Lying, Cheating, & Stealing: Strategies for Mitigating Technology-Driven Academic Dishonesty in Collegiate Schools of Business

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LYING, CHEATING, AND STEALING: STRATEGIES FOR MITIGATING TECHNOLOGY-DRIVEN ACADEMIC DISHONESTY IN COLLEGIATE SCHOOLS OF BUSINESS

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ABSTRACT

We summarize contemporary issues related to academic dishonesty and draw from relevant organizational ethics program research to present a dual framework that business educators can use to mitigate technology-driven cheating among their students. Based on a review of the relevant literature, we develop a rationale which identifies three key observations: 1) technology-driven academic dishonesty is pervasive among college business students, 2) there are proactive steps that can be taken to address this problem, and 3) faculty, staff, and administrators in collegiate schools of business can and should do more to mitigate cheating among their students. We first provide an overview concerning the evolution of academic dishonesty and the technological advances that simplify cheating. Next, we propose a conceptual framework and list recommendations for business educators, using both compliance-based and values-based strategies, to reduce the frequency and severity of cheating.

Keywords: Academic Dishonesty, Compliance-Based Strategies, Values-Based Strategies

INTRODUCTION

College students cheat. At least, a significant proportion of them do. In a comprehensive study involving over 80,000 students from eighty-three different universities in the United States and Canada, approximately 20% of students indicated that they had cheated on an exam in the last year, and 33% indicated that they had acquired advance information about test content (McCabe 2005). Frequent occurrences of academic dishonesty extend beyond North America. For example, in a study involving 14,000 Australian students, 27% indicated that they had shared an assignment with another student, and 6% admitted to blatant cheating, such as obtaining a copy of an exam for another student (Bretag et al. 2017). In a cross-cultural comparison study, 30% of Hong Kong business students reported that they had cheated at some point during their university studies (Chapman and Lupton 2004). A survey from four German universities reported 36% of students cheated on a test at least once (Patrzek et al. 2015). In short, academic dishonesty is a global phenomenon, and it is not going away.
The abundance of research on academic dishonesty clearly points out a few things: students feel pressure to pass courses with good grades; students perceive that the positive benefits of cheating exceed the negative consequences of getting caught; and advances in technology have afforded students a greater opportunity to cheat (Boyle, Boyle, and Carpenter 2016). It is also clear that academic dishonesty is pervasive, particularly among business students, and that students do not normally report it. Although codes of conduct can help deter dishonesty, success is contingent upon faculty and administrator engagement, which is generally lacking (Teixeira and Rocha 2010).

In the case of business students, the situation is worse. Research suggests that business students tend to be more unethical in their attitudes and behaviors than non-business students (Smyth and Davis 2004). Business students are also more likely than their peers to engage in academic dishonesty. For example, McCabe and Treviño (1995) found that students in other majors such as education, engineering, science, and medicine were less likely to engage in cheating behaviors than business students. A cross-cultural study involving 7,213 undergraduate business students enrolled in forty-two universities located in the American, European, African, and Oceanian continents found that the average magnitude of copying on exams was an astonishing 62% (Teixeira and Rocha 2010). Business students also appear to have a more lenient attitude toward cheating, justifying it as a creative way to get ahead (Simkin and McLeod 2010). Similarly, Lawson (2004) reported that business students’ inclinations to engage in acts of academic dishonesty were strongly related to their beliefs that unethical behavior in business practice was the norm and that participating in unethical activity might be necessary for career advancement.

Certainly, any concern over academic dishonesty should also be a concern about conduct in business, with research showing that individuals who engaged in academic dishonesty were more likely to participate in unethical misconduct in the workplace (Nonis and Swift 2001; Smyth, Davis, and Kroncke 2009). As Iyer and Eastman noted (2006), “There is an increased need for business schools to address academic dishonesty because what students learn as acceptable behavior in the classroom impacts their expectations of what is acceptable professionally” (101). Against the backdrop of recent ethics and compliance failures at well-known companies like Facebook (e.g., Cambridge Analytica scandal), Purdue Pharma and other opioid drug manufacturers, KPMG (e.g., audit leaders stole confidential information), Wells Fargo (e.g., fraudulent accounts), Mobile TeleSystems (e.g., bribery) and others (see: Jaeger 2019), it is evident that business educators must play a vital role in shaping the ethical conduct of future business leaders.

There is significant research investigating the role of technology and academic dishonesty. Unfortunately, empirical evidence suggests a link between the use of internet technology and the deterioration of academic integrity (Eret and Ok 2014). The situation is exacerbated by faculty and administrators who are generally unaware of the various technological advances that make it easier for students to cheat. In addition, previous research largely emphasized a singular values-based approach without detailed recommendations to deal with these technological changes. As such, the purpose of this article is twofold. First, we provide an overview concerning the various ways in which the evolution of technology has further enabled academic dishonesty. Next, we detail a two-pronged approach for business educators to utilize for improving the ethical conduct and decision-making of their students. Adapted from organizational ethics program research, we propose both compliance-based and values-based strategies from which we derive specific technologically relevant recommendations to lessen the frequency and severity of academic
dishonesty. In our proposed framework, the compliance strategies are meant to act as a necessary, fair, and effective deterrent by strengthening rules and enforcement. The integration of values-based strategies is intended to improve awareness, shape culture, and foster long-term resolve to approach academic and future management-related decisions with integrity.

**ACADEMIC DISHONESTY**

Prescott (1989) defined academic dishonesty as “fraudulent behavior involving some form of deception whereby one’s work or the work of others is misrepresented” (285). Ethical issues aside, there is practical and positive utility that results from lessening academic dishonesty. Preserving academic integrity helps to promote skill development and employability. Assisting students to develop technical proficiency in the disciplines of business and core competencies like oral and written communication skills, critical thinking, and analytical skills is essential to help students be “job ready” in a competitive and demanding labor market. Students who engage in academic dishonesty limit opportunities to gain knowledge, refine important skills, and bridge the gap between learning and working (Sotiriadou, Logan, Daly, and Guest 2020).

Unfortunately, there is also utility in academic dishonesty. Students who cheat tend to be unfairly awarded higher grades than their non-cheating peers (Finchilescu and Cooper 2018). In addition, business students who witness widespread cheating may develop the belief that cheating is normative, and they might be more inclined to engage in academic dishonesty themselves (O’Rourke et al. 2010). Finally, cheating that goes unchecked creates perceptions of a lack of fairness, as students observe their peers engaging in cheating without consequence, and research demonstrates that unfairness leads to increased cheating and erosion of the legitimacy of schools (Houser, Vetter, and Winter 2012). There are multiple reasons why business educators should be concerned with academic dishonesty, but the task has become more daunting for educators because technological advancements have facilitated additional opportunities for cheating.

**Technology-Driven Challenges**

Advances in technology and internet usage over the past twenty years have resulted in the proliferation of websites dedicated to helping students. As with other technologies, students can leverage these evolving websites in ways that are legitimately encouraged or for more nefarious purposes like the unauthorized sharing of copyrighted exam content. Or, sometimes they are used in ways that are ethically “gray” and not clearly defined by obvious social boundaries and institutional rules. Emerging business models complicate the decision calculus through increased anonymity of perpetrators and legitimizing academic dishonesty through formal economic transactions on established platforms.

Regardless of their creators’ intentions, online study tools like Course Hero, Chegg, Quizlet, and “paper mill” services such as 123HelpMe, Essay Town, and Research Papers Online simplify the cheating process. The sheer number of these websites and their rate of change prevent business educators from keeping pace. A thorough understanding of the current state of technology-driven academic honesty requires an updated review of some of these major types of student-focused sites and how students are utilizing them to commit academic dishonesty.
The online methods currently available for cheating are numerous and varied—including purchasing completed papers, Googling online quiz questions for answers, contracting for someone else to complete an online class, peer-to-peer file sharing sites, and paper mills (Mills 2010). Some of the websites described in this review monetize their content through clever business models such as auction bidding, informal sharing economies, and the sharing of syndicated advertising revenue. Online services are so pervasive that there are now aggregation services that rank and review sites to help match students to the services most likely to meet their needs (Awdry 2020).

Peer-sharing is a platform model that enables students to contribute toward and benefit from the site. The peer-sharing model has become popular for students because of the low monetary cost of participation. These sites typically allow students to upload their documents to gain credits, which they then spend to download other materials or services. In the academic world, peer-sharing sites host a variety of content including presentations, lecture notes, assignments, test banks, and course content (Rogerson 2014; Rogerson and Basanta 2016). Importantly, the peer-to-peer model provides a level of anonymity that did not exist prior to such technological advances.

Quizlet is a popular peer-to-peer sharing site. This website positions itself as an online study tool specializing in flashcards. It is available through a standard internet browser and through a mobile application. The platform offers various ways to facilitate learning, such as games, tests, word lists, and flashcards. Some instructors utilize Quizlet by providing content on the platform so that students can study outside of class. On the positive side, research suggests that providing accessible content in these formats can help students study outside the classroom (Jackson III 2015) and improve student outcomes and learning as students leverage these platforms in their study practices (Dizon 2016). Despite the potential benefits, crowdsourced learning platforms like Quizlet can also become resources for committing academic dishonesty through unauthorized sharing of content.

Unauthorized sharing of exam content is the primary way that students can use Quizlet to cheat. Although the platform allows students to post their original content to help them study, some students share exam questions and answers from their courses for others to gain an easy and unauthorized edge. Course instructors frequently find their entire exams posted on the website (McKenzie 2018). A straightforward way to find exam answers on sites like Quizlet or Chegg is to search specific phrases utilized in exam questions (Golden and Kohlbeck 2020). The same approach can be used by students to Google exam answers while taking online exams using a separate web browser tab.

The company behind Quizlet has made some effort to monitor its website to prevent it from being used for nefarious purposes. For example, it publishes community guidelines that prohibit posting copyrighted content. The company will also remove content that other users identify as negatively affecting a course. Additionally, the site publishes an honor code that encourages students to use the website appropriately (McKenzie 2018). And when requested by the copyright owner through the submission of an online form, the company will remove content that was posted without the author’s permission. Still, the usage of these crowdsourced sites for academic dishonesty remains prevalent. For example, Golden and Kohlbeck (2020) found that students scored an 80.4% average on test questions from the test bank. However, when instructors paraphrased the same questions using different words (so students could not easily find them
online), they scored a 69.1%, suggesting students utilize the online resource for academic dishonesty.

Peer-to-peer models typically offer both free and paid service tiers to monetize their platforms. The paid service allows students to directly purchase materials and tutors, whereas the free service requires students to contribute to the platform to gain access to more material. The platform leverages the efforts of students by granting “unlocks” when they contribute new content. Contributions include posting content, evaluating others’ content, and sharing the more valuable content with other members. These unlocks grant access to other content and to online tutors to answer questions. Students also earn additional credits when they refer a friend to join the platform (Course Hero 2020).

Students today have near instant access to seemingly limitless peer-contributed resources through their phones. Chegg is one such website that provides quick access to peer-contributed content that grays the boundaries between acceptable and non-acceptable sources of academic “help.” Chegg’s stated vision is “to improve the overall return on investment in education by helping students learn more in less time and at a lower cost” (Chegg 2021). Chegg claims to reduce the time and energy required to learn by facilitating an exchange of classroom specific information between peers, which can often lead to cheating.

In contrast to peer-sharing sites, bidding sites often focus on services rather than content. For instance, bidding sites facilitate transactions between student buyers and others willing to sell their time to edit assignments or even write entire papers from scratch. Students post the requirements they are looking to fulfill along with their assignment deadlines. Contributors then offer a timeline and quality estimate, along with a price. The bidding site matches buyers and contributors to facilitate the transaction (Lancaster and Clarke 2015).

Similarly, in the context of academic dishonesty, ghostwriting occurs when a student compensates a writer to create academic work attributed to the student. Some studies have suggested that ghostwriting is not as prevalent as other forms of academic dishonesty. A 2011 survey showed that 3.54% of undergraduates and 1.62% of graduate students admitted to submitting work that was created by someone else (Schrimsher, Northrup, and Alverson 2011). In another survey, 15.31% of faculty said that they had seen papers secured from sample essay websites (McCabe, Treviño, and Butterfield 2012).

Another method of online cheating comes in the form of Copying Answers using Multiple Existences Online (CAMEO). This approach is used in massive open online courses (MOOCs). Students use CAMEO through users who create harvester accounts that collect the correct answers to exams. These same users then create a separate account where they submit answers. The CAMEO approach operates like a macro, where computer automation completes all the requirements of a MOOC course by utilizing a comparison account. Using CAMEO, a student can complete an entire MOOC course in a matter of seconds. Research has indicated that 1.3% of awarded certificates were to CAMEO users. For users with twenty or more certificates, 25% of certificates were earned using CAMEO (Northcutt, Ho, and Chuang 2016).
One of the central ways that technology has enabled academic dishonesty to thrive is by changing the decision calculus of academic dishonesty (Colnerud and Rosander 2009). Emerging business models complicate the decision calculus by facilitating anonymity of perpetrators, and by legitimizing academic dishonesty through formal economic transactions on established platforms. Before the advent of peer-to-peer sharing websites, cheating students faced a market problem—finding another student willing to engage in an exchange. Finding like-minded students limits academic dishonesty because of the potentially harmful social implications of unsuccessfully finding another student with whom to conspire (Dixon and George 2020). Furthermore, the timing problem before the evolution of peer-to-peer networks meant that students looking for nefarious sources of helpful information faced obstacles of finding relevant information from a previous student or a test bank (Rogerson and Basanta 2016). Peer-to-peer networks helped remove this obstacle because of the storage and searchability of previous work and anonymous profiles. By facilitating anonymity, these emerging platforms weaken social processes that stood as a barrier to academic dishonesty in the past.

Online tools also enable academic dishonesty to thrive by legitimating previously illegitimate behaviors in pursuing academic dishonesty. Before these online networks, an individual would need to engage in some form of illegitimate effort, whether to steal the completed assignment, engage in social exchange, or leverage access through social pressure. Each of these approaches for gaining access to the information would have been illegitimate efforts. Conversely, the sophistication of the peer-to-peer model is that it supplements the student’s efforts with legitimacy. The business model legitimizes the students’ actions through either a secure credit card transaction for consuming content or by granting credit unlocks for sharing content (Dixon and George 2020).

A legitimate effort is a distinguishing feature between genuine learning and academic dishonesty. When students seek academic outcomes without the expected effort, they engage in academic dishonesty. The nefarious nature of peer-to-peer networks is they pave an illegitimate path to a legitimated result. For example, a student may choose to upload, share, and evaluate the content on a peer-to-peer site related to finance to access information for their human resources course. Because the sites legitimate their effort, students may believe that they have earned the outcome.

In summary, the evolution of technology exacerbates the already pervasive problem of academic dishonesty. These boundaries include the role of anonymity and the legitimizing of non-academic effort for academic ends.

**ACADEMIC DISHONESTY MITIGATION STRATEGIES**

While there are shifting incentives and consequences associated with student cheating in the digital age, there is a considerable body of work exploring approaches for minimizing academic misconduct. Work by McCabe and colleagues has pointed to organization-level solutions such as honor codes, but even more, they noted that, “cheating can be most effectively addressed at the institutional level...” However, at an even broader level, academic institutions are advised to consider ways of creating an ‘ethical community’ on their campuses” (McCabe, Treviño, and
Butterfield 2001, 228), and scholars have gone so far as to recommend holistic organizational approaches such as building cultures of integrity as the strategy for addressing misconduct (Gallant and Drinan 2006; Gallant and Kalichman 2011; McCabe, Treviño, and Butterfield 2012; Whitley and Keith-Spiegel 2001). Despite broad acknowledgement of academic dishonesty as a systematic problem, the existing literature tends to present approaches to academic integrity as a dichotomy of competing options—of values-based approaches versus compliance-based approaches. Thus, we highlight research in ethics compliance programs to clarify that approaches do not require an either/or solution. Specifically, we propose the approach of building values-based cultures supplemented by compliance-based features.

In presenting this approach, we draw from research on organizational ethics programs (Weaver and Treviño 1999). This established body of research proposes the complementary benefits of values-based and compliance-based ethics programs as the best means of promoting ethics in organizations, and we present that view as an ideal approach to promoting academic integrity in the digital age. In particular, we draw upon research demonstrating the complementary (both additive and interactive) nature of values- and compliance-based approaches for improving ethical conduct in the workplace, recommending the adaptation of these approaches to the academic domain. Because of the relevance of these theories in the established organizational ethics program literature, we believe that business educators will find these approaches compelling for implementation into their classrooms.

Kelman (1958) presented one of the first distinctions in approaches to organizational compliance programs—highlighting external contingencies as one way to improve rule following, versus self-regulatory, or internal, processes defined by identification and internalization. Tyler and Blader (2005) further developed this approach, contrasting the effectiveness of the compliance approach—what they call command-and-control—against a self-regulatory approach that is intrinsically motivated by social value judgments of the organization as being congruent with an employee’s moral values. Research in organizational ethics programs has been more explicit in separating programs into two distinct approaches, one—the compliance-based approach—emphasizes compliance with rules through monitoring and punishment for misconduct, and the other—the values-based approach—emphasizes shared values aimed at developing organizational norms for appropriate behavior (Weaver and Treviño 1999).

These program orientation distinctions followed with research examining the efficacy of each approach, often noting how a values-based approach was better than a compliance-based approach (Tyler et al. 2017). Indeed, the unique contributions in ethics program orientations have varied, but they have also varied in how the outcomes are assessed—such as rule-following versus rule-breaking, employee perceptions of ethics programs, and short- versus long-term program outcomes—and studies have demonstrated that each approach accounts for unique variance in the outcomes. That is, each approach contributes uniquely to the outcomes—even if a values-based approach is comparatively more effective. In other words, the two approaches can coexist and even operate such that they are complementary (Treviño et al. 1999; Weaver and Treviño 1999); however, given the stronger relationship between values-based program and important ethics outcomes, the program emphasis should be values-based with compliance-based components that support the overarching values-based approach.

The Rationale for a Compliance-Based Approach
The compliance-based approach is grounded in rational choice theories to explain individual motivators that discourage academic misconduct, where compliance results from imposing costs for misconduct. From a rational choice perspective, unethical behavior results from a cost-benefit tradeoff where people engage in unethical or illegal activity when the benefits are likely to outweigh the costs. Compliance-based approaches regulate social interaction by establishing clarity about the rules of conduct, monitoring behavior, and applying consequences for engaging in inappropriate conduct (Gibbs 1975). This approach considers how actors calculate the cost-benefit analyses that weigh tangible rewards (i.e., grades) against both tangible consequences and social influence stemming from less tangible outcomes, such as acceptance resulting from compliance with social norms. When the boundaries around acceptable and unacceptable behavior are made clear, individuals can more effectively evaluate the consequences of academic dishonesty.

In the academic domain, while results from the effectiveness of social factors (e.g., peer approval) and exchange factors (e.g., academic sanctions for cheating) vary (McCabe and Treviño 1997; Vandehey, Diekhoff, and LaBeff 2007), these factors collectively impact the effectiveness of compliance-based approaches. For example, the presence of an honor code alone may not reduce academic dishonesty (Vandehey et al. 2007). Still, clear articulation, support, and enforcement of standards lower the likelihood of academic dishonesty (McCabe and Treviño 2002). Clearly articulating specific unacceptable behaviors raises awareness of social norms disapproving academic misconduct, making it harder for students to rationalize and justify dishonest behavior (McCabe and Treviño 2002). It also highlights student responsibility. Research has suggested that individuals must integrate responsibility to activate norms to influence their behaviors (Schwartz and McGuire 1968).

Even more relevant for faculty’s role in addressing academic dishonesty, clearly articulated and supported codes result in higher faculty willingness to report (McCabe and Treviño 1993). Beyond social influence factors, clearly articulated policies also affect rational choice with increased clarity on the cost of inappropriate behavior—particularly when facing likely sanctions. Effective compliance-based approaches must shape student perception, as students consistently note perceptions of punitive measures as the most effective deterrents (Diekhoff et al. 1996; Vandehey et al. 2007). Part of the benefit of compliance-based approaches is only symbolic because compliance-based approaches have only marginal reductions in unacceptable behavior (Pratt et al. 2006). Symbols are important, however, because the perceived legitimacy of the organization can depend on universities consistently executing compliance-based approaches (Sims 2009).

The Rationale for a Values-Based Approach

The rules and punishment established through a compliance-based approach are essential components of a broad organizational approach because they develop procedures to address unacceptable conduct. To the extent rules and consequences affect behavior, they are useful and support a compliance approach, but they do not inculcate values or promote integrity. Indeed, the many cases of corruption cited previously occurred in highly regulated business sectors (e.g., banking and pharmaceuticals), suggesting that rules alone are insufficient to promote honesty. Even if it were possible to create a rule for every misconduct contingency and every technology-enabled cheat, enforcement would be dubious. In addition, educators providing business students
with structure and a set of clearly defined rules serves to deter misconduct, rather than develop student integrity. Ethical and unethical conduct are not two sides of the same coin; a reduction in cheating does not equal an increase in integrity. Addressing dishonesty through compliance pursues the near-term goal of deterring cheating but does not teach values that promote ethical conduct and integrity over the long-term. Therefore, it is important for business schools to also adopt values-based approaches that complement the compliance-based structures (Tyler, Dienhart, and Thomas 2008).

According to Hartman, DesJardins, and MacDonald (2017, 119), a values-based culture is a “culture in which conformity to a statement of values and principles rather than simple obedience to laws and regulations is the prevailing model for ethical behavior.” A values-based approach emphasizes the importance of fundamental values such as integrity, trust, and accountability. In contrast to compliance-based approaches, which emphasize immediate consequences and clarity about policies, values-based approaches focus on students’ character and long-term beliefs about themselves and the world. While intermediate discussions about values and academic dishonesty may influence behavior, it is less likely to have a lasting impact on students than indoctrinating students in a values-based culture. Values-based approaches help students make ethical decisions because of their value systems rather than because an organization’s rules require it (Paine 1994).

Whitley and Keith Spiegel (2001) proposed institutional integrity, a learning-oriented environment, a values-based curriculum, and an honor code as four critical elements of a values-based approach. Institutional integrity demonstrates the type of honesty and transparency expected of students because institutional invitations to integrity must come from a place of respectability to have an impact. A learning-oriented environment moves the focus of education away from grade-based outcomes and toward the importance of student development; thus, it emphasizes the means rather than the ends (e.g., Pavela and McCabe 1993). A values-based curriculum encourages students to see their own personal values as part of their academic development and the application of such an important outcome. An institutional honor code provides a clear statement of the organization’s values and its commitment to academic integrity, thereby providing a guidepost for both teachers and students. Therefore, creating a values-based approach is essential to implementing norms and beliefs, and in establishing a supportive culture that transcends institutional rules alone.

Paine (1994) has argued that prevention of misconduct through compliance-based approaches is necessary to create a values-based culture. As Paine conceptualized, the values-and-integrity approach to ethics management integrates a concern for rules and regulations with an emphasis on managerial responsibility for ethical behavior. This same approach can be adapted for academia. Although the specific strategies for building a values-based culture might vary from institution to institution, educators should endeavor to define both the written (i.e., compliance-based culture) and unwritten (i.e., values-based culture) rules of behavior and decision-making for the university’s key stakeholders. The goal is to have business students engage with and adopt the organization’s values as part of their own guiding principles.

Organizations that want to build values-based cultures to promote ethical conduct should consider the importance of procedural fairness, as stressed by Tyler et al. (2008). In other words, values-based organizations need to make sure stakeholders perceive the processes used to determine outcomes as impartial. For example, the procedures should be open, objective, and fact-
based, and the policies should be consistently applied. Notably, the research of Tyler et al. (2008) has also suggested that a values-based approach can have a highly significant influence on voluntary compliance with organizational rules and policies. In a sample of American workers, the authors compared the relative influence of perceived “risk” (i.e., “fear of punishment for rule-breaking”) with values-based motivating factors to determine their relative effect on voluntary adherence to company rules. Tyler et al. (2008) used a regression analysis that indicated that the two combined factors explained 87% of the variance in rule following. Similarly, it is first essential for students to view institutional policies as congruent with their own moral values in an academic context. Second, students are more likely to believe that institutional policies are legitimate if they are perceived to be consistently and fairly applied.

By building a values-based culture, students should start to choose compliance behaviors. In turn, students that choose not to engage in academic dishonesty should begin to model these behaviors to their peers. By doing this, vicarious learning will occur, and through a contagion effect, students should begin instilling these values into their own lives. It is also important for business educators to positively reinforce their students’ behaviors when consistent with the organizational values.

RECOMMENDATIONS

Whether driven by the educator, the program, or the institution, the basic application of compliance-based approaches requires 1) a clear definition of the rules of acceptable conduct, 2) regular monitoring of student behavior (to catch misconduct), and 3) fair and consistent responses to unacceptable behavior. The blurring of acceptable lines through the proliferation of online study sites has made compliance-based approaches even more important. Compliance approaches provide greater specificity to provide the support necessary to facilitate ethical decision-making and make more informed decisions.

Whereas compliance-based approaches provide short-term incentives for appropriate behavior, values-based approaches, while more abstract and slower to implement, result in long-term changes regarding attitude and the ability to act appropriately when the rules are not well defined. Values-based cultures should emphasize 1) consistent communication with students, 2) model exemplary behavior on the part of educators, and 3) emphasize learning processes more than quantitative outcomes.

It is worth noting that some recommendations are neither solely compliance-based or solely values-based; some may fit into both categories. For instance, defining a set of penalties for students found guilty of plagiarism is clearly a compliance-based approach to lessening academic dishonesty. However, creating a code of conduct or honor code that defines both the values embraced by the institution as well as the specific rules of conduct within that institution is a strategy that could be categorized as both compliance- and values-based. From a practical standpoint, it is more important to understand that the two approaches should be complementary than it is to try to neatly define an approach as clearly either/or.

Based upon this theoretical foundation, we next offer pragmatic recommendations that business educators can utilize to build compliance- and values-based organizational cultures. In an increasingly complex educational environment driven by technological developments, we hope
that these specific guidelines can improve awareness and long-term resolve on the part of students to approach academic and future management-related decisions with integrity.

Define the Rules

Business educators can start by clearly defining the rules of acceptable behavior in their classroom and at the university. Clearly defining the boundaries assists students as they navigate the graying of boundaries arising from emerging technologies. Educators can begin by reviewing the university’s academic integrity policies, update the syllabus to include details that define inappropriate behavior, and then review it with students in the classroom. Also, be sure to have clearly defined consequences that let students better weigh the potential punitive costs of committing academic dishonesty. Whereas a values-based approach allows educators to be more abstract with expectations (e.g., “Be honest with your work”), the complementary compliance-based approach will require more specific rules for certain technology-related situations. Passive or ambiguous approaches to academic dishonesty are not likely to provide the support needed to help students make ethical decisions in these gray-area instances. Instead, acknowledge the technology upfront and guide acceptable usage of this technology in the classroom.

For instance, is group work allowed, and in what capacity? Can students talk about their assignments with one another? Can notes be shared, or will this result in a “zero” and the filing of an academic misconduct report? How can Quizlet or other similar sites be used, if at all? For example, educators should request that students inform them if they plan to use Quizlet or other similar sites; they should give the instructor a courtesy alert in advance to avoid any misunderstandings. Students should make their flashcards private, not public, so that only they can see them. Students should also be aware that they must never post content that they do not own without permission, and that they should never post questions and answers from exams. Review proper citation expectations with the students.

Communicating these policies verbally and in writing to students is more likely to result in compliance and provide the foundation for a lasting values-based culture (Chirikov et al. 2020). Failure to clearly define the rules and the consequences for breaking those rules leaves students vulnerable to the graying of boundaries from emerging technologies. Without a clear and vibrant voice for academic integrity, students are unlikely to hear the boundaries drawn. The mixed messages of anonymity and legitimacy coming from emerging technologies will likely result in the students adopting practices that are inconsistent with instructor expectations and damaging to the instructor's ability to move toward a solid values-based culture.

Monitor Student Behavior

When students engage in academic dishonesty through technology, they may feel insulated from consequences because of anonymity and the asynchronous space from the classroom and standards. Because there is little risk of repercussions, students may begin to believe that such behavior is excusable. Start monitoring your students’ behavior regularly. Investigate suspicious behavior, such as similar essay answers. Search engines like Google help track down the sources of borrowed, purchased, or stolen content. Anti-plagiarism software like Turnitin is available through many university campuses and acts as a good deterrent and a monitor of potential
plagiarism. Anti-plagiarism software can also help highlight instances of genuinely accidental forms of plagiarism, such as improper use of citations.

When educators proctor their exams, it is likely to communicate the importance of academic integrity. If that is not an option, consider other monitoring deterrents, such as third-party live proctoring services or automated monitoring services that “lock down” a student’s browser while recording their testing session taken at home. Students may act with greater integrity by knowing the session is recorded and that it can be accessed later by the instructor. Also, automated proctoring can produce less anxiety for students than what might be caused by a live proctor watching them through a webcam.

Consider running an audit on class exams once a semester. For instance, highlight questions and answers from the exams and paste them into a search engine. If questions and answers are readily available online, students are likely to find and use them easily. Test bank answers are more likely to be available online when compared to original questions written by individual instructors. Sites such as Quizlet provide forms that copyright owners can fill out to have their unauthorized content removed within a matter of hours or days.

Monitoring your students’ behavior can assist students in overcoming the ambiguity posed by emerging technologies. Monitoring behaviors connects students’ behavior outside the classroom to the standards set inside the classroom, instilling accountability to assist students in dealing with anonymity or the isolated space of peer-to-peer networks.

Appropriately Respond to Unacceptable Behavior

When suspected academic dishonesty is found, follow through with applying university policies and more-specific classroom policies. Accountability might mean reporting questionable behavior through a formal process, collecting necessary information, and investigating problematic situations. Empirical research indicates that faculty with strong attitudes and behaviors to limit academic dishonesty affect student behavior and attitudes (Chirikov et al. 2020). Turning a blind eye to a suspected problem will only further promote the problem; consistent and equitable enforcement of rules is essential to creating and maintaining a values-based culture. Compliance-based approaches can be considered the table-stakes of establishing a value-based culture. They serve as a necessary set of symbols, supports, and reminders of academic integrity, and they assist students in making positive choices.

Notwithstanding their importance, a compliance-based approach alone focuses only on applying general principles to known situations. It does little to assist students in forming their principles to deal with currently unknown problems. In this case, a values-based approach helps students develop a sense of values to deal with unanticipated situations.

Communicate Your Values

Compliance-based approaches require business educators to communicate their rules. Values-based approaches require educators to communicate the core values they are trying to instill in their classroom, program, and institution. Therefore, educators should talk about academic dishonesty and all the investments made to create a values-based culture. For instance, students often do not consider the time that business educators put into circumventing cheating by
writing new exams. They might not know that many instructors choose not to share exam answers with students out of fear of them ending up on the Internet. It can also help to talk about how unfair cheating is to the students who do not engage in academic dishonesty. It is the right of their peers to earn a fair grade by playing by the rules.

Stories can be a powerful way to create and maintain a values-based culture. If business educators encounter instances of cheating, they can talk about them in the classroom. It is not necessary to name offenders for the stories to be effective. These stories can sometimes take on a legendary quality as the students pass them on to one another and reinforce a culture where academic dishonesty is not acceptable. Students will be less likely to repeat the same mistakes when they perceive a high level of fairness regarding student sanctions. For instance, while reviewing the syllabus on the first day, it might be helpful for instructors to tell a story about how they have dealt with past students who violated the course policy on acceptable use of Quizlet flashcards. This will help to define the rules and consequences, emphasize the values that are desired, and allow the instructor to model the seriousness of both.

Finally, creating a values-based culture requires both educators and students to create an environment where individuals are less likely to cheat. It can be critical for educators to encourage students to act with integrity in their education and challenge them to encourage their peers. Here are some questions that might be helpful to ask business students:

- What are the consequences that cheating or not cheating creates for them and others?
- Do they have a duty to play by the rules, and do others have the right to require this from them?
- What kind of person do they want to be when they graduate? What is most important to them at the end of the day?

Organizational cultures are often the result of consistently communicating and acting on the values of the organization. Schools that develop and implement an honor code are associated with less cheating and more peer-based accountability to reduce academic dishonesty (McCabe et al. 2001). Communicate your values and tell stories to reinforce those values; students benefit from associating with an institutional culture that can inform their own values. As they associate with an integrity-based culture, they are likely to assimilate to those values, form their own complementary value system, and have more tools with which to make informed academic decisions.

Model the Desired Behavior

Business educators should hold themselves to a high standard to create a values-based culture. For instance, if business educators are not holding students accountable for cheating by proactively pursuing it, they are not modeling that principled behavior is a high priority. It is unlikely that students will hold values in high esteem if educators do not model them. For instance, if educators are turning a blind eye to students who are Googling answers to exam questions, they are sending a message that the ends justify the means and that good grades are more important than learning. Also, when business educators demonstrate a commitment to accountability, it sends
a strong signal to their students. Procedures should be open, objective, and fact-based, and consistently applied. Creating a value-based culture requires that business educators take care and take time to act in ways that demonstrate the ideal version of desirable values. Personal stories that exhibit ethical behavior also assist in creating and maintaining a values-based culture.

**Emphasize the Learning Process**

Focusing more on learning processes rather than measurable outcomes, like grades, might be challenging for some business colleges because business managers are used to quantifiable objectives and focusing on the means necessary to achieve those ends. Thus, it is easy to encourage business students to explicitly or implicitly focus on grades and any means to achieve those ends, including cheating through the use of online technologies. It is important that instructors not let their students overlook the importance of focusing on the process of learning itself. Grades are just one measurement, but they mean little if they do not truly reflect the knowledge learned. Emphasizing the learning process is essential to helping students navigate the gray boundaries of education within evolving technology. Students may believe that searching out solutions online from previous classes is an acceptable and effective learning process, even when it is not. Emphasizing what is and what is not appropriate in the learning process can assist students in delineating that it is not just the academic outcome but also the methods used to reach that outcome that matter.

**CONCLUSION**

Academic dishonesty is a globally pervasive problem on college campuses. Although the practice is not limited to business schools, research suggests that business students may be more likely to pass it off as acceptable behavior and adopt similar tactics to get ahead after graduating and entering the workforce. Although academic cheating is not new, advances in online services targeted at college students contribute to a new environment where cheating is much easier for students, but more challenging for educators who want to curb these practices. This article reasons that more action on the part of business educators is needed to reduce the quantity and severity of academic dishonesty among their students.

To support business faculty in their efforts to reduce instances of cheating, this paper makes two unique contributions. To create better awareness and understanding, it provides a description of current online classroom technology that students have at their disposal. While many of these resources can be used appropriately as learning tools, this review also describes the various ways these online resources can be utilized for nefarious purposes. Next, the paper presents a framework that business educators can use to address the problem of technology-driven academic dishonesty. Drawing upon compliance- and values-based approaches for improving ethical conduct in the workplace, we adapt these approaches to the academic realm. In particular, we propose that compliance strategies can act as a necessary, fair, and effective deterrent by strengthening rules and enforcement. Going further, we suggest that values-based strategies can improve awareness, culture, and long-term resolve to approach academic and future management-related decisions with integrity.

In practice, compliance strategies should clearly define the rules of acceptable conduct, consistently monitor student behavior, and fairly and consistently respond to unacceptable
behavior. Where possible, compliance-based definitions should be applicable to specific technologies that are likely to create confusion, such as flashcard sites and peer-sharing sites. In turn, values-based cultures should emphasize consistent communication with students, modeling ideal behavior on the part of educators, and emphasize the value of the learning processes. Whereas compliance-based approaches are good short-term deterrents for specific scenarios, values-based approaches help guide these same students’ decision-making down the desired path when emerging technologies no longer apply neatly to those well-defined rules. Collectively, this comprehensive framework can help shape the ethical behavior and decision-making of business students in order to mitigate the prevalence of academic dishonesty. It is also recommended that future research should empirically test the effectiveness of the compliance/values framework proposed in this article, particularly as an attempt to mitigate technology-driven academic dishonesty.
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