to avoid in the first place in not you know, leaving people out." His staff did not know that he was performing a clean up function.

The principal, in remarking on the system, first said he did not agree with the reward system but then corrected himself to say, "he didn't agree with the way they have asked us to distribute the funds." He also commented that "educators are motivated by intrinsic rewards [but the] new situation makes it so there's an expectation for external rewards." The risk in his eyes is backing away from the rewards as it would provide critics a chance to discredit the overall reforms.



He thinks his teachers see it as just a "one shot deal." The power of the system is in being motivated by fear of the sticks: "there is more concern about being a school is crisis, running a school improvement plan, being assigned a distinguished educator than there is a drive toward getting more rewards."

The case of Truitt Falls' reward distribution illustrates a few important points. The principal was sensitive to the potential problems that might emerge as a result of the distribution process and thus was careful to create a process that would protect the school community. The system worked, but only after he used his access to discovering where the funds had been distributed to assure a distribution that left no one out. The school certainly changed its structure, if not its teaching, in seeking to maximize its test scores. This effort appears to have been motivated not out of interest for the rewards, but rather by fear of the sanctions. It is unclear whether the structural changes explain the success or whether it was the serendipity of having an exceptional group of students as expressed by the principal. Certainly the overall incentive program did motivate change, but some of those changes might not have been in the best interests of student learning within the entire school. And, although teachers could have selected areas to support with their reward funds that would have supported continued instructional change, the majority of funds went directly to teachers and not to areas that would improve the professional capacity of the staff. And, in fact, the selection process itself required time that otherwise might have been used in a process more directly linked to instructional issues.

IV. Sherman Elementary School

Sherman Elementary has 555 students across pre-K through 5th grade. Its benchmark index was set at 34.6. The school exceeded its threshold of 42 by two points qualifying it for a level 15 award category. Like the other schools visited, staff expressed a deep skepticism about the rewards. The principal commented,

I do not think the rewards were a motivating factor because they did not believe it would come true. The rumors around the school that I listened to were that the state had offered them moneys before and those dollars never came; they never thought it would happen. In fact even after we qualified for the rewards and been told ... how much money it would be they still didn't believe it; they said they would believe it when they saw it.

A librarian who had been at the school for eighteen years reflected the long history of failed promises of past reforms in her comments. In referencing the state failure to come up with three



hundred dollars, she wondered how would they ever really give any more money. Thus, she never expected the reward.

Well, the school did get its reward. When asked what behaviors he could point to in explaining the reward the principal had just one anecdote to share. He explained how the school focused heavily on teaching students how to respond to open ended questions. The principal explained the method: "In fact we have developed a little card that we use and all the kids have that particular process and it's posted on the walls in each room. We teach that process."

Like other schools that received the reward, the first staff meeting was devoted to deciding who would vote. The staff were very divided on the issue of who should vote. As the principal commented, "The legislators did not explicitly say who would and would not vote which created a major problem on the part of some members of our faculty who felt those who were here in the 92-94 biennium should vote and others felt those currently here should vote." A ballot was distributed to current staff and it was decided that only those currently employed should vote; thus 6 staff members who had been at the school during the biennium would not vote. The logic behind not having the teachers who had left vote was explained by the principal: "Those who were no longer here had nothing to loose and everything to gain and would most likely vote self-interest so we voted for those currently employed to make the decisions."

The school staff then established a committee to take suggestions as to what should go on the ballot to decide how the reward funds should be distributed. One representative from each grade level sat on the committee. The committee compiled ideas from the staff about how the funds should be distributed and constructed a ballot. The ballot provided numerous options. The current staff voted and decided that only current certified staff would be given the rewards. In discussing the results, the principal commented,

... Our staff voted by majority to give the rewards to present staff -- well that's when the war started; there was a group of people on staff that felt like those people who were here between 92-94 should have received bonus money and they did not according to the ballot. It became real ugly, feelings were hurt, lots of animosity developed. The classified staff were not included and felt unappreciated.

Sherman experienced what the principal at Truitt Falls had feared. The school climate had been severely disturbed. As one aide who had taught in the school for twenty-two years commented, "My feelings were hurt. It caused division in our school. I had never sensed that before. Some people could not even look you in the eye. It brought some feelings to the surface we did not realize were even here." The experience left her feeling that the school "would have been better if the money had not been offered." The librarian commented, "the cooks wouldn't speak to anybody. I don't know about the bus drivers. They might have run you down."



Speaking about the aides, the librarian said she did not blame the aides for being hurt: "you know we give this big PR speech to the community how it takes a whole village to educate children, and we're all in it together, and it's teamwork, but when money comes along only the faculty gets it."

A new teacher, who had not been in the school working at any point during the biennium, commented, "I wanted no part of it, but that was not an option. I refused to go to one faculty meeting; they came and got me ... said I was certified and had to be there." After the vote, she reflected on the anger she felt about the position she was in, "It was the worst experience of my life in a school system. The classified were so upset. They would not even look at me. The certified were also offended; My only sin was that I was new. I wanted no part of it." She herself did not want the reward and commented, "I worked hard at my other school, but did nothing to get this school where it is."

The principal as well as many teachers expressed great concern about the deteriorating school morale. In a faculty meeting the issue of the distribution was revisited and different staff members vented their emotions about the result of the process. Some were outraged by the neglect of current non certified staff, others were more upset about the staff who had left but would receive nothing. Some argued that "when you have a vote you have to go by the vote" and others said "that this is not right we just can't continue this." The principal felt caught. He could not override the decision, but also knew that status quo was not sufficient.

Describing the effort put forth dealing with the reward program, the principal commented, "There was a tremendous amount of time put into it. The main reason is I'm not as smart as most administrators and it took me a longer period of time to figure out how to deal with the process." He went on to explain the quandary he was in after the staff failed to share the reward with any non classified staff or the teachers who had left. "How do I deal with that? How do I bring this together? It took me a week just mulling over it and trying to figure which route to take and then it hit me -- of course I made several phone calls to some friends, and one of my former professors." His old professor helped him find a solution. As the principal expressed it,

I could not leave the house divided. In the end I used what the legislative body can use, a petition; I could not change the decision, but I could welcome a petition signed by more than 50% of the certified staff.

He allowed a small group of teachers to circulate a petition to start the process all over. The staff could find no support to a petition addressing the question of who should vote, but a modified petition to just re-vote with a new ballot was supported. The petition passed and a new ballot was constructed with three choices: 1) rewards for those at the school in the biennium 2) rewards for the current teachers 3) rewards for the old and new teachers. At the bottom of the ballot was an



additional choice to decide whether to share 3% off the top with the current school secretary, teaching assistants and cafeteria workers. The staff reversed their previous vote and chose to allot the 3% and include the staff that had left. In explaining the reversal the principal commented, "In any decision that you make there are unintended consequences and I think what they got into was, they saw that the unintended consequences of the results of the first vote and when they saw that, the vote was held -- it was a done deal and when they had the opportunity to revisit that or review it through a process, they changed their decision."

The reversed decision did not heal the community. A teacher aide expressed how she "personally did not want the money after the first vote. I felt like they should keep it. The second vote did not heal the wounds." Although she and some of the other classified staff went to the principal to tell him they did not want the funds, they were informed that they must take the money, \$82.

Looking forward to a time when the school might potentially get another reward, the principal commented "I think we can handle it next time but I think we'll have the same problem if it's not explicitly stated who votes. Leaving it open like that sets a school up for adversarial situations and I don't think that those folk who make policy should structure work for schools that creates adversarial relationships within the building."

The Sherman case illustrates the fears of the principal of Truitt Falls all actualized. The reward process became a time consuming effort that darnaged the school community and contributed little if anything to the effort to improve teaching and learning in the school. The strategy the school employed in seeking success was less structural than Truitt Falls, emphasizing how to answer open ended questions. The reward process damaged the relationship between the certified staff and the classified staff. Although the staff reversed its original decision, the feelings were not so easily changed. The school did attempt to take the new assessments seriously and maximize its performance, but this effort, like in the other schools, was motivated more out of fear of the sanctions than hope for a reward.

Discussion

The reward program in Kentucky is problematic on multiple levels and provides specific, illustrative examples to probe the assumptions behind incentive programs in general. The following discussion revisits the general assumptions/goals introduced at the beginning of the paper, viewed this time in light of the cases, survey data and newspaper reports presented about



Kentucky. Again, this paper, and the following discussion in particular, is intended to highlight what we view as weaknesses in Kentucky's program in hopes of informing future efforts at teacher incentive programs. If rewards worked as intended, that is, if the general assumptions about and conditions of rewards, as described earlier, were actually manifested in programs like Kentucky's, we believe they would have the potential to bring about school change and ultimately, improve student outcomes. However, as we demonstrate below, KIRIS is not very well aligned with those assumptions and conditions.

I. Rewards Systems Promote "Better Change" Than Top-down Regulation and Oversight.

The first assumption/condition discussed in the beginning of this paper was that incentive programs are appealing inasmuch as they offer the chance to make a "horse-trade," decreasing bureaucratic oversight, satisfying the interests of teachers, and appealing to our sense of an even deal, the potential result of which may be less regulation and more meaningful, inclusive change. The issue was raised, however, that this "trade" requires that the motivating interests of teachers be known and satisfied, and that we be able to determine that it is actually the promise of rewards, and not fear of sanctions, that brings about the desired changes.

The cases suggest that none of the administrators or teachers in this sample felt that they were participating in an even exchange of their efforts in return for a motivating reward. In fact, there is little indication that the rewards acted as an incentive at all. According to all four schools, fear of sanctions was a stronger motivator than the anticipation of cash rewards. In each of the cases, comments were made that it was the fear of becoming a "school in crisis" that prompted attention to the new assessments, not the promise of rewards. It would appear, therefore, that a much more traditional, regulatory dynamic was in operation at these schools than an incentive program is intended to create. The potential for self-change and the internalization of organizational goals which advocates might associate with the theory of incentives was not in operation here. Generally speaking, the gains in student performance that occurred in the four schools cannot be attributed to the incentive value of the rewards for teachers.⁷ This fact is born

⁷This paper does not address the technical effectiveness of KIRIS to improve student outcomes, nor does it delve very deeply into the fairness or accuracy of the measures used to assess and hold schools accountable for student outcomes. A study conducted for that purpose, Review of the Measurement Quality of the Kentucky Instructional Results Information System, 1991-1994, prepared for the KY General Assembly, suggests that the reported gains in KIRIS scores "significantly overstate improvement in student achievement." The report goes on to state: "Indeed, it is not



out more fully when the remaining assumptions related to rewards are viewed in comparison with Kentucky's experiences.

II. Monetary Rewards are the Appropriate Motivation to Improve Teacher Performance and Thereby Improve Student Outcomes.

The second general principal of cash rewards discussed earlier was the issue of intrinsic vs. extrinsic motivation. Research varies in the weight it attributes to extrinsic and intrinsic motivation of teachers and other school staff. Both forms of motivation are believed to play some role, but overall, studies and surveys of teachers indicate that it is the intrinsic value - work environment, personal fulfillment, relationship with children - that makes work satisfying and affects teacher performance in the classroom. (Odden and Protsik, 1995). Money and other extrinsic benefits are more often associated with the initial decision to take a job, and can have a basic practical influence over retention of teachers who, without financial incentives, might move out of teaching and into more lucrative professions. (Brandt 1990). Given that KIRIS uses a financial incentive in an effort to improve student outcomes, this is another point where the basic premise of rewards - that they go to what motivates people - is misaligned with Kentucky's rewards plan. Not only does the program as implemented fail to provide for intrinsic rewards in its incentives and distribution structure, it actually threatens to undermine the existing intrinsic benefits of the schools by having a negative impact on school culture, work relationships and public perception. This is exactly what occurred in the cases.

Without exception, each of the schools described above experienced some level of inner-conflict, especially in the distribution phase of KIRIS. Truitt Falls and Sherman Elementary, in particular, reported bitter conflict between and among the certified and classified staff. Teachers were conscious of the time consumed by the decision process and the many meetings it required. This was time away from the classroom, class preparation and other school activities and ultimately it also proved to be a contentious, stressful time that degraded the school environment. In some instances this time resulted in new equipment, supplies or field trips for the school, all of which go to the intrinsic values of teaching and learning. However, in many others, none of the reward value was put back into the school but rather, went directly to teachers and staff. Beyond the

clear whether any appreciable, generalizable gains in achievement have been produced in some grades and subjects ... The panel is also unable to determine which of many factors might have caused exaggerated gains on KIRIS. (Final Report, Office of Educational Accountability, KY General Assembly June 1995, pg. 8-2)



serious questions of motivation, the distribution process itself presented schools with a serious challenge to address, but a challenge disconnected from issues of teaching learning. The time devoted to the reward process had few if any linkages to any issues related to teaching and learning.

III. Reward Systems Emphasize Motivation Over Support for Capacity.

In addition to causing teachers to spend extensive time and energy away from teaching, KIRIS fails to provide a mechanism through which they can improve their teaching skills. In fact, the program as it is designed, suggests that the extra motivation of cash, alone, will prompt better student learning. This assumes that capacity and resources are adequate to attain the goal, and that motivation is the key factor lacking. We believe this is a flawed assumption and results in a missed opportunity to address skills-based and professional development of teachers.

The ultimate purpose of KIRIS is to improve student outcomes. A large portion of the reform legislation's funds were devoted to the reward program rather than a mechanism that might have built the capacity of schools to meet the established threshold. Schools were left to use their existing resources and working knowledge to devise a local strategy to meet the required goals. This study finds little evidence to suggest that the reward process provided school staff with an opportunity to engage in conversations that might enhance teaching and learning efforts. Further, there was no built-in mechanism in the rewards portion of the legislation to provide for professional development or skills-based improvement, nor was there any requirement that the reward money be put back into the school for this purpose. Instead, at best very small portions of rewards were designated into categories beyond the certified staff. In a few cases minimal resources were left to enhance professional development efforts. The presumption, therefore, seems to have been that given adequate prodding (cash incentives) teachers could, at will, improve student outcomes. This is problematic.

The cases illustrate that the new incentive structure has triggered changes, some of which might maximize the performance on KIRIS but not necessarily enhance the educational effort. It is not at all apparent what a school must do to achieve a reward, nor whether there is an optimal way for teachers to help students reach the benchmark. Certainly the threshold is well defined, but the mechanism one might use to assure that success is left undefined. Thus, each school takes its best guess at practices that might assure success whether it be through a new configuration of classrooms at Truitt Falls or through the mass production of laminated cards explaining how to answer an open ended question as at Sherman.

29



Although students appear to have made the gains intended by KIRIS, we cannot conclude that increased teacher capacity caused this apparent success for at least two reasons. First, because of the loose configuration of KIRIS in terms of guidance, implementation and reporting, there is no way to determine what caused the gains recorded. A panel report for the Kentucky General Assembly supports this point. (KY General Assembly Panel Report. pg. 8-2). Second, that same report indicates, there is evidence to suggest the KIRIS test gains are "substantially exaggerated." Among the reasons for this skepticism cited by the panel is a serious disparity between KIRIS scores and other indicators such as ACT and NAEP test data for the same students. They point out that these test measure related skills but without the "coaching" accompanying the KIRIS program.

IV. Rewards for Teachers Alone will Translate to Improved Student Performance.

Another premise of incentive policy is that rewards must be promised to those who have it within their control to make the desired changes. KIRIS does not fully address this condition. While incentives are provided to teachers (the effectiveness of which has already been questioned), there is no built-in mechanism whereby students are rewarded for their improvements. Since KIRIS scores are measured by cohort, not longitudinally, individual student's progress is not tracked, so there is not even the opportunity for the reward of personal satisfaction from one's individual progress. In some instances, teachers chose to use their reward money for student activities thereby sharing the rewards with students, but this was neither the norm, nor in any way required by KIRIS.

Also left out of the rewards structure are teachers who leave the school sometime during the assessment and reward cycle, and the non-certified staff in schools. Again, some schools chose to designate a portion of their reward money to former teachers, cafeteria staff, aides, bus drivers etc., out of recognition for the role they played in students achievement. There is no requirement, however, that these individuals be included in rewards distribution, and the problems that ensued from this omission are well documented in the cases.

Aside from the impact this exclusionary policy had on school culture, it is inefficient in terms of achieving the goal of improved outcomes. Teachers clearly play a role in student achievement but they are by no means the only lever on their gains. Certainly, the students are also responsible for their outcomes, as are all of the individuals who contribute to their learning



environment. By leaving these individuals out of the incentive and reward scheme, KIRIS excludes key players in *meaningfully improving* student outcomes.⁸

V. Reward Funds are Stable and Secure Enough to Inspire Teacher Confidence.

Because of empty promises in the past, educators had little faith that the funds would ever materialize. There is no clear evidence that the reward acted as an incentive to motivate change. Instead, the historical memory of failed promises made teachers more skeptical that rewards would ever materialize. Schools in some cases, doubting the funds would ever appear, waited to make decisions about distribution of cash rewards until the money was in hand. Clarke Township High was one such school. Teachers and principals spoke of the \$300 promise as if that was clear evidence that the policy talk must be suspect.

The state, in the mid 1980s, promised educators a \$300 bonus that never materialized. Thus, many teachers felt the KIRIS rewards would never happen. Prior to the announcement of rewards one member of the state department said "you walk around the state and you ask people about rewards and they will say what rewards? There aren't any rewards. We'll never see it."

Although they were proven wrong, the size of the promised rewards was substantially reduced and the continued use of the incentive program is now being questioned. These changes support and in part justify the skepticism teachers express about such reforms. With so little stability between the policy talk and policy action -- even if there were strong evidence that teachers were motivated by extrinsic rewards -- a rational actor in Kentucky would be skeptical about the cash incentive. For example, the severest sanctions have been put on hold until the reliability and validity of KIRIS can be better established. This is likely to call into question the reliability of KIRIS to measure gains for rewards as well -- if it is unreliable for determining low scores, it may be similarly unreliable in determining high scores. In addition, the fist year of the next biennium was almost over by the time the schools were notified about the rewards from the previous biennium, bringing into greater doubt whether teachers were actually motivated by the cash incentive.

^{*}We stress "meaningful improvement" of student outcomes because, while KIRIS was successful in prompting many schools to reach their benchmarks, this paper has already called into question the validity of those gains. Ultimately, the net-gain of the improvements is debatable.



Moreover, after the state announced which schools would receive the awards, many continued to doubt that the funds would ever materialize. As one newspaper report quoted a teacher in a school that qualified for an award, "some joke they'll believe it when they see the check does not bounce." Escaping the cry wolf behavior of the past has been difficult, raising serious questions as to whether the rewards had any value as a motivating factor for teacher behavior.

This lack of stability has ramifications beyond just KIRIS. Hanushek has pointed out that the question of whether the state (or district) will follow through with promised rewards translates into a commitment issue in the minds of teachers and that this impacts all reforms, not just incentive programs. (Hanushek 1995)

Lessons From Kentucky

The new attention to educational accountability and the use of cash rewards linked to student performance is at a critical stage of development in the United States. As state systems and more locally designed systems are implemented, lessons for improvement and modification to enhance others will be more possible. The experience of Kentucky provides helpful guidance surrounding key issues that emerge not just in the design of programs but also in the actual implementation.

We perceive six main challenges for state policy makers who consider using rewards as part of an incentive program to improve student performance: involving teachers in the actual design process of the incentive program, linking rewards to individual student progress, resolving issues of fairness, defining a clear link between the distribution of rewards and continued improvement of teaching and learning, assuring state justification and rationale for incentive programs and finally, assuring long term stability of the incentive program.

I. Involving Teachers in the Actual Design Process of the Incentive Program

The design and use of rewards should be carefully discussed and debated among all essential stake holders. In Kentucky, teachers were given autonomy but were not part of the conversations to decide whether such a system for allocation was what teachers wanted. The

⁹Hanushek also stresses that while the issue of commitment is not easily resolved, failure to commit is not a viable choice. He frames the problem as a design issue, not an implementation issue - a distinction which we agree is important.



reluctance of staff to attend meetings or serve on committees related to the distribution process suggests that another policy design might have been preferred by staff, and might have better suited their needs. For example, if research about intrinsic sources of teacher motivation is correct, then teachers might have been able to articulate those intrinsic values to policy makers and to assist in designing a program that allocates rewards to generate and support the intrinsic value of teaching. They might also have alerted policy makers to the dangers of leaving the distribution process undefined, and would likely have predicted the bitterness that arose in so many schools as a result of that process.

II. Linking Rewards To Individual Student Progress

A school in Kentucky where the 4th grade students show greater achievement than previous cohorts is not necessarily a school where individual students are improving and making academic gains. Thus, schools that achieved rewards in Kentucky were not being rewarded for individual student growth. If incentive programs are to be used to reward student performance, then the incentives should be levied based on the progress or lack of progress of individual students over time. By focusing on students and not cohort comparisons, teachers can't discredit the design by pointing to changes in student population from year to year. By focusing on student growth, all teachers become more accountable rather than focusing on narrow hot spots, such as the 4th grade in Kentucky, for capturing school performance. Dallas is currently using a reward program that incorporates individual student gains into its model of how schools are evaluated thus assuring attention to improve the performance of all students (Clotfelter and Ladd, 1995). Hopefully, further research on local initiatives like that in Dallas will inform discussions about state-wide policy design.

III. Resolving Issues of Fairness

Is it fair to punish or reward teachers when they do not fully understand why they are being punished or rewarded and when they are equally unsure as to what behaviors are necessary to assure the desired end? In Kentucky, it is not readily apparent what school practices assure cohort improvements. Based on this research, different schools employed different strategies and were never fully sure of the connection between the strategy and student performance. Although other parts of KERA have provided resources for professional development activities, the state gives little oversight to suggest what professional development activities might be most beneficial to achieving state aims. Not all schools have the same capacity to improve school practices such that



they would be aligned with a positive outcome on KIRIS. Ultimately, achieving gains in performance depends on school administrators, teachers, parents and students knowing what to do to improve performance. When systems fail to convey information about how to improve performance, they are not likely to be viewed as helpful by those who are being held accountable. School personnel need to understand if they are succeeding or failing at improving student achievement. Evaluation by artifacts of a measurement system they do not fully understand neither provides that understanding, nor allows for self-correction.

IV. Defining A Process and Usage for Reward Funds

In the spirit of decentralization, Kentucky left the reward distribution process up to the certified staff at each school site. The teachers were given full authority to decide how to allocate the reward funds. In most cases the teachers in schools that received rewards distributed the funds among themselves and did not use the funds for school improvements. Thus, the rewards acted as a salary enhancement and not a school enhancement. The process in many cases took time away from issues of teaching and learning. Unlike South Carolina, where reward funds stay in the school building, in Kentucky most of the rewards provided no direct benefit to the school or students. Since in fact it is student effort and performance that determines whether a school receives a reward, a case can certainly be made that the reward funds should benefit the students, not just the teachers.

V. Assuring State Justification and Rationale for Incentive Programs

The Kentucky system of rewards and sanctions is connected to a highly complex set of assessments that imposed high demands on the technical capacity of the assessment system and the capacity of the state to oversee school improvement. The twenty year goal of having all students be proficient was not determined based on any model of either student growth or institutional capacity for change, but rather served as a distant goal around which to garner support. In fact, policy makers in Kentucky are not sure if the model upon which the incentives are premised is even possible. As other states and localities develop incentive systems based on performance goals, it is critical to develop clear goals that are achievable over time.



VI. Assuring Long Term Stability of the Incentive Program

The memory of the promised \$300 that never came true undermined the faith teachers had in the Kentucky reward program. The reduction in the reward levels only reinforced skepticism about policy design on the part of Kentucky teachers. Incentives depend at a minimum on those targeted having faith that the program will last and that promises will be fulfilled. The Kentucky experience of reduced funding allocations and delay of sanctions undermines such stability. Thus, reward programs should only be pursued in a stable policy context that can assure and convince teachers that the program will not vanish with the arrival of a new administration. Without such security, there is little evidence to suggest that the program should motivate significant changes in practice.

Summary

The lessons of the Kentucky reward system leave us skeptical about the use of limited public resources being given directly to teachers as potential salary enhancements in a system that does not track individual student progress. We are not convinced that reward programs in a generic sense should always be dismissed, but rather remain agnostic about the use of rewards without knowing the details of the design. Rewards for reward sake might attract public support, but will not in themselves provide any mechanism to improve the teaching and learning in schools that need improvement. In fact such reform efforts can provide a distraction while deferring responsibility of state administrators from improving instruction. The tinkering that such programs require to often solve the technical requirements associated with reliability undermine the faith teachers hold in the system. Thus, teachers are right to presume that such reforms might be just a passing fad and thus any reactions are likely to be tempered.

References

- Bacharach, S.B., Lipsky, D.B., & Shedd, J.B. (1984). <u>Paying for Better Teaching:</u>
 <u>Merit Pay and its Alternatives</u>. Ithaca, NY: Organizational Analysis and Practice.
- Bradley, A. (1996, January 17). Model Chicago Schools to Get Cash Rewards. Education Week, pp. 1, 12.
- Brandt, R. M. (1990). Incentive Pay and Career Ladders for Today's Teachers: A Study of Current Programs and Practices. Albany, NY: State University of New York Press.
- Church, T.W. & Heumann, M. (1989). The Underexamined Assumptions of the Invisible Hand: Monetary Incentives as Policy Instruments. <u>Journal of Policy Analysis and Management</u>, <u>8</u>(4), 641-657.
- Cibulka, J. (1989). State Performance Incentives for Restructuring: Can They Work? Education and Urban Society, 21(4), 417-435.
- Clotfelter, C. & Ladd, H. (1995). Picking Winners: Recognition and Reward Programs for Public Schools. Paper prepared for the <u>Performance-Based Approaches to School Reform</u> conference at the Brookings Institution, Washington, D.C.
- Cohen, D. (1996, forthcoming). Rewarding Teachers for Students' Performance. In Susan Fuhrman and Jennifer O'Day (Eds.) Rewards and Reform: Creating Educational Incentives that Work. San Francisco: Jossey-Bass.
- Firestone, W. (1994). Redesigning Teacher Salary Systems for Education Reform. American Educational Research Journal, 31(3), 549-574.
- Fuhrman, S.H. (1994b). Legislatures and Education Policy. In S.H. Fuhrman & R.F. Elmore (Eds.), <u>The Governance of Curriculum</u>. Washington, D.C.: Association for Supervision and Curriculum Development.
- Good Schools Won't Let Rewards Get Them Down. (1995, February 13). The Courier-Journal. Louisville, KY. A6.
- Hambleton, R.K. et al. (1995, June). Review of the Measurement Quality of the Kentucky Instructional Results Information System, 1991-1994. Panel Report prepared for Kentucky General Assembly, Office of Educational Accountability.
- Hanushek, E. (1995) transcript of comments from the <u>Performance-Based Approaches to School Reform</u> conference, The Brookings Institution, Washington, D.C. April 6 and 7.
- Johnson, S.M. (1984). Merit Pay for Teachers: A Poor Prescription for Reform. Harvard Educational Review, 54(2), 175-185.
- Kelley, C. & Odden, A. (1995). Reinventing Teacher Compensation Systems. (CPRE Finance Briefs). Madison, WI: Consortium for Policy Research in Education.
- Kirst, M. (1988). Recent State Education Reform in the United States: Looking Backward and Forward. Educational Administration Quarterly, 24(3) 319-328.



1

- Murnane, R. & Cohen, D. (1986). Merit Pay and the Evaluation Problem: Why Most Merit Pay Plans Fail and a Few Survive. <u>Harvard Educational Review</u>, <u>56</u>(1), 1-17.
- National Commission on Excellence in Education. (1983). A Nation at Risk: The Imperative for Educational Reform. Washington, D.C.: U.S. Department of Education.
- National Governor's Association. (1986) Time For Results. Washington, D.C.
- Odden, A. & Protsik, J. (1995) Pay and Motivation for Teachers. Paper prepared for the Teacher Leader Working Group of the CPRE Teacher Compensation Project. Madison, WI: Consortium for Policy Research in Education.
- Odden, A. (1996, forthcoming). Incentives, School Organization and Teacher Compensation. In Susan Fuhrman and Jennifer O'Day (Eds.), Rewards and Reform: Creating Educational Incentives that Work. San Francisco: Jossey-Bass.
- Protsik, J. (1995). History of Teacher Pay and Incentive Awards. <u>Journal of School</u> <u>Leadership</u>.
- Richards, C. & Shujaa, M. (1990). State-Sponsored School Performance Incentive Plans: A Policy Review. Educational Considerations, 17(2), 42-52.
- Vance, D.A. (1995, April 4). Everbody Shares School Rewards. The Kentucky Post, Covington, KY. pp.1, 2k.

