

CLASSROOM TEACHERS' VIEWS OF THE RELATIONSHIP OF WHAT THEY DO IN THE CLASSROOM AND SALARY SCHEDULE COMPENSATION FACTORS

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ABSTRACT

The researchers developed and implemented a survey instrument for classroom teachers to ascertain their perceptions of factors which are or may be used to establish pay scales. The survey instrument was administered to a group of 539 teachers attending Ashland University 2004 summer school classes at five different program centers.

Three compensation factors were identified in the data as statistically significant ($p < .05$): level of formal training (degree held and beyond), number of years of teaching experience and student achievement in the classroom level. The outcome of the research suggests that teachers are not essentially opposed to the use of performance measures, and even student achievement, in establishing or influencing pay scales so long as these measures remain in contexts where the teacher has some direct capability for exercising control. The researchers are replicating the study currently, with an additional set of items correlated to locus of control measures to capture and expand this above described finding. Additionally, researchers are expanding the study to include superintendents, school board members and building administrators, and are recruiting out-of-state institutions and researchers who may be interested in joining this study.

BACKGROUND

It is commonly accepted that effective classroom teachers are an essential element in successful school reform and school improvement. Excellent teachers do more than assist the students in learning. They model positive, effective practice to other staff members. They motivate professional growth with fellow teachers. They mentor beginning teachers and assist those who wish to improve their teaching skills. They develop and implement new learning experiences and teaching techniques in their classrooms and schools. They serve as the generally accepted teacher-leaders of the faculty. These talented and creative teachers are the critical elements in improving teaching and learning in our schools. The current federal education initiative *No Child Left Behind* recognizes the importance of good teachers by requiring states to staff each classroom with effective teachers only. However, the responsibility for the implementation of this goal is left to the individual states.

While educational leaders and policy makers have long recognized the importance of effective teachers, this recognition has seldom been reflected in teacher salary schedules or compensation plans. The almost universally adopted compensation plan, the so-called single salary schedule, was developed as part of the sweeping school reform movement of the early twentieth century. It was and still is based on educational degrees and number of years of experience. While it has been widely accepted by both administrative and faculty organizations within the educational community because of its simplicity and alleged fairness, it is often bemusing for those involved in fields other than education. One of the authors of this paper remembers a question from the chief executive officer of a major rubber company about why all second grade teachers did not get the same salary since they all taught second graders. The attempted explanations were greeted politely but with skepticism even though this CEO was a product of and a very strong supporter of public schools.

ISSUES

The perceived disconnect between the factors used to determine teacher's salaries and actual student achievement has helped fuel the cry for results-oriented teacher compensation plans. While for many this concept appears to be new and novel, in reality it dates back to the nineteenth century in England. In an excellent review of the literature of the history of "performance based pay systems" in England and the United States, Chamberlin, Wragg, Hayness, and Wragg (2000) note that the British Parliament adopted performance related pay for teachers in England in 1861. It remained in place for 30 years before it was discontinued for many of the same reasons cited by critics of such plans in the United States today. Chamberlain, et al noted

The notorious “payment by results” systems lasted for 30 years, during which time teachers taught to the test, were confined to a narrow, boring curriculum attempted to arrange the school intake, cheated, ignored bright children and drilled and beat the slower ones until they could satisfy the all-powerful inspectors. (p. 32)

Many of these comments can be found in books and journal articles discussing current programs that attempt to link teachers’ salaries to student achievement.

There are a number of approaches attempting to link teacher pay to student achievement as measured by test scores. Lafee (2000) points out

Roughly half the states, according to *Education Week*, have passed or are considering merit pay in schools. In Florida, all school districts must include performance components in their teachers’ salary schedules. At least a dozen districts, from sprawling Los Angeles Unified School District with more than 711,000 students to the Colonial School District in Plymouth Meeting, Pennsylvania with 4,700 students, want compensation to be directly related to student performance on standardized tests. (p. 14)

Lafee’s estimate of a dozen school districts which have developed or are in the process of developing performance-based compensation programs appears to be well below the actual numbers engaged in these efforts. There is much evidence of a rapidly growing interest in developing compensation plans that are based on student achievement.

A review of the research literature in terms of the relationship of wages and teaching reveals little empirical work. Figlio (1997) found there was a significant relationship between teachers’ salaries and quality as measured by the selectivity of the undergraduate college the teacher attended and subject matter expertise (major area of study). Kahn (2002) described a weak relationship of training and experience to effectiveness in urban schools in Pakistan but no connection in rural schools. Apparently, schools in other countries have not resolved the problem of relating salaries to student achievement. Loeb and Page (2000) report a somewhat complex study which established a relationship of teachers’ salaries and student achievement as measured by student dropouts. While the reduction of dropouts is a concern, the major focus of the current public school reform movement is the improvement of student test scores in basic subject areas.

There is ample evidence of a rapidly growing interest in developing compensation plans which are based, in whole or in part, on evidences of student achievement. Time will tell if such efforts will succeed. A variety of so called merit plans have been attempted since the 1920’s and, in almost all cases; the school districts involved in these approaches discontinued these practices within five years of their implementation.

Policy makers, foundations, think tanks, and commissions continue to advocate for the basing of teacher salaries, at least in part, on evidences of student achievement. A recent example is the *Teaching Commission*, a blue ribbon panel made up of nineteen

members representing government, business and education. In January 2004, they recommended the overhaul of teacher preparation and compensation in order to recruit and retain talented teachers in America's public schools. The commission expressed the belief that teacher-leaders are those most able to successfully raise student achievement and to have expertise in their subject matter but who unfortunately are compensated through a system that pays them the same as their least effective colleagues. The Commission believes that a system that does not reward excellence cannot inspire it.

THE NATURE OF INCENTIVES

While there appears to be a fairly common agreement among individual reform advocates and the various interest groups as to the need to relate teacher compensation to student outcomes, there is far less agreement as to the mechanics of accomplishing this goal. There is little agreement even as to the impact of such plans.

A basic issue is whether additional pay based on student achievement is an incentive or a disincentive. The teachers' professional organizations tend to take the position that pay based on performance can be counter-productive to collaborative teamwork among teachers. This has been the experience in states like North Carolina that was an early adopter of the career ladder approach. It is interesting to note that in current efforts to establish achievement incentives, most of the districts involved are offering incentive programs to whole schools or groups of teachers (Lafee, 2000). While the building group approach reduces the competitive factor, it is not eliminated. It also dilutes the recognition of the achievement of the individual teachers involved in the group. Also, problems such as the role and involvement of support personnel, substitute teachers, educational specialists and others can complicate the division of the group incentive awards.

There are a few performance pay plans which include both teacher-based competency expectations as well as student achievement factors. For example, this was an out growth of the recommendations of a commission appointed to study teacher compensation appointed by the Kentucky Legislature. One of their proposals, presented for the Legislature's consideration, would create a system that rewards teachers with higher wages if they have better skills and with bonuses based on student performance. The Iowa Legislature has adopted a performance pay schedule based on a "four-step career path," plus bonuses for employees working in schools where students made gains in student achievement (Blair, 2000). This plan has not been fully implemented due to funding problems.

A great deal more thought and study is needed as to the advantages and disadvantages of individual incentive awards, group incentive awards or some combination of the two as well as whether they should be based on teacher performance, student performance or on a combination of both. Since most of the incentives being developed and implemented involve the use of student test scores, at least as one of the determinative factors, the issues surrounding the use of these measures need to be

resolved. Ideally, such incentive programs must avoid handing out rewards and punishments that are not related to the contributions of school personnel (Duncombe and Yinger, 1999).

The nature of the incentives can also be an issue. Most of the incentive plans reviewed in the literature involve bonuses to individuals or groups and they are usually based on student performance. Some, such as the National Board Certification, are based on other factors. Many of the latter relate to teacher performance. However, only a few of the various incentive plans result in a basic salary schedule structure recognizing teacher performance.

Some of the concerns relating to the bonus approach include issues such as the size of the bonus in relation to the level of student achievement, whether it is based on reaching a specified level or growth from a previous level and whether or not it is a one time grant or a continuing part of a teacher's salary. In regards to the development of a competency based pay scale, questions such as which factors or competencies will be considered, what evidence is symptomatic of achievement of the desired competency and what happens if the competency fades are among the issues which need to be investigated.

There are many more issues than answers to the questions in developing student achievement-based compensation plans. While a number of individuals and groups are making proposals relative to relating teaching excellence and student achievement in teacher compensation plans, there has been little success in translating proposals and policies into practice.

TEACHER VIEWS

Our review of the literature revealed that ideas, opinions, and proposals relative to performance based compensation tended to reflect the views of those who have little contact with those who direct or produce actual educational experiences. Many of the proposals come from policy experts and political leaders who have little or no background in education nor experience working with children. This prompted the research team to attempt to gain an insight into the thoughts and attitudes of actual classroom teachers serving in public schools as to their salaries being based, in part at least, on student performance.

To this end, focus groups of classroom teachers from urban, suburban and rural public schools in Ohio were asked to react to some of the issues growing out of the proposals to revise teacher compensation to reflect student achievement. The teachers chosen for the groups represented a full range of faculty members: senior faculty and new faculty, men and women, young and old and all of the academic areas commonly found in a comprehensive public school of that level. The individual buildings included elementary, middle and high school. All sessions were tape recorded with the full permission of the participants.

After the usual introductions and an explanation of the purposes of the meeting, the focus group members were asked to react to a series of questions relating to financial incentives tied to student achievement as well as other salary issues. The participants were encouraged to present their ideas as was most comfortable to each of them. Their comments were shaped to a large extent by the suggested questions, but there was evidence that they felt free to pursue their own concerns and ideas about teachers' salaries and related issues (Wilson and Van Keuren, 2003).

The resulting responses, after expressions of surprise that teachers' opinions were even being sought relative to the issue, did provide insight into classroom teachers' opinions as to the use of student achievement factors in their compensation. These responses were then used to develop a survey of classroom teachers' views as to whether or not they perceive a relationship between the factors being proposed to reflect teacher performance an/or student achievement and what they do in the classroom.

METHOD

Survey Instrument

Based on the promising results in the focus group research, the authors developed a draft survey instrument to use with larger groups of classroom teachers. It was believed that a more quantitative approach would provide data in a format conducive to generalization to larger groups of teachers than the focus group provided, and would allow the findings from the focus group study to be tested empirically.

The instrument was designed to capture a rank value for twelve different factors observed in the literature which have been considered or discussed with respect to establishing teacher pay scales. Consequently, the first half of the instrument was prepared in Likert scale format to capture equal-appearing interval responses on a seven-anchor scale.

The second half of the survey instrument captured demographic data such as type of school or school district, grade level taught, number of years of classroom teaching and highest degree earned. It further asked for respondents to provide, in open ended format, a list of self-generated factors, in rank order, that should be used for establishing pay scales. This item would protect the study from undue restriction of the responses due to researcher selected factors in the Likert scale section.

The instrument was piloted during the spring semester at Ashland University in 2004. The purpose of this piloting was to identify items which might have lacked clarity or which would pose problems in larger administration and analyses. Based on the pilot administration of the instrument, several revisions were made to the instrument, and it was then used during following summer semesters in 2004.

Participants

The survey instrument (Appendix A) was administered during the summer school I, II and III sessions in 2004 at Ashland University. The University operates graduate program centers in five cities in the middle to northeastern region of Ohio. Students at the Ashland, Cleveland, Columbus, Elyria, and Stark, Ohio program centers were asked to complete the survey, with the instruments disseminated via faculty members of those sections. The respondents were Ashland University students seeking additional teaching licensure or a master of education degree and were, with only a few exceptions, currently classroom teachers in Ohio K-12 schools. A group of 539 teachers completed the survey instrument. Because of the geographic distribution of the program centers, this pool is assumed to be geographically diverse. Based on faculty experience teaching in these various program centers and select demographic data collected by the graduate program offices, the sample is also considered to be diverse from urban and rural distributions, and with respect to teaching experience.

Hypothesis

The initial analyses of the teacher rankings of researcher provided compensation factors were undertaken to test the following hypotheses. First, it was hypothesized that a statistically significant difference could be measured between a set of compensation factors provided to teachers. Second, given that this overall relationship was measured, it was hypothesized that individual compensation factors would be viewed more positively as they coincided with classroom level indicators of success, and less positively as the factor represented an underlying construct less connected to personal or classroom level control by the teacher.

Results

The data were obtained in rank ordered format, and were thus treated as nonparametric. Using a Kruskal-Wallis one-way analysis of variance by ranks (KWANOVA) the researchers treated the factors as a single independent variable with three levels: scale values below one standard deviation below the mid-point of the scale constituted level one; responses between one standard deviation below and one standard deviation above the mid-point of the scale constituted level two; and responses above one standard deviation above the mid-point were level three. The calculated H value was statistically significant ($\chi^2=10.59$; $df=2$; $p\leq .05$). The first hypothesis was consequently supported, i.e. a statistically significant difference in the distribution of

responses among the teachers was observed overall among the twelve, *researcher provided* factors.

Following an overall significance finding, pairwise post hoc comparisons were implemented using Tukey's HSD test on the distributions of ranks among the compensation factors. Three of the compensation factors were identified as statistically significant ($p < .05$): level of formal training (degree held and beyond), number of years of teaching experience, and student achievement in the classroom level. A fourth compensation factor had a mean rank value that neared significance, i.e. performance based teacher evaluation, but was not statistically significant at the .05 level. Four additional factors were strongly negative, i.e. scarce licensure bonus, National Board Certification, building level student performance, and district level student performance, but were not statistically significant at the .05 level in any combination.

The training and experience factors (positive rankings) are consistent with the importance placed on them by the focus groups members and with the literature. The other two factors, student achievement in the classroom and performance-based teacher evaluations, were a concern of the focus group members because differing student needs would make measuring student achievement difficult, and the issue of who would define effective teaching and determine how it would be measured seemed to question the basic credibility of performance assessment of teachers.

The four strong negative factors of scarce license bonus, National Board Teacher License, building performance and school district performance, while not statistically significant, are conceptually consistent with the belief expressed by the focus group members that training and experience are relevant and motivate teachers to upgrade their skills because these two factors do not lend themselves to subjective interpretation which might happen with performance-based factors.

Section II of the survey collected select demographic characteristics of respondents including type of district, i.e. rural, suburban, city, or large city; grade level taught; years of teaching experience; and degree earned. This section also solicited respondents to provide a self-written list of factors to include in teacher pay scales which may not have been suggested in Section I of the survey by the researchers—and to provide this list in rank order. The researchers implemented post hoc analyses of the Section I responses as summarized above and found no significant differences among any of the collected subpopulations. This would indicate the ranking preference which emerged in Section I is not biased to groups of single locations, years of experience, or teaching levels.

Additionally, the self-ranked lists of factors provided by the respondents were summarized. The three largest components, in rank order, were 1) years of teaching experience; 2) formal training or education level; and 3) performance based systems particularly emphasizing student achievement at the classroom and local school level. A Spearman *rho* comparing the teacher overall ranking in Section II of the survey with the teacher ranking from Section I, where the researchers provided the stems is not significantly different at $p \leq .05$. This indicates:

1. the teachers do not disagree with the factors the researchers provided in Section I, and did not suggest a significant cluster of different factors;
2. there remains strong support for the use of student achievement and performance indicators in a teacher pay scale among the sample collected for this study; and
3. within the teacher provided factors—there was not a statistically significant difference between years of experience and formal training as compared with performance-based and local student achievement-based factors in pay scales—further supporting a conclusion that teachers in our sample are not necessarily opposed to student achievement and performance-based evaluation components to pay scales.

COMMENTS

Clearly, schools statewide in Ohio and nationally are in crisis with respect to finances and with respect to student achievement, such that governments at all levels are increasingly active in using legislation and policy to direct and influence the local district, building, and classroom levels of practice. From *A Nation at Risk* (U.S. Government, 1983) and Goodlad's *A Place Called School* in the early 80s through to today—we are increasingly aware that past practices are unworkable in current fiscal, policy, and performance environments. Creative and innovative thinking will be required, risks must be taken, and the “status quo” must be reexamined if we are to make substantive changes to schooling in America. Among the areas for deep reflection are the mechanisms and factors used to consider teacher remuneration at the initial employment level and subsequently over the professional career continuum. Our research suggests that teachers are not essentially opposed to the use of performance measures, and even student achievement in establishing and influencing pay scales—so long as these measures remain in contexts where the teacher has some direct capability for exercising control and influence. Such a finding acknowledges the core professionalism of classroom teachers and their concern for the outcomes of their efforts with respect to their students, but reminds us all that forced accountability outside of personal capability or locus of control is demoralizing.

NEXT STEPS

It seems clear from these findings that further research is necessary in several directions. First, the clarity with which respondents could delineate their perceptions of student achievement on a continuum from classroom to building to district to state-level considerations was constrained by the use of the Likert scale instrument. The instrument captured the presence or absence of response to a stimulus, but not the relative strength of

response between related stems. In other words, the researchers are clear that teachers prefer local school measures of student achievement to district measures, but not how strongly—nor in relation to years of teaching experience, level of teaching, or location/environment in which the respondent teaches. The researchers intend to revise the instrument to incorporate items which scale for this strength of relationship to allow more rigorous consideration of locus of control with respect to student achievement and pay scales.

Additionally, as the researchers pursue the relationship between student achievement and pay scales, clearly other populations have a natural interest in this line of thinking. Certainly, the administrators responsible for establishing and enforcing pay scales which might be based in part on student achievement may have perspectives which contribute further factors for both researchers and future teacher respondents to address. Based on the findings above, and beyond follow-up survey refinement for teachers, the researchers are planning to extend the research line to include superintendents, school board members, and building administrators.

Finally, given the strength of the findings in this current analysis and the particularly difficult financial concerns within Ohio, it seems important to expand the sample size of the current research approach to include a statewide distribution of respondents and recruit out-of-state institutions and researchers who may be interested in joining in this study.

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APPENDIX A
Survey Instrument

TEACHERS' VIEWS ON COMPENSATION FACTORS

(If you have completed the survey in another class, please return to the professor.)

We invite you as a teacher to share your opinions as to compensation factors which best reflect what you do as a teacher. Teacher compensation is being studied across the nation. National and state leaders are making a number of proposals to modify teacher salary schedules with little or no information as to the relationships to what teachers actually do. The data produced by this survey will be shared with state and national policy makers.

Please rate the following possible compensation factors by marking the box on the adjacent scale that most accurately reflects your opinion of how it relates to what you do as a teacher. If you mark specific items higher than 5 – indicating a high relationship to what you do as a teacher, use the back of this page to provide explanatory comments. Similarly, if you mark specific items less than 3 – indicating a low relationship with what you do as a teacher, your constructive criticism comments would be appreciated and useful.

4 = some relationship to what I do as a teacher.

Less than 4 = low to no relationship to what I do as a teacher.

Greater than 4 = high to very high relationship to what I do as a teacher.

Compensation Factor		Relationship to Teaching						
1	A performance based teacher evaluation	1	2	3	4	5	6	7
2	Building level performance on State Report Card	1	2	3	4	5	6	7
3	Number of years teaching experience	1	2	3	4	5	6	7
4	Hard-to-serve school building (low performing)	1	2	3	4	5	6	7
5	Student achievement at the classroom level	1	2	3	4	5	6	7
6	National board teacher certification	1	2	3	4	5	6	7
7	Level of formal training (degree held and beyond)	1	2	3	4	5	6	7
8	Student achievement – school district level	1	2	3	4	5	6	7
9	School district performance on State Report Card	1	2	3	4	5	6	7
10	Classroom performance on State Report Card	1	2	3	4	5	6	7
11	Scarce licensure bonus (Math, Sci. etc.)	1	2	3	4	5	6	7
12	Student achievement at the building level	1	2	3	4	5	6	7

Considering both the traditional compensation factors and the compensation enhancement factors listed above, please rank order of what you believe are the top **five** factors which should be included in a Teacher's Salary Schedule:

- 1.
- 2.
- 3.
- 4.
- 5.

Demographic Data:

How would you describe the school/school district in which you are employed?

_____ Large City _____ City _____ Suburban _____ Rural

What grade level do you teach?

_____ Primary (K-3) _____ Intermediate _____ Elementary (K-5-8)

_____ Middle School _____ High School

Number of years of classroom teaching _____

Highest degree earned _____