



# Perspectives

## IN COVENANT EDUCATION

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### **Statement of Purpose**

*Perspectives in Covenant Education* is a journal regulated and published quarterly, in November, February, May, and August by the Protestant Reformed Teachers' Institute. The purpose of this magazine, in most general terms, is to advance the cause of distinctively Christian education as it is conceived in the Protestant Reformed community. More specifically, the magazine is intended to serve as an encouragement and an inducement toward individual scholarship, and a medium for the development of distinctive principles and methods of teaching. The journal is meant to be a vehicle of communication, not only within the profession, but within the Protestant Reformed community and within the Christian community in general.

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*Perspectives in Covenant Education* will publish any article written by a teacher, parent, or friend of Protestant Reformed education, provided the article is in harmony with the stated purpose of the magazine. The journal will publish articles whether theoretical or practical. All manuscripts must be signed and all authors are solely responsible for the contents of their articles.

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# If It Ain't Broke, Don't Fix It—But Still Check It Once in a While

Tom Bergman

Featured in this issue of *Perspectives in Covenant Education* is an article written by Mr. Eric Pols for one of his graduate courses. We include his article, “Reform of Teacher Compensation,” not to take issue with the way salaries are determined for teachers in our schools, but merely to visit a topic that isn’t often discussed. Even if something isn’t broken, there can be value in evaluating its status once in a while.

Many important aspects of our lives are so routine that we take them for granted. (We even take for granted the phrase “take for granted.” We expect some things in our lives to always be the same or always be at hand for us, without pausing to consider how or why or for how long these things are in our possession. “Take for granted” has the additional connotation of not prizing something highly enough.)

In the interests of maintaining the valuable parts of our schools, consider each of the following topics below. These are common, ordinary aspects of our schools and school life, all of which could fit under the heading “Ain’t Broke—Don’t Fix It.” But broach the topics anyway. Perhaps the “worst” that could come of it is a re-energizing reminder to continue to do what we are doing—because our reasons remain firm.

But what are our reasons? Why is this journal called *Perspectives in Covenant Education*? Back in the 1970s, when the Protestant Reformed Teachers’ Institute (PRTI) started up a journal, those teachers deliberately chose this title. It is worth asking ourselves if their reasoning still applies today. I think we would have a richer understanding of what we are holding if we pause to consider the name *Perspectives in Covenant Education*.

Is the existence of *Perspectives* taken for granted? It shows up in our mailboxes four times each year and probably will continue to show up in our mailboxes four times each year. Should we bother? Asking ourselves whether or not we should continue to publish *Perspectives* or discontinue it indefinitely will likely lead to a renewed interest in this distinctive look at Reformed education and perhaps a referral to a friend or family member to be a subscriber.

Inside our schools, a normal part of the curriculum is Bible class. We include Bible and religion instruction in the curriculum, but our reasoning might not be as conscious as one might expect. It would be interesting to hear the responses if we had to give an answer to why we have Bible classes in our schools. Although the benefits of such a practice may seem self-evident, the result of facing ourselves with such a question may be a generous boost in our attitudes toward curricular decisions.

What do we have our students memorize? How much do we assign them to memorize? Why have them memorize anything at all? A longstanding practice in our schools that certainly doesn't seem broken, the assignment of memorization is still worthy of some discussion. Renewed attention to the reasons why we assign so much to be memorized will not do any harm but will give teachers sharper focus on what is most important about our practices. Another benefit would be more awareness among teachers regarding who assigns what. If memorization assignments are taken for granted, teachers might never be motivated to talk about it with their colleagues. An informal discussion in the teacher's lounge could open our eyes to a broader understanding of what our students are being asked to memorize in other grades or courses.

With respect to parent-teacher conferences, we are certainly not ignorant of the purpose. Veteran teachers often serve as mentors to newer teachers by coaching them how to handle conferences, what issues to talk about, etc. We all have a general sense of the need to get parents and teachers together, discussing the children, their work and their lives. But are there more reasons, more specific reasons for why we have conferences? Do we have them too often or not often enough? Do we promote them enough? How do we promote them? Or have parent-teacher conferences become so routine that we simply announce the date of conferences and remind parents to call the school office? A good PTA discussion on the topic might revitalize our devotion to a good cause.

Playground equipment is a physical feature of a school that illustrates this idea well. Swings and slides and merry-go-rounds do not need to be broken before we

give them an occasional review. Even if they are not broken, an annual check-up is a good idea. It might prompt us to do preventative maintenance or to start up a replacement fund.

What about hot lunch? All-school programs? Cursive writing? Singing? These are tried-and-true practices and smoothly functioning aspects of school life. Some topics, such as cursive writing, are forced into the spotlight because technology changes so rapidly. Others become so routine that we seldom take the occasion to ask simple but important questions. Why do we have students sing at school? Why do we teach them to sing? One answer may be patently obvious, but perhaps it's a question with several other good answers. Trying to see how many reasons we could list for why we sing may lead us as parents and teachers to stop taking singing in our schools for granted. Instead, we may take the opportunity once in a while to explicitly lay out the reasons for singing right before our students.

This journal is designed to present clear principles behind our practices, lest we take them for granted. Just in the past few years, we have seen articles that explain why we do what we do for chapel, recess, graduation, and in the teaching of art, mythology, and social science. Rather than leave well enough alone, the PRTI prompts itself to continually reassess what should not become too customary.

Hopefully, an overview of teacher compensation methods in this issue will be like an annual physical exam or a well-child visit to the pediatrician where the report comes back "all clear." Even if the doctor finds nothing wrong, he often reminds the patient about healthy lifestyle practices. Although we already know about good nutrition and fitness, it still helps to have a periodic face-to-face encounter with a doctor to bring these to our attention. Likewise, a brief consideration of the topic of teacher compensation may pass with flying colors while at the same time it may stimulate some healthy discussion that we otherwise wouldn't hear if the matter, like our health, was simply taken for granted.

# Reform of Teacher Compensation

Eric Pols

Teacher compensation is ripe for reform, but reform of a practice that has been cemented in place is not easy. Attempts have been made to reform teacher compensation, with few succeeding to this date. Because the staff is a school's greatest resource, school administrations must work to reform their practice of teacher compensation to match their mission and vision.

## History of Teacher Compensation

The history of teacher compensation, from the nineteenth century until today, can be divided up into three major periods. The transition from one era to the next is brought about by changes in broader society and the economy (Odden, 1995, p. 3). The three eras are the boarding 'round system, the differentiated salary schedules, and the single salary schedule (Protsik, 1994, p. 1).

### *Boarding 'Round*

In the 1800's the one-room schoolhouse was the venue of education for most students. More than seventy-seven percent of Americans lived in rural areas during the 1880's, and the schools catered to the lifestyle of these rural Americans. The lifestyle of the rural Americans influenced their school; school was secondary to work on the family farm. The need for labor dictated when the children would be in school and when they would be helping seed, cultivate, or harvest the family crops. During this time period, children in the agrarian lifestyle spent half as many days in school as their counterparts in the cities (Protsik, p. 2). This lifestyle forced men to work on the farm, and therefore men only taught for short periods of time in the winter months to supplement their income (Odden, p. 4). The job requirements of teachers focused on the three Rs, moral character, and a "middle class appearance" (Protsik, p. 2; Odden, p. 4). The compensation of these teachers reflected this lifestyle.

Teachers were compensated by "boarding 'round" at the homes of their stu-

dents. Each week, the teacher would move to another student's home and would be provided room and board as part of his pay. Kelley and Odden point out that this reflected the barter economy of the time (Kelley & Odden, 1995, p. 2). Teachers were also given a small amount of cash for their work (Odden, p. 4). In 1862, sixty-eight percent of teachers in Vermont boarded 'round (Protsik, p. 3).

This system of boarding 'round allowed parents to monitor the activity of the teacher to be sure of the teacher's moral character, especially if he was hired from outside of the community. This system allowed for accountability to each parent, not on the academic ability (which was secondary), but assuring that the teacher was living a morally upright lifestyle.

According to Tyack, the problems for the rural school included the haphazard selection and supervision of the teacher, the "bookish" curriculum, low attendance rates, lack of standardized teaching materials, and lack of school equipment. The upcoming change in the economy led to a new system of schooling which would address some of these problems.

### *Differentiated Salary Schedule*

The economy of the United States then changed from the agrarian lifestyle to that of manufacturing and industrial labor, forcing schools to adjust. Families began to migrate toward cities and schools began to "reflect the bureaucratic organizational structures of the developing industrial cash economy" (Kelley and Odden, p. 2). Along with the migration of people to cities, the state began to make restrictions and rules for a school's accreditation and teachers' licenses (Odden, p. 5). Teachers were required to be certified by passing a county exam or attending teachers' institutes (Protsik, p. 6).

In the 1890s the National Educational Association Committee of Twelve on Rural Schools proposed, as a possible solution to the issues Tyack addresses, that schools become consolidated into larger districts and be run by county superintendents (Protsik, p. 5). The boarding 'round system no longer worked with the changing of schools forced by the change in the economy. Teachers began to be paid salary using cash. Many states adopted a minimum salary for teachers to address the issues in the boarding 'round system of high teacher turnover (Protsik, p. 6).

The position-based or differentiated salary system was put into place. Teachers were paid based on "their years of experience, gender, race, and the grade level that they taught" (Protsik, p. 6). This differentiated salary system was based on the societal biases of the time, where the father was the bread winner and the

minorities were discriminated against by society and by law (Kelley and Odden, p. 2). This system of compensating teachers, although accepted by society, was unjust and inequitable. The salary schedule was racist and sexist and these unjust practices were used as a way to keep expenses low. Because the cost of education had risen due to the need for county superintendents, costs were kept low by hiring female teachers. In Boston, male grammar school teachers were paid between \$1,700 and \$3,200 while pay for female grammar school teachers ranged from \$600 to \$1,200. The Massachusetts Board of Education addressed this unjust treatment of women in 1893 by saying that women's wages, when compared to men's, "are so low as to make it humiliating to report the two in connection" (Protsik, p. 8). Salary was also based on the administrator's assessment of their teaching which would cause the gap between males and females to widen due to societal biases. The call of many to end the unjust practices of the differentiated salary scale led to the single salary scale.

### *Single Salary Scale*

The societal change in views of women and minorities forced salary schedules away from the position-based scale. The same salary scale was adopted by Denver, Colorado and Des Moines, Iowa in 1921. By 1950, ninety-seven percent of schools had a single salary scale (Protsik, p. 9). The single salary scale does not pay every teacher the same amount, but pays based on years of experience and educational units. This system addressed two important teacher needs: equity and objectivity (Protsik, p. 10). The issues of objectivity and equity were addressed because the reasons for paying different amounts to different teachers were objective, measurable, and not "subject to administrative whim" (Odden, p. 8; Kelley & Odden, p. 2). This system of teacher compensation is also one of easiest to implement, easy to negotiate when addressing matters of teacher pay, and gives a predictable budget for school leaders.

### **Problems with Single Salary Scale**

Although the salary scale has been firmly in place until today, there are significant shortcomings with this pay model. As seen in the history of teacher compensation, ways of compensating teachers have changed along with the economic and social realities of different time periods. Differing compensation practices only remain if they are "well aligned with broader changes in the economic and social situation" (Kelley & Odden, p. 3). The single salary scale does not reflect the economics of today and therefore is ripe for change.

The economics of today have moved away from the industrial age to that of an information-based system. Kelley and Odden point out five different ways in which employers (outside of schools) pay their employees: skills-based pay, pay for knowledge, pay for professional expertise, collective rewards for adding value to performance, and gainsharing (p. 3). The focus of the economy today is not necessary on quantity, but rather on quality and results. Companies are realizing that the hierarchically organized and managed workplaces are not the most effective: companies know they must restructure, they must decentralize both their management and their organization (Odden, p. 13). The emphasis of the economics of today will allow and push for a different compensation model for teachers that will allow response to market forces.

Another issue relating to the market forces and economics is the lack of qualified candidates entering the teacher profession. The single salary scale has not produced salaries that are competitive with the current job market (Baratz-Snowden, 2007, p. 3). Prospective teachers, especially in the subject areas of math and science, can make a larger salary in the private sector (Committee for Economic Development (CED), 2009, p. 16). The retention and recruitment of teachers is also difficult due to the length of time it takes a teacher to reach the top of the pay ladder (Baratz-Snowden, p. 3). To become more competitive to attract and keep teachers, school districts and boards must give teachers the opportunity to earn a competitive wage.

But problems with the single salary scale are farther reaching than simply not reflecting today's economics. The single salary scale is based on merely two items: education and experience. As a teacher increases in the years of experience, research has shown that years of service do not translate into improved student learning. "Most researchers find that teacher effectiveness does not improve significantly after the first three to five years" (CED, p. 17). Therefore, according to research, teachers are being paid more without improving or allowing student improvement. Other research has stated that there is a glaring disconnect between teacher pay and performance (CED, p. 16). Snowden states that there is no strong evidence that "education and experience are the most critical teacher characteristics associated with improved student achievement as measured by student test scores" (Baratz-Snowden, p. 3).

The single salary model pays differing amounts based on the level of education, for example a school could pay different amounts for a bachelor's degree, bachelor's degree +18 credits and master's degree. But simply taking professional

development does not improve teaching and student learning. There are no incentives with the single salary scale to take professional development which helps with a teacher's subject areas or needs of the students in the classroom (CED, p. 17; Protsik, p. 12). Appropriate professional development is essential to teach students the standards-based instruction of the 21st century (Baratz-Snowden, p. 3). While education and experience could be important for teacher quality, treating teachers with the same educational level and experience as equals, despite unequal performance and skills poses a dilemma. Teachers with the single salary pay scale are not held accountable for their teaching and the learning of their students.

The single salary scale is ripe for change. Odden hypothesizes that the single salary scale became disconnected with the Effective Schools Movement in the 1970s (Odden, p. 10).<sup>1</sup> School Administrators and Boards must realize this disconnect and the fact that any compensation scheme “implicitly sends a message to teachers about desired behavior through its reward system” (Protsik, p. 11). What message is being sent to teachers? Is it the proper message? As Goldhaber stated, “Today’s teacher-pay system is simply too out of touch to remain untouched.”

## Consideration of a New Pay Scheme

Teacher pay is ripe for reform, but change cannot and must not be quick and abrupt. Special considerations should be made due to the sensitivity of the matter to teachers and the importance of teachers in the lives of students. Compensation reform was attempted in the 1980s and 1990s, but few examples remain of this attempt to reform teacher compensation by use of merit pay. The work of reform must be carried out with a careful and precise plan of action.

The first consideration of school administration in working on a new compensation scheme for teachers is to consider the purpose and objective of such a change. Questions such as “Why are we making this change?” “What is the purpose of this change?” and “What do we desire as the outcome?” should be considered before extensive work is made at attempting reform. If reform is made for the wrong reasons (or none at all) it will fail.

The reform of teacher compensation is not a pay issue but rather it is an issue that has direct bearing on the mission and objective of education (Odden &

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1 The Effective Schools Movement places emphasis on professional expertise because they believe every student in any school can learn.

Wallace, 2004; Kelley & Odden). If reform is made in an attempt simply to pay teachers more, the objective and mission of education will not be influenced or furthered. The reasons for a compensation reform should reflect the mission and vision of the school and help to further that mission and vision. Just as the compensation of teachers should parallel the broader changes of society and the economy, the reform should also parallel the needs, desires, and mission of the school (Kelley & Odden, p. 3). Odden believes that compensation reform can be “designed to function as an incentive that reinforces the goals, norms, values, human resource policy and workers’ roles in any organizational change that a system could adopt” (p. 9). The reform must be part of a larger effort of the school administration to help the teachers help students and support student learning (Baratz-Snowden, p. 1-2).

While private and charter schools may be exempt from state and federal regulations, they are strongly influenced by legislation which is passed. State and federal legislation such as No Child Left Behind and other standards-based education reform, along with budget pressures, will continue to pressure schools to improve student learning, gain high-quality teachers, and investigate teacher pay (Odden and Wallace). Schools who refuse to improve student learning according to standards by ignoring the need for high-quality teachers and the need for better teacher compensation will fall behind other schools prompting students to attend better performing schools. The focus on a standards-based education will force schools to continue to investigate an alternative teacher compensation scheme.

Another important consideration when considering the need for reform is the history of successful and unsuccessful change. The history can be used as a guide for developing and thinking through teacher compensation reform (Kelley & Odden, p. 2-3). For example, research in the 1980’s showed that an across-the-board raise for all teachers does not significantly improve teacher quality (Odden & Wallace). History also shows that while some elements of a new compensation scheme are necessary, no single element or way of compensating teachers will result in high achievement for students; it must be a synthesis of elements which will accomplish the proper purpose (Hershberg & Lea-Kruger, 2007, p. 1; Kelley & Odden, p. 10).

Most attempted reforms deal with the ideas of incentive pay. Based on the failed attempts of incentive pay, there are some significant problems that could arise. One of these is a significant teacher morale problem resulting from unfair

evaluation processes and practices, competition between other teachers, and the use of quotas in determining which teachers receive awards (Protsik, p. 16). Other problems have arisen in the administrative aspects such as lack of personnel, lack of resources, and the difficulty in implementing such a system. While these may be significant issues to confront, they should not deter others from working to reform the current teacher compensation scheme.

But these problems cannot be ignored, but rather should be considered carefully and ways of correcting these deficiencies must be developed. Researchers in the field of teacher compensation have looked at the failed attempts of compensation reform and have compiled their own lists of necessary elements in order to avoid significant problems in a new compensation scheme. Some of these necessary elements include issues such as the necessity of teacher buy-in, the new compensation scheme must be considered fair by all parties that are involved, the purpose of the new compensation scheme must be clear, and incentives should lead to the desired teacher behavior (Kelley & Odden, p. 10; Baratz-Snowden, p. 2).

Any school administration working toward the goal of compensation reform must realize from the outset that the work of compensation reform is a work in progress. Work is not finished when a new scheme is developed and implemented; it must be refined and reviewed regularly (Baratz-Snowden, p. 2). The history of compensation reform shows these elements along with others to be integral in the implementation of a new compensation scheme.

But compensation reform will not happen unless there is also support of those outside the school. Lawmakers, along with the teachers, must be willing to make “small (and reversible) leaps of faith and if we make the deliberate choice to study and learn from the results” (Goldhaber & DeArmond, 2007). Lawmakers must help in the process by being willing to help, providing the proper resources, and giving freedom for differing compensation schemes for different schools. President Obama has been an advocate for a reform of compensation by the use of merit pay. In addressing the issue of merit pay he said the following to the National Educational Association Annual Meeting in Philadelphia:

The most controversial aspect of any discussion of teacher compensation is merit pay, and I know that folks here object to the idea properly that if you are being measured and paid simply by how the child is doing on a test without taking into account what that child is bringing to the school with, ...if it's all based on assessments made on No Child Left

Behind, then it's not fair to pay teachers who are pouring their heart out based on some of these arbitrary measures.... What I want to do is work with teachers, and where we can work with teachers to come up with ways to set those kinds of professional standards, then I want to be part of that process. But I'm not going to do it to you; I'm going to do it with you (MSNBC, 2009).

President Obama, an advocate for merit pay, realized the delicacy of the topic while addressing teachers' unions. He was careful to give specific instruction on how he intended to start the process. This is true especially at the end of the above quotation when he says that he is not going to do it to the teachers, but with them. More leaders and lawmakers will make to support reform in order to allow its full implementation.

While politics are an important factor, the general public must support and understand the ideas of a new compensation model. Because new compensation models usually require additional funding, the public must know about the model, find it to be valuable for the school, and have evidence that such a model will work for the school (Baratz-Snowden, p. 24). If the public community is ignored, the proper funding will not be available to support such a reform.

Compensation reform and research must continue to be a work in progress. Reformers should be sure to do their own research to develop a compensation scheme that will fit their school and community. If critical lessons from history and other special considerations are ignored, success of a new scheme will be very difficult. Following are two examples of attempted teacher compensation reform in Houston, Texas and Denver, Colorado.

## Examples of Compensation Reform

### *Houston Independent School District ASPIRE*

Houston Independent School District developed a performance pay system entitled Accelerating Student Progress – Increasing Results and Expectations (ASPIRE).<sup>2</sup> Teachers were rewarded based on the improvement of student test scores individually and as an entire school. Rewards were also given based on growth as compared to forty other schools with similar demographics (Baratz-Snowden, p. 20). The ASPIRE program was not successful for several reasons.

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2 An overview of the ASPIRE program can be found at: [http://www.houstonisd.org/ResearchAccountability/Home/Teacher%20Performance%20Pay/Teacher%20Performance%20Pay/Board%20Items/ASPIRE\\_AWARDS\\_OVERVIEW.pdf](http://www.houstonisd.org/ResearchAccountability/Home/Teacher%20Performance%20Pay/Teacher%20Performance%20Pay/Board%20Items/ASPIRE_AWARDS_OVERVIEW.pdf)

The new compensation scheme in Houston was designed and implemented by the administration and forced upon the teachers. It was a top-down approach with limited teacher involvement; teacher involvement that was allowed was not considered authentic. There was no meaningful communication and collaboration with the new implementation of ASPIRE—it was a mystery to most teachers. The criteria by which the system was implemented were not clear. There was little sense of school and teacher ownership of the program, there was no effort to account for curriculum and school climate, and there was questionable use of standardized tests. Some teachers were also offended by the word “incentives” as if teachers were not working hard apart from financial incentives. There were also errors in computing awards, and some teachers and support staff had to return money (CED, p. 22, 24; Baratz-Snowden, p. 20-21). These, along with other issues, lead to an unsuccessful attempt at compensation reform.

### *Denver ProComp*

Denver Public Schools’ Professional Compensation for Teachers (ProComp)<sup>3</sup> showed that reform is possible. Denver Public Schools (DPS) involved many stakeholders in developing and implementing their compensation reform: teachers, central office administration, principals, and community members (CED, p. 17). The work of this reform was careful and collaborative. DPS had a clearly defined purpose (to raise student achievement) and a clearly defined process (to raise teacher quality through incentives). With the purpose and process clearly defined, they were able to develop a new compensation scheme with the help of taxpayers and additional funding by the Rose Community Foundation (Baratz-Snowden, p. 16).

The new compensation scheme allowed for permanent salary increases and one-time bonuses through nine different elements, which can be broken down into four different categories: knowledge and skills, professional evaluation, student growth (measured for individual teacher and whole school), and market incentives (service in hard-to-serve schools and hard-to-staff subject areas) (CED, p. 17). The professional evaluation was based on several differing items such as instruction, assessment, curriculum and planning, learning environment, professional responsibilities, and assessment of rigor in student objectives (Baratz-Snowden, 17). Every teacher hired in 2006 and after become part of Pro-

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3 An overview of ProComp can be found at: <http://static.dpsk12.org/gems/newprocomp/ProCompPaymentTable2009102009Sep14.xls>

Comp and existing teachers were given the opportunity to opt in (CED, p. 17). The salary increased, and bonuses were added to the base salary. The base salary made up 59% of teacher pay and 41% was from incentives.

Because the community was involved in the development and implementation of ProComp, along with a belief that the new compensation scheme would work, voters approved a twenty-five million dollar tax levy (CED, p. 17). The tax levy was used by DPS for the new compensation model: 57% for knowledge and skills and 30% for pay for performance (Baratz-Snowden, p. 17). DPS also realized that this was a process, not a one-time event: DPS has realized the need to allow the program to evolve and change (CED, p. 18).

## Possible Alternatives

After viewing the history of compensation reform, the issues with the current single salary scale, necessary conditions, and examples of compensation reform, what are the possible alternatives? When considering a new compensation scheme for an individual school, the considerations for each must be remembered. When selecting a possible alternative, the school administration must remember that no one alternative is possible. It must be a synthesis of alternatives which fit the purpose and objective of the school.

### *Pay-at-Risk*

A pay-at-risk compensation model would allow teacher compensation to be withheld until teachers have engaged in a specified activity (Kelley & Odden, p. 10). This activity would be determined by the school administration and could range from a required amount of professional development to a requirement of additional tasks.

### *Compensation for National Board Certification*

The National Board for Professional Teacher Standards offers professional development leading to National Board Certification. The National Board for Professional Teacher Standards offers twenty-five different areas of study. They have the mission to

advance the quality of teaching and learning by maintaining high and rigorous standards for what accomplished teachers should know and be able to do, providing a national voluntary system certifying teachers who meet these standards, and advocating related education reforms to integrate National Board Certification in American education and to capitalize on the expertise of National Board Certified Teachers (National Board for Professional Teaching Standards, 2009).

By gaining National Board certification teachers may receive a one-time bonus, a bonus every year for the life of the certification, or a permanent salary increase. Compensation for National Board certification shows teachers to be exemplary, it is equitable, and it fosters community (Lieberman, 2002, p. 4).

#### *School Based Performance Awards (Group Based Awards)*

School-based performance awards would allow the entire staff to work together for the common good of the school (Kelley & Odden, p. 10). Bonuses for teachers would be tied to meeting specific goals and benchmarks (Lieberman, 7). Some examples of specific goals of schools could be items such as improving test scores and reducing dropout rates and absenteeism (Goorian, 2000, p. 4). A reward system such as school-based performance offers rewards and encourages a communal effort in educating the students and working to achieve the mission and vision of the school.

#### *Knowledge and Skills-based Pay Systems*

Knowledge and skills-based pay would allow for compensation based on the knowledge and skills of the teachers. Areas such as content knowledge, curriculum development, professional development, guidance counseling, parent outreach, and management skills are areas of knowledge and skills that could be compensated (Kelley and Odden, p. 10; Goorian, p. 3). This system of compensation would reward teachers for “acquiring knowledge and skills based on the needs of their school” (Lieberman, p. 6).

#### *Career Ladder*

The Career Ladder model of compensation is an attempt to base teacher compensation on more than years of experience and educational degrees. This model classifies teachers as “Novice,” “Apprentice,” “Professional,” or “Master” teachers; teachers on different rungs of the ladder have differing responsibilities (Protsik, p. 14). A teacher’s position on the ladder is determined by the teacher’s expertise, effectiveness, and roles outside of the classroom (Viadero, 2009). Increases in pay indicate that there is an increase in responsibility based on peer and management review (or another type of assessment) (Palaich & Flannelly). Several states, including Arizona, Missouri, Tennessee, and Utah, have developed career ladder programs. Some benefits that have been shown are increased achievement of students, lower dropout rates, and increased graduation rates. Critics of this model have also argued that there was usually a lack of funding and also teacher opposition (Protsik, p. 15). The career ladder model also allows for good teachers to be promoted beyond the classroom (Lieberman, p. 5).

### *Pay-for-Performance*

The pay-for-performance model of teacher compensation is often associated with the merit pay of the 1980s. The attempts at merit pay in the 1980s were short-lived because of many problems: expense, problems of administration and personnel, competition between teachers for limited funds, arguments that teaching extends beyond the measurable, and lowering of teacher morale due to the lack of appropriate evaluation process and assessment of teacher based on one test of the students (Protsik, p. 13; Lieberman, p. 4; Palaich & Flannelly). When pay-for-performance is poorly implemented it becomes the failed merit pay of the 1980s.

Based on the failures of merit pay and the desire to implement several characteristics of merit pay, pay-for-performance has been modified. As with all compensation models, pay-for-performance will vary in its implementation but could include both individual and group compensation. The school administration could set performance benchmarks which the students should meet and compensation could then be linked to student performance based on the benchmarks assigned by the school (Goorian, p. 3; Lieberman, p. 6; CED, p. 20). Compensation should not be related to the level of scores, but rather a measurement of the gains of students. This model would allow reward for effective teachers while taking into account the socio-economic status, living conditions, and family background (CED, p. 20).

### **Biblical Perspective on the Reform of Teacher Compensation**

I do not wish to point out specific biblical texts that relate to how school administration should go about compensation of employee or the change in compensation model. But I do wish to point out a couple of principles that the school administration should keep in mind. Teachers are going about the work of God, teaching and instruction the next generations of the church. School administration should keep this in mind and be sure that there are quality teachers in each classroom so the vision, mission, purpose, and goals of the school can be achieved. Teachers also deserve—as Paul mentioned several times in his letters—to be compensated equitably for their work. Teachers should not be taken advantage of merely because of their love for students, their agreement with a mission, or a fulfillment of God’s calling for them. School administration should be sure to apply biblical principles when compensating their employees by being sure they do not repeatedly offend teachers, take advantage of teachers, and other

possible violations of biblical principles.

## Personal Views on Teacher Compensation Reform

Reform is possible! Examples such as Denver's ProComp show that compensation reform can be performed, but examples such as Houston's ASPIRE show how compensation reform can be a disaster. I believe that reform in every school is possible, but several conditions are necessary. Here are the five that I believe are most important.

First, every school will have a different compensation model. No one compensation package can support the mission and vision of every school just as no single compensation model can be applied to every individual school. If a compensation model conflicts with the mission and vision of the school, it should be revised or abandoned. Each school board must take into account the purpose and objectives for such a compensation reform. Careful consideration should be the first step for each school board at every school.

Second, if a decision is made to pursue the idea of compensation reform, the school board should carefully set up a committee to investigate the reform. This committee should not be composed of only board members, but should include teachers, administrators, and community members. If reform is forced on or done to teachers, it will not achieve its stated reason and purpose. Reform should be performed with teachers to allow for authentic involvement of all teachers.

Third, research should be thorough and complete. A compensation model which is not properly researched could lead to the destruction of the implemented model. The research should be used to identify and correct potential weaknesses or disadvantages to be sure the model is the best model for the specific school. Each school will place different emphases on various models of compensation to create a model that fits its mission and vision.

Fourth, reform should be clearly understood and all evaluation methods and procedures should be transparent to every staff member. Clear guidelines should be placed so each individual teacher knows what is required by this new compensation model. Every question should be answered by the board before such a plan is implemented. Evaluations should be authentic and transparent and should never become a rubber-stamping by the evaluators.

Finally, compensation reform is a process. Teachers and school boards must agree to revisit the compensation reform regularly in order to correct deficiencies and add necessary elements to fulfill the purpose and objectives of the reform.

Teachers and board members must continue to investigate better practices and ways of integrating their mission and vision into the reform. A desire to perform the mission and vision of the school will force all parties to continually revisit this compensation reform.

Due to the nature of the today's economy, the goals of education, and the benefits of teacher compensation reform, more schools will begin to implement programs such as Denver's ProComp. Reform is necessary and as more research, development, and articles on teacher compensation reform emerges, the call will come to all schools to investigate and implement reform.

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## Contribution

# Math: Appreciation for God as Creator

Kristin Dykstra

“Math is the language with which God has written the universe.”

Galileo Galilei

“The laws of nature are but the mathematical thoughts of God.”

Euclid

I can see it in their eyes. I *know* what they are thinking. Some days as I stand in front of the students during math class, I can tell that they are wondering why

they need to learn *this* math. They have serious doubts whether they will ever use the math they are learning once they graduate from school.

We teach math *not* because every student will use all of the math they have learned throughout their lives. Studying math teaches the students more about the world God has created. Studying math teaches the students more about the Creator God.

$1 + 1 = 2$ .  $1 + 1$  has always equaled 2.  $1 + 1$  will always equal 2. From a very early age, we teach our children and our students this and other basic facts. They memorize these facts, and then we build on them by teaching the students subtraction then multiplication and finally division. Using this knowledge, we go on to teach them algebra and geometry.

“For by him were all things created that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions or principalities, or powers: all things were created by him, and for him: And he is before all things, and by him all things consist” (Colossians 1: 16-17). God is the creator of all things—which is why  $1 + 1 = 2$ . God *upholds* all of creation—which is why we can depend on this fact always being true. Man has come up with the symbols we use each day in class, but man is not the creator.

Man has discovered what God has created. Like addition, all of math is a way of recording and expressing the laws and relationships God created. Math works because God faithfully holds everything in place. Math is not independent from God. It is not neutral. Math’s very existence and ability to work is dependent on God’s faithfulness in holding everything together!<sup>1</sup>

The study of mathematics in creation gives us a greater appreciation for God as Creator.

Just looking at a sunflower, we can tell that the sunflower was carefully designed by a wise Creator. Math, however, allows us to see God’s design at a new level, revealing the care God took with each aspect of His creation. The seeds in all sunflowers—be they large or small—are arranged according to two patterns. When we use math to examine these patterns, we observe that, regardless of how many seeds the sunflower contains, the number of seeds will be distributed between the two patterns in approximately the same mathematical proportion—a propor-

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1 Loop, Katherine A. *Beyond Numbers: A Practical Guide to Teaching Math Biblically*. Fairfax, VA: Christian Perspective, 2007.

tion that enables sunflowers to hold the maximum number of seeds and reproduce quite efficiently! What a wise Creator we serve!<sup>2</sup>

This is only one example of the intricate, mind-boggling math found in creation. We stand in awe before our Creator God.

Mathematics teaches the students a different aspect of the creation and God than their study of the other subjects will teach them. They might not use every lesson taught in math class throughout their lives, but they should be growing in knowledge and wisdom of God and His creation.

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2 Loop, Katherine A. *Revealing Arithmetic: Math Concepts from a Biblical Worldview*. Fairfax, VA: Christian Perspective, 2009.

## Book Reviews

# Children and Youth Literature

Brenda Dykstra

*Toot and Puddle* books. Author/illustrator: Holly Hobbie. Little, Brown and Company, 2000. Recommended reading level: preschool to 2nd grade. Picture book read-aloud level: ages 3-6.



### *Puddle's ABC*

Otto, a curious turtle, wants to write his name, but he can't read! He is a friend of our main characters, the best-friends pig duo Toot and Puddle. Puddle takes charge and decides to teach the turtle his letters using his very own

A, B, C words. Will Puddle reach success in teaching words and letters to turtle Otto? What kind of mischief will ensue?

The *I'll Be Home for Christmas* Toot and Puddle picture book is the typical non-Christ-centered portrayal of Christmas eve. It's a cute story as the far-away friend Toot has to trudge home to see his friend Puddle, yet certainly not the Christian's salvation Christmas views. Will his plane land safely in the blizzard conditions? Will the two pig friends reunite?

This modern author and illustrator, pen-named Holly Hobbie, has an incredible ability to portray these two fun-loving pigs with her watercolors. Toot and Puddle's irresistible antics in and natures bring smiles and joy in the stories she shares. I also noticed that there were several *Toot and Puddle* books published by National Geographic's authors which haven't been reviewed. I'd share a definite thumbs-up, especially for *Puddle's ABC* book. Enjoy the ending play on the letters T-O-O-T.

*Ladybug Girl* books. Author/illustrator : David Soman and Jacky Davis. Dial Books for Young Readers, 2011. Recommended reading level: early preschool to 2nd grade. Picture book read-aloud level: ages 3-7.



Dressed in bright red and black polka-dotted tutu, wings, antennae, and rain boots is Ladybug Girl and her friendly basset hound Bingo. Will she overcome fears of the ocean? Learn how to pretend and play by herself? Will she enjoy being on the Bug Squad with Bumblebee Boy, Butterfly Girl, and Dragonfly Girl? Her older brother says she is WAY

too little. How does she become the triumphant Ladybug Girl?

These recent *New York Times* bestsellers possess calming yet fun, cheerful qualities for children. The husband/wife author team knows kids well enough to design appealingly cute and fun adventures with realistic characters. The bright, whimsical watercolor pictures almost share the emotions and tale as well as the actual text. We appreciated the imaginative tales, and our children, with no exceptions, ask for these books to be re-read. From saving ants in distress to jumping shark-infested puddles, kids relate well to Ladybug Girl. The texts seem to ignite their imagination to go “pretend, pretend, pretend.” I wouldn't label these

classics, but they're certainly worth a look. So put away the Wii and Xbox, online computer games, and TV; discover if the kids can begin to play and imagine after hearing Ladybug Girl's journeys.

*Ladybug Girl*

*Ladybug Girl and the Bug Squad*

*Ladybug Girl at the Beach*

*Ladybug Girl and Bumblebee Boy*

*Ladybug Girl and Bingo*

*The Amazing Adventures of Bumblebee Boy*

*Thimble Summer* (1939 Newbery Award winner) by Elizabeth Enright. 136 pages. Recommended reading level: 3rd to 6th grade.



Energetic, spirited Wisconsin farm girl Garnet's summer is unfolding. Set in the 1930's surrounding the Great Depression, lack of money brought impossible dilemmas for Garnet's father and her family on their drought-ridden farm.

But events turn as Garnet discovers a silver thimble in the dried up riverbed while on a swim adventure with her younger brother Jay. Soon government loan funding arrives, and Garnet excitedly helps Father build a brand new barn. An orphan named Eric is lovingly taken in by their family, too. Adventure continues as Garnet's runt pig, nursed back to health, is entered in the county fair competition. Will he take home a medal? Will Eric stay? Impulsive, tom-boyish nine-year-old Garnet decides to hitchhike—eighteen miles? Will she safely return? Read to the end to join the excitement of Garnet's tale.

**Response:** This gentle, quiet read definitely holds Newbery characteristics. The character Garnet embodies its literary criterion for main character. And the plot ebbs and flows gracefully, bringing the reader along on an enjoyable ride. Descriptive similes and metaphors sprinkled throughout really tell the tale.

Discretionary issues were few, although one small issue may be worth identifying. Enright sketches pencil drawings here and there of Garnet and her "fat" friend Citronella. Garnet, on the other end, is described as fine, but really the drawings are subjective as Citronella is penciled as nearly the same size as Garnet

or quite average in my mind. So many children (and adults) struggle with body image so this may be worth noting.

This simple classic reminds me of *Charlotte's Web* in some ways. Though there is no mention of God, the family values were strong. A heartwarming, exciting tale awaits in this very old, award-winning Newbery novel. Don't forget to try it!



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