

PAY FOR PERFORMANCE: DEVELOPING THE BASIS FOR ADVANCING  
PERFORMANCE INCENTIVES TO PUBLIC SCHOOL TEACHERS IN  
JAMAICA.

Leroy Johnson

Analysis, Assessment, and Technology, Unit 4

Professor: Jolly Holden

July 8, 2006

## Abstract

This study explored the bases for awarding incentive in a pay for performance system in Jamaica. The bases were generated by surveying the perspectives of a representative sample of teachers in the system at the time. The relative significance of emerging bases were examined through quantitative methods culminating in a set of criteria for awarding incentives, these became the foundation of recommendations for policy makers. The Bases for awarding incentive pay from teachers' point of view were developed using a mixed method research design. Qualitative and quantitative data were collected on a single instrument. First, teachers respond to a single open-ended question by writing their responses on one section of the instrument. Next, they responded to questions using a likhert type response format which provided demographic data.

The written responses were coded into categories based on an essay analysis framework constructed from pay for performance schemes found in research. The researcher's intent is to provide policy makers the opportunity to learn from the history of performance pay and to pioneer an incentive program for public school teachers – the inclusion of teacher generated bases for incentive pay in the developmental stages of pay for performance system.

### Introduction

Pay for performance schemes in education have been used to advance several objectives; motivation for teachers, to attract and retain teachers, as a measure of school accountability and to improve students' achievements. However, the move toward implementing a pay for performance scheme for the Jamaican education system suggests a major change in educational policy. As a former high school teacher in two of Jamaica's high schools, It was recognized that there were teachers who created and got involved in activities and programs that helped student realized their potential, improved their own content knowledge and pedagogical techniques and improved the school's overall image. It was not difficult for fellow teachers and administrators to see that some of these activities go well beyond those of the teacher's job description. Despite the often casual recognition by peers, parents and school administrator the current compensation practices does not reward such teacher performances outside he single salary schedule. That is, outstanding teachers receive nothing more by way of monetary compensation from the state, than the teachers who are just meeting the basic job requirements.

Several pieces of literature were found describing pay for performance systems throughout the 1980s. For the most part they were "administrator-led reviews" of teacher performance which "created resentment among teachers and their unions."(ERIC Digest, 2000 (p. 3). More recent designs of incentive programs have focused on: (1) knowledge and skills-based compensation pay for performance, (2) knowledge and skills-based pay systems, (3) school-based performance award programs, and (4) compensation for qualification such as certification with the National Board for Professional Teaching Standards (NBPTS). However no studies could be found which

describe attempts to use teachers teacher developed bases as an input in developing a pay for performance scheme.

The purpose of this study is to identify the basis for advancing incentive bonus to teachers. This study proposes to find the answer to the following research questions:

1. What do teachers perceive as the base for determining whether teachers qualify for incentive pay?
2. What is the order of significance of the bases identified teachers?
3. What are the differences in bases generated by teachers from different school types?

The results represent part one, a small scale pilot which involved three public schools selected randomly. A pilot project was undertaken to glean some experience for taking the study to the larger population of teachers in part two. The relative importance of emerging basis across categories of teachers would be determined statistically. Finally, the emerging performance basis will be presented as a set of recommendations for policy makers and persons directly involved in implementing the Education Taskforce recommendations in Jamaica.

#### *Rational for Mixing the Methods Approach*

The study used is a mixed method design with a concurrent transformative strategy. Equal priority was given to the types of data. A mixed method design employs qualitative and quantitative data sources to explore and examine the phenomenon. Integration of the results may take place at different stages; analysis, conclusion or recommendation stages. In this study integration will take place during analysis to provide an understanding of the problem. The premise of this study is to show that teacher should have an input in the construction stages for the bases for awarding teacher incentive pay, through the analysis

of teachers writings and examination of the significance of the bases in relation to teacher demography.

## Review of Literature

### *The Current Education Situation*

In 2004 the Jamaican education system catered to 800,000 students in public and private institutions at the early childhood, primary, secondary and tertiary levels. Over 22,000 teachers were employed in 1,000 public institutions. At the time only 20% of teachers were trained university graduates. This state is not of course a true measure of teachers ability to teach but the Government at the time spent over \$30 billion on education, with households estimated to have spend an additional \$19 billion. The focus of this effort was to reform the education system making it compatible to standards in other parts of the world and to move the country forward with a common goal for education which is “an education which facilitates lifelong learning and acquisition of social and life skills for all.”(Davis, 2004)

There have been several changes to the education system in Jamaica in the last five years: “There has been increased awareness and sensitivity to the outputs of the system. This has led to the passing of the historic resolution in Parliament, and the establishment of a 10-man Education Review Task Force mandated by the Honorable Prime Minister to develop a strategic action plan for the system.” Jamaica observer (2004)

The mandate of the task force was to provide a plan and an approach for transforming the education system in Jamaica. The work of the taskforce culminated in a set of recommendations to the Prime Minister. One significant recommendation was put

forward (Education Task Force, 2004, p. 88) “Design and implement Performance-Based Management System, to include rewards and sanctions, for all staff in MOEY&C, Support Institutions and public schools on the following bases (individual, departmental and institutional):

- Teachers should be rewarded based on improved student achievement
- Teachers should be rewarded based on improved student achievement
- Teams/Departments within schools based on increased student performance in specific subject areas”

This bore resemblance to the process discovered in the US. Education districts and states in the US have recommended and even used legislation to implement pay for performance as incentive schemes, (Cornet, et al 2002) cite the South Carolina Education Improvement Act of 1984. This suggests a look at the history of performance pay for teachers in the US so that one can draw parallels and look at the lessons learned.

*Pay for Performance: A Brief History*

Odden, O. (1995) traced the history of teacher compensation from the 1800s to the present. The author highlighted the first evidence of incentive; “room board”, was used at a time before the establishment of the current structure of the education system. In the room and board scheme, teachers were offered living quarters on school grounds. Later, teacher’s salaries were introduced followed by salary scales which recognized novice and experienced teachers. Odden suggests that as society changed and the knowledge and skill base increased, salary scales awarded teachers with higher degrees higher pays for doing the similar jobs as well as for teaching in institutions of higher

learning. Cornett (2002) reported on numerous aspects of performance incentive pay in the southern states. They provided a summary of such programs which began in the 1980s. According to Cornett: “the interest in such programs began with the concern about the quality of the teaching force.” Several programs were developed, most were implemented. But because they excluded teachers input (Florida, mid-80s), they were never fully implemented. South Carolina for example, discontinued its program because of vulnerability to funding cuts (North Carolina and Texas are other examples) and difficulties in their implementation (North Carolina and Tennessee for example) most never lasted and interest waned. The one program surviving to 2002 proposed to completely restructure the pay schedules (Arizona). The researchers pointed to a shift in focus from individual teacher performance and student achievement to a system of school- by- school results and gains in student achievement as the new face of incentive programs. Twenty states across the nation were mentioned as having a school based performance system in place or in the process of implementation a program.

Another set of studies (Gallagher, H. A. 2002 and Kingdom, G & Teal, F. 2002) focused on the concept of pay for production for teachers that is, increased pay as the result of increased student performance, or that increased production results in more pay. In the private sector particularly where production piece rate is used, the amount of pieces produced determines compensation, but it also determines incentive earnings if workers produced above target number of pieces per period. In education, productivity could be a measure of student performance, but where is the evidence. Kingdom et al set out to determine whether the salary received by a representative sample of teachers in the public and private sector schools were determined by their productivity. Teacher

productivity in that study was a measure of students score on selected numeracy and literacy tests. Other factors were included in the study to account for parental effects, student effects and school effects in explaining student gains. These included student ability, parent involvement, quality of school in terms of resources and quality of teacher in terms of their qualification and years of service. The results of this study revealed that:

1. With the exception of seniority wages “there was no relationship between teacher wages and student achievement in the public sector”.
2. There is a “highly significant effect of [student] achievement to pay for the private sector schools.”

One conclusion from this study observed that “managers in the private sector schools have the flexibility to set wages and as such efficiency wages were a means of enhancing teacher incentives.” A second conclusion suggested that a system of reporting the achievement of teachers would have to be in place in the public sector “which would enable measurement of a teachers’ value added” performance over a given period. This conclusion is significant and should become a factor in the study of the Jamaican situation.

The Jamaican government has made a move toward implementing a standards based performance evaluation system, the first of its kind. The objective of this system is to measure the performance of schools and teachers against agreed targets. Henry-Wilson (2004) noted:

“the teacher performance evaluation system introduced last academic year will be fully implemented this year. Under this program we are emphasizing measurable outcomes for schools. We urge all principals



to ensure targets are set for their schools as well as for each teacher.

The performance evaluation instruments are not punitive measures but aimed at identifying the strengths and weaknesses of our teachers and the institutions so that all of us can buttress the strengths while correcting the weaknesses.”

The key to this program is that it is a step toward having a performance measurement and reporting system in place, one on which teacher performance measurements can make reference.

### *Implementing Pay for Performance Systems*

Hall, G.E; Cafarella, E; Bartlet, E. (1997). Conducted a study which outlined a case study of implementing a pay for performance system in a selected school district. Two critical aspects were clearly evident in this study; one was a rigid attempt to include all parties involved the development and implementation process, this factor was also observed by Cornett, et al. The second was the absence of deadlines in the development and implementation process. The process described in the study took years because it allowed for the development of “trust” and for all to buy in the system. Allen, M. & Wyman, W. (2001) presented an overview of the current models in the US. The results showed that four of the five models described a base pay system in place for and incentive bonuses were based on extra work or based on traditional performance evaluation reports and whole school performance. Cornett, et al, point to six key lessons from the states’ efforts to reward teacher based on performance whether school based or individual performance. The key lessons are:

1. Teachers prefer to be paid for additional work rather than pay for performance.

2. Programs that alter pay with responsibility.
3. Pilot programs rarely produce reliable results for implementing performance pay schemes
4. Rewards for what teachers do rather than for student achievement may be more productive.
5. Evaluation of teachers must be perceived as fair.
6. Teacher who participate in performance-pay programs are positive; those who do not are negative.

#### *Summary of Review of Literature*

The result of the literature review resulted the following:

1. Pay for performance system rarely work in the public sector
3. There is no evidence that supports the concept that in creased pay results in increased student performance in the public schools
4. Incentive pay is used as motivation in private sector schools
5. Whole school performance factors used as the basis for incentive programs are more successful than teacher performance evaluation systems
6. Teacher individual performance coupled with whole school factors has been successful.
7. The most successful incentive program focused on whole school performance or the achievement of school building objectives.

#### Methodology

#### *Data Sources*

Two distinct types of data will be collected simultaneously on a single instrument. First, teachers will respond to a single open-ended question by writing their responses. Second, they will respond to likhert scale type questions to provide demographic data in a separate section of the instrument.

### *Data Collection*

During the collection of data teachers were asked to complete the survey by the end of the day, as soon as possible and by the end of the week. This resulted in return times ranging from 15 minutes to eight days. The reason for this variation in allotted time was judged by the assistance knowledge of the schools activities and thus prevented disruption of the school's normal activities. In two of the three school teachers were busy preparing for end of year internal and external exams. In these schools teachers were allowed to complete by the using a combination if time limits. In the other school, teachers were not in full preparation had not begun most of the results were returned on the same day.

The data were triangulated through two techniques at the data collection stage. First data were collected at three different sites, with three different collectors, this allowed for comparisons both within and across sites. In the second, two versions of the instrument were used. In the first instance the essay prompt included examples of what could be considered examples bases for incentives. The data returned with the some teachers using the examples in the prompt as part of their answer. To test whether the teacher responses could be the same without examples in the prompt, the last set of instrument did not include any examples of bases in the essay prompt. The essay prompts used were:

1. A recent development in the government's Reform of Education policy is the possible implementation performance pay for teachers. In performance pay schemes, incentive pay is awarded for meeting or exceeding performance expectations.

2. A recent development in the government's reform of education policy is the possible implementation performance pay for teachers. There are three main views on this issue: Pay teachers based on: (1) teacher performance factors such as qualification, additional responsibility and annual teacher evaluation, (2) school-based performance factors such as graduation rates or overall school improvements and (3) Student performance on internal and external.

In each instance, the request was the same: "As a public school teacher, what performance factors should be the basis for awarding incentive pay." Comparison of the results showed great similarity in the bases generated.

#### Limitations

The ideal amount of time to ensure that responses were properly thought out was not determined by the pilot and is still undetermined. An alternative that could solve this problem would be based on an experimental design with no control groups. The essential feature would be to hold seminars to inform teachers about the various bases on which pay for performance schemes have built then following this dissemination of information, teachers could be asked to write on what they regard as the basis.

The study does not include the views of the other stake holders such as principals, parent teacher association or the teachers' union. To keep true to the arguments put forward from a study of successful implementation strategy, a complete study would

attempt to gather these seemingly critical views and construct an argument of validity for the bases identified by teachers.

#### *Delimitations*

This study focused on consenting teachers three public schools. The schools selected represented the most common types of schools that which exist at the time data was gathered. The aim is to see what can be learned from a small scale version of the proposed study. The demographic criteria used in the analysis was school type, since there are differences in these schools it was expected that differences existed in teachers' perceptions.

#### *Data Analysis*

Rather than let the essays fall into emerging categories an analysis framework was developed based on techniques used by McKoy and Sorrenson (2005). The authors described the "development of a document analysis framework". This method compared policy analysis frameworks for virtual universities then selected the more frequently occurring categories within the frameworks. Finally, adding additional categories to incorporate other types of universities that developed since the researcher's policy analysis framework was developed. The methods used by McKoy and Sorensen were adopted to identify categories for analyzing teacher's essays and develop the Johnson Essay Analysis Framework.

Wyman, W and Allen, A. (2001) presented a comparison of five current models of pay for performance schemes, this comparison produced eight bases for awarding performance incentives. Cornett, L. M. & Gaines, G. F. (2002) examined the last twenty

years of pay for performance schemes and outlined a comparison of “twelve school incentive programs with monetary awards “(p. 8) the only two bases for incentive awards were “high school performance” and “improved school performance.” Allen, O. (1995) traced the history of teacher incentive programs from the 1800s to the present and outlined five bases for the award of incentives. Another study Kelly, C; Heneman, H, III; & Milanowski, A. (2000) studied three similar programs in depth and described five bases for incentive awards. The bases in these studies overlapped in terms of concept and were therefore grouped to form single comprehensive basis. The bases were then combined to form the Johnson Essay Analysis Framework.

**Outstanding teacher** – programs implemented by schools for recognizing the major accomplishment of teachers or the extent to which they met school level objectives.

**Need for subsidy** – incentives awarded due to hardships faced in traveling to school, finding affordable housing within reasonable distance of the school and to offset the cost of lunch where there school does not run a canteen.

**Teacher years of experience** – seniority allowance built into the single salary schedule is awarded to teacher whose years of service extend beyond that required for the highest pay on a particular scale.

**Advanced degrees/Education Units** – differentiated pay or yearly cash awards for achievement of qualification requirements and include; attainment of an advanced degree in the content area, national teacher board certification and additional teaching or professional development certifications.

**State priority** – from time to time the state focus its resources to change the current state of different elements in the education system. For example, demand for math teachers would see the creation of a range of incentives to attract, train and retain teacher of mathematics.

**Collective rewards** – Oden described grouping persons with varied skills and knowledge to work on meeting an organization's goal. In this case the reward is shared among the members when the goal is achieved. This category is extended to include informal grouping in which individuals operate with a sense of responsibility to the whole school and work along with other teachers to ensure success of the endeavor.

**Whole school performance** – certain areas for school improvement are identified before hand. For example, if the school should reduce the number of student who drops out by 10% over a time period is a measure of improved performance. If the school meets this target teachers and administrators receive incentives.

**Peer evaluations** – this is a complementary evaluation used with principal's evaluation to provide an average rating of teachers. The rating received would determine the proportion of incentive received.

**School type** – incentives given at the end of the year in recognition of the challenge faced by school level. Different awards will be advanced although not necessarily monetary.

**Mandated annual evaluations** – principals and assistant principals conduct evaluation of teachers' performance as a part of normal operations. This is done at different intervals during the year. Evaluations are based on established criteria and teachers receive a final average grade.

**Additional responsibility**- this is the concept of “extra pay for extra work.” Teachers preferred to be paid for additional teaching or administrative duties than on the basis of administrative evaluations.

**Student performance** – incentive awards are advanced to teachers based on student improved or maintaining high students’ performance on internal and external examinations. This category takes into consideration the fact that teachers may begin with student who are already high achievers or working with limited instructional resources.

**Job function evaluation** – this is similar to the annual evaluations except the evaluations would include assessment of; teacher portfolios, critical job functions(attendance, lesson planning, record keeping, class management) and the extent to which teachers meet certain school building level objectives( time management, improved student discipline, participation in social programs). This may be carried out by principal, assistant principal or teacher with specific responsibility for subject areas.

Table 1

Basis for Incentive Categories	Johnson Essay Analysis Framework			
	Wyman and Allen	Cornett and Gaines	Oden	Kelly et, al.
1. Outstanding teacher				X
2. Need for subsidy( include lunch, room and board and traveling )	X		X	X
Teacher years of experience			X	X
3. Advanced degrees/ Additional education units	X		X	X
4. State priority (government initiatives which focus on: I. Improving subject area performance II. market demand)	X		X	



---

5. Collective rewards(teachers collaborating on a school project resulting in school improvement)			X	
6. Whole school performance (improved or sustained exam pass results, dropouts, absenteeism)	X		X	
7. School type (Jr. high, High School, K and pre-K)			X	X
8. Additional responsibility	X			
9. Mandated annual evaluations	X			
10. Student performance	X			
11. Principal's evaluation	X			
12. Peer evaluation	X			

---

### Results and Interpretation

This paper reports on the first of a two part study. The results presented here are from the pilot study and showed the bases for incentive pay from teachers' point of view, the ranking of these bases and the differences and similarities in the bases selected by school type. Three types of schools were selected for this pilot study, Primary, High, and a Technical high school. There are significant differences among these schools and therefore it is expected that there will be some difference in the emerging bases from these schools.

A group of 32 teachers from three different schools completed the survey. Table 1 below shows descriptive statistics for the sample. The average grade level currently taught by the group was between grades 7 to 12 with average years of service in the 10-15 years category and the typical qualification was a first degree.

Table 1 Descriptive statistics for teachers

Variable	Average Respondent	Most Frequent Respondent	Standard Dev
Years of service	10-15	16 +	0-5
Highest Qualification	BA/Bed	BA/Bed	Teacher Certificate
Grade level taught	7- 12	7-12	1-6

***Perceived basis for determining whether teachers are awarded incentive pay***

Each response was examined for direct word match with the policy categories. In other instances, the explanations provided by respondents were examined to see if they connote the same idea as the description of the categories of the essay analysis, this made it possible to place the responses into the analysis categories. A table was then constructed to indicate the pattern of responses. Nine out of an expected 16 bases expected bases were. The nine bases for awarding incentive pay to teachers are:

**Annual Evaluations:** This is based on states annual evaluation exercise.

**Whole school incentive:** The expressions surround extending the rewards to teachers who are not directly involved in students. The issue also includes teacher activities and students' performance that correlates to whole school improvement, in such cases the whole school should benefit.

**Student Performance:** Respondents seem confident that this basis is valid but with a condition. The condition is that all the necessary infrastructure, system to support the efforts of teacher and basic training materials to work with are in place.

**Job function:** The most critical elements among the responses were attendance, punctuality and the willingness to take on additional responsibility. Lesson planning and samples of teacher work was also implied.

**Group incentive:** The expression of respondents in this sample surrounds actions team effort not just on particular school based project but a display of a sense of responsibility to the institution in ones relationship with parents, other staff, and students

**Qualification /Skill based performance:** The arguments presented by teacher on this issue were generally implicit but descriptions the skills and knowledge to do the job were expressed in almost all instances.

**Teacher years of experience:** the implied response is the value of a teacher's experience in delivering particular content type resulting in improved student performance and ability to mentor less experienced teachers.

**Need for Subsidy:** This surrounds the issue of geographical challenges. Particularly, for schools are located in neighbor hoods known for frequent violence.

This result suggest that teachers are concerned with a wide set of bases for advancing incentive pay. Some of the selected bases is a part of the teachers' value system and is evident by strong opinions. For example, one respondent argues that a teacher should be awarded incentives based on his/her ability to affect students' learning so that students work is of excellent quality and reflect a high level of knowledge. How the teacher does this should be evidenced through the quality and depth of lessons taught. In another instance the respondent outlined:"the number of responsibilities assigned to a teacher, for example, form teacher, year group supervisor, head of section, faculty supervisor to clubs and societies... no one factor should ever be considered as the basis for awarding incentive pay for any [teacher]."

***Order of significance of the bases identified teachers***

This significance of the bases identified is determined by n, the number of times this bases basis identified explicitly. From the table 2 the most significant basis for incentive pay is additional responsibility with (n = 17). This is followed closely by job function (n=16) basis. The other categories follow the order; qualification, Student performance, and annual evaluation. It is clear that years of service, need for subsidy and collective rewards were the least significant bases for awarding incentives.

This result is significant as teachers have contended that despite their best efforts during a school period it often takes more effort to reach some students and to raise their performance levels. What it translates to is more teaching efforts by way of remedial and make up classes as well as meeting the challenges through creativity and innovation. This kind of effort often requires going beyond the scope of the job requirements. By extension, this is more work and should result in more pay. In an example the teacher asserts:

“The caliber of students should be considered. This is because a teacher can prepare [and deliver] a topic but if students are not interested, the subject cannot be successfully taught.

The second point is that a teacher can deliver a lesson and the students appreciate the lesson but refuse to study hence failing the exam. This is not the teacher’s fault but this will give a bad impression of the teacher.”

A similar argument arising from another teacher and different school type:

” The role of the teacher is to impart knowledge but the level at which the student enters the institution is of utmost importance. The infrastructure

such as adequate classroom space and specialized tools are needed so that the teacher can carry out their tasks efficiently.”

Finally, the results of the study by Hall et al (1997) the results presented here. In that study the authors outlined: “teachers prefer to be paid for additional work rather than pay for performance” and a system that “rewards for what teachers do rather than for student achievement may be more productive.”

### *Differences in bases by school type*

The bases selected by teachers were compared with the school types from which the data was gathered. Together with the number of times the bases were generated by school type is shown in Table 2. The data showed that primary school teachers, like technical school teachers selected two bases with a clear priority for one basis over the other in each case. The primary school teachers had a preference for two bases, additional responsibility and student performance. The preference is additional responsibility over student performance. For the technical high school the preference was job function over teacher qualification/advanced degrees.

The high school teachers placed equal priority on three factors: annual evaluations, job function and qualification/advanced degrees.

Table 2 Results of bases selected by school type.

Variable	School Type			Total
	Primary School	High school	Technical High School	
Additional Responsibility	11	4	2	17
Annual Evaluations	4	5	1	10
Whole school incentive	1	0	1	2
Student Performance	9	2	2	13
Job function	5	5	6	16
Group incentive	0	0	1	1
Qualification/Advanced degrees	6	5	4	15
Teacher years of experience	0	2	0	2
Need for Subsidy	0	1	1	2

This result is significant as it shows teachers' confidence in the state's annual evaluation program, supervisory type evaluations and the abilities teachers who received a higher degree or professional development certification. What is also clear is that the level of evaluation done at the school level is different from evaluations done by the state. Unlike supervisory evaluation which has been in schools for quite some time, the annual evaluation program came into effect in schools 2004. The Education Minister outline in a broadcast to the nation: "The performance evaluation instruments are not punitive measures but aimed at identifying the strengths and weaknesses of our teachers and the institutions so that all of us can buttress the strengths while correcting the weaknesses." This exercise represents a long held desire by teachers that first hand examination the challenges and conditions under which teachers work be observed on a regular basis by the education ministry. The extent of the teachers' achievement under such condition will highlight value-added student performance, school improvement efforts and the efforts of teacher that are beyond their job expectations.

#### Conclusions

This study examined the teachers' perception of the bases for awarding performance incentives, focusing, on the efficacy of their response to essay prompts. Data was taken from teacher demographic information and their written responses to the essay prompts. Three different school types were included and the collection process involved three different data collection agents over a two week interval. The analysis involved the use of an essay analysis frame work constructed entirely of categories in the history incentive pay schemes.

The study specifically examined the categories selected by teachers with a view to rank and look for differences in bases selected by teachers. This generated four significant conclusions.

*Conclusion 1 Application of the categories found in the history of incentive pay*

The application of the essay analysis proved useful in highlighting the perceived bases for incentive pay from teachers' written responses. Some adjustments were made to some categories to accommodate slight variations in responses and properly categorized the responses without the need for additional categories in this study.

*Conclusion 2 Bases for awarding incentive pay*

Teachers prefer to be paid based on at least two bases. With the exception of a few respondents teachers expressed several issues affecting teachers', school and student performances and suggest that these issues are critical and need to be addressed before incentives can be fairly awarded.

*Conclusion 3 Differences in bases by school type*

Teachers from primary and technical high schools selected and prioritized two bases for awarding performance incentives. The primary school teachers showed preference for additional responsibility over student performance. The technical high school teachers selected job function over teacher qualification/advanced degrees and high school teachers placed equal priority on three factors: annual evaluations, job function and qualification/advanced degrees. Based on this result the bases for awarding incentive should differ in different school types.

*Conclusion 4 Ranking of the bases for awarding incentive pay*

The overall results showed that teachers prioritized the bases for awarding incentives, the order is; qualification, student performance, annual evaluation, years of

service, need for subsidy and collective rewards. The first three bases selected seem the most critical to the teachers in the sample. However, the numeric priority given the bases is close enough to conclude that the first two are equally important.

#### Recommendations for Change

The results of this study have significant implications for policy makers and those directly involved in implementing the recommendations of the education taskforce. The following 4 recommendations are based on the findings in this study.

1. Conduct a thorough survey of teachers' preferences for the basis of incentive separately in primary, high and technical high schools. This would provide a clear view of what bases are significant to teachers on a school type bases.
2. Survey the system over a specified period of time, say, five years to ensure that the objectives for paying incentives are producing the desired results in the areas of significance both to teachers as well as the education ministry.
3. The results of the survey should be used to negotiate and consolidate the bases that will attract incentive pay and which might attract instructional incentive. Since the priority of some bases are close based evidence in numbers individual incentive could be paid for one or the other or based on some combination of bases.
4. Annual evaluations should include examination of teacher portfolios. Evaluation of teacher skill and knowledge which may satisfy the ministry or school building objectives will require innovative and deliberate methods for gathering and examining needed evidence. One alternative is to examine the examples of teachers' work as well as evidence of the acquisition of new knowledge and skill in written and other forms in a teacher-made portfolio. This will provide discrete



information on which judgments are made for awarding incentives as well as reduce the work load for assessors and stress on teachers.

#### Recommendations for Future Research

The results of this study support some of the findings of pay for performance schemes past and present. However, areas of this study could be improved through future research especially if the results are to be applied across the school system. The first recommendation is to repeat the study but apply the systematic random sampling technique to select the research site and obtain a response from a greater number of teachers in each site. The second surrounds the time needed allow for well constructed responses, the ideal length of time to ensure that responses were properly thought out was not determined by the pilot and is still undetermined. A solution to this problem could be based on an experimental design with no control groups. The essential feature would be to hold seminars at the selected sites to increase respondents' knowledge of the various bases on which pay for performance schemes have been built. This could then be followed by the data collection. Teachers could be asked to list and explain the bases for awarding incentive pay.

Third, the study never included the views of the other stake holders such as principals, parent teacher association or the teachers' union. To keep true to the arguments put forward from a study of successful implementation strategy, a future study would attempt to gather these seemingly critical views to construct an argument of validity for the bases identified by teachers and highlight the differences and or similarities in the bases identified.

The fourth recommendation is for a study to examine the difference in selected basis compensating for teacher qualification, gender and years of service. These factors separate teachers into categories which might hold different patterns in the bases selected for incentive awards. Such a study could use the results here to develop the instrument for data collection.

The last recommendation relates to the psychological effects of pay for performance. There is an assumption that if a person is rewarded for efforts for which he is motivated intrinsically his efforts may be reduced in the future. A study of the effects of incentive on teacher increased performance in terms of some measure should be undertaken if the system is implemented. Such effort would help in adjusting the incentive plans to recognize the intrinsic rewards and complement them with external rewards – incentive pay.

#### References

- Allen, M. & Wyman, W. (2001) *Pay-for-Performance: Key Questions and Lessons from Five Current Models*. Retrieved from [http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/28/25/74.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/28/25/74.pdf). May 8, 2006
- Allen, O. (1995) *Incentives, School Organizations and Teacher Compensation*. Retrieved from: [http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/25/bb/0d.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/25/bb/0d.pdf). June 13, 2006.
- Cornett, L. M. & Gaines, G. F. (2002) *Quality Teaching: Can incentive Policies Make a Difference?* Retrieved from [http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/0d/e0/d6.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/0d/e0/d6.pdf) May 11, 2006
- Creswell, J.W. (2005) *Educational Research: Planning, Conducting and Evaluating Qualitative and Quantitative Research*  
Ohio: University of Nebraska
- Davis, R. A (2004) *Task Force on Educational Reform: JAMAICA A Transformed Education System 2004 Report*. Retrieved on May 15, 2006 from <http://www.jis.gov.jm/EducationTaskForce.pdf>

- Gallagher, H. A. (2002): The Relationship between Measures of Teacher Quality and Student Achievement: the Case of Vaughn Elementary Retrieved from [http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/0d/e0/pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/0d/e0/pdf) May 11, 2006
- Hall, G. E. Cafarella, E. Bartlet, E. (1997) Implementation of a Teacher Performance Pay Plan For Teachers: *Strategies, Findings And Implementations*. Retrieved May 19, 2006, from [www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/11/12/31.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/11/12/31.pdf).(ED423218)
- Kelly, C; Heneman, H, III; & Milanowski, A.(2000) School Based Performance Award Programs, Teacher Motivators And School Performance: *Findings From A Study Of Three Programs*. CPRE Research Series. Retrieved June 13, 2006, from: [http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/22/3b/e8/pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/22/3b/e8/pdf).
- Ministry Of Education Youth and Culture (1999) *White paper the way upward*. Retrieved May 16, 2006, from <http://www.moeyc.gov.jm/policies/whitepaper.htm>.
- Ministry Of Education Youth and Culture (2005) Back-to-School Broadcast. Retrieved July 3, 2006, from [http://www.moeyc.gov.jm/bts/broadcast\\_message.htm](http://www.moeyc.gov.jm/bts/broadcast_message.htm).
- McKoy, D.R & Sorensen, C.K.(2003) Policy Perspectives of Selected public Virtual Universities in the United States. Retrieved May 19, 2006, from [http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_](http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_)
- Qualitative vs Quantitative analysis. Retrieved May 18, 2006, from <http://bowland-files.lancs.ac.uk/monkey/ihe/linguistics/corpus3/3qual.htm>.
- University of Surrey (2001) Social Research Update. Retrieved May 18, 2006 from <https://mycampus.aiu-online.com/MainFrame.aspx>.



## Appendix 2: Overall Results of Selected Bases for Performance Incentives.

## Accountability for Results

1. Design and implement Performance-Based Management System, to include rewards and sanctions, for all staff in MOEY&C, Support Institutions and public schools on the following bases (individual, departmental and institutional):
  - Teachers should be rewarded based on Improved student achievement
  - Teams/Departments within schools based on Increased student performance in specific subject areas
  - Management team based on Overall school performance
  - Ministry and other Support Institutions based on National (regional in the case of REA's) education performance
2. Develop strategic plans for the Ministry, support institutions and all learning institutions, to include clearly defined objectives, measures and targets, as well as strategies and actions required to achieve the targets.
3. Implement monitoring and reporting systems at the Ministry, support institutions and schools to focus on achievement of targets.
4. Implement a comprehensive Management Information System to collect, collate and analyze information.
5. Publish information on a timely basis at the school, community and national levels.
6. Conduct an annual National Taxpayer Satisfaction Survey to get feedback from the citizens on the overall performance of the education system.
7. Conduct annual parent and community satisfaction surveys to get feedback on the performance of individual.