Cheating Themselves Out of an Education: Assignments that Promote Higher-Order Thinking and Honesty in the Middle Grades

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Students generally report little cheating during their elementary school years (Cizek, 1999); yet, by high school, students consider cheating to be a widespread and serious concern (Evans & Craig, 1990; Finn & Frone, 2004; Schab, 1991). Of 30,000 high school students surveyed in a recent study, 64% admitted to cheating on a test during the past year, with 38% doing so two or more times, and 36% admitting to using the Internet to plagiarize an assignment (Josephson Institute of Ethics, 2008). Given that students cheat so infrequently in elementary school and yet by high school cheat so routinely, the question arises, "What happens to students during the middle school years?"

The conditions that lead to such a drastic change in student behavior may be tied to a number of environmental factors evident as students advance to higher grades—more challenging course material, a greater emphasis on grades, and, at least for the students in this study, the higher stakes associated with gaining access to further educational opportunities. In concert, these factors may contribute to an overall learning experience in which the classroom culture—both in terms of its structure and student perceptions of the purpose behind their learning—grows increasingly performance-based. That is, rather than learning for the

inherent value derived from *mastering* material through an assignment or demonstrating such mastery on a test, students are motivated largely by isolated *performances* and the grades they receive for their work, sometimes regardless of how they attain those grades.

To better understand how this shift occurs and the learning conditions that seem to promote an honest effort by students to truly master coursework, we designed a study to explore the meaning students assigned to the work they did in school and, accordingly, how they approached that work. In addition, we considered how faculty conceptualized course assignments that promoted both subject mastery and student honesty.

Goal orientation theory

Goal orientation theory attributes student motivation for learning to the structure of the classroom environment as being either performance- or mastery-oriented (Stephens & Gehlbach, 2007). Differences between these two conceptions of academic success influence how students think about their academic aptitude, the work assigned, and the nature and purpose of learning (Ames, 1992).

This article reflects the following This We Believe characteristics: Value Young Adolescents — Meaningful Learning — Multiple Learning Approaches

Performance orientation

A classroom environment that focuses on performance can promote a culture where achieving a particular grade becomes more important to students than learning. When classroom practices emphasize such extrinsic motivation and rewards for performance. students seem to assume that what is not graded is not worth learning (Ames, 1992). And research suggests that such perceptions may be well founded. That is, when creating purely evaluative assessments, teachers tend to "reshape instruction ... [to] lower the complexity and demands of the curriculum" (Shepard, 2001, p. 1067), emphasizing "rote and superficial learning" (Black & Wiliam, 1998a, p. 141), largely because of a preoccupation with measuring and comparing their work to that of their peers. Students may see little value beyond the classroom to the work they do and may have little concern for how they complete that work. Consequently, cheating becomes a viable strategy.

Moreover, in performance-oriented environments students tend to emphasize peer comparison and competition (Anderman, 1997). They tend to view achievement as a largely comparative phenomenon, focusing on how their aptitude measures up to others. Under these conditions, a central concern for students is to appear competent and smart (Stephens & Gehlbach, 2007). Common assessment and evaluation practices such as class rank, percentile scores on standardized exams, curve grading, and grade point averages often reinforce this perspective. Further, when teachers rank students, generally by how they grade, students tend to view success as dependent on natural ability (Ames, 1992). Based on previous performance, students generate a fixed perception about their intelligence in comparison to their peers (Kohn, 1999a). Consequently, students' confidence in their ability to learn new material derives from earlier successes or failures and the resulting self-determination of whether or not they are naturally intelligent (Ames, 1992).

Furthermore, when teachers emphasize evaluative feedback rather than formative assessment, students often have little sense of how effort might influence their performance. As Kohn (1999a) explained:

When students are made to think constantly about how well they are doing [mainly through evaluative assessments], they are apt to

explain the outcome in terms of who they are rather than how hard they tried. (p. 42)

At their worst, performance-oriented classrooms prioritize grades over genuine understanding, present achievement as a comparative phenomenon, downplay the link between effort and achievement, and ultimately create a context in which cheating becomes a practically viable and morally defensible strategy.



Most middle grades students find collaborative work meaningful and motivating. photo by Alan Geho

Mastery orientation

In mastery orientation classrooms, students appreciate the inherent value in the work they undertake and strive to realize course objectives because they find them personally meaningful (Wiggins & McTighe, 2008). Such classrooms promote long-term and high-quality engagement in learning, as teachers encourage students' personal development of new skills and proficiencies, emphasizing proof of understanding behind their work and learning from mistakes, often through formative assessment (Black & Wiliam, 1998a, 1998b). In turn, students see learning as dependent on effort rather than innate ability and believe that failing to understand material means they have not yet applied the requisite effort or an effective learning strategy (Ames, 1992). They care about individual improvement rather than how their ability compares to that of others and see learning

as incremental rather than absolute, reflecting the effort and attention devoted to their work (Anderman, 2007).

Cheating and goal orientation

To a certain degree, cheating reflects the meaning students assign to the *goal* of an assignment, understood here as what they stand to gain by completing it. When students view the purpose of learning as developing valuable skills they will use, they are more likely to put forth genuine effort rather than attribute success to natural ability and then try to compensate for the difference by cheating or other means. If a teacher communicates to students, either explicitly or implicitly, that the goal of an academic task is to get a high grade,

Figure 1 Data collection—schedule and content

Overview of the study

Goodwin School (a pseudonym) is a private, nondenominational, coeducational day school in northeastern Massachusetts. The school has a strong academic reputation, an advisory program, and a focus on the holistic development of students. Average class size for grades six through eight ranges between 13 and 16 students, with an overall student-to-faculty ratio of 8 to 1. Nearly 30% of students and 17.5% of teachers and administrators identify as non-European Americans. Typically, students are assigned two and a half hours of homework each night. There is no tracking, although some ability grouping occurs to accommodate students in advanced math programs.

| Classroom observation | Two observations: Teachers introduced assignments or gave feedback; students made presentations or took tests; etc. | |
|----------------------------|--|--|
| Interviews with teachers | Discussed how teachers view the type of assignment and the value students have for work as affecting how honestly students complete it. | |
| Focus group 1 | Conversation about what cheating is, why students do it, whether there is ever a good reason to cheat, if there are classrooms with cheating and classrooms without cheating, and what the differences are. | |
| Interviews with students 1 | Discussed with the students from the focus group how they see the type of assignment and value students have for work as affecting how honestly students complete it. | |
| Focus group 2 | Conversation about what cheating is, why students do it, whether there is ever a good reason to cheat, if there are classrooms with cheating and classrooms with out cheating, and what the differences are. | |
| Interviews with students 2 | Discussed with the students from the focus group how they see the type of assignment and the value students have for work as affecting how honestly students complete it. | |

then cheating may offer a justifiable means to that end, and students may value the work merely for the grade they receive. As Anderman and Murdock (2007) maintain, students cheat less frequently on assignments they consider valuable to their learning and that have personal meaning (see, Wiggins & McTighe, 2008) than assignments completed for the primary purpose of receiving a good grade, pleasing parents, or protecting school-related sport/activity eligibility. Through the lens of goal orientation, when teachers attach importance to mastery of learning and create assignments that promote such outcomes rather than mere performances, students are more likely to value the work they undertake and complete it in an honest, ethical way.

Two advisories were invited to participate in this study, and 8 of 16 students in those advisories became involved. All four of the core teachers (math, English, history, and science) participated in the study along with two of the four world language teachers. Data were gathered during the spring semester of 2008 and included classroom observations; semi-structured, one-hour interviews with all participants; and two focus groups of four students. (Figures 1 and 2 offer a description of the participants, data sources, and data collection processes.)

Figure 2 Data collection—data sources, participants, and frequency

| Data Source | Participants | Frequency per Participant | Totals |
|---|---|--|--|
| Interviews | From two advisories of eight eighth grade students, their four core teachers, and two world language teachers | One 60-minute, semi-structured individual interview with teachers and one 60-minute, semi-structured individual with students | Six 60-minute, semi-structured individual interviews with teachers and eight 60-minute, semi-structured individual interviews with students |
| Focus groups | | One 60-minute focus group session with four students | Two 60-minute focus group interviews |
| Classroom observation Advisory observation | | Two classroom observations per teacher Several advisory observations | Eight classroom observations and three advisory observations |
| Artifacts | | Two assessments to be brought to teacher interview | Four sets of two artifacts |

Performance-oriented aspects of Goodwin School

Both students and teachers discussed a culture of academic pressure that rewards test scores and final grades—those measures of student achievement that can be quantified and assessed comparatively. Although participants all commented that teachers emphasize learning over grades, realistically, the school operates in a larger context in which grades may be the single most important factor for students and parents, regardless of what teachers think. As the math teacher observed, "This is an environment where there is a lot of pressure on kids about grades. I wish it weren't like that." Although she emphasized the importance of understanding, she was skeptical about the effect:

I don't know how big of an impact [grades have]. But if [students] were getting the message that a grade of B is an all-important thing, then that would lend itself to a sense of, "I just have to do what it takes to get the grade."

In a similar vein, a Spanish teacher explained that, too often, student motivation to do work comes entirely from how much the assignment affects their grade—"how much something will count"—though she acknowledged that without grades, students would not try.

Goodwin students readily admit that grades are critical and, to some extent, more important than understanding. As one stated:

Teachers are always like, 'Oh, grades don't matter.' But they do. When you are going on to the next school or high school or college or graduate school, that is what they look for.

Another student explained:

[Teachers] believe it is better to get a good understanding than [to] get a good grade, but I think they understand the importance of getting a good grade. They oversimplify it by saying grades don't matter.

In a focus group, one student said the emphasis on grades does not come from teachers. In fact, teachers often say earning a low grade is okay as long as you understand the material. But other students quickly chimed in, "But really, it is not," insisting that, "teachers are just wasting time by repeating that over and over. No matter how many times they say [grades do not matter], kids aren't going to listen." As this student spoke, others nodded in agreement, stating:

You get to high school and the college application [and the admission counselors will think], "It's good you understand this, but you still didn't get a good grade and [therefore] we aren't going to let you in."

to care about the integrity of the manner in which they complete it. One student explained how other students may justify cheating to themselves:

When students do not view their school work as providing an opportunity for them to acquire valuable skills and knowledge, they may attribute little value to the experience and be less likely to care about the integrity of the manner in which they complete it.

High school applications may include interviews, letters of recommendation, personal statements, and lists of extracurricular activities, yet students emphasized the importance of grades.

What we send to the schools from our school is our grades and, in this case, it is the most important [goal], not really to understand the information, but to look like you understand the information, to get good grades so [that] your high schools can see [that] you get good grades and will obviously do well here.

Others agreed, "That is it in a nutshell: looking like you know it, as opposed to actually knowing it." Most students appreciated why understanding is more desirable than high grades are and do not question teachers who emphasize this belief. At the same time, they pointed to those in high-achieving high schools, those attending Ivy League colleges, and those holding successful jobs as evidence to the contrary.

Given the importance of grades, one student considered how such priorities influenced student behavior.

Many students feel like grades are really important. I mean, they are, but they feel like it is the only thing that is really important. On a quiz or test they are going to cheat because they want to get a good grade.

Others acknowledged that if assignments were not graded, they would not cheat; however, nor would they care about the quality of their work: "You don't cheat on things that aren't graded. Without the grade, you don't do a good job." When the purpose of work is perceived to be generating a grade, and when students do not view their school work as providing an opportunity for them to acquire valuable skills and knowledge, they may attribute little value to the experience and be less likely

Well, let's see, I'll cheat on the exam, so I will get a good grade, and everything works out. I am happy. The teacher is happy. I am not looking like I am really terrible in school. My parents are happy.

A history teacher supported this perceived emphasis on grades.

A more typical motivation for kids is grades. I try to make the class as interesting as possible, but, ultimately, when they study at the middle school level, it is grades. You can explain how much these skills are meaningful for them in the course of their lifetime, but it really is grades.

Inherently valuable work

Despite the emphasis on grades, our research participants, students, and teachers alike described various assignments that had an inherent value, such that the work in and of itself had many motivating dimensions. Specifically, students valued assignments that (a) had future applications and real-world relevance, (b) were personally meaningful, and (c) included formative and summative assessments that ultimately demanded proof of understanding.

Real-world relevance

For many students, knowing they will build on course content later in the year, in high school, or in life justifies working toward mastery. As one student explained, when students view learning as preparing for the future, they value the work involved. "If [students] saw that [an assignment] had a point and was going to be really useful to them, they probably wouldn't cheat on it. They want to get the benefit from it." Much the same, another student commented that meaningful learning includes

material "I will use in real life, because I know there are a couple of classes where I would never use the stuff in real life." When teachers cannot explain to students how the material will apply to their lives in the future, students are less likely to exert genuine effort to do a good job on the assignment. Speaking to this matter, one student recalled a time when

I asked [my teacher], "When do we need to know this?" and she said, "I don't really know." Then why are we doing it? So, then I don't think I did the homework that night.

Similarly, students said they are willing to complete math assignments, regardless of how boring, if the work lays a foundation for their future work in high school math. In world language courses, students are likely to spend time learning grammar when they see how memorizing these structures will allow them to better communicate with native speakers. One student, for instance, appreciated learning French verb forms because, "If I go to the country speaking that language, like France, or if I go to Quebec, [knowledge of French grammar] would come in handy."

Teachers, too, recognized that when students understand how learning can be used in either their future schooling or in the real world, they are deterred from cheating. As the history teacher remarked, "They realize that if they cheat and they don't do the work here, it is going to catch up with them down the road." The science teacher possessed a similar point of view, noting:

A Spanish teacher explained that it is easy for students to see value in learning a second language. Echoing the sentiment of the student quoted above, she explained that when students return from vacation, they will tell her, "I was in Costa Rica this summer. And I ordered in a restaurant." Or, "I could understand. I had a little conversation with a person in the hotel." Spanish speakers are in their communities as well. As one student said, "I was in church this Sunday, and we were talking to someone there who spoke Spanish."

The very nature of authentic, relevant, "real-world" assignments can discourage cheating. The work students produce for such assignments often has the potential to be unique and unpredictable. Thus, not only are students likely to complete these assignments honestly because they value them, they are also less likely to cheat because the assignment's connection to the real world makes it difficult to misrepresent their work.

Personally meaningful

A key aspect of formal education is helping students "make meaning" from the content they encounter in their courses (Wiggins & McTighe, 2008). That is, teachers cannot assume that the value of the material they present is self-evident to students. Rather, they should try to explicitly connect course content and learning activities to students' personal lives and interests and, thereby, raise student motivation to complete the work honestly. The Goodwin Spanish teacher, for

When students view learning as preparing for the future, they value the work involved.

I think the more students can buy into that process of written work or assignments being a means to their academic improvement then I think that discourages cheating. Part of the challenge ... is helping students to understand why each class is going to be of value to them down the road.

The history teacher added, "[If students] don't see the connection between answering this question and anything they need to know, the chance there will be copying is probably much greater." example, reported that she tries to build connections between students' interests and her subject. Recalling her work with a student who struggled to learn Spanish and saw no need to do so, she remarked:

I have tried to make some personal connections with him to figure out what he likes. He really loves sports, so I will mention [in front of the class that] a friend of mine went one summer and played for a soccer team in Argentina or that someone's mother here at Goodwin, after she graduated from high school, took a year off and was a ski instructor in Chile. They [all] think "Oh, I would like to do that. That would be neat."

Many assignments that students consider meaningful involve the use of technology, likely because new, communicative media have inherent value for young adolescents, who use them daily. Students in world languages express enthusiasm about going to the language lab, even before knowing what the lesson entails. The English teacher shared his personal writing on a Smart Board and communicated assignments to



Young adolescents often find assignments involving technology to be inherently valuable. ${\it photo}$ by Alan Geho

students through e-mail, all of which seemed to increase student engagement. The math teacher noted how even a dry lesson on linear equations can entice students when they see graphs on a computer screen.

They are going to see these points moving around on the screen making the designs, [and so] some kids ... are going to be thinking, "Oh, that is kind of cool."

Students often find collaborative group projects meaningful, as personal relations are a key element in this stage of their social-emotional development (National Middle School Association, 2010). In addition, merely giving students some measure of choice in the work they do can enhance the meaning an assignment has for students (Newman & Whelage, 1993).

Requires proof of understanding

Additionally, students and teachers described how work that demands comprehensive understanding of some topic, always in some form of higher-order thinking, tends to promote engagement and honest work. Furthermore, they noted that the nature of this kind of work itself often precludes cheating. When asked, for instance, to describe assignments that allow little cheating, students responded that it is much more difficult to cheat on work that involves longer, openended responses, especially those that require a student's opinion or draw on personal experience. One student admitted, "The shorter the assignment is [sic], if you have to fill in one word, almost everyone will cheat except one person."

Another student described how completing the personal essay was worthwhile.

The paper was meaningful for me because it wasn't your normal thesis, three-bodied paragraph, conclusion kind of paper. I wrote about a place by my house that I call 'the hideout.' It is a place I go to be myself.

Participants discussed how assigning work without "correct answers" that entails creativity in generating a unique product will rarely result in cheating. In the science classroom, students said they enjoy "becoming scientists" by, for example, designing models and then building bridges of spaghetti to see which designs can withstand the most mass. For another science project, instead of writing a report, students act as chemists hired by a research lab to do practical research, designing a scientific experiment and presenting their findings as though they were communicating with business capitalists, companies, or municipalities that have contracted the lab to do research.

As the science teacher explained, in a class with little cheating, you would see few assignments that could be completed with merely the appearance of being understood.

I think a lot of times cheating happens because students truly do not see the value in doing the work. Oftentimes, they think of an assignment as handing a piece of paper in with words on it. They don't get to the next step where written assignments are proof of understanding ... [as] diagnostic tools for helping students understand what they understand and then to diagnose problems with that understanding and try [to] help them become stronger. I think

the more students can buy into that process of written work or assignments being a means to their academic improvement, [it] discourages cheating.

As this teacher suggested, cheating becomes irrelevant when students appreciate the importance of actually understanding the concepts they must apply to complete an assignment, and formative feedback serves as a means to help them develop skills they will need in the future. For the science teacher, all written work he now assigns targets "proof of understanding," with the primary goal of providing students feedback on their "idea development or their academic skills to help them become better students." And when students appreciate this objective, they seem more likely to complete their work honestly.

Assignments with low incidence of cheating

As the following examples reveal, class work with a low incidence of cheating often blends the various dimensions of inherently valuable course work—they integrate aspects that have authentic, real-world relevance; they are meaningful for students; and they demand proof of understanding.

Personal relevance, student choice, and My Ántonia

Goodwin teachers and students said that giving students increased autonomy for their learning tends to decrease the likelihood of cheating. The English teacher noted that students like to have the freedom to write about themselves and their lives. Students agreed, saying they consider it important to develop the independence to do work on their own.

Along these lines, the English teacher had students compose a paper exploring a personal relationship based on the novel, *My Ántonia*. Rather than imposing a standard five-paragraph essay, the teacher assigned a personal essay allowing students to describe a relationship in their lives and discuss this love for a person, place, pet, or period in their life in light of what they learned about *Á*ntonia's relationship with the land from the text. As the English teacher explained, students found the paper personally meaningful:

This kind of assignment arises from a critical study of a work of literature, but the paper itself is about one's individual experience in one's own life, but the epigraph [a quotation from the text that captures the connection between the novel and the student's life], part of it is a bridge between those two things.

Students are expected to connect the notion of love in the text to their personal lives by selecting a quote from *My Ántonia* to place at the beginning of their essays. The English teacher believed the epigraph made the connection clear to students.

[Taking] something that seems, on the surface, completely irrelevant to their own lives and showing them how it can be relevant is a really, really important goal for me as a teacher of literature. I think seeing the relevance of art, not just literature, but art in one's life and how it is an expression of life, is incredibly valuable to an individual.

As the English teacher noted, this essay also addressed various writing conventions that students worked on all year, such as punctuation and writing organization, but framed the skills in a way that drew explicitly on students' life experiences.

Student collaboration and the trial of Marcus Brutus

In many instances, students find collaborative work, and the associated joint responsibility, meaningful and motivating. According to participants, such collaboration can further enrich the experience when students draw on multiple communicative skills—writing, interviewing, videotaping, and public speaking—to complete the assignment, which also lessens the possibility of cheating, especially when compared with projects that focus solely on writing. Such projects can be further enriched when a public dimension is added—when the objectives include sharing, enlightening, entertaining, or convincing a real-world audience.

At Goodwin, such a collaborative assignment has been enacted in history class, with students becoming practicing attorneys and putting Marcus Brutus on trial for the assassination of Julius Caesar. Testimony comes from lines in the play, and students must collaborate as legal teams to assign parts, develop a strategy, and build a case to convince jurors (a role assumed by parents) that either the murder was justifiable homicide or Marcus Brutus engaged in the unlawful killing of a Roman citizen. Students prepare opening and closing statements, witness testimony, questions for witnesses, and cross-examinations. Students do not want to let team members down by being unprepared.

Throughout the preparation stages, students practice their oral arguments with one another and receive feedback. Students and the history teacher believe such work is "cheat-proof." As the teacher, a licensed attorney, noted, "If they get help from anyone, that is completely fine." In fact, he encouraged students to act like real attorneys and copy others' ideas.

I don't pretend that they can't get information from other sources, because, ultimately, their job is to defend or prosecute that particular person. In the real world that would be the case too. People steal closing arguments all the time.



Peer teaching is a powerful way for students to demonstrate proof of understanding. photo by Alan Geho

Students find meaning in the collaboration this assignment requires, but its inherent value is further enhanced by the unpredictability and spontaneity generated by the need for students to respond to the lines of questioning from opposing attorneys and testimony from various witnesses. None of these aspects of the assignment can be predicted at the outset.

Students as teachers: The Chemical Bonding Wiki Project

As the popular aphorism goes, if you want to really understand something, try teaching it to someone else. To put students in the role of teacher, the science teacher in this study suggested incorporating technology, such as wikis, into course assignments. Wikis themselves are a tool of understanding—a way to teach others who access the wiki—and students generally find such use of contemporary technology very motivating, thereby lessening the likelihood that cheating will occur.

In science class, students collaboratively build a collection of web pages on electrons and chemical bonding called The Chemical Bonding Wiki Project. Each student must independently research ionic bonding, covalent boding, or properties of compounds. To demonstrate proof of understanding, after students complete the individual portions of the wiki, they teach other group members about their area of expertise. The science teacher explained the value of this assignment for students once they had finished their individual portions of the wiki.

This is actually where I really started to feel that the wiki was beneficial, because they had this great teaching tool all of a sudden, where they could have their other two group members look at the work they had done. They could use the text and the images they had assembled to help their teaching. In addition to the fact that they knew they would have to demonstrate an understanding after the project was finished, they knew others were depending on their understanding.

As a group, students presented their wikis to the class. Eventually, everyone took a quiz on all topics covered in the wikis. The wiki itself became a study tool for students, likely better organized than class notes and more interactive than a textbook. One student shared:

You wouldn't want to cheat on that. I am really trying to actually see if what I know can come out to a good grade, because I am really interested in the topic. I kind of want to challenge myself, and the opposite of challenging yourself is cheating.

Implications for practice

As students transition from elementary to middle to high school, teachers increasingly assign greater weight to performance and grades as opposed to understanding and the process of learning (Anderman & Midgley, 2004). In turn, students may tie greater importance to grades than to genuine understanding. Teachers honor students when they design meaningful classroom learning activities and assign work that is tied to the

learner's needs and interests and has enduring value beyond the classroom. When teachers assign work that is busy work—work that requires no proof of understanding, is neither central to the discipline nor meaningful to students, and has no perceived future benefit—students may feel a greater need to complete the work for a grade, whatever that may entail, rather than truly mastering the assigned work. To reduce cheating behavior, teachers cannot work alone.

Students must embrace a learning culture based on genuine mastery of concepts rather than superficial understanding. Students must view classroom learning as critical to future application.

Yet, consistent with the literature, Goodwin students do not believe that their educational system always rewards understanding. Many feel eighth grade is preparing them for high school rather than preparing them with the skills and knowledge they find innately interesting, personally relevant, and applicable to real life. In students' minds, admission to elite educational institutions, professional opportunity, and their future prosperity depends, to a considerable extent, on test scores, grades, and class ranking. Truly mastering course material may or may not overlap with these objectives. Goodwin students and teachers as a whole perceive that they unwillingly participate in a performance-oriented educational system. Starratt (2005) critiques such an inauthentic "playing" of school, in which

[Students] scramble for some scrap of what it is they perceive the teacher expects them to have learned, to parrot out a phrase or definition just in time before the class or the test runs out of time, to guess at a right answer without having any clue as to why this constitutes a right answer. (p. 402)

If educators want students to focus on personal effort, take educational risks, and develop a positive orientation toward learning, classrooms must work against a performance-oriented system. Otherwise, as Starratt (2005) warns, "learners are forced to make believe that they know what they do not know" (p. 402).

As this study suggests, certain types of coursework both engage students in rich learning and reduce the inclination and opportunity for students to cheat. Such work has real-world relevance, has personal meaning for students, and demands proof of understanding. Middle grades educators should explore ways to help students balance the pressure of performing for grades with the desire to engage in authentic learning and

honest academic work. Community dialogue around these issues involving parents, students, educators, and other stakeholders would help address concerns with the performance-oriented aspects of middle grades academic programs. Professional learning communities for teachers would also offer a mechanism for exploring how student work can be designed to (a) integrate authentic, real-world tasks; (b) hold genuine, personal meaning for students; and (c) promote mastery by demanding proof of understanding.

Extensions

Examine the overall program at your school to identify factors that may cause students to focus on grades rather than learning.

Work in teams to create assignments that demonstrate authentic, real-world relevance; hold meaning for students; and demand proof of understanding

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