Journal of Contemporary Research in Education

Volume 3 Number 3 April 2015

Article 4

4-1-2015

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Bourgeois, Steven J. (2015) "Contingent Rewards in the Elementary Classroom: The Teacher's Perspective," Journal of Contemporary Research in Education: Vol. 3: No. 3, Article 4. Available at: https://egrove.olemiss.edu/jcre/vol3/iss3/4

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Contingent Rewards in the Elementary Classroom: The Teacher's Perspective

Journal of Contemporary Research in Education 3(3) 94-108

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Responsive Education Solutions

Abstract

With growing force, extrinsic motivators, such as stickers, certificates, gold stars, and monetary compensation, permeate the educational environment (Kohn, 1993). While innocuous on the surface, such incentive-laden practices represent a level of teacher control that has profound consequences for student motivation (Reeve, 2006). Although considerable field experiments have shown the effects of contingent rewards on subsequent intrinsic motivation for engaging in proscribed activities (Deci & Ryan, 1985), such studies do not shed light on the motivational realities of the classroom environment, complete with student discipline, standardized curricula, and accountability measures. One hundred five (105) elementary teachers of grades one to five within a single school district in the Southern United States responded to Likert-type items and open-ended questions, allowing them to articulate and justify their use of systems of rewards and sanctions in the classroom. Results indicated that the overwhelming majority of teachers (95%) had systems of rewards and consequences/sanctions, which they deemed effective and pedagogically appropriate. Teachers revealed highly developed token economies spanning both the students' behavioral and academic outcomes. While this study is descriptive and exploratory in nature, it attempts to provide context for further research in an area of pressing concern that needs to be reclaimed.

The year 2013 represented the 20th anniversary of Alfie Kohn's *Punished by* Rewards (1993), which can be viewed as a warning call concerning the unintended consequences of contingent rewards on intrinsic motivation. Kohn's plea for moderating the administration of incentives, both verbal and tangible, received a wide readership and took its place on the bookshelves of both educational researchers and practitioners. However, based upon recent educational policy and classroom practice, Kohn can be viewed as a voice crying in the wilderness. In the 20-plus years since Kohn's publication on rewards, nationally-legislated accountability measures have placed students' academic performance under the spotlight. Primarily through requirements of No Child Left Behind (2002), students have been subjected to an unprecedented battery of high-stakes assessments, which have transformed our definition of what it means to be welleducated (Kohn, 2004). The genius, if one can ever call it that, of *NCLB* is that it

rightfully assumed that setting accountability standards for school districts would produce a chain effect. School boards pressure district superintendents, who pressure campus principals, who pressure teachers, who pressure students. And all of it is very public, as Kohn foresaw.

With growing force, extrinsic motivators, such as stickers, certificates, gold stars, and monetary compensation, permeate the educational environment (Kohn, 1993). While innocuous on the surface, such incentive-laden practices represent a level of teacher control that has profound consequences for student learning (Burgess et al., 2004; Kohn, 1993; Popham, 2001; Reeve, 2006). Federal calls for merit pay (based in part upon value-added measurement of teacher performance through student test scores) encourage teachers to narrowly tailor their instruction toward what is tested, maximizing gains in measurable student growth, while marginalizing learning beyond the scope of the assessment.

Although external rewards and sanctions may produce short-term increases in student achievement, they also have hidden costs with respect to long-term intrinsic motivation to learn (Ryan & Weinstein, 2009). Researchers have linked extrinsic approaches in the classroom to less complex learning (Deci, Koestner, & Ryan, 1999), less creativity, and less risk-taking behavior (Hennessey, 2000) on the part of students. Consistent with these findings, Senecal, Koestner, and Vallerand (1995) also found a positive correlation between extrinsic orientation and academic procrastination. In contrast, research has shown that intrinsically motivated students exhibit a desire for academic challenges (Reeve, 2006) and are likely to demonstrate academic exploration and creativity (Grolnick, Deci, & Ryan, 1997). They are also able to sustain attention in academic tasks (Deci & Ryan, 2000), which results in increased academic achievement (Boggiano, et al., 1993).

Despite research cautioning the longterm viability of incentivizing learning, educators have implemented token economies to maintain discipline and promote student achievement (Kohn, 1993; Lipe & Jung, 1971). In a study of 186 charter schools, Raymond (2008) reported that 57% instituted some type of incentive system to promote academic achievement. In an ambitious experimental study, Harvard economist Roland Fryer Jr. distributed \$6.3 million to 38.000 students in 261 schools in Chicago, Dallas, Washington D.C., and New York to bolster test scores (Freyer, 2010). Fryer (2010) reported that, although the incentives contributed to gains in compliant behavior and classroom performance, these increases did not correlate positively with standardized test scores.

Because of the prevalence of contingent rewards in the school setting, cognitive psychologists have attempted to evaluate their effect upon long-term intrinsic motivation (Deci, Koestner, & Ryan, 1999). Contingent rewards represent physical token

administered immediately, or a longer-term benefit tied to completion of an activity. Based upon the results of a meta-analysis of 128 experiments Deci, Koestner, and Ryan (1999) found that contingent rewards have an undermining impact upon long-term intrinsic motivation.

While the work of Deci, Koestner, and Ryan (1999, 2001) has strong support, it is not without controversy. Particularly relevant is the meta-analysis conducted by Cameron and Pierce (1994), who examined the same categories of rewards as those considered by Deci et al. (1999) and came to different conclusions. Specifically, Cameron and Pierce reported that rewards have no overall significant effect on intrinsic motivation for free-choice measures (returning to an activity without prompting during an experimental study). In addition, they found that rewards created significant enhancement of intrinsic motivation on selfreport measures, and that verbal rewards significantly enhanced intrinsic motivation on both free-choice behavior and self-report measures (Cameron & Pierce, 1994). Based upon these findings, Cameron and Pierce advocated for the use of contingent rewards in the educational setting.

While Kohn's (1993) research found much support, particularly from advocates of self-determination theory (Deci & Ryan, 1985), it would seem that the approach advocated by Cameron and Pierce (1994) has won the day, considering the support of the current educational practitioners and policymakers. A visit into most elementary classrooms in the United States will show complex and pervasive token economies, complete with certificates, gold stars, and symbolic monetary compensation. Because contingent rewards and sanctions represent tried and true elements of the pedagogical toolbox of elementary teachers, problematizing this practice entails shifting scrutiny toward the long-term effects.

Statement of the Problem

Considerable field experiments have shown the effects of contingent rewards on subsequent intrinsic motivation for engaging in proscribed activities, such as completing a puzzle or drawing (Deci, 1975; Lepper, Green, & Nisbett, 1973). While valuable on a theoretical level, such studies do not shed light on the motivational realities of the classroom environment, complete with student discipline, standardized curricula, and accountability measures. Although research has documented the use of praise and contingent rewards in the school setting (Kohn, 1993; Lipe & Jung, 1971; Raymond, 2008), there have been no accounts from the perspective of classroom teachers.

Researchers have shown that academic intrinsic motivation decreases from ages 9-18 (Eccles, Wigfield, Harold, & Blumenfeld, 1993; Gottfried & Gottfried, 1996, 2006; Harter, 1981; Lepper, Iyengar, & Corpus, 2005). Yet no research has examined the administration of incentives during the initial period of formal schooling (grades one through five), which lays the foundation for subsequent academic motivation. Because elementary school represents the student's initial exposure to the school system, the student internalizes the expectation of receiving rewards for academic activities, which are typically characterized as work. Although educational psychologists such as Dewey (2004, original work published 1916) and Piaget (1926, original work published 1923) have theorized that essential aspects of the personality are formed during the early elementary years, there has been little research documenting the extent to which elementary teachers incentivize instruction. Furthermore, elementary teachers have not been given the opportunity to articulate their justification for implementing the token economy and culture of rewards and sanctions (Kohn, 1993) which is ubiquitous in this setting.

Purpose of the Study

The present study attempted to shed light onto systems of rewards and sanctions within the elementary classroom in grades one through five. Through the responses of elementary teachers, the study revealed a variety of motivational techniques, both positive and punitive in nature. The study sought to both quantify teachers' attitudes toward rewards and sanctions, and to provide descriptions of their implementation. While the descriptions of both school-wide and teacher-initiated systems of incentives provide a glimpse into the elementary classroom, the teachers' justifications for these approaches reflect a philosophy of education that has broad cultural implications. While this study is descriptive and exploratory in nature, it attempts to provide context for further research in an area of pressing concern that needs to be reclaimed.

Theoretical Framework

Self-determination theory (Deci & Ryan, 1985) provides the lens through which I analyzed the data on rewards and sanctions. Building upon early work by Harlow (1950), Heider (1958), and DeCharms (1968), the theory focuses upon the quality of motivation and the extent to which the individual perceives himself or herself to initiate an action. Deci and Ryan (1985) defined motivation as "the energization and direction of behavior" (p. 3). By energy, they mean the needs that are either innate or acquired through environmental factors (Deci & Ryan, 1985). By *direction*, they mean the process by which these basic and acquired needs are satisfied (Deci & Ryan, 1985). On the surface, this sounds like a drive theory in the tradition of Hull (1943). However, the actions that are of most interest to Deci and Ryan are those outside the realm of survival drives. For example, they cite DeCharms' (1968) characterization of the human tendency to explore and alter the environment for what appears to be its inherent enjoyment. Deci (1975) identified these activities as being intrinsically motivated. Such activities, according to Deci are "ones for which there is no apparent reward except the activity itself. People seem to engage in the activities for their own sake and not because they lead to an extrinsic reward" (Deci, 1975, p. 23). Much of the work of Deci and Ryan (1985) focuses on environmental and cultural factors that undermine intrinsic motivation and the process of internalization whereby extrinsic activities become part of the individual's sense of self.

Within the context of selfdetermination theory, Deci and Ryan (1985) proposed the basic human needs of autonomy, competence, and relatedness. Deci, Vallerand, Pelletier, and Ryan, (1991) characterized these basic needs as feeling in control of actions (autonomy), expecting to meet performance goals (competence), and developing emotional connections with significant others (relatedness). Deci et al. indicated that individuals who experience autonomy, competence, and relatedness are self-determined to the extent that their acts are "fully endorsed" (p. 328) at the cognitive level. According to Deci (1975), intrinsically motivated activities are those in which people engage for their inherent enjoyment with no external reward or compulsion (Deci, 1975). Individuals with an intrinsic orientation experience psychological well-being and happiness (Deci & Ryan, 1985). According to Deci and Ryan, cultural factors, including education and parenting can foster or undermine intrinsic motivation.

While self-determination theory (Deci & Ryan, 1985) has been studied within the contexts of parenting (Garn, Matthews, & Jolly, 2010), competitive athletics (McAuley, Duncan, & Tammen 1989), psychology (Milyavskaya et al., 2009), weight loss (Kim, Deci, & Zuckerman, 2002), and health care (Ryan, Patrick, Deci, & Williams, 2008), it seems perfectly suited as a lens through which to view the incentivizing of education.

The theory provides the mechanism by which extrinsic motivators, though effective instructional practice in the short-run, undermine long-term interest in learning.

Research Questions

The following questions guided the collection and analysis of data:

- 1. What school-wide and teachergenerated incentives do elementary schools have in place to enhance academic and behavioral outcomes of students?
- 2. How do elementary teachers implement and justify systems of rewards and sanctions in school?
- 3. How useful is self-determination theory (Ryan & Deci, 1985) in understanding systems rewards and sanctions in elementary classrooms?

Methodology and Design

Quantitative survey results were supplemented by open-ended textual data to provide a contextual understanding of teachers' practices and attitudes. Two hundred elementary teachers of grades one to five within a single school district in the Southern United States received links to Survey Monkey. Respondents included 105 teachers (53% response rate), representing a range of experience and grade levels. One hundred female and five male teachers completed five demographic items, two Likert-type items, and 11 open-ended questions, allowing the teachers to articulate and justify their use of systems of rewards and sanctions in the classroom.

Coding and Analysis

I coded and organized data with an eye toward addressing the research questions through the lens of self-determination theory (Deci & Ryan, 1985). While limiting interpretation in the Presentation of Data, I organized the subsequent Analysis around the basic human needs of autonomy,

competence, and relatedness as postulated by Deci and Ryan (1985). Although I analyzed data through existing theory, I recognize my own role as both interpreter and judge of which textual items to include and which to leave. Therefore, I am mindful of Gadamer's assertion that "interpretation begins with fore-conceptions that are replaced by more suitable ones. This constant process of new projection constitutes the movement of understanding and interpretation" (1975, p. 269).

Presentation of Data

Presentation of Data is divided into two sections, with the first being significantly shorter. It includes findings relating to two self-report items, along with brief quantitative analysis. This is followed by a more detailed qualitative section, which includes thematic subdivisions for different categories of rewards and sanctions. Although a formal Analysis section follows, I offer contextual analysis and clarification throughout the Presentation of Data.

Quantitative Self-Report Items

To provide a general understanding of their attitudes toward the use of rewards and sanctions in the classroom, participants responded to two Likert-type items on a seven-point scale, with 7 indicating *very true*, 4 indicating *somewhat true*, and 1 indicating *not true at all*. By calculating the sum of responses of 7, 6, and 5 (all indicating a relatively high level of perceived truth), I was able to represent the level of teacher consensus. Table 1 indicates that the overwhelming majority of teachers (95%) have systems of rewards and consequences/sanctions.

Table 1: *I implement a system of rewards and consequences regularly in my class.* (7-point Likert scale)

	Percentage	Count	
7 (Very true)	66.3%	69	

6	17.3%	18
5	11.5%	12
4 (Somewhat true)	4.8%	5
3	0%	0
2	1%	1
1 (Not at all true)	0%	0
Total	100%	105

Similarly, Table 2 indicates that 90% of participants felt that rewards and consequences are effective at the elementary level.

Table 2:

I believe systems of rewards and consequences are effective with elementary students. (7-point Likert scale)

	Percentage	Count	
7 (Very true)	58.7%	61	
6	22.1%	23	
5	9.6%	10	
4 (Somewhat true	8.7%	9	
3	0%	0	
2	1%	1	
1 (Not at all true)	0%	0	
Total	100%	105	

While demographic variables, including gender, grade level taught, and teaching experience were tested with respect to the two survey items on teacher attitudes toward rewards, no significant differences were found. Across gender, grade, and experience, respondents overwhelmingly supported the use of contingent rewards in the classroom, along with strong belief in their effectiveness.

Qualitative Free-Response Items

While the two 7-point items revealed a general understanding of teachers' attitudes towards rewards and consequences, 11 openended questions allowed teachers to detail their systems of group and individual incentives, along with their application of

consequences for inappropriate behavior. The management systems spanned both the students' behavioral and academic outcomes throughout the school day, including both district-wide initiatives and teacher-created approaches. Teachers revealed highly developed token economies that covered nearly all of the students' time in school. Through the teachers' written responses, details of their application of praise and systems of incentives and punishments emerged, along with justifications, both pragmatic and philosophical in nature. The presentation of qualitative data is divided into seven major sections, including the schoolwide incentive system, teacher-initiated token reinforcement, teacher-initiated tangible rewards, and privileges as incentives, responsibilities as incentives, color-coding behavioral plan, and recess as currency.

School-Wide Incentive System.

Central to the teachers' written descriptions of their use of incentives was their implementation of a district-wide system. All of the 105 participants described their unique application of this program, along with practical insights that only experienced practitioners could supply. One teacher outlined the [School Token] system:

[School Tokens] are given for doing their classroom jobs and in every group activity. Group completion for each lesson and the group that wins in the lesson gets a [School Token] individually in their [School Token] bank. Teacher opens the little store for them to buy toys or other little items with their [School Tokens]. Whole group students are given tickets for big activities like assemblies or field trips and have a small raffle for the day.

From the above description, it seems that students have specific "jobs" which must be performed to earn some type compensation. The teacher spoke in economic terms,

creating a "bank" to stockpile students' [School Tokens], and a "store" where transactions occur.

Another teacher provided additional details on the program, with emphasis upon the color-coding system:

If they misbehave they get their ticket taken away and cannot participate in the raffle.

Consequences are no rewards and color change if they keep misbehaving, depending on warnings. Color change leads to time off recess and I keep adding time if it continues.

Still another teacher described how the [School Tokens] are tied to sticks, stickers, and stamps, representing a tangible currency to foster a range of student behaviors:

Students are paid [School Tokens] each week for attendance. They are deducted [School Tokens] for each stick pulled, and miscellaneous management behavior (i.e. no homework, needing extra copies of assignments, not bringing books, etc.). Additionally, I have used sticker/stamp charts to reinforce positive behaviors, passing them out when students are exhibiting those traits I desire in students, and they can exchange full cards for a trip to the prize box or extra [School Tokens].

Another teacher clarified how the school-wide behavioral policy is connected to documentation and parental communication:

School-wide, our campus implements a Behavior Policy. We have six specific rules, and each one is a different color. Students that break rules must "pull at Stick" of that color. Behavior issues are documented on calendars and taken home daily in folders to be signed by parents.

Teacher-Initiated Token Reinforcements

According to the teacher participants, although the school-wide token system is a district-mandated policy, they still had a range of options concerning implementation. In fact, most teachers expanded substantially on the original program, adding a range token reinforcements. One teacher described this practice, stating "When we fill our marble jar up for total classroom behavior or get a complement from another teacher, we have a party: pizza, ice cream etc." According to the teachers, these delayed rewards can be tied to student conduct or academic activities, such as reading books. Another teacher mentioned a visual aid for tracking class behavior, noting "We use the 'caught you being good chart' for large group. If they collect so many stars, they earn a class lunch or party." Some of the token systems represent the performance of small groups or tables of students. One teacher noted "We keep track of table behavior with 'Sparklers,' if a table earns five sparklers they can choose an intrinsic reward." Although the teacher did not clarify what she meant by "intrinsic reward," one would assume that the group would be afforded some choice of activities.

Although some of the aforementioned systems of tokens applied to the actions of individual students, most represented large-group incentives, typically tied to citizenship behaviors. For example, one teacher explained that "if the entire class earns 20 days of not pulling a stick, I will personally give them an ice cream party after lunch." Presenting a similar approach, a teacher linked class behavior to reading, stating "When the entire class has gone all day with zero codes we have a popcorn party while we read for pleasure."

Teacher-Initiated Tangible Rewards

While teachers described various systems of tracking behavior linked to indirect tokens, they also clarified the specific rewards that students eventually receive. These tangle rewards can be divided into two categories, including physical objects and food. The physical objects could be best described as trinkets, such as stickers or stamps. Several have some connection to academics, such as bookmarks or erasers. While the food items represent a range of options, some teachers stressed the need for "healthy treats."

Table 3 illustrates a sampling of the contingent rewards according to the aforementioned categories.

Table 3:

Stickers

Contingent Rewards in the form of Physical Objects and Food Referenced by Participating Teachers

Physical Objects	<u>Food</u>			
Marbles	Pizza			
Sparklers	Ice cream			
Sticks	Crackers			
Gems	Jelly beans			
Clips	Healthy treats			
Tickets for treasure box	Skittles			
Pirates' gold	Gum			
Token money for store	Popsicles			
Raffle tickets	Popcorn			
Erasers				
Bubbles				
Happy faces				
Stamps				
Toys from Kids' Meals				
Folders				
Bookmarks				
Gift certificates				

Privileges as Incentive

Just as teachers described their distribution of token and tangible rewards, they also detailed how they offered students choices and special privileges, contingent upon academic achievement and acceptable behavior. Several teachers described granting well-behaved students the chance to "sit in the teacher's chair for a day," "sit by

the teacher at lunch," or "sit by a friend at lunch." They also afforded students the right to "choose a quiet spot in the room with a blanket or carpet square and read quietly during assigned reading times as opposed to remaining at their desk." Teachers also spoke of awarding "free dress days" for appropriate behavior and successful completion of academic tasks. Another teacher mentioned using free homework passes and "no starters for a week [warm-up activities]" as incentives for successful academic performance. One teacher justified the system of incentivizing with privileges, noting "They get paid every week for their attendance, behavior, and doing their job."

Responsibilities as Incentives

In addition to privileges, the elementary teachers made frequent reference to the practice of offering individual students additional responsibilities as compensation for appropriate behavior. One teacher explained, "If there is one particular student who is showing good behavior, I let them be my line leader, or take messages where they need to go." Another provided additional details on specific responsibilities that she affords students:

I let students who are behaving well be my helpers. They love to help. I will let them deliver things to other teachers, turn the lights on/off, hold things for me, etc. I use this a lot. I'll even say "I'm looking for a helper in line to hold our headphone basket . .." And most of them will straighten right up in line because they want to help!

Other teachers mentioned special jobs, including line leader, floor specialist, and snack helper. They also rewarded students by allowing them to grade papers, read to the class, help with the weekly calendar, sharpen pencils, turn off the lights, close the doors, and serve as table or bathroom monitors. One teacher reported an extrinsic approach to

student motivation, explaining "The students that show consistent positive behavior get to do jobs around the classroom to earn more [School Tokens]. The students love to help out, especially if they get paid for it." She went to point out how she supplements the School Token approach with the imposition of physical exercise, additional tangible rewards, curricular choices, and food:

When I need to provide discipline for the entire class, I may use laps around the playground, stickers, center time, or even on occasion one Skittle. I do not use a treasure jar. I really try to move students intrinsically rather than extrinsically; but they are only five years old.

Teachers clarified that the offer of responsibilities and special duties was always contingent on good behavior. Thus, the prospect of losing that responsibility loomed over the students, both individually and as a group. Table 4 illustrates a sampling of the privileges and responsibilities, as mentioned by the participating teachers.

Table 4:

Contingent Rewards in the form of Privileges and Responsibilities Referenced by Participating Teachers

<u>Privileges</u>		R <u>esponsibilities</u>
Choices:		Teacher helper
	Seat	Team captain
	Work center	Pencil sharpener
	Partner in activity	Door monitor
	10 minute free choice	Light monitor
	General free time	Table monitor
Clothing		Read to class
	Pajama day	Snack helper
	No shoes day	Floor specialist
	Hat day	Paper grader
Play:		Errand runner
	Board games	Helper with
calendar		
	Learning puzzles	

Longer recess

Food:

Snack break Eat with teacher Picnic lunch

Academics:

No homework pass

Computer time

Free reading

Free study time

Free drawing time

Extra writing time

Library time

Music while working

Special speaker

Movies

Select reading

Pillow time during reading

Use of classroom space:

Couch time

Chair time

Sit by teacher

Sit on floor

Social:

Quietly talking

Extra time to socialize

First student:

To lunch

To stations

Just as teachers detailed the use of incentives to encourage appropriate student behavior, they also described systems of consequences for inappropriate conduct. Teachers uniformly reported using color coding behavior plans as a way to visually represent the performance of their classes. They also demonstrated strong support of using recess as a currency for group behavior.

Color coding behavior plan

One teacher explained her chart for behavior, noting "As a second grade team, we utilize a color system. Students start each day on green and move to yellow, orange, and red for misbehavior. We do not allow students to move back to green." She went on to explain that she implements "a whole group smiley/frowny system where the class, as a whole, earns tally marks under smilies or frownies for group behavior. Compliments

from other teachers earn smilies, as well." Another teacher clarified specific infractions in the behavioral code, stating "We have a color system and I try to have the rule of not getting out of your seat without permission and no talking without raising your hand."

Typical of the teachers' coding plans was a punitive approach to behavior management, with clear consequences for noncompliance.

One teacher explained:

I use a code sheet to manage behavior. If the students are not following instructions, or are demonstrating poor behavior choices, they receive a code. If they reach five codes, they are sent to the office, and phone calls are made to parents.

While most teachers advocated a mix between incentive systems and imposed consequences, two suggested that the punitive approach should not apply to the class as a whole. One teacher explained her position, stating "I don't believe in punishing a whole class for one person's actions unless the whole class has made bad choices; I still assign negative consequences individually." Another echoed her remarks, noting "I generally don't give group consequences. The only exception being when my class as a whole gets too rowdy, too loud, I have them put their heads down for a few minutes."

Recess as currency

In addition to detailing their color coding behavior systems, teachers expressed the overwhelming consensus that recess can be used as an effective incentive or consequence for student behavior. One teacher described a type of recess calculation:

For the whole class, we have a point system. If they are off task, loud, or not following directions, I get a point. If they are doing the right thing, they get a point. At the end of the week, if they have more points,

they get to go outside an extra time. If I have more points, we come in from recess 10 minutes earlier.

Another indicated that she imposed specific activities during recess, including "taking laps around the playground . . . for poor conduct." Other teachers described requiring students to "spend time walking during recess," based upon the color coding system. A teacher explained how she used recess as a central behavioral tool:

As a whole, students earn recess daily. I write the word RECESS on the board, and if the class gets too out of control they lose a letter. If they lose all the letters, the whole class has to sit out during recess.

The teachers' comments indicated a willingness to leverage social pressure in the form of group incentives and consequences to obtain student compliance, both academically and behaviorally.

Analysis

As I read the participating teachers' accounts of systems of rewards and consequences, I was first struck by the uniformity of their views. All of the 105 participants implemented the district-wide incentive system and offered personalized versions, with a range of tokens and currency to modify student behavior and academic output. While their solid support for incentivized instruction may not be surprising, their nuanced descriptions of these systems, along with philosophical justifications for the practice, provide a context for a broader discussion of educational motivation. The following analysis is organized by the three basic needs of autonomy, competence, and relatedness, as described by Deci and Ryan (1985) with respect to self-determination theory.

Autonomy

Reeve (2006) argued that the imposition of contingent rewards undermines autonomous learning on the part of students. He framed this view in terms of increased teacher control, which results in relatively fewer student choices, and a teacher-centered classroom environment (Reeve, 2006). In the present study, teachers were happy to relate the intricacies of their programs of incentives and sanctions, describing a clear power structure, where the teachers bestowed a range of rewards to their students. The teachers also held additional desirable outcomes, such as special privileges or recess, over the heads of the group. In many cases, teachers described elaborate coding systems, tracking the groups' progress, particularly with respect to behavioral outcomes. In fact, the teachers expressed their practice of periodically updating students on their progress, referencing the reward, along with specific behaviors that move students closer or farther from this desired outcome.

Common to many of the student rewards was the idea of choice. In the case of recess, students had the opportunity to engage in relatively unencumbered play, making an array of choices with minimal adult direction. They also offered students choices of apparel, seating, and activities, contingent upon appropriate behavior and successful academic progress. It is not surprising that activities driven by choice would be of particular value to students. Many teachers in the study related that such *currency* was the only means at their disposal to successfully manage their classroom.

Eisenberger, Pierce, and Cameron (1999) argued that contingent rewards can communicate a task's importance, which has a positive effect upon intrinsic motivation. Conversely, Kohn (1993) suggested that the imposition of a reward reflected the message that the activity was not of inherent value; only the activity's instrumental value would be meaningful to students. The findings of the current study seem to support Kohn's view, particularly with respect to student

autonomy. The group of teacher participants frequently referred to school as "work," for which students needed to be compensated. Although the students have the opportunity to autonomously navigate the system of token rewards and engage in shopping to spend their [School Tokens], they have also received constant communication of contingencies and technical aspects of the coding system which permeates the school environment. Reading into the teacher statements, the implied message is that the inherent interest in the subject matter is trumped by how well the students do, particularly within the realm of the incentive system. The public application of rewards and sanctions, often in the form of full-group incentives, implies a school-wide system of control. Within this incentivized environment, students encounter controlling teaching practices, which profoundly limit autonomous, self-endorsed learning (Deci, Koestner, & Ryan, 1999).

Competence

Closely related to autonomy is the concept of perceived competence, where students develop an understanding of success with respect to academic output. According to Deci and Ryan (1985), perceived competence can be viewed as a predictor of intrinsic motivation. Since the systems of incentives described by the participating teachers represent a ubiquitous feedback loop, one could argue that it fosters feelings of competence. Particularly for individual rewards, students may gain feelings of selfefficacy with respect to both academic and behavioral outcomes. Deci and Ryan (1985) posit that verbal feedback can be interpreted as either controlling or autonomy-supportive by students. With that in mind, the students' perception of competence may be moderated by the quality of that feedback. As in most teaching situations, the delivery and tone of the feedback may be especially important.

Particularly salient to a student's perceived competence is the extent to which the learning activities are optimally

challenging (Csikszentmihalyi, 1997). In the current study, teachers described the practice of "catching a student doing well." In many instances, students received positive feedback and tangible rewards for merely behaving in a normal and expected fashion. Rewarding a student for quietly standing in line without causing a disturbance is qualitatively different from providing a tangible reward for solving a difficult math problem.

Relatedness

According to the teacher participants, a common practice of behavioral management was to "catch a student behaving well," and to make this fact know to the entire class. By leveraging a student's feeling of belonging in a group, teachers wield a powerful tool of classroom management. According to Deci and Ryan (1985), seeking a sense of belonging to a group represents a basic human need, which is foundational for subsequent intrinsic motivation. Based upon the teacher comments, systems of competitive rewards were common for all ages of children. In fact, awards assemblies with recognition of achievement, often in the form of [School Tokens] was typical practice at all campuses.

This public display of rewards represents an attempt to heighten the competitive aspect of the behavioral program. In a summary of research, Deci and Ryan (1985) stated that "competitively contingent rewards are the most controlling" (p. 81). This aligns with Kohn's (2004) point that teachers often create distrust between students when they promote competition within the classroom. By placing contingencies on relatedness, the teachers risk the fragile sense of belonging which is a prerequisite to intrinsic motivation.

Beyond pitting students against each other to compete for scarce rewards, the elementary teachers reported frequent dependence upon their most prized currency: recess. Teachers revealed elaborate color coding schemes that provided students with constant reminders of their progress toward

"earning" recess. Although a few teachers spoke against the practice of group rewards and punishments, most indicated a willingness to take full advantage of the students' desire for free play. Teachers referenced recess as the most potent power present in their disciplinary toolbox, perfectly suited to modify student behavior. Because recess represents a group reward/consequence, well-behaved students are often at the mercy of their less compliant colleagues. While student-level data would be required to understand the scope of this phenomenon, the teachers' comments indicate a disposition toward short-term expediency over potential long-term effects.

Limitations and Future Research

Although the data come from a single school district, one would expect similar accounts in most classrooms across the United States. Future research could expand the sample to a range of public and private schools. In addition, it would be instructive to consider incentives throughout the entire k-12 spectrum, focusing on the qualitatively different forms that emerge at the high school level. One could also gain meaningful insight into the phenomenon by observing the incentive systems in action within an elementary classroom, paying particular attention to the level of autonomy-support vs. control exhibited by teachers. Research could also uncover the motivational link between the home and school by studying parental incentives (payment for satisfactory report cards, books read, etc.). On a broader scale, it would be instructive to learn the extent to which heightened incentivizing of education represents a peculiarly American phenomenon. One could compare levels of educational incentives in various countries. such as Germany, Japan, and China, who have high-stakes summative assessments similar to those in the United States. Finally, research should explore alternative approaches, such as Montessori, where teachers apply informational, rather than evaluative feedback and minimize the

imposition of rewards for learning (Montessori, 1912).

Conclusion and Implications

While the present study was exploratory in nature, it confirmed many suspicions that I had about incentive structure present in the elementary classroom. Although substantial research from the past four decades has shown the unintended consequences of extrinsic motivators in the educational setting (Deci, Koestner, & Ryan, 1999), teachers persist in implementing sophisticated incentive systems to ensure behavioral compliance and maximize academic outcomes. While clearly encouraged by school administrators, the extent to which this practice is supported by colleges of education is beyond the scope of this study. I have explained the motivation of the teachers in terms of the increased emphasis on results of high-stakes testing (Kohn, 1993; Popham, 2001). While that explanation is satisfactory, it does not align with calls for creating life-long learners.

I would argue that the teachers' approach does not originate from inadequate understanding of child development, nor from lack of willingness to align instruction to research on student motivation. In fact, the comments of the elementary teachers revealed an acute awareness of student development, particularly in the area of character. Teachers spoke of the benefits of affording students privileges and responsibilities, contingent upon compliance with classroom rules. Yet, in spite of their focus on development, they engage in largescale incentivizing of learning. It is likely that teachers are responding in a predictable manner to their own pressures to produce measurable student growth (Flink, Boggiano, & Barret, 1990; Pelletier & Sharp, 2009). This aligns with Campbell (1976), who stated "The more any quantitative indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor"

(p. 49). If you read *high-stakes testing* as the *quantitative indicator*, it follows that we are seeing those *corruption pressures* in action, through teaching to the test, narrowing the curriculum, and incentivizing learning.

Perhaps most troubling aspect of the teachers' responses was that they did not make the distinction between type of activities for which they imposed rewards and sanctions. Rather, they freely offered up rewards for both enjoyable and non-enjoyable student behavior. By providing the same type of incentives for pleasurable and unpleasant activities, the teachers send confusing signals to children, who may come to doubt the value of any activity (such as learning) to which one attaches a reward (Kohn, 1993).

I view the current research as an attempt to reclaim an old question in education. Kohn (1993) presented exhaustive and compelling evidence that teachers should proceed with caution when offering praise, rewards, and consequences to students. He expanded our understanding of incentives, suggesting a cultural phenomenon that included schools, the workplace, and the home. Perhaps the only effective strategy to push back against such overwhelming forces would be to link the absence of incentives (intrinsic motivation) to student achievement (standardized testing). Kohn would appreciate the irony.

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