Teachers’ and administrators’ thoughts on changes in reading instruction within a merit pay program based on test scores

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THE STUDY describes teachers and administrators’ thoughts concerning reading and reading instruction within the context of a reading program which combines merit pay and other business practices to increase students’ standardized test scores. Questionnaires, interviews, observation, and district publications were used to investigate two theoretical consequences of such programs: that school personnel would construct their definitions of reading and reading instruction to those prescribed by district policy, and that teachers would consider reading instruction less fulfilling than they did prior to the merit pay program. Results supported these predictions and suggest that attempts to change teacher behavior from current practice may meet with failure.

L’opinion des professeurs et des dirigeants sur les changements en didactique de la lecture qu’entraînent les programmes de “merite-récompense” basés sur les résultats de tests

CETTE ÉTUDE présente l’opinion des enseignants et des dirigeants à propos de la lecture et de son enseignement dans un contexte où le programme de lecture combine un système de “merite-récompense” et d’autres habitudes de travail visant à élever les résultats des tests standardisés. On a recours à des questionnaires, des entrevues, des observations et aux publications des districts en vue d’étudier deux conséquences théoriques qu’entraînent de tels programmes: premièrement, que le personnel dans les écoles se limiterait à définir la lecture et sa pédagogie selon un parfait accord avec ce que prescrit le district, et deuxièmement, que les professeurs considèreraient l’enseignement de la lecture moins satisfaisant avec l’applicaton du système “merite-récompense”. Les résultats obtenus appuient ces prédictions et suggèrent l’échec prévisible de toute tentative visant à faire abandonner aux professeurs leurs pratiques habituelles.

Los pensamientos de maestros y ‘administradores’ al respecto de cambios en la enseñanza de lectura dentro de contextos de programas de pagos por la conducta adecuada (merit pay) basados en los resultados obtenidos en tests de lectura

LA INVESTIGACIÓN describe los pensamientos de maestros y administradores respecto a la lectura y su enseñanza dentro del contexto de un programa de lectura que combina pagos por la conducta adecuada (merit pay) y otras prácticas de recompensa para incrementar el rendimiento en los resultados de las pruebas estandarizadas que se aplican a los estudiantes. Se usaron cuestionarios, entrevistas, observaciones y publicaciones del districto escolar para investigar los dos consecuencias hipotéticas de dichos programas: Por una parte, que el personal escolar limitarían sus definiciones de lectura y enseñanza de lectura a aquellas prescritas por el distrito escolar, y que, por otra parte, los maestros considerarían la enseñanza de lectura como menos satisfactoria que como lo consideraban antes del programa de pagos por la conducta adecuada (merit pay). Los resultados obtenidos apoyaron esas predicciones y sugieren que cualquier intento de cambiar el comportamiento actual de los maestros puede estar destinado al fracaso.

Recently, schools have been the target of public criticism for their failure to produce literate students. Stimulated by this criticism, schools have tried to counter negative public opinion regarding their effectiveness by borrowing business practices from industry (Callahan, 1962; Shannon, 1983; Wise, 1979). One business practice which has received considerable attention recently is to pay teachers according to their instructional effectiveness (Say, 1982; Schrag, 1983; Stewart, 1980). This practice, called merit pay, is surrounded by controversy based on two concerns: How will effectiveness be defined? And how will teachers effectiveness be judged (Bruno & Nottingham, 1974; Educational Research Service, 1979)?

Traditionally, teachers’ effectiveness has been defined by instructional input factors–teachers service to community, professional development, and instructional innovation (Levit, 1972). However, with the charge that schools are ineffective, and with the influence of business practices on instruction, teachers’ effectiveness has been tied to instructional output in the form of achievement test scores (Otto, Wolf, & Eldridge, 1984; Rosenhine & Stevens, 1984). This study describes teachers and administrators’ thoughts about reading and reading instruction within the context of a merit pay program based on students’ test scores which was initiated in a school district in a major metropolitan area.

In attempts to increase their productivity, schools have adopted not only the practice of merit pay but also the underlying assumption of American business called formal rationality (Cuban, 1983; Giroux, 1983; Goodman, 1979; Shannon, 1982). That is, these schools design instruction to meet the designated goal of increased test scores, eliminate distractions leading to inefficiency in attaining this goal, and assign clearly defined roles. According to this philosophy, all teachers perform according to the routine established by their administrators, their instructional production should be predictable—even calculable, according to precise prediction equations (Callahan, 1962; Wirth, 1982). Merit pay provides the monetary incentive for teachers to follow the routine, and a teachers acceptance of formal rationality virtually guarantees his or her attainment of merit pay.

However, critics of formal rationality predict two (perhaps unintended) side effects to increased productivity: (a) the confinement of administrators’ and teachers’ perspectives concerning reading and reading instruction to those

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prescribed in administrative plans; and (b) the reduction or elimination of intrinsic rewards teachers enjoy when teaching reading (Apple, 1982; Arenot, 1958; Johnson, 1984; Weber, 1964).

According to Mannheim (1940) and Marcus (1964), with the planning of instruction beyond teachers' control, teachers should gradually become accustomed to following someone else's planned routine, and they should replace slowly but surely their own interpretations of instructional events and problem-solving strategies with those the administrators prescribe. According to the actions during the activity, teachers' thoughts about reading and reading instruction, as well as their instructional actions, should become aligned closely with administrators' prescriptions. As a result of this process, teachers should lose their abilities to solve instructional problems outside the parameters of the prescribed routine.

As Neitz (1975) observed during experimental tasks, the introduction of extrinsic rewards for carrying out an activity which participants considered enjoyable previously reduces their feelings of enjoyment in and control over their actions during the activity. Elementary school teachers have traditionally considered reading instruction enjoyable (Barton & Wilder, 1964; Jackson, 1968; Lortie, 1975), but thus pay for the development of literate students should decrease teachers' intrinsic motivation and ultimately alienate them from their work. Thus, this theory predicts that in reading instruction, merit pay and feelings of enjoyment and control should work against one another.

The combination of merit pay and formal rationality within a reading program appears to entail a practical contradiction. Although designed to improve teachers' reading instruction, the program should instead create teachers who have limited instructional repertoires, who are unable to make thoughtful instructional decisions outside their prescribed routines, and who find reading instruction laborious. Moreover, this combination should create tension within teachers: they have the opportunity to increase their incomes and achieve a narrow sense of accomplishment, but to do so they may have to forfeit thought, insight, feelings of control, and broader feelings of accomplishment and responsibility.

This study investigated the two predicted side effects of combining merit pay and formal rationality within a reading program. Two questions directed the investigation:

1. Do school personnel prescribe and project single definitions of reading and reading instruction to the exclusion of viable alternatives?
2. Do teachers within this context view reading instruction as less fulfilling than they did prior to the advent of the merit pay program?

Method

Common sense suggests that to answer the two research questions, one need only ask teachers for their opinions. This, of course, assumes that teachers are conscious of their thoughts and behaviors on these subjects, that they are able to articulate their awareness clearly, and that external reality resembles closely their internal reality. Studies concerning teachers' theories of reading (e.g., Harste & Burke, 1977) and teachers' descriptions of their instruction (e.g., Rosenthal, 1978) prove these assumptions questionable. They suggest that only observation of teachers' external reality—their actions—will allow researchers to infer teachers' internal reality accurately. Sharp and Greene (1975) offer an alternative to this either/or argument concerning research methods. They suggest that teachers are sincere in their pedagogical convictions, but they are sometimes falsely conscious—they believe things are true about themselves or their work although it is clear to an outside observer that these things are not true. Moreover, teachers are often blocked from action on those convictions by situational constraints such as administrators' expectations or traditions. Sharp and Greene suggest that to understand schooling, researchers must investigate teachers' internal and external reality from several angles. They might survey teachers and administrators perceptions of teachers' instruction, observe that instruction, and analyze the structure of the school environment.

Consistent with Sharp and Greene's suggestions, interview schedules and questionnaires were used to test four hypotheses concerning school personnel's subjective opinions about merit pay, reading, and reading instruction.

1. School personnel recognize aspects of the merit program that are based on principles of formal rationality.
2. School personnel think that the program has improved students' reading ability.
3. School personnel believe that the program has improved the quality of reading instruction in the district.
4. School personnel consider the merit program a forum for improved faculty and administrator relations.

Informal observations and the district's printed descriptions of the program were used to develop an objective picture of the merit reading program.

Subjects

Thirty-four classroom teachers, five principals, and a central administrator served as subjects. All subjects had been full-time employees for at least 2 years, and all except two teachers had received some form of merit pay one or more times during the 4 years of the program. Twenty-four teachers were selected for interviews from a group of 75 teachers enrolled in graduate school at district expense. Five principals were asked to participate because they had been principals at their schools prior to and during the merit pay program. The central administrator was asked to participate because she had been involved with the administration of the reading program for 11 years. Finally, because the logistics of the observation presented considerables problems, 10 teachers not interviewed were observed—2 teachers from each grade level, Grades 1 through 5. Although the use of two different sets of teachers may be a limitation of the study, it was assumed that the behaviors and thoughts of those interviewed and those observed would be similar.

Interviews

Interviews were scheduled to obtain teachers' and administrators' answers to seven questions based on the four hypotheses (See Table 2 for correspondence):

1. Why was the merit program adopted?
2. What have been the effects of the program on students' reading?
3. What have been its effects on teachers' instruction?
4. What instructional alternatives were made available to teachers to help them increase their students' test scores?
5. What has been done to the organization of the school to make sure that the average reading score is raised?
6. What has been the effect on relationships between teachers?
7. What has been the effect on relationships between teachers and administrators?

In addition, teachers were asked to define reading and to discuss reading instruction within their own school and in other schools. To promote candor on the part of teachers and administrators, colleagues were trained to conduct the tape-recorded interviews. Eight practicing or former teachers interviewed the classroom teachers, one trained administrator interviewed the five principals, and a central administrator from a different district interviewed her counterpart from the merit program.

Questionnaire

At the conclusion of each interview, respondents completed a biographical survey and a 16-item questionnaire. The survey requested information about respondents' years of experience in public schools, the number of reading courses they had completed, the socioeconomic status of the students they served, and the number of times they had received merit pay. The 16 questionnaire items were designed to gather data relevant to the four hypotheses (refer to Table 1 for correspondences). Five reading researchers agreed that the items and questions should provide valid information concerning the four hypotheses, useful in answering the research questions. The instruments were field-
tested with 10 teachers; minor modifications were made to the wording of four items to promote clarity.

Informal Observations
Ten teachers were observed three times each by three different observers over a one-semester period. A total of 30 lessons were observed. Four undergraduate students were trained to write one- or two-sentence descriptions of the behavior of the teacher and of one student every 5 minutes during 1 hour of formal reading lessons. Each university student observed five teachers, one at each grade level, Grades 1 through 5, and I observed 10 teachers, 2 at each grade level. After each lesson, the observer answered two summary questions according to set criteria (see Appendix 1): (a) What was the teacher's definition of reading? and (b) What was his or her definition of reading instruction? To check the validity and reliability of these observations, I also observed 10 of the reading lessons while the undergraduate students observed. Although there was some variability in wording of the descriptions, my answers to the summary questions matched those of the undergraduate students.

Scoring the Responses

Questionnaire. Questionnaire items were constructed using a 5-point Likert scale, and responses were assigned a score according to the corresponding hypotheses. For example, respondents were asked to consider the following item as a partial test of Hypothesis 1: "Administrators were primarily responsible for planning the reading part of the merit pay program." A score of 5 should be interpreted as strong agreement, 3 as moderate agreement, and 1 as strong disagreement with Hypothesis 1 because a positive response to the item acknowledges a hierarchy of authority and separation of planning from execution, both of which are indicative of formal rationality.

Interviews. Interviews were scored holistically by two independent scorers, a graduate student and myself, who listened to the taped interviews and used set scoring criteria to determine whether the responses supported each of the four hypotheses (refer to Appendix B). Only four disagreements arose between scorers (97% initial agreement), and each was resolved through discussion.

Both scorers listened to the entire interview a second time and made holistic judgments based on teachers' responses to all seven questions to determine whether teachers found reading less rewarding psychologically because merit pay was offered. Scorers classified teachers as "less fulfilled" if they made repeated remarks concerning the pressures of the program or their disenchantment with the new emphasis of the reading program. After this second listening, there were five disagreements between scorers (82% initial agreement), two of which could not be resolved; therefore, these respondents were dropped from this part of the analysis.

Observations. The two scorers sorted observation data according to observers' answers to the two summary questions. Teachers' definitions of reading were categorized as either holistically or subskill based on Harris and Hodges' (1981) and Samuels and Schecter's (1978) definitions of these terms. For teachers' definitions of reading instruction, three categories were set based on the prescribed procedure of the merit program and various research: (a) Teachers behave as if reading instruction requires teacher/student interaction (Au & Mason, 1981; Harste, Burke, & Woodward, 1984); (b) they use the commercial materials predominantly, but do not follow the guidebook closely (Duffy & McIntyre, 1980; Durkin, 1984); or (c) they employ the prescribed procedure exclusively. (Refer to Appendix A for further explanation.)

There was complete agreement between scorers on sorting these data.

Limitations
This study may be limited in several ways. The study took place in only one school district and included only a limited number of employees. Although steps were taken to ensure that subjects were representative of the population, other teachers and administrators might have provided different information. The survey instruments were relatively brief, and they were administered at one time. Perhaps holding multiple sessions with longer interviews and longer questionnaires would alter the results. Trained undergraduate students conducted two-thirds of the observations, and they observed other teachers than those who participated in the questionnaire and interviews. It may be that experienced teachers would have arrived at conclusions different from those of undergraduate students and that the surveyed teachers would have conducted their instruction differently than did the observed teachers.

Results

Description of the Program
Both input and output factors were considered in the design of the merit pay program discussed in this paper. Teachers could receive merit pay for input factors not related directly to reading instruction (e.g., improved work attendance). Output money was awarded to all teachers and the principals of any school in which the collective reading and arithmetic achievement test scores exceeded goals set mathematically by central administrators. Schools, not teachers per se, were the unit of reward. If the goal was exceeded, each teacher and the principal received approximately one twentieth of a starting teacher's salary, and the school was allowed to fly a flag to signify to the public that the school had received the award. In addition, schools were rank-ordered by average test score, and the teachers and principals from the top 10% were given an additional 3% in pay.

According to the district's printed descriptions, the reading program incorporated several principles which are based on formal rationality:

1. Reading was divided into a core of common objectives at each grade level.
2. Central administrators provided a five-step instructional procedure to direct teachers' use of a single set of commercial materials.
3. Cross-referenced charts were developed to coordinate the skills included in the materials with the tested skills.
4. Standardized tests were designated as the arbiters of teacher effectiveness.

The teacher's role was to follow the prescribed five-step plan using a single set of commercial reading materials, with the assigned procedure and the approved materials to be evident in teachers' lesson plans and their daily instruction. Principals were to monitor teachers' instruction and student progress and to coordinate the schools' cooperative efforts to raise test scores to the designated amount.

Questionnaire
Table 1 displays the individual items, means, and standard deviations from the completed questionnaires. Teachers and administrators' responses were compared to determine their relative commitments to the merit pay program. The analyses of variance (ANOVA) comparing administrators and teachers yielded significant main effects for Hypothesis 1, $F(1, 28) = 10.175, p < .004$, and for Hypothesis 2, $F(1, 28) = 9.342, p < .005$. That is, administrators were more in agreement than teachers on items indicating that the merit pay program actualized principles of formal rationality and that the program improved students' reading abilities. Differences between administrators' and teachers' means approached significance for Hypothesis 3, $F(1, 28) = 3.328, p < .08$, and for Hypothesis 4, $F(1, 28) = 3.246, p < .08$, suggesting that administrators tended to agree more strongly than teachers that reading instruction improved under the merit pay program and that the program was a forum for improved employee relations. Responses to items designed to test Hypotheses 2 and 3 were significantly correlated for both administrators ($r = .72, p < .05$) and teachers ($r = .58, p < .05$). All other correlations between response sets were not significant.

Interviews
Table 2 presents the percentages of teachers and administrators whose responses to the seven interview questions supported the four hypotheses, and the results of chi-square com-
Table 1  Means and standard deviations for responses to questionnaire items listed by hypotheses

<table>
<thead>
<tr>
<th>Hypothesis: School personnel recognize aspects of the merit program that are based on principles of formal rationality.</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Central administrators were primarily responsible for planning the reading part of the merit pay program.</td>
<td>3.52 ± 1.06</td>
<td>4.50 ± .83</td>
</tr>
<tr>
<td>2. The reading part of the merit pay program gets the teachers to concentrate primarily on improving reading test scores.</td>
<td>3.50 ± 1.38</td>
<td>3.83 ± 1.60</td>
</tr>
<tr>
<td>3. Administrators think the reading part of the merit pay program will make reading instruction more uniform among teachers.</td>
<td>3.25 ± .89</td>
<td>4.00 ± .63</td>
</tr>
<tr>
<td>4. Administrators can tell how well teachers are teaching reading through the reading part of the merit pay program.</td>
<td>2.25 ± 1.13</td>
<td>4.00 ± 1.54</td>
</tr>
<tr>
<td>Average Hypothesis 1:</td>
<td>3.13 ± 1.26</td>
<td>4.08 ± 1.17</td>
</tr>
</tbody>
</table>

Hypothesis 2: School personnel think that the program has improved students' reading ability.

| 1. The reading part of the merit pay program accelerates the rate at which students learn to read. | 3.12 ± 1.26 | 3.33 ± 1.36 |
| 2. Under the reading part of the merit pay program, administrators can tell how well a student is learning to read. | 2.25 ± .94 | 4.00 ± 1.09 |
| 3. Students are better readers because of the reading part of the merit pay program. | 2.50 ± .93 | 3.83 ± 0.98 |
| 4. Under the reading part of the merit pay program, students do not get enough time to read stories and books. | 2.63 ± 1.05 | 3.83 ± 1.16 |
| Average Hypothesis 2: | 2.62 ± 1.08 | 5.75 ± 1.11 |

Hypothesis 3: School personnel believe that the program has improved the overall quality of reading instruction in the district.

| 1. The reading part of the merit pay program has given teachers incentive to become more effective reading teachers. | 2.83 ± 1.20 | 3.33 ± 1.03 |
| 2. The reading part of the merit pay program is an attempt to reward good teachers of reading. | 3.13 ± 1.36 | 3.33 ± 1.63 |
| 3. The reading part of the merit pay program has given the district teachers a useful direction for reading instruction. | 2.91 ± 1.10 | 3.83 ± 1.16 |
| 4. The reading part of the merit pay program has generally improved the reading instruction in the school district. | 3.00 ± 0.83 | 4.33 ± 0.81 |
| Average Hypothesis 3: | 2.97 ± 1.12 | 2.71 ± 1.19 |

Hypothesis 4: School personnel think that the merit program provides a forum for improved faculty and administrator relations.

| 1. The merit pay program promotes healthy competition over reading instruction among teachers. | 2.20 ± 1.11 | 4.00 ± 1.54 |
| 2. The merit pay program encourages teachers to help one another to improve their reading instruction. | 2.66 ± 1.16 | 3.00 ± 1.09 |
| 3. The reading part of the merit pay program has improved relations between principals and teachers. | 2.33 ± 0.91 | 3.83 ± 1.16 |
| 4. The merit pay program should reward teachers for individual accomplishments other than averaging students' test scores across an entire school. | 3.37 ± 1.52 | 2.50 ± 1.51 |
| Average Hypothesis 4: | 2.65 ± 1.26 | 3.33 ± 1.40 |

The interviews also afforded information concerning whether the merit pay program affected teachers' feelings of fulfillment during reading instruction. Fifteen teachers (68%) implied that they found teaching reading less rewarding psychologically for reasons that they attributed to the program. Six teachers mentioned that they felt increased and undue pressure from principals. 5 reported competition among teachers, 8 admitted personal knowledge of teachers' cheating on standardized tests to gain an advantage for the reward, and 12 said the emphasis on reading scores conflicted with their personal philosophies of reading and reading instruction. Seven teachers said that the monetary incentive made them more aware of the district's priorities, more concerned about their reading instruction, and more interested in it. The scorers could not agree on classification of the remarks of two teachers. One teacher said, "When other schools get the stipend for reading, it makes me feel like a failure, but I have never really felt secure about reading..." The other expressed similar self-doubt, but did not attribute that feeling to the merit pay program.

Table 2  Percentages of school personnel whose responses during interviews support the hypotheses

<table>
<thead>
<tr>
<th>Hypothesis: School personnel recognize aspects of the merit program that are based on principles of formal rationality.</th>
<th>Teachers</th>
<th>Administrators</th>
<th>X²/df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Who was the merit program adopted?</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>4. What instructional alternatives were available to teachers to help them increase their students' scores?</td>
<td>100%</td>
<td>100%</td>
<td>.00</td>
</tr>
<tr>
<td>3. What has been done to the organization of the school to make sure that the average reading score was raised?</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 2: School personnel think that the program has improved students' reading ability.</td>
<td>50%</td>
<td>67%</td>
<td>.53</td>
</tr>
<tr>
<td>2. What were the effects of the merit program on students' reading?</td>
<td>75%</td>
<td>84%</td>
<td>.19</td>
</tr>
<tr>
<td>Hypothesis 3: School personnel believe the merit program has improved the quality of reading instruction in the district.</td>
<td>67%</td>
<td>59%</td>
<td>.14</td>
</tr>
<tr>
<td>3. What was the merit program's effect on teachers' reading instruction?</td>
<td>50%</td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 4: School personnel consider the merit program a forum for improved faculty and administrator relations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What has been the effect of the merit program on the relationships between teachers?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. What has been the effect of the merit program on the relationships between teachers and administrators?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Merit pay SHANNON
Table 3  Distribution of teachers' concepts of reading from observation summaries

<table>
<thead>
<tr>
<th>Grade</th>
<th>School 1</th>
<th>School 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Holistic</td>
<td>Sub-skill</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Observations

The results of the scoring of the observation data are presented in Tables 3 and 4. Four teachers were difficult to classify in terms of definitions of reading because, in each case, one lesson was considered to display a holistic concept of reading and the other two lessons, a sub-skill approach. However, most lessons (23 of 30 observed) were classified as based on a sub-skill definition. Only one teacher was considered to project a holistic concept of reading instruction, whereas five clearly projected a sub-skill definition.

During only 2 reading lessons (7% of the total observed) were teachers observed to be interacting frequently with students in ways that might help students to learn to read more than one particular passage – explaining, discussing, or modeling reading behaviors. Six lessons (20%) were classified as applying commercial materials but not following the teacher guidebook strictly. The majority of lessons, 22 (73%), were directed entirely by the five-step procedure outlined as the prescribed method of instruction.

Discussion

To a degree, these data substantiate the two theoretical predictions of a reading program which combines merit pay and formal rationality: Most teachers and all administrators projected the prescribed definition of reading and reading instruction, and many teachers considered reading instruction less fulfilling.

Table 4  Distribution of teachers' definitions of reading instruction from observation summaries

<table>
<thead>
<tr>
<th>Grade</th>
<th>School 1</th>
<th>School 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CM 5S</td>
<td>CM 5S</td>
</tr>
<tr>
<td>1</td>
<td>0 1 2</td>
<td>0 0 3</td>
</tr>
<tr>
<td>2</td>
<td>0 1 2</td>
<td>0 0 3</td>
</tr>
<tr>
<td>3</td>
<td>0 1 2</td>
<td>0 0 2</td>
</tr>
<tr>
<td>4</td>
<td>0 0 3</td>
<td>0 0 3</td>
</tr>
<tr>
<td>5</td>
<td>2 1 0</td>
<td>0 1 14</td>
</tr>
<tr>
<td>Total</td>
<td>2 3 8</td>
<td>0 1 14</td>
</tr>
</tbody>
</table>

Note. CM = use of commercial materials; 5S = the 5-step procedure.

Teachers and Administrators Accept the Prescribed Definition

The questionnaire and interview results provide strong evidence that teachers and administrators recognized aspects of the reading program that are based on the principles of formal rationality. Consistent with Hypothesis 1, they agreed that central administrators designed the program, that increased test scores were the program's goal, and that the program required more uniform instruction. The difference between teachers' and administrators' average means for all items based on Hypothesis 1 can be explained as a difference of opinion concerning administrators' use of the merit pay program as a monitoring device of teachers' instruction. However, administrators and teachers interviewed mentioned that public criticism was the impetus for the merit program. One teacher remarked:

The district was under so much criticism for falling short of certain nationwide standards in the field of reading. They had so much bad press. This was simply a method to inspire teachers to achieve better on standardized tests... The five-step procedure, the commercial materials, and the stipend are all ways to raise the scores.

Administrators' expectations for teachers' reading instruction were clear from administrators' questionnaire and interview responses, which implied they agreed that the merit pay program improved students' reading (Hypothesis 2) and teachers' instruction (Hypothesis 3). One administrator suggested that 'before the merit pay program, the single adoption (of commercial materials), and the five-step plan, we were floundering. We had no way to keep track of what was going on in classrooms during reading.' These beliefs combined with administrators' agreement that the merit program provided a legitimate monitoring device of student learning (Hypothesis 2, Item 2; $M = 4.00$) and of teacher behavior (Hypothesis 3, Item 4; $M = 4.00$) suggest that administrators had the necessary attitude to fulfill their roles in supervising teachers' instruction. During interviews, principals offered several strategies they used to help keep teachers on the right track.

I tell my teachers to focus on the high-ability students because they will raise the average score more than bringing up the bottom.

All my teachers follow the five-step procedure each day, and they use all the (commercial) materials available.

I have my teachers prepare mini-tests based on the same format as the [standardized test] for every skill they teach.

The central administrator explained one incentive for principals to be interested in raising test scores and in fulfilling their roles.

Let's say the scores are down in a school. That principal is brought in for a meeting where we discuss methods to remedy the situation. It's all very informal. Principals are evaluated on their school's reading scores, and if the scores are not high the next year, they are put on a growth plan, just like their teachers will be. It's like the domino theory.

Teachers' responses to questionnaire items and interview questions appear somewhat inconsistent. Their responses to the questionnaire items rejection of Hypothesis 2 and Hypothesis 3, but during interviews most of teachers the statements which suggested acceptance of both. Teachers' disagreement that the merit pay program is a legitimate device for monitoring students' reading (Hypothesis 2, Item 2; $M = 2.25$) may explain teachers' implied rejection of Hypothesis 2 and may also explain the difference between teachers' and administrators' means for this hypothesis. However, during interviews, 12 teachers spoke at length of a rise in students' test scores since the beginning of the merit pay program. For example, one teacher explained that "...over the last few years [the district] has had an increase in scores in all elementary grades. You can't tell me that that doesn't mean our students aren't reading better; that's fact."

The apparent inconsistency in results for Hypothesis 3 is more difficult to explain. Perhaps the questionnaire items did not present the important issues in the relationship between the merit pay program and improved reading instruction, for although the questionnaire elicited only a moderate response, 75% of the teachers interviewed suggested that the program's focus on tested skills meant improved
instruction across the district. Two teachers explained: "The [five-step procedure] means no nonsense during reading, just direct skill teaching," and "The programs all set up for us. It's very structured. We are to go by the five-step procedure and the reading series we have here. We go straight through and do all the little parts."

Although the results from questionnaires and interviews leave some ambiguity as to whether or not teachers accepted their role in the program, the observation data are less ambiguous. Most teachers did indeed accept their role: only one teacher behaved as if she rejected the prescribed role; the other nine teachers followed administrators' plans most if not all of their instructional time. The observation data proved remarkably consistent with those of other studies of reading instruction (Barton & Wilder, 1964; Durkin, 1978-1979; Educational Project Information Exchange, 1977): Only 7% of the lessons were conducted without the use of commercial materials. However, the 93% which included commercial materials differed from lessons observed by researchers in other school districts (Durkin, 1984; Mason, 1982): In only 20% of the lessons from the merit pay district did teachers rely on commercial materials at an almost haphazard way. During 73% of the lessons, teachers used the materials according to the five-step procedure. That is, nearly all teachers carried out their roles as assigned most of the time.

This is not to say that school personnel regarded the merit program without conflict. Teachers seemed to resent principals' use of the merit program as a monitoring device (Hypothesis 1, Item 4: M = 2.25), and their responses implied rejection of the program as a forum for improved relations between teachers and administrators (Hypothesis 4). In addition, many complained about the goals that central administrators set for their schools.

My school is in a better part of town. Our scores are above the national average at every grade level...I think...We got the stipend 1 year...no wait, we got it the first 2 years, but then we stopped getting it even though the scores still are above average. Some schools get it and their students can't read at all. Does that seem fair to you? The good schools are penalized.

Our children are from poor homes and they have difficulty with the language and learning to read. We're happy if we get them to read anything. The district wants us to show 9 months growth each year. They must be dreaming. At our school we concentrate on the [basic] kinds of merit money.

Although administrators seemed to accept Hypothesis 4, each had some reservations about the program and its effects. The central administrator questioned the continued funding of the program during times of budget cutting and teacher layoffs; principals were concerned about the assumptions behind merit pay in education and the pressures of the program.

In the back of my mind, I often find it hard to believe that a teacher who didn't have a commitment to reading would find that commitment just because she's getting paid for it. Can you make a silk purse out of a sow's ear?

We can have too much of a good thing you know...I mean yes, we should focus on basic skills, and yet, we can improve our reading scores...I mean instruction, but I am concerned that maybe we've overdone it. There's a lot of pressure and resentment out there.

Teachers View Reading Instruction as Less Fulfilling

The merit program did reduce teachers control over their reading instruction. According to the central administrator, prior to the merit program teachers selected their own materials, designed instructional plans, and evaluated their own instruction. When the merit pay program was instituted, central administrators assumed all of these functions. On questionnaires, teachers acknowledged this fact in their responses to items under Hypothesis 1, and during interviews, teachers remarked on their loss of control over their work.

We have to show all five steps on our lesson plans and the principal checks these every week. I'm pushed harder to get my kids through commercial materials. I have to be at a certain point in the commercial materials by the end of the year. Otherwise I'm in trouble. I have to make my lesson quicker. I'm pushed so I push, and we do get there whether we're ready or not...That sounds terrible I know...but what else can I do?

I find myself teaching to the test. It's test, test, test at my school, and I caught the fever I guess. I heard about these [commerical materials] that will help kids with test-taking skills...Well, I asked my principal if she would give some for our school. She said that we couldn't afford it, so we bought them ourselves. We're going to get that stipend this year.

Sixty-three percent of the teachers interviewed implied that reading instruction was less enjoyable within the merit pay program than it had been for them in other circumstances. They offered several reasons for their disenchantment: (a) principals applied "intolerable" pressure (posting test scores on classroom doors, requiring inservice for teachers who were "behind" in their commercial materials, announcing test scores over the public address system, and conducting surprise observations; (b) other teachers made instruction unenjoyable (teachers' strongest disagreement among questionnaire items concerned healthy competition among teachers, Hypothesis 4, Item 1: M = 2.20); and (c) some teachers cheated on the standardized tests (two principals and the central administrators confirmed this allegation). In addition, half of the teachers interviewed said they did not agree with the program's emphasis on test scores. One teacher offered: "Reading is more than just skill acquisition; it's an attitude, and teaching it is an art."

Twenty-nine percent of the teachers stated that the merit pay program made them work harder on their reading instruction. They characterized the program as "just the right thing" for a district with low reading scores. Although they considered the program an attempt to reward good teachers (Hypothesis 3, Item 2: M = 4.71), they favored the reward of individual rather than group accomplishments (Hypothesis 4, Item 4: M = 4.21). One teacher explained this position:

I think the effect has been a positive one. Teachers are highly motivated. I think the teachers are improving their own reading instruction. I became highly motivated—more interested in reading. The goal became to try and see that children's scores were raised. While I prepared my lessons, I thought about the reward I would get financially.

Implications

To the degree that these results can be generalized, they suggest that programs which combine merit pay and formal rationality will alter teachers' usual patterns of instructional behavior by standardizing definitions of reading as being equivalent to tested skills, by constraining their methods of instruction to the use of a single procedure, and by separating teachers intellectually and emotionally from their instruction. Apple (1982) labels this process "the deskilling of teachers" because teachers' experience and knowledge are ignored as they are asked to implement uniform plans rather than to produce and implement their own plans based on reasoned consideration of instructional alternatives within a specific context. Deskilling is particularly disturbing for reading instruction because teachers confront situations daily to which they cannot react mechanically (Anderson, Mason & Shirey, 1984; Jackson, 1968; Mosenthal, 1983). At the very least, teachers must recognize and adjust to the needs and interests of their students, respond to teachable moments, find meaningful examples, and at the same time contend with the organizational realities of the classroom environment (Heath, 1983; Mehran, 1979).

Clearly, plans for these events cannot be made outside the instructional setting, and deskilled teachers, with their prescribed instructional repertoires, are ill-equipped to meet these challenges (Postman, 1979). Rather than follow a prescribed role, teachers of reading should observe their students and themselves closely to inform their instructional decisions and to re-examine the appropriateness of both the means and the ends of their instruction (Pearson, 1978).
Unfortunately, reading programs which combine merit pay and formal rationality offer monetary rewards to teachers to substitute students' test scores for self-observation; therefore, these programs appear unable to move students beyond the "mechanistic" reading abilities which Purves (1984) describes in the introduction to the 1983 Yearbook of the National Society for the Study of Education.

Some instructional programs concentrate on "skill areas and behaviors" to such an extent that the skills have become isolated from the subjects to which they were once attached. The teacher concentrates on the skills seriation and in so concentrating tends to lose sight of the whole of which they are the parts. As a result, students concentrate on subskills, but seldom on the central skill, making meaning from text...As the teaching becomes compartmentalized so does the learning and children lose the sense that when they read they are supposed to gather information about the subject of the reading passage. (pp. 9-10)

Mechanical reading and standardized instruction are not the only alternatives to improve effectiveness of reading instruction throughout a district. For example, Cuban (1984) presents bottom-up, school-based strategies as a question about test results, how can the general, more complex and non-quantifiable goals of schooling be achieved? (p. 159). Burke (1982) and Frease, Hetzel, and Grant (1982) describe merit pay programs which encourage diverse solutions to instructional problems by rewarding teachers who design and implement personal programs to improve their instruction. In Michigan, Wilson and Peters (1984) provided a document to redefine the state's position on reading which emphasized standardized testing and promotes teachers as autonomous decision-makers. Finally, Searle (1980) remarks upon the diversity of reading instruction in Edmonton, Alberta, Canada, where teachers are encouraged to teach reading according to their own convictions; thus, teachers using Holdaway's Big Books coexist side-by-side with those using Distan.


APPENDIXES

Appendix A Definitions of Categories to Direct Summarization of Observation Data

Concept of Reading

1. Holistic:
   Having to do with a psychological approach (gestalt) which represents the belief that the whole is different from and greater than its parts. (From T. Harss and R. Hodges. *A dictionary of reading*.)

2. Sub-skill Concept:
   Having to do with a psychological approach (associations) which represents the belief that the whole is defined by a summation of its parts and that the whole is divisible into these parts. (Adapted from T. Harss and R. Hodges. *A dictionary of reading*.)

Definitions of Reading Instruction

1. Interaction:
   The lesson is shared between teachers and students. Teacher engages students or students engage teacher in discussion on topic of reading. Teacher explains and elicits feedback from students. Teacher models appropriate reading strategies for students then leads them as they practice the strategies. Teacher organizes environment to allow students to recognize patterns of words or text structure.

2. Commercial Materials:
   Completion of materials is most important. Teacher holds and refers frequently to teacher's manual but skips steps in the lessons. Discussion is directed by suggestions in the teacher's manual. Must time is spent explaining how to complete designated assignments within commercial materials.

3. 5-step procedure:
   Approved lesson plan format is in evidence (outline written on board, for example). Teacher uses materials according to the 5-step procedure adopted by the school district. Lesson follows steps in order, and student behaviors and questions are directed by these steps:
   - Preparation for Reading
   - Word Service/Decoding
   - Reviewing Vocabulary
   - New Vocabulary/Language Skills
   - Reading and Discussing the Selection
   - Setting Purposes for Reading
   - Directing Silent Reading
   - Directing Oral Reading
   - Interpreting the Selection/Critical Reading

- Continuout Skill Development
  - Word Service/Decoding
  - Comprehension
  - Language Skills
  - Study Skills

- Providing for Individual Differences
  - Word Service/Decoding
  - Comprehension
  - Language Skills
  - Study Skills

- Enrichment

Appendix B Criteria for Holistic Scoring of Interview Responses

Respondents must make several of the statements listed under each hypothesis and the general tenor of their remarks must suggest agreement before they can be considered in agreement with a hypothesis. There should be consistency across questions relating to each hypothesis, and their remarks should be directly tied to the merit pay program.

A. Acceptance of Hypothesis 1 from Responses to Questions 1, 4, and 5.
   Listen for any direct statement that the reading program is a bureaucracy, that administrators control it totally, that there are few instructional alternatives, that these are the only materials available, that specific strategies for raising test scores have been employed, that the program's primary goal is to raise test scores.

B. Acceptance of Hypothesis 2 from Responses to Question 2.
   Listen for any direct statement that students are reading better because of the merit pay program, that scores have increased and that means better reading, that students are more motivated, that students do the library more, that they take more books home.

C. Acceptance of Hypothesis 3 from Responses to Question 3.
   Disregard personal statements either suggesting or denying improvement: rather, listen for direct statements that reading instruction in general has improved because of the merit pay program, that instruction is more focused, that teachers are very motivated, that the incentive makes them work harder, that the 5-step procedure has provided needed structure for reading instruction.

D. Acceptance of Hypothesis 4 from Responses to Questions 6 and 7.
   Listen for any direct statement that faculty and administrators are more supportive because of the program, that teachers are more receptive to administrators' intervention, that there has been no change in the previously good relations. These must be personal statements or they must provide names of incidents from other schools.