



No. 15



A MERIT PAY PLAN

FOR MANITOBA'S TEACHERS

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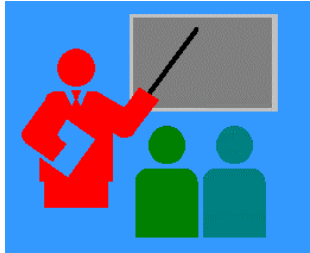
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Executive Summary



1. Manitoba uses the same salary grid as the majority of school districts in North America. Two axes appear on this grid—the teacher's years of university education and years of experience.
2. Studies show no correlation between the number of years of university education a teacher possesses and the performance of the teacher's students. They show only a small correlation between years of experience and student performance.
3. A strong case for implementing some form of merit pay can be made. It would reward teachers who do a good job and weed out poor teachers. The majority of professionals in other occupations are already reimbursed with a merit pay system.
4. A minority of school districts in the United States use a merit pay system. Those described in this report include Douglas County, Virginia Beach, Midland, Evanston, Cincinnati and Denver. In particular, the merit pay regimes in Cincinnati and Denver have aspects worth emulating.
5. In a merit pay plan for Manitoba, a new salary grid would be created. The impact of increments based on experience would be lessened and the consideration of the teacher's years of university education would be entirely replaced by six merit levels. A teacher's merit level placement would depend partially on in-school evaluations and student performance on standards exams. Principals will also have six possible merit levels, determined entirely by student performance.
6. A preliminary cost analysis for merit pay makes two key assumptions, that a roughly equal number of teachers will be placed at each merit level and that teachers will have a fairly even spread of experience amongst teachers. The cost of a merit pay plan under those conditions would be approximately equivalent to current expenditures on teachers' salaries.

Introduction

"A teacher's first professional responsibility is to her or his students,"¹ states the Manitoba Teachers Society's official code of conduct. In other words, teachers are expected to make decisions based on what is best for their students.

Is this really the case in Manitoba? In particular, are teachers' salary structures and incentives set up in such a way as to reward effective teachers, ones who do accomplish that goal?

All Manitoba teachers and the majority of teachers in North America are paid on a salary scale with years of university education and seniority as the only criteria. While this may be a simple way to pay teachers, neither of these criteria have much, if anything, to do with student learning.

A number of school districts in the United States incorporate some form of merit pay in teacher compensation. Some of these pay plans are moderate while others are comprehensive. This report describes representative examples of different forms of merit pay.

Finally, a merit pay plan is proposed for Manitoba teachers that borrows some of the best elements from a variety of other plans. The focus of this plan is on rewarding effective, or outstanding teachers, while weeding out those who don't perform.

The Single Salary Grid in Manitoba

Almost every school district in Canada and the United States uses a similar method to determine teacher salaries. The salary grid contains two axes, years of university education and years of teaching experience, and their weightings are negotiated between teachers and their employers. Each teacher's qualifications are reviewed and the teacher is placed on this grid. Teachers with more years of university or more years of experience get higher salaries than teachers with fewer years of education and less experience.

Manitoba uses seven levels of classification by years of post-secondary education, and grants automatic salary increases for each year of experience for the first nine or ten years of the teacher's career, the amount depending on the school division. Class 4, a four-year Bachelor of Education degree, is currently the minimum level at which new teachers are certified. This will change in 2003, as a total of five years of university education will be needed before a B.Ed. Degree is awarded.²

Teacher salaries are relatively consistent across different school divisions in Manitoba. Hanover School Division, located in southeastern Manitoba, is relatively large, with over 6000 students. As of 2002, teachers in this division at class 4 receive \$37,371 in their first year of teaching. A class 4 teacher with ten years or more of experience receives \$58,101. Teachers in class 7, who have seven years of university education, receive \$44,457, while a teacher at that level with ten or more years of experience receives \$67,593.³

Manitoba had 12,643 teachers in 1994-95⁴ and this number has remained relatively constant since then. Approximately 5% of these teachers were at classes 1-3 while 42% of teachers were at class 4. The remaining 53% were at classes 5-7 with most of these (36%) at class 5⁵.

The average experience level for class 4 teachers in Manitoba is 12 years⁶. Since teachers receive annual salary increments every year for only the first nine or ten years of teaching, most teachers have already reached their maximum salary within their class.

Thus the only way for most teachers to increase in their salaries beyond those negotiated through their collective bargaining is to acquire more post-secondary education. This creates a substantial financial

incentive for teachers to increase their level of education and by that means to increase their level of certification.

Problems with the Current System

Since education and experience are the sole determinants of teacher salaries in Manitoba, it is important to evaluate what role, if any, these factors play in determining teacher effectiveness.

In 1986, Eric Hanushek, an economics professor at the University of Rochester, conducted an exhaustive review of 147 studies that identified the statistical relationship between the performance of students and other factors, including the teacher/pupil ratio, teacher education, teacher experience, teacher salary and general expenditures per pupil.⁷ Out of 106 studies that evaluated the effect of additional teacher education on student performance, only 11 found a statistically significant correlation and half of these reported a negative correlation.⁸ Many other reviews of this literature have come to the same conclusion: there is virtually no relationship between years of teacher education and student performance.⁹

The results from one recent study illustrate the problem. In the United States, approximately a dozen states require a teacher to have a master's degree in order to be certified. This means that teachers in these states have, on average, more years of university education than teachers in other states. However, an examination of Scholastic Aptitude Test (SAT) data for students from 1972 to 1990 showed that students in states where teachers were required to have a master's degree had lower SAT scores on average than students in states without this requirement.¹⁰ This unexpected result indicates the difficulty of finding any significant positive relationship between teacher education and student performance.

There is a stronger, although still weak, relationship between teacher experience and student performance. According to Hanushek, out of 109 studies evaluating teacher experience, 40 studies found a statistically significant correlation with student performance. In fact, 33 of these 40 studies showed a positive correlation and seven showed a negative correlation.¹¹ One might conclude that additional teacher experience is a more important factor in the performance of students than additional years of university education. Nevertheless, more than half of these 109 studies still found no statistically significant correlation between teacher experience and student performance.

If teacher education and experience play only a limited role in student performance, are there other possible criteria by which to compensate teachers?

The Case for Merit Pay

Merit pay simply means paying teachers based upon their performance. Under a merit pay system, teachers who do a good job of teaching would receive a higher salary than poor teachers. There are a number of reasons why Manitoba should consider implementing a merit pay plan:

- 1) In the current system, outstanding and mediocre teachers are paid based on an identical salary scale. If teachers are paid based on performance, they will have a strong incentive to be effective.
- 2) A significant number of other professions employ some form of merit pay. Examples of these include the fact that banks pay loan officers based largely on the long-term quality of their loan portfolios, lawyers who regularly win court cases are rewarded by their companies with greater responsibilities and pay, and university professors only receive promotions once they have demonstrated an ability to produce quality research.

- 3) The current salary scale compensates teachers by means of factors that have little or no relation to student learning.¹²
- 4) Under a merit pay system, good teachers can command higher salaries. Currently, the only way to reward good teachers is to raise everyone's salary. Merit pay will make it possible to retain outstanding teachers in the profession by compensating them appropriately.
- 5) A system that encourages teachers to teach well will likely result in a larger number of quality teachers. Thus, the quality of education received by students in Manitoba would improve.
- 6) Introducing merit pay would initiate a public dialogue about what makes a good teacher. The importance of accurately measuring student progress and results through standards testing would become evident.

Merit Pay Myths

While there are excellent arguments in favour of merit pay, opponents of the concept use a number of common arguments against it.

Merit pay has been tried in the past and it has failed.

This simplistic argument is based on the assumption that all merit pay plans are the same. This is far from the case. While the current salary structure is essentially the same across North America, there are a wide variety of merit pay plans. As will be shown in this report's case studies, some merit pay plans have been better implemented than others. But in many school districts it has been implemented successfully.

It is impossible to define concretely what makes a good teacher.

The qualities shared by good teachers are fairly specific. Good teachers ensure that students learn what they need to learn, have control of their classrooms, treat students fairly, provide a positive learning environment and participate in extra-curricular activities. Is it possible to measure these qualities? The evidence indicates that it is.

Teachers who teach in "difficult" schools will be paid less than those who teach in more affluent communities.

Merit pay rewards teachers based on how much the students have *improved* from the previous year. Thus, teachers in schools where students have performed less well actually have the opportunity to receive *more* merit pay than teachers in schools where the students already have excellent results. Merit pay should therefore have the effect of encouraging more talented teachers to take on more challenging classes.

Socio-economic status makes more of a difference in learning than good teaching does. It is unfair to evaluate teachers when they can't make much of a difference.

William Sanders, a University of Tennessee statistician, has effectively refuted this claim. His approach, the Tennessee Value-Added Assessment System, used statistical methods to chart the progress of students against themselves over the course of a year. His study determined that teachers make a difference and that some made more of a difference than others.¹³ Good teaching does matter.

Merit pay will undermine teacher morale and cause teachers to compete rather than work together collaboratively.

This argument is based upon the assumption that the status quo keeps teacher morale high. It seems unlikely, however, that the morale of outstanding teachers is improved by seeing mediocre and lacklustre teachers receive exactly the same compensation. So long as the merit pay system is properly and fairly designed, there is no reason to assume that morale will suffer. If merit pay results in more good teachers and less poor teachers remaining in the system, how can this do anything but improve morale and collaboration? Even traditional opponents of merit pay, such as the American Federation of Teachers, acknowledge that there are examples where merit pay has been implemented successfully.¹⁴

Implementing merit pay would be extremely complicated. Principals would be forced to spend an excessive amount of time on subjective evaluations.

Some merit pay schemes have created this problem. The key is to design a form of merit pay that is simple to understand and administer. Some school districts have successfully done that. Good merit pay plans rely upon more than just a principal's subjective evaluation to determine a teacher's salary. The academic progress of students as measured by standards tests is a relatively objective criterion.

History of Merit Pay

Merit pay was the primary method by which teachers were paid in the United States up until the 1920's.¹⁵ School administrators would negotiate salaries with individual teachers and then evaluate teachers based upon student examination marks and observed teaching performance. The opposition to merit pay of American teachers unions, particularly the National Education Association (NEA) and American Federation of Teachers (AFT), eventually resulted in the implementation of single salary schedules in the vast majority of school districts.¹⁶

In the 1950's, interest in merit pay revived and in the 1960's 10% of American school districts introduced merit pay plans. But the number of school districts providing merit pay was cut in half by the early 1970's.¹⁷ Since that time, merit pay has been extensively discussed, but only a small number of school districts have actually implemented it.

Merit Pay Case Studies

Although school districts that have forms of merit pay, or performance-based pay (PBP), are in the minority, a wide variety of methods of merit pay have been implemented. Merit pay arrangements range from its use as a supplement to the salary grid, to ones that completely overhaul the system.

The merit pay schemes of six school districts located throughout the United States provide a representative sample of the different possible methods.¹⁸ The six school districts are Douglas County, Colorado, Virginia Beach, Virginia, Evanston, Illinois, Midland, Texas, Cincinnati, Ohio, and Denver, Colorado. Each of these is a public school district. The merit pay schemes of these six districts are all quite different from each other.

Douglas County

Douglas County School District in Colorado has established one of the most elaborate merit pay schemes in North America. The standard salary grid based on education and experience was replaced in 1994. Douglas County is also unique in that the Performance Pay Plan for Teachers (PPP) was put into action jointly by the Board of Education and the Douglas County Federation of Teachers.¹⁹

There are six components to the determination of each teacher's salary. These include: base general pay, outstanding teacher pay, site responsibility pay, group incentive, district responsibility pay, and skill blocks.

The general pay for each teacher is calculated individually and replaces the standard salary grid used by most other school districts. Each teacher's salary is calculated by a formula. $\text{BASE} \times (1 + I) \text{KL} + \text{EC}(\text{EV})$ where: BASE = District Base salary (\$23,043 for 94-95) I = Percentage increase for Knowledge levels (0.03 for 94-95) KL = A teacher's knowledge level.

Ba00 = 0	Ma00 = 4	PhD = 8
Ba14 = 1	Ma16 = 5	
Ba28 = 2	Ma32 = 6	
Ba36 = 3	Ma48 = 7	

EC = A teacher's current Evaluation level

EV = The Knowledge Level's Evaluation Value

Ba00 = \$945	Ma00 = \$1255	PhD = \$1455
Ba14 = \$1015	Ma16 = \$1305	
Ba28 = \$1085	Ma32 = \$1355	
Ba36 = \$1195	Ma48 = \$1405	

While most teachers indicated that they liked having their salaries tied to their evaluations, many also said that they had not received adequate information on how this scale works. Although there is no official salary scale in Douglas County, an unofficial scale that circulated among teachers. The existence of this unofficial scale led many teachers to believe that it would be much simpler and more effective to bring back the former system of a universal salary grid instead of a complicated individualized formula.

The outstanding teacher component is undoubtedly the most visible and debated part of the PPP. In order to be designated an outstanding teacher, eligible teachers have to complete and submit a detailed portfolio in which they document and reflect upon their teaching practices. Principals were required to read each of these portfolios and select a certain number of teachers to be designated as outstanding. Each of these teachers then received a \$1,000 pay increase for that year. In order to receive the same pay increase next year, the teacher had to re-submit another portfolio to the principal. In other words, the increased salaries that teachers received were not part of their base salary.

There were a number of problems with using portfolios to determine which teachers were outstanding. First, many teachers complained that the skill that was being evaluated was the ability to put together a convincing portfolio rather than actual teaching excellence. In their minds, a portfolio is not teaching and it should be teaching that should be evaluated. Second, teachers reported that they spent an average of 44 hours each working on their portfolios. This extra time spent on a non-teaching activity may detract from some teaching duties. Teachers who were successful received approximately \$22.50 for each of the 44 hours they spent on constructing their portfolios. In addition, principals spent an average of 30 hours reviewing them and they did that in May, one of the busiest months of the school year. Given that the construction and review of these portfolios was time-consuming, their value in determining teaching excellence is significantly reduced.

Site responsibility pay is extra money given to teachers for performing duties above and beyond classroom instruction. Each school in Douglas County is responsible for allocating it to teachers, based on duties such as membership on a school committee and assistance with extracurricular activities like sports. Some schools paid teachers for all of their activities outside of the classroom and these teachers were required to keep a record of the hours spent on them.

Because site responsibility pay is not a very large amount, no more than \$500, it forms a relatively small part of the total salary teachers received. But it may seem questionable to pay teachers for activities that they would likely have been participating in anyway. The positive reviews that most teachers in Douglas County gave site responsibility pay is probably explained by the fact that over 50% of teachers in the district received it.

Group responsibility pay is another component of Douglas County's PPP system. Essentially, teachers are given the option of working together within their school on an agreed-upon goal that has been approved by a Group Incentive Board. Teachers that choose to participate are given approximately \$150 each if they achieve the goal, whatever it may be. An example of one group goal was an effort to get more students to start using day-timers. Approximately 84% of teachers in the district participated in group incentive pay in the 1994-95 school year.

The major problems with group responsibility pay are its ambiguity and inconsistent application from school to school. Because teachers in each school set their own goals, teachers in one school can set much less ambitious ones than teachers in another school but still receive the same bonus. Pay bonuses granted to people based on goals set by themselves are highly subjective. Moreover, group incentive pay systems as currently structured discourage the setting of extremely difficult or challenging goals, yet such goals might be necessary to improve performance by some types of students.

District responsibility pay is similar to site responsibility pay, except that the activities are done for the district rather than for the school. These activities include such things as serving as members of district-wide committees or task forces. The size of the stipend that a teacher receives depends upon the scope of the activity. Because district-wide activities are one level removed from teaching in the classroom, this part of the PPP is more a reward for extra work than for merit. Nevertheless, if teachers are going to perform duties that are outside the normal scope of their profession, it seems reasonable to reward them for it. The stipend teachers received depended on the nature of their involvement. However, 69% of teachers in Douglas County felt that they had received inadequate information about district responsibility pay.

The final part of Douglas County's PPP is skill-training courses for teachers known as skill blocks. Non-university courses developed by the local teachers' union and taken by teachers throughout the school year, they are designed to improve teaching. Each teacher who takes one of these courses receives a stipend between \$200 and \$500 upon completion of the course. In the 1994-95 school year, approximately 35 to 40% of teachers participated in this part of the PPP. The program seems more appropriate as an incentive for teachers to continue their education for teachers rather than a component of a merit pay system.

Overall, the Douglas County School District Performance Pay Plan does not appear to hold much promise. First, Douglas County's merit pay provides for only a small amount of extra money over and above the standard salary (approximately \$24,000 per annum at the time of the study) that teachers already receive. Second, the PPP is extremely complicated. Third, it is questionable whether Douglas County's PPP actually rewards merit in teaching. The outstanding teacher designation is only given to teachers with excellent portfolio submissions. One does not have to be an outstanding teacher, as defined by the classroom performances of his or her students, to submit impressive portfolios. In addition, parts of the PPP such as the site and district responsibility pay, skill blocks, and group incentive pay, are rewarded for activities other than teaching.

Virginia Beach

Virginia Beach, Virginia, has implemented a much more moderate merit pay scheme than Douglas County's. A suburban district with approximately 54,000 students and 3,000 teachers, it enjoys a good reputation and is known for having good teachers and well-performing students.²⁰

Teachers' salaries are determined primarily by the standard salary grid. However, teachers are given the option of performing six activities out of a list of eighteen. These activities include such things as completing a school-sponsored in-service course, serving as a member of a district committee, accepting a student teacher in their classroom or completing three hours of graduate study. If teachers complete six of these activities, they receive a salary increase of \$600 annually for three years. After three years, they must re-apply for merit pay. In 1982-83, only about 16% of teachers received merit pay.

Perhaps the low participation rate is explained by the relatively small reward for participating. An increase of \$600 represents only 2.4% of the average teacher's salary (\$25,000 in 1985). Many of the teachers interviewed also pointed out that few of the eighteen possible activities had anything to do with teaching excellence. Virginia's merit pay scheme could be best described as paying teachers for extra, not better, work.

Evanston

Evanston, Illinois, is an affluent suburb of Chicago. One form or another of merit pay has been in effect there since the early 1950's. Evanston's current merit pay scheme is more elaborate than Virginia Beach's, but less complicated than Douglas County's.²¹

Two procedures are used to assess teacher performance. First, the teacher and principal are expected to set specific job targets jointly. These targets are supposed to relate to student achievement, although it is not directly measured. The principals conduct an annual review of each teacher to determine whether the agreed targets have been met. The second part of the evaluation is a general performance appraisal. Teachers are expected to write a narrative in a journal format which details their teaching performance and is submitted to the District Board. Based upon these two factors—whether or not they have met their targets, and their journal—teachers are awarded one of four ratings: "exceeds expectations," "meets expectations," "needs to improve," and "unacceptable."

In this scheme, merit is defined more by teacher education and community service than by excellence in the classroom. There are several tracks to which teachers who meet one of the top two ratings can move, with each track representing an increase in salary. While teachers who "exceed expectations" can move to the top the fastest, teachers who only "meet expectations" can get there as well by completing graduate courses in education or by performing certain types of community service. The majority of teachers receive either the "exceeds expectations" or "meets expectations" rating every year. Most of them reach one of the two top tracks simply by teaching in the school district for a period of time and taking extra university courses. In this sense the scheme is similar to the grid scheme commonly used in Manitoba and elsewhere.

Midland

Midland, Texas, is another financially well-off school district. Approximately 17,500 students are located in this district. Midland has a merit pay scheme with many similarities to Evanston's.²²

Midland has a four-track advancement system. Teachers on the first track receive a \$1,000 annual increment, those on track two receive \$2,000, teachers in track three receive \$3,000, and teachers in track four receive \$4,000 annually. Teachers need to re-apply when the awards lapse after four years.

The evaluation criteria for each of the three tracks place more emphasis on community service and teacher education than they do on classroom performance and student achievement. Teachers cannot move to track two without receiving a master's degree, and they cannot reach levels three or four without completing a substantial number of courses beyond the master's degree, as well as engaging in substantial professional work outside the classroom. Thus, teachers who focus solely on excellence within the classroom will not be rewarded as well as teachers who focus on non-classroom activities.

Teachers are expected to document their classroom performance in a portfolio and to submit it to the District Board annually. As with the other merit schemes, teachers who are skilled in producing portfolios tend to be the ones who receive a promotion to a higher track, and with it, a higher salary.

Midland's scheme is unique in that only about 6% of eligible teachers win merit pay in any given year. The main reasons appear to be the complexity in application, the relatively low probability of success and the small size of the awards. As a result, most teachers simply do not apply. Since the district gives the merit pay scheme a low profile, not a lot of teachers compete for these awards.

Cincinnati

The Cincinnati Public School board recently came close to implementing a comprehensive merit pay plan. Although the Cincinnati Teachers Federation rejected the plan,²³ it is still worth considering because it is substantially different from most other merit pay plans.²⁴

The merit pay plan is relatively simple. Teachers would receive an assessment by a supervising administrator and a lead (or master) teacher. The evaluation consists of 16 criteria which include planning and preparing for student learning, creating an environment for learning, teaching for learning and professionalism. Teachers would be given a grade of between 1-4 (1 being the lowest and 4 the highest) in each of these categories. After assessment, teachers would be ranked as apprentice, novice, career, advanced, or accomplished. Although the assessment will normally be done every five years, a teacher desiring a quick promotion may request an assessment every two years.

Apprentice, or new teachers would have a starting salary of \$30,000. Their contract is not renewed if they do not attain novice status by the end of their second year of teaching.

Novice teachers must have a score of two or better in all four domains. In addition, they must also pass Ohio's teacher licensing test. Their salary range is \$32,000-\$35,750 and their contract is also not renewed if they do not attain career level by the end of their fifth year.

Career level would likely encompass most practising teachers. They must have a score of three or better in all four domains and their salary range is \$38,750-\$49,250. In order to move up to advanced level, they must have a score of four in the learning domain, a score of four in at least one other domain and scores of three in the two remaining domains. Their salary range is \$52,500-\$55,000. Accomplished teachers, who achieve a score of four in every domain, have a salary range of \$60,000-\$62,500.

The salary ranges allow for the fact that teachers can receive extra pay for teaching in a curriculum area with chronic teacher shortages like science, for receiving additional degrees in their teaching fields and for receiving additional licenses or national certification. Some elements of the standard salary grid would therefore remain intact.

Because the new merit pay plan was never implemented, its outcome cannot be evaluated. But it does seem to contain some advantages. First, the Cincinnati Board of Education (CBE) and the Cincinnati Federation of Teachers (CFT) developed the plan jointly. Almost 55% of CFT members initially voted

for the implementation of this merit plan. The support of both teachers and administrators makes it more likely that a plan like this would actually be implemented.

Second, while it retains some of the best elements of the single salary grid, the Cincinnati plan is substantial. Teachers have more avenues in which to be rewarded for their professional development. In addition to completing more university courses and acquiring more experience, improving teaching effectiveness and classroom management also directly impact pay levels.

Finally, this system is remarkably innovative. It is simple to understand and yet represents an almost complete overhaul of the system.

Yet Cincinnati's merit pay plan still presents some difficulties. Reviews of teaching performance are conducted too infrequently, only once every five years. In order to provide a real incentive to teachers, reviews should be conducted on an annual basis. A teacher can improve dramatically from one year to the next and this increase in performance should have a more immediate reward. It is also possible for teachers to perform noticeably less well in one year than the previous year. Conducting the reviews every five years might cause teachers to perform somewhat better in their fifth year, the review year, than in the previous four.

Terminating the contracts of novice teachers (the second level) if they do not attain career status by the end of their fifth year is also problematic. It means that every teacher who has been teaching for six years or more will automatically be at career level (the third level) or higher. This can create a tendency for administrators to increase the average marks that they give to teachers. If this happens, the quality difference between the remaining three levels (career, advanced, and accomplished) will become increasingly blurred.

In addition, nowhere does this plan provide for directly linking merit pay with student performance. Since one of the most important duties of a teaching is to ensure that students learn, this omission is significant.

The Cincinnati plan does provides some solid ideas for implementing merit pay. It retains much of the simplicity of the current salary scale, the status quo's strongest selling feature, and implements a clear system of pay for performance.

Denver

In 1999, the Denver Public Schools board and Denver Classroom Teachers' Association agreed to jointly design a pilot performance pay plan for teachers. This four-year project will be concluded in December 2003, at which time the school board and teachers' union will decide on whether or not to extend the plan.²⁵

A minimum of 12 elementary schools and 3 middle schools are required to participate in this plan. At least 85% of teachers must (in a secret ballot) vote in favour of joining the plan in order for a school to be included. This ensures that there is school-wide support for the initiative.

Teachers in participating schools will be evaluated in one of three ways. One-third of schools will design objectives relating to student achievement on the Iowa Tests of Basic Skills. Another third of schools will design objectives relating to student performance in individual courses as measured by teacher-made criterion-reference tests. The final group of schools will design objectives relating to teacher knowledge and skill in improving student achievement and behaviour.

All teachers will receive an extra stipend of \$500 for participating in this program. Each teacher, in conjunction with the principal, must decide upon two objectives to achieve by the end of the school year. These objectives must relate to the goals of the school as described in the above categories.

For each objective deemed successfully met the teacher will receive an additional \$500. Teachers who meet both objectives while participating in the program could receive a maximum additional stipend of \$1500.

Midway through the four-year pilot project, the Community Training and Assistance Center of Boston released a detailed report on it.²⁶ This document reported that students in the pilot schools showed some moderate improvements in basic skills as measured by achievement tests. In particular, students taught by teachers who had achieved the highest quality objectives averaged greater gains on the Colorado Student Assessment Program (CSAP) and the Iowa Test of Basic Skills (ITBS) than students taught by teachers who had lower quality objectives.

The perceptions of teachers and parents about this project are also positive. Despite concerns that merit pay would increase unhealthy competition among teachers, most teachers felt that competition had remained about the same. Most teachers also felt that fair objectives can be set and that quality teaching can and should be rewarded. In addition, parents generally felt that this pilot project had increased the focus on student achievement.

Although this merit pay plan is only in its preliminary stages, it seems to have a great deal of potential. It is unique in that it is the only plan that directly links teacher pay with student performance. Considering the support that this plan has among teachers, the school board, and parents, it certainly has some aspects worth emulating.

Merit Pay in Manitoba

The basic framework for a merit pay model that could work in Manitoba emerges from these case studies. Many of the elements of the best merit pay plans, particularly Cincinnati's and Denver's, are incorporated in this model.

The following are several recommendations for the implementation of merit pay in Manitoba:

1. Stop differentiating teacher pay based upon years of university education. Reduce annual experience increments to 50% or less of their current levels.

The research evidence clearly shows that there is no correlation between years of university education for the teacher and impact upon students' learning in the classroom.²⁷ If this is the case, it is unwise to attribute such a large portion of salary to teachers on this basis.

Manitoba, along with most other provinces, has changed the requirements for teacher certification. As of 2003, all new teachers will need to have at least five years of university education. Thus, all teachers will eventually be at class 5 or higher. With only three different class levels (5-7) remaining, it seems pointless to continue to differentiate among teachers on this basis.

While it is not unreasonable for an experienced professional to earn more than an inexperienced professional, the amount of difference in pay should be based primarily on ability and effort, not just on putting in time at work. The evidence shows that years of experience play only a small role in student outcomes.²⁸ Therefore, salary increases should reflect this relatively small amount. The majority of a teacher's pay increases should be coming because of successful teaching.

2. Provide all public school teachers in Manitoba with a minimum basic salary.

Every merit pay plan described in this report incorporates a minimum salary for all teachers as an important part of the pay scale. Teachers are not salespeople working on a 100% commission structure. As professional educators, they are entitled to know what their minimum income in any given year would be. An amount somewhat equivalent to a basic starting salary of a Manitoba teacher today (approximately \$30,000), would not seem unreasonable.

3. Implement mandatory standards tests for all students in Grades 1-12, with minimum skills tests for lower grades and content-based exams in higher grades.

In order to evaluate whether or not learning has taken place, it is important to have the necessary measuring instruments in place. By implementing standards testing at all grade levels, it will become possible to track individual student performance from one year to the next. It is important for a merit pay plan to include a relatively objective criterion by which to evaluate teachers. Student performance is an obvious choice.

4. Set up clear and easily definable standards for each grade level in order to facilitate measurement of student performance.

Along with mandatory standards testing, it is important that standards at each grade level be clearly defined. It would be unfair to teachers to base a large portion of their salaries on student learning if it is unclear what their students are to learn. These standards would obviously focus on the four core subjects in Manitoba—Language Arts, Mathematics, Science, and Social Studies.

5. Create five different levels of merit pay classifications for teachers. For each level of merit, teachers would receive a large salary increase (approximately \$7 000 per level).

All new teachers would initially start at the lowest merit level and receive only their base salary (\$30 000). Other than small annual experience increments, set at less than half of their current size, the only way for teachers to increase their salaries would be to move to a higher merit level. This is how a merit salary scale for teachers could look.

Merit Pay Scale

Years of Experience	Merit Level 1	Merit Level 2	Merit Level 3	Merit Level 4	Merit Level 5
0	30 000	N/A	N/A	N/A	N/A
1	31 000	38 000	45 000	52 000	60 000
2	32 000	39 000	46 000	53 000	61 000
3	33 000	40 000	47 000	54 000	62 000
4	33 000	41 000	48 000	55 000	63 000
5	33 000	42 000	49 000	56 000	64 000
6	33 000	42 000	50 000	57 000	65 000
7	33 000	42 000	51 000	58 000	66 000
8	33 000	42 000	51 000	59 000	67 000
9	33 000	42 000	51 000	60 000	68 000
10	33 000	42 000	51 000	60 000	69 000

One of the distinct advantages of this merit pay plan is that it discourages teachers from becoming complacent. While they would receive a small increase in salary for having more experience, this increment would be dwarfed by the potential size of merit pay raises.

In addition, teachers who consistently remain at lower merit ratings would stop receiving automatic experience increments. Teachers who fail to move beyond merit level 1 would never receive more than a \$33,000 annual salary. In contrast, teachers at merit level 5 with ten years or more of experience would receive \$69,000, more than twice as much.

The merit pay scale in this model is also very simple. It is easy for teachers to know exactly where they are on this scale and what their salary potential is.

6. A teacher's merit pay level would be based on two factors: student performance on standards tests, and immediate supervisor (principal and/or vice-principal) evaluations. Each of these factors would account for 50% of a teacher's merit pay classification.

Because of the significant amount of salary at stake, teachers must be evaluated as fairly as possible. To base all of a teacher's evaluation on standards test performance of students leaves out other important aspects of a teacher's work, like participation in extra-curricular activities. Conversely, if all of a teacher's evaluation comes from the principal's report, the evaluation process becomes completely subjective and difficult to quantify. These factors need to be combined in order to create a fair evaluation process.

In order for the system to work, standards tests – minimum skills tests and content-based exams – would have to be administered to all students at all grade levels. Teachers would be evaluated based on their students' *improvement* from the previous year. The provincial government would be responsible for determining the amount of improvement necessary for teachers to move to a higher merit pay level. These standards would be uniform across the province.

The other half of teachers' merit pay evaluations would come at the local level from the school principal. In most divisions, principals currently conduct annual evaluations of teachers which take into account factors such as classroom management, extra-curricular activities, rapport with parents and teamwork. School boards would be responsible for determining the relative weight of the different criteria. Based upon the principal's recommendations, a merit pay level will be determined. As is noted in the next recommendation, principals will have a strong incentive to reward good teachers.

At the end of each school year, once student performance assessments and principal evaluations have been taken into account, these two factors will be averaged together to determine a teacher's merit pay level. Teacher will be able to move up or down the merit pay scale as quickly as their teaching skills allow. It is thereby theoretically possible for an outstanding teacher to receive a \$50,000 salary after teaching for just one year. However, if that teacher decided to stop working hard, he or she could just as quickly go back down to merit pay level one at the end of the next school year.

7. All principals would also be placed on a merit pay system. In addition to a base salary (approximately \$40,000) and small experience increments, they would also have five possible merit pay levels. These merit pay levels would be based entirely on overall student body performance on provincial standards tests.

Being the principal of a school is an important and challenging job. The principal is responsible for overseeing a school and ensuring that the students are receiving a good education. The importance of this job dictates that principals who do their job well should receive a larger salary than principals who do not.

In order to ensure that principals keep schools focused on the primary task of educating students, their level of merit pay will be determined entirely by overall student performance on standards tests. This will have the effect of ensuring that principals have a strong incentive to keep good teachers and get rid of poor teachers.

It also will make it less likely that principals will try to “compensate” for the standards half of teachers’ evaluations by giving them unreasonably high or unreasonably low school-based performance evaluations. Principals who attempt to reward teachers based on favouritism or personal dislike will likely impair the overall academic performance of their schools. This would have a direct effect on the principal’s salary the next year.

This is a proposed principals’ merit level salary grid.

Principals’ Merit Pay Scale

Years of Experience	Merit Level 1	Merit Level 2	Merit Level 3	Merit Level 4	Merit Level 5
0	40 000	N/A	N/A	N/A	N/A
1	41 000	51 000	61 000	71 000	81 000
2	42 000	52 000	62 000	72 000	82 000
3	42 000	53 000	63 000	73 000	83 000
4	42 000	53 000	64 000	74 000	84 000
5	42 000	53 000	64 000	75 000	85 000
6	42 000	53 000	64 000	76 000	86 000
7	42 000	53 000	64 000	76 000	87 000
8	42 000	53 000	64 000	76 000	88 000
9	42 000	53 000	64 000	76 000	89 000
10	42 000	53 000	64 000	76 000	90 000

On this scale, merit is considerably more significant than years of experience. Principals will have a strong incentive to recruit and retain stronger teachers while getting rid of weaker teachers.

In addition, principals who consistently remain at lower merit ratings will stop receiving automatic experience pay increments once they have reached a certain level. As with teachers, principals who fail to improve within a given period would see their pay frozen.

The provincial government will be responsible for determining what levels of student performance are needed in order for a principal to move to the next merit level. As with teachers’ merit pay, these standards will be uniform across the province to ensure fairness.

Cost Analysis – Key Assumptions

What would this plan cost to implement? Obviously, it is difficult to evaluate the exact costs of a theoretical plan. The task is made even more difficult by the fact that it is unknown how many teachers will end up being placed at each of the five different merit levels.

In order to calculate a preliminary estimate of the approximate cost of implementing this merit pay plan, two key assumptions are made.

1. *The average number of years of experience for Manitoba teachers will remain the same.*

Some teachers have just started their teacher career while others have been teaching for up to 40 years. On average, teachers in Manitoba have 12 years of experience.²⁹ Thus, it is safe to assume that approximately half of teachers have reached their maximum experience pay increment. The other 50% of teachers will be evenly distributed from 0-9 years of experience.

2. There will be an approximately even distribution of teachers among the five different merit levels.

Obviously, this assumption is tentative, as it is unknown how many teachers would land at each merit level. However, as with most rankings based on merit, there is bound to be a distribution among all five merit levels. There will be some teachers at the bottom levels (new teachers and those performing inadequately), some in the middle (average teachers), and some at the top levels (outstanding teachers).

In fact, this assumption will likely lead to overestimating the total costs of the plan. For example, in addition to all other teachers who would be placed in this category, first-year teachers would automatically start at merit level 1. It is unlikely that there would be an equally large number of teachers at the highest level (merit level 5).

Nevertheless, this assumption is made in order to compensate for any unanticipated increases in the cost of this plan.

Cost Analysis – Actual Numbers

In the 2001/2002 school year, Manitoba employed 13,569 teachers. According to the 2001/2002 FRAME report, a total of \$615,874,479 was spent on teacher salaries relating to the instruction of regular and special needs students.³⁰ How does the merit pay plan's estimated cost compare to this amount?

Assuming that half of teachers will be paid at the maximum experience level increment, while the other half will be evenly distributed from 0-9 years of experience, and that an equal number of teachers will land at each of the five merit levels, the average salary of teachers with 0-9 years of experience would be \$48,402 a year. The average salary of teachers with more than 10 years of experience would be \$51,000 once all years of experience and merit level increments are added together and divided.

Total salaries of teachers with 0-9 years of experience	$\$48\,402 \times 6784.5 =$	\$328 383 369
Total salaries of teachers with 10+ years of experience	$\$51\,000 \times 6784.5 =$	\$346 009 500
Estimated total cost of all teacher salaries under merit pay plan.		\$672 392 869

The estimated costs of this merit pay plan would be approximately 9% higher than the cost of current teacher salaries. But since the assumptions have likely overestimated the cost of the plan, total expenditures on teacher salaries would likely remain roughly the same as they are now.

Evaluating the Costs

The purpose of this merit pay plan is not to serve as a simple cost-cutting measure. As noted previously, the cost of this plan is estimated to be roughly revenue neutral in relation to current expenditures on teacher salaries. The difference is that greater pay increases will be made based on demonstrated success in the classroom. Poor teachers will never make more than \$33,000 annually, while exceptional teachers could make as much as \$69,000.

This merit pay plan should make it possible to attract and retain high quality teachers while encouraging low-performers to either improve or leave the profession. While it might be prohibitively expensive to raise all teachers' salaries by a significant amount, it is possible to give larger raises to

teachers who have earned them. Members of the public are more likely to support pay raises for teachers if they know that the raises are due to merit rather than university education or experience.

Conclusion

The current method of deciding how teachers are paid in Manitoba based on years of experience and years of university education is simple and easy to administer. However, simplicity alone is not a strong enough reason to keep the status quo in place. To create incentives for better outcomes, teachers should be compensated in such a way as to ensure that those who make a difference in student learning are rewarded while those who do not are penalized.

The merit pay plan proposed in this report retains much of the simplicity of the current system. It also replaces a criterion that has no measurable impact on student learning, the years of education the teacher has, with one that does, the teacher's merit.

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Endnotes

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- ¹⁰ Berger & Toma, op. cit.
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- ¹⁶ L. Webb & M. Norton, *Human Resources Administration: Personnel Issues and Needs in Education*. Columbus, OH: Prentice-Hall Inc., 1999.
- ¹⁷ Educational Research Service, Inc., *Merit Pay for Teachers*, Arlington, VA, Educational Research Service, 1979.
- ¹⁸ To the author's knowledge, no public school divisions in Canada currently have a merit pay system.
- ¹⁹ All of the information on this school district comes from an independent study by Hall and Caffarella (1996) as well as a detailed description of the plan put out by Douglas County School District (1996).
- ²⁰ D. Cohen & R. Murnane, "The Merits of Merit Pay," *The Public Interest*, 80, 3-32.
- ²¹ *Ibid.*
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