

Academic Honesty During the 2020 COVID-19 Shutdown: Perspectives from Instructors and Students in Higher Education

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The higher education Spring semester of 2020 was heavily impacted by stakeholders' calls for a complete shutdown of in-person gatherings. This call to action forced instructors and students to transition from face-to-face education to the virtual, online classroom. Institutions were given a few days to 2 weeks for this transition. During this crisis, 14 faculty from across Georgia formed a research consortium to investigate the perspectives of instructors and students on multiple topics, including academic honesty. As part of a mixed method approach, surveys were distributed via email across the university system, which included both quantitative items and narrative, open-text response options. The results of thematic analysis and frequencies revealed the application of well-documented strategies from instructors for reducing the occurrence of cheating during assessments but also revealed new and challenging tactics of cheating by students. These perspectives from the instructors and students provide a rich description of how the shutdown impacted academic honesty in the higher education community. The authors detail these participant narratives and provide information on strategies to encourage academic honesty that move beyond creating more tests, such as revision, randomizing items, and proctoring to catch cheaters in the act.

During the Spring of 2020, safety strategies to reduce the spread of the COVID-19 virus challenged higher education institutions' teaching and learning methods. The most common response by on-ground colleges and universities was to convert the face-to-face courses to online formats. While this transition was a massive undertaking for administrators, instructors, and students, the intent was to maintain the same academic excellence and rigor stakeholders expect while facilitating student success. During this semester, the Centers for Excellence in Teaching and Learning across the state of Georgia facilitated the organization of a consortium of educational researchers to investigate the local instructor and student perspectives of this transitional semester. Fourteen faculty from across the state system, utilizing a modified Delphi technique, participated in the creation, distribution, and collection of data answering the question of the perceptions of instructors and students of the emergency transition to remote learning (ETRL). Within this larger study, three researchers dedicated effort to analyzing items identifying the prevalence and perceptions of academic honesty among students and instructors.

Background

Academic honesty, as a term associated with online higher education, is first identified by Herkert and Cartwright (1998) in their article on the social implications of technology. Coincidentally, with the expansion of persistent social integration of the internet, the number of research studies on academic honesty has increased. Of 668 articles found from 1998 to the

present, 399 were published after 2017, demonstrating the relevance of the topic and growing concern by stakeholders.

Evolution of Studies in Academic Honesty

Since the introduction of the concept of academic honesty in the technological era, the research questions have evolved. An early literature review encompassing 1991–1998 by Ercegovic and Richardson (2004) identified research articles prioritizing the identification of acts of plagiarism, the prevalence of cheating among college students, and attempts by faculty to curb academic dishonesty. Through the 21st century, research continued on the prevalence of academic dishonesty but began to include strategies to combat cheating (Kleinman, 2005). Another area of research interest included studies investigating the most common characteristics and traits of the typical participant engaging in academic dishonesty (Ives et al., 2017; Underwood & Szabo, 2003). Other methods of cheating identified in the literature include the use of a variety of unapproved resources during test taking, cutting and pasting of unoriginal content on assignments, a lack of citations, copying peer work, and the retail business of scholarly writing (Bazoukis et al., 2020; Ives et al., 2017). Formal terms for these actions include plagiarism, theft, and fraudulence (Akbulut et al., 2008; Karim et al., 2009; Koul et al., 2009; Măță et al., 2020; Şendağ et al., 2012). While most students recognize that copying others' work, ghosting or paying someone to pretend to be the student, and contract cheating, a term used for purchasing papers, is wrong, several studies have

revealed cheating occurs anywhere between 30% to 95% of the time depending on the behaviors being targeted (Baran & Jonason, 2020; Ives & Giukin, 2019; Mățã et al., 2020; Patrzek et al., 2015; Stiles et al., 2018; Ternes et al., 2019). Aside from these studies highlighting the occurrence, frequency, or type of academic dishonesty, other studies have sought to identify environmental factors associated with academic honesty. These environmental factors identified in the literature include the situational context of the classroom and motivational factors impacting the student (Park, 2020; Pulfrey et al., 2019; Rholetter, 2019).

More recently, due to the COVID-19 pandemic, global interest in academic honesty within higher education in relation to online learning and assessment has increased irrespective of discipline. A brief literature review from 2020 to 2021 identified 19 research articles with findings related to academic honesty, integrity, and education ethics specific to the ETRL in higher education from multiple perspectives. One perspective addressed the increased availability and student use of online assistance options (Lancaster & Cotarlan, 2021). Hill et al. (2021) identified roughly 30 million additional assignment and exam assistance websites that came online since 2020. Alternately, Mortati and Carmel (2021) highlighted that software commonly used to identify online assistance during exams erroneously flagged a third of the California bar examinees, of which only 47 cases were later officially confirmed. Another perspective under investigation was instructors' perceptions of student cheating. Asgari et al. (2021) found that instructors perceived higher levels of cheating during remote assessments with closed book and asynchronous assessments and therefore relied more heavily on technological countermeasures such as Lockdown Browser and open access to resources. Henderson and McKinnon (2021) corroborated this perception of cheating, finding that students' scores were significantly higher on unproctored exams versus proctored exams. Alternatively, multiple studies have refuted these findings when comparing digital exams to a traditional testing format (Bearman et al., 2020; Egarter et al., 2021; Harper et al., 2020; Ilgaz & Adanır, 2020; Kolack et al., 2020; Marín García et al., 2021). Additional perspectives from the literature include student and instructor perceptions of the ease or difficulty of online cheating, the need for reliable anti-cheating software, the time and cost of alternative assessment formats, and the impact of the learning environment on cheating behaviors (Eshet et al., 2021; Hamad et al., 2021; Kamalov et al., 2021; Meccawy et al., 2021; Reed et al., 2021; Sa'di et al., 2021; White, 2021; Wu et al., 2021).

Identified Barriers to Academic Honesty

Motivation and Orientation Factors

Multiple terms can be identified for the idea that student learning and academic engagement are dependent upon a future goal. For some researchers, the *learning orientation* is the difference between a student who cheats and one who does not. Lang (2013) explains, "In terms of student attitudes and dispositions, students with a *performance orientation*, i.e., those who focus on their grades, are more likely to cheat than their mastery-oriented counterparts who pursue understanding" (p. 41). Similarly, Pulfrey et al. (2019) found lower levels of cheating in courses associated with the mastery of learning for the sake of self-improvement versus performance goals of outperforming classmates. Additionally, Park (2020) found that student behaviors of cheating occur within the context of goal content or what the student intends to achieve such that achievement of the identified goal will influence the decision to cheat or not.

The classroom environment and instructor behaviors also can create barriers to academic honesty. The learning environment consists of the mental, social, emotional, and physical factors present during student learning (Ambrose et al., 2010). Thomas (2017) found that "a learning environment that encourages problem-solving, investigation, fairness, and opportunities for discussion" was strongly associated with academic honesty through the 'construct of the learning environment' (p. 150). In opposition, academic dishonesty can prevail when an instructor creates a learning environment that encourages social comparison or avoidance of failure.

High Stakes Evaluations

A literature review by Hunsicker and Chitwood (2018) defined high-stakes evaluations as those measures of learning that impact student progression, program completion, and possibly graduation. Examples of such exams are found in the disciplines of nursing and teaching; for example, when success or failure of the exam determines access to certification and licensure processes (Gitomer et al., 2021; Hunsicker & Chitwood, 2018). Such high-pressure conditions and their consequences are well-documented worldwide. A complete review of the Chinese Civil Service Exam data set by Suen and Yu (2006), spanning from 606 CE to 1905 CE, determined that any system of learning that employs high-stakes assessment is impervious to prevention measures based on the perpetual nature of dishonesty among the test-takers. High-stakes testing is associated with a range of undesirable behaviors, 'including rote memorization of model performances

[instead of deeper learning or understanding], focusing on test-taking skills, cheating, and negative psychological consequences' (p. 60). Lang (2013) states, "The higher the stakes that you load onto any specific exam or performance of any kind, the more you are tempting students to engage in any means necessary to succeed." (p. 45).

Self-Efficacy

Putarek and Pavlin-Bernadic's (2020) research suggests that self-efficacy is negatively associated with work avoidance, an indifference in academic situations resulting in a minimal effort toward learning, and, in turn, positively associated with cheating. Anderman and Murdock (2011) originally proposed that student self-efficacy dually addresses the capacity to complete a task versus the *situational contingencies* that impact decisions of execution and outcome (p. 110). Lang (2013) clarifies Anderman and Murdock's idea of *situational contingencies* as those self, peer, and instructor factors that are viewed as beyond the student's control. Self factors include insufficient time and internal barriers such as psychological immobility (i.e., anxiety) or illness at a deadline. Peer factors are concerns of interference in project completion or study time, such as distracting roommates and low-contributing project group members. Instructor factors revolve around concerns that student work will not be impartially assessed or that the necessary support will not be provided for task completion. While research findings demonstrate that self-efficacy functions as a moderator for academic honesty, the role is complex. The literature suggests that further research is needed to confirm the relationship between self-efficacy and academic honesty (Baran & Jonason, 2020).

Influence of Peers

For decades, peer approval has been identified as a top-ranking influential factor in academic dishonesty (Bowers, 1964; McCabe & Trevino, 1993; McClung & Gaberson, 2021). Further, studies have shown that social acceptance and visibility of cheating behaviors alongside a perception of a lack of consequences increases academic dishonesty (Awdry & Ives, 2020; Daumiller & Janke, 2019; Julián & Bonavia, 2020; Malesky et al., 2021).

Based on a familiarity with the literature and the challenges of the educational environment during the Spring of 2020, the conversation across the consortium's campuses included an awareness that this environment might support academic dishonesty due to the stress of life and lack of time from competing responsibilities. The campus closings shortened the semester while all learning and assessment moved online. These factors

supported an investigation of perceptions of academic honesty among both students and instructors. With this in mind, the researchers identified the following research questions for consideration:

1. What were students' and instructors' perceptions of whether academic dishonesty was an issue during the transition?
2. In what ways were students trying to cheat, and how did instructors respond?

Method

Participants

Participants in the current study included students and instructors from six institutions within the University System of Georgia. Participants were part of a larger study examining the impact of the emergency transition to online learning on teaching and learning during the COVID-19 pandemic. Over 60% of the student surveys and approximately 74% of the instructor surveys were completed from one of the largest institutions in the system.

Students

A total of 4,181 students completed surveys. Students who had completed at least 63% of the questions, a key point in the survey, were selected for analysis. This resulted in 3,636 students (74.1% female, 23.1% male, 1.1% non-binary, 0.3% FTM transgender, 0.1% MTF transgender, 0.1% unsure, and 1.1% who did not wish to identify their gender). The student sample was predominantly Caucasian (35.3%) and African American (35.2%), under 20 to 25 years old (70.1%), and enrolled full-time (80.8%). Participants included students of various academic classifications, including undergraduates (20% freshmen, 25.7% sophomores, 21.1% juniors, and 19.0% seniors), post-graduates (6.3% Master's, 2.9% Doctoral, 1.0% law and 2.0% non-degree seeking), and other (i.e., enrolled in age 62+ program, dual enrollment, or second bachelor's degrees) (2.0%). A broad range of majors was represented, with biology (7.2%) as the largest group.

Instructors

A total of 1,040 instructors completed surveys, and those who had completed questions for at least one transitioned course were selected for analysis, resulting in 819 instructors (54.5% female, 42.4% male, 0.1% transgender, 0.5% non-binary, and 2.4% who did not wish to answer). A breakdown of age shows an evenly distributed sample, with those aged 65+ (14.8%), 51–55 (14%), and 41–45 (13.1%) representing the most

prominent groups. The majority of the sample was white/non-Hispanic (73.7%). The most commonly held ranks among instructors included Assistant Professor (14.2%), Associate Professor (19.7%), Professor (14.2%), or Part-Time Instructor (16.5%). Participants represented virtually all department/program types. Most participants had at least 11 years of teaching experience in higher education, with 10% indicating 31 or more years. In terms of online teaching experience, 63.7% of the instructors had no prior experience teaching online, while the remainder had experience ranging from one year (4.3%) to over 10 years (7.9%).

Instrumentation

The participating researchers developed the two online surveys (one each for students and instructors) used in the study using the Delphi technique. The Delphi technique of instrument development is a process of discussion among experts to reach a consensus (Ungvarsky, 2020). For this study, a panel of 13 instructors of all ranks and from categories of institutions ranging from technical colleges to research-focused universities from within the state university system were invited to join the primary investigator (PI) to form a consortium for this project. The consortium followed the process of the Delphi technique via web-conferencing/video-conferencing/screen-sharing software, Webex, over several weeks. The collaborative consortium virtual meetings were held within 2 months of the emergency transition to remote learning. Those meetings resulted in the development of two general survey item sets; one set for instructors and one set for students targeting specific areas of interest. Each meeting consisted of survey item development proposals and discussions leading to trial survey items completed anonymously by consortium members. Each successive meeting included feedback and discussion of the previously trialed survey questions, adjustments to phrasing for clarity, removal of items deemed insignificant, and generation of the next set of items. Specific to this study, items were vetted and added to the survey based on adequacy to address the research question. The survey included items concerning types of academic honesty violations, a comparative estimate of the number of violations that occurred before and after the transition, and for the instructors, whether they used specific preventive measures to reduce the likelihood of academic dishonesty.

The final version of the student survey contained 27 questions of which two pertained to academic honesty within a subcategory titled “course management after transition.” The questions and potential responses for the student survey are:

1. What, if any, violations of academic honesty did you participate in after the transition? (Check one or more). Note—you have total anonymity here. There is no way to trace your answer to you personally. Thank you for being honest. Answer choices included: None, Plagiarism (using other sources without giving credit or a reference), Group participation on individual assignment/projects/papers, etc., Sharing of quiz/test questions and/or answers, Using books and class notes during tests (without the instructor's permission), Completing graded course work or tests for other students, Other students completing graded coursework or tests for me, I do not wish to answer this question, or other (please specify).
2. Compared to before the transition, violations of academic honesty policies by students (you and others) were _____. Answer choices were: Much less frequent, Less frequent, About the same, More frequent, Much more frequent, I don't know, I do not wish to answer this question, other (please specify).

The final version of the instructor survey contained 50 questions of which six pertained to academic honesty within a subcategory titled “interactions with students and academic honesty violations.” The questions and potential responses for the instructor survey are:

1. Check all of the ways you interacted/communicated with students (outside of any class time contact) after the transition to remote was announced (email, social media, the learning management system, phone calls or face time, scheduled virtual office hours, video meetings outside of office hours, none of the above)
2. Suspected or confirmed cases of academic policy violations in Spring 2020 (I had none before or after the transition, I had suspected or confirmed cases before and/or after the transition)
3. What, if any, violations of academic honesty did you suspect or confirm in your course/s after the transition (none, plagiarism, group participation on individual assignment/projects/papers, etc.)
4. Compared to before the transition, these suspected or confirmed violations in my courses were (much less frequent, less frequent, about the same, more frequent, much more frequent, I don't have enough evidence to answer this)
5. Did you take any preventative measures to reduce the likelihood of academic dishonesty for your remote course/s (yes, no)
6. Answer only if you previously taught one or more of your Spring 2020 course/s in previous semesters. If so, how were your Spring 2020 grades (across all courses) compared to previous semesters of the same course/s? (much lower, somewhat lower,

about the same, somewhat higher, much higher, I can't say- not enough information)

Procedure

Surveys were administered via online survey software, Qualtrics, after obtaining institutional review board (IRB) approval. Each researcher was responsible for securing approval from their campus' IRB. Local approvals came over a span of time, and differences in local academic calendars prevented establishing a uniform start date and stop date across the participating institutions. However, across institutions, all surveys were open for 5 weeks. Electronic survey request messages, including informed consent content as approved by the various IRBs, were distributed differently across the institutions; some went out as broadcast emails to all students and instructors, some were posted on the institution's Learning Management System (LMS), and some were delivered in faculty and student e-newsletters. The first surveys were accessible approximately 2 weeks after the end of the Spring semester, and the last surveys closed 6 weeks later. Scheduled reminders were sent to instructors and students at those institutions that agreed to broadcast the survey request messages.

Data Analysis

To explore the students' and instructors' perceptions of academic dishonesty during remote instruction, a mixed-method approach was taken. First, quantitative data from the survey was examined via frequencies. Next, open-response items relating to academic honesty violations and measures taken to reduce cheating from the instructor data were qualitatively examined using Abraham et al. (2020)'s protocol for thematic coding. In examining the data, we assumed that individual realities concerning the emergency transition to remote teaching and learning and experiences and norms about academic dishonesty would vary considerably. We utilized qualitative data analysis software, NVivo (Version 27), to manage individual coding structures in addition to the overall consensus found by those analyzing the data. After reading and re-reading responses from instructors and students individually, the researchers performed an analysis of the instructor and student data individually and then collaborated through multiple virtual sessions. The qualitative researcher lead was responsible for promoting critical feedback and assuring a collective analysis of the codes and themes confirmed by each member.

Results

The majority of instructors, 68.3%, indicated that they did not have enough evidence to suspect or confirm academic honesty violations. However, of those that suspected academic dishonesty, a wide range of types of violations was reported. These violations included sharing of quiz/test questions and answers (21.6%), plagiarism (15.9%), group participation on an individual assignment (11.2%), and turning in work done by other students (8.2%). Additionally, uncategorized types of violations (8.3%) were identified as *Other*. Interestingly, 26% believed that the number of suspected or confirmed violations was about the same as before the pandemic. Preventive measures to reduce the likelihood of academic dishonesty were reported by 64.2% of the instructors. Instructors indicated that they utilized a wide range of measures, including lockdown browsers, open note/open book exams, plagiarism detectors, verbal requests to be honest, and random question sets in tests and quizzes.

When asked about academic honesty violations before the pandemic, a large percentage of students (46.10%) did not know whether the number of violations was more or less frequent than before the pandemic. In fact, 18.20% of students felt they were about the same as before the pandemic. Additionally, 16.7% thought it was less or much less frequent than before the pandemic, and 10.20% felt it was more or much more frequent. Students were also asked about the types of violations that they thought they or their peers were engaging in during the transition. Approximately, 67.90% of students reported that no violations were occurring, while 11.80% reported using books and class notes during tests when it was not permitted, 8.20% engaged in group participation on individual assignments/projects/papers, and 5.50% shared quiz/test questions and/or answers. A much smaller percentage indicated completing work for other students or having other students complete work for them.

Qualitative Results

Students

There was a spectrum of responses for students as to whether cheating occurred, how it occurred, and why. For this reason, the theme titles are much different than initially anticipated. The themes identified include *Couldn't if I Wanted To*, *There are Reasons for What I Did*, and *Against My Personal Ethics*. The first and most prevalent student theme, *Couldn't if I Wanted To*, encompasses the idea that cheating, even if desired, was not really an option. The highest number of free-text responses to items of academic honesty were attributed to this theme. Almost a quarter of the students wrote

narrative responses to items about allowed resources during evaluations. Other students mentioned methods and strategies such as proctoring tools and time limits that faculty employed to promote honesty. Narratives of barriers to cheating included this student's, who stated, "I couldn't cheat even if I wanted to because we used Webcams for exams," and another student wrote, "could not use outside resource as all exams had lockdown browser." Other students wrote that the ETRL motivated their instructors to move to formats that created environments of honesty: "most teachers went open note but it didn't really matter." Revising assessments to include access to notes and books was common, as well as allowing group testing. Responses included: "We were allowed to use the groups on quizzes for one of our classes as well as our notes," "We shared answers but had the instructor's permission, hence [it] did not violate honesty," and "while I didn't cheat most changed tests to open notes since they know they couldn't verify who would and who wouldn't."

The theme of *There are Reasons for What I Did* consisted of students' statements recognizing they were engaging in actions and behaviors that, in any other situation, would be cheating but during the stress of a global pandemic and social shutdown, were necessary for getting through the semester. Within this theme, a perception of a lack of boundaries in the online environment between acceptable norms of behavior and dishonesty was noted by students. Peterson (2019) identified this same phenomenon in the online educational environment even outside of a pandemic. Many students stated that the use of additional sources during assessments was now a permissible behavior due to the stress and difficulties of the semester. One participant wrote, "I used my textbook on my online quizzes which was technically not allowed. Lord knows I needed all of the help I could get." Still, other students shared that they used, "portions of written assignments from previous written work or courses in a new assignment," "completed test study guides," "homework assignments," and "notes" during online tests. Several participants mentioned their cheating as a consequence of their instructors' lack of knowledge of virtual or online teaching. One participant wrote, "Since the instructors had no experience with online meetings, the students had to help each other." A nuance of this theme was the burden of online test integrity that students placed on the instructor. "The instructor did not seem to put any effort whatsoever in making the test hard to cheat on, which I found a little strange." Another student stated, "Professor posed we cheated but the exam was open book. Should have conducted a lockdown browser, she has caused us so much trouble."

Narratives of academic dishonesty also seemed to suggest that the instructor was at fault due to a failure to communicate acceptable online testing behaviors

clearly. The narratives of multiple students revealed this attribute. One student wrote, "Although instructor never specifically said tests would now be open book, she implied that they could be." Echoing this same disclaimer, other students wrote, "Instructors did not specify whether or not books and notes could be used during tests, so I did utilize both" and "Some professors were lenient on resources we could use so it was not necessarily dishonest."

Outside of accessing questionable resources during assessments, students' next most common method of academic dishonesty was using online search engines and help sites such as Google, Chegg, Symbolab, and Quizlet during an evaluation due to feelings of potential failure and the impossibility of success. One-fifth of all respondents mentioned accessing online answers during tests. The lockdown browser did not deter these students from using other people's phones or additional computers logged into these help sites to complete their work. One student wrote, "I never plagiarized anything word for word, but I've definitely looked up pretty much every answer on Google." And yet another student wrote, "For assignments using a lockdown browser, I just opened up another computer to Google answers." A shared strategy for testing used by a fourth of the respondents was online group test-taking using social media outlets. One student wrote, "There was more in-depth discussion of tests in group chats (most of the 40+ students in the class were in these chats) than I was comfortable with for tests that were supposed to be done alone." Similarly, a student stated, "I did not participate, but I saw students in our GroupMe requesting assistance with assignments, quizzes, and exams." Included in this theme was the use of paid "tutors." Several students divulged their use of paid academic work, such as this narrative, "Someone that I do not know wrote my papers from GroupMe. He lives in Kenya."

Inefficacy, an identified sub-theme of *There are Reasons for What I Did*, evolved from the students' shared sense of their inability to succeed. Founded in the new teaching and learning formats, students blamed the reduced time allowances in class and during tests as the culprit for motivating them to cheat. Online content delivery and a reduced time frame were described as permission to access unauthorized help. One respondent conveyed the idea that without online resources, the quiz was impossible; "Googling some answers I had no chance of knowing in time to complete the timed quiz." Yet another student wrote, "I used MY notes taken during online readings to prepare the essay questions which were provided before the test was given. The length of the test and time allotted did not provide much time for 'starting from scratch' answering the essay questions."

For the final theme, *Against My Personal Ethics*, a minority of the students surveyed indicated that

academic dishonesty was against their personal ethics, thus supporting the final student theme. One respondent went so far as to include their honor code in the narrative, "A Marine never lies, cheats, or steals. ... First to fight for right and freedom. And to keep our honor clean. We are proud to claim the title of the United States Marines." This small cohort of student participants also included five responses indicating indignation with either an all-caps response, language, or punctuation. For example, "Why is this even a question? I can't believe it," "my answer is NONE," and "Cheaters should wait until they are prepared for school instead of cheating!"

Instructors

Analysis of the instructor responses yielded three themes. The first, *Preventive Measures*, consisted of responses originating from either an unsupported expectation of academic dishonesty or suspicions grounded in evidence of assessment inconsistencies across the semester. Over half of the surveyed instructors included examples of their proactive measures to reduce the likelihood of academic dishonesty. While most of the instructors' strategies were options already accessible within their current learning management system, such as using a lockdown browser or randomized item order, many turned to open-book or notes as allowable resources during exams to reduce the potential for dishonesty. One instructor's successful strategy in the narrative was explained as: "After their first online exam, where I suspected that they were relying too heavily on outside materials for answers, I changed the format so they could not move backwards. This resulted in test averages more similar to those observed prior to the switch to online." Other instructors invested in creating new exam and quiz items, changing the assessment format from a test to a paper, or revising the assessment altogether. Wrote one instructor, "The assignments were more individually focused (e.g., reflections) which would make them hard to plagiarize" and "I drafted assignments that are specific enough to make plagiarism difficult if not impossible."

The instructors' perspectives on how students challenged the concept of academic honesty were less varied than the students' actual examples. This lack of diversity in the narratives was attributed to the limited number of survey items addressing this concept and the phrasing of the associated quantitative survey items. These shared perspectives from instructors supported the creation of the second and third themes which included *Outside Help For Assessments* and *In the Student's Defense*. The majority of written responses regarding an awareness of dishonesty consisted of the use of online assistance from Google, unapproved open notes and texts during exams, and shared test-taking. One instructor wrote, "I think most students were looking up

answers or getting help during online tests," and another stated, "Even with webcam monitoring, students still reference notes. Eyes leave the screen all of the time. I suspect about two-thirds of the class (as always online) cheated in some way." Other instructors shared narratives indicating a more objective opinion of the occurrence of cheating as grades were noted to increase after the ETRL. Instructors included such narratives as: "A student that did little work and performed poorly on both in-class and online tests did exceptionally well on the final exam," "Grades significantly increased after the transition," and "It seems that some students got help: their results were way above previous performance."

Alternatively, some instructors exhibited empathy and even indignation on questions of academic honesty during their students' experience after the ETRL. The sub-theme of *In the Student's Defense* illustrates these concepts. Written by one concerned instructor, a narrative of indignation stated, "This is a terrible stance—our students have been traumatized JUST LIKE FACULTY—and I refuse to assume that there is more dishonesty now than before. We should be approaching this from a liberatory perspective where we recognize that this is THEIR EDUCATION, not ours." One instructor responded to the question requesting identification of preventive measures by declaring, "Again, I reject this premise [of cheating] and see this as a fundamentally flawed way to think about education." Another instructor identified the priority of pursuing academic honesty by writing, "In this environment, I can't say that chasing down academic cheaters was my top priority."

Discussion

The results of this study reveal the perspectives of academic honesty held by instructors and students in a large, secondary education system in the southeastern US during the emergency transition to remote teaching and learning that occurred in the Spring semester of 2020. The narratives from instructors highlight their assumptions and expectations of academic dishonesty and the strategies attempted to counteract these occurrences. The most prevalent strategies consisted of implementation of existing technology surveillance software and altering assessment methods and mechanisms. The software applications included the use of a modified browser, time limitations during exams, and plagiarism detectors. Mechanical measures within the online testing software consisted of randomization of test items, short time frames for assessment completion, and the elimination of right-click capabilities. Additional alterations in testing strategies included allowing book, notes, and resource access during assessments, removal of exams from the course in exchange for other types of

work such as papers or discussion boards, and the addition of oral assessments.

Student responses to the free-text item requesting an explanation of known examples of academic dishonesty provided myriad activities they either heard of or witnessed. These activities included sharing answers using online social media or messaging sites such as GroupMe during exams and quizzes, purchasing completed exams or locating answers from online tutoring sites such as Quizlet and Chegg, hiring test takers, using unauthorized resources such as Google, books, or notes, and virtual and in-person group test taking.

As identified in the literature, cheating among students is not a new phenomenon, yet this study determined that the techniques for completing academic assignments, quizzes, projects, and exams have changed. Students are no longer just cutting and pasting content into their papers, but the retail business of global contract paper mills has relegated essay and paper assignments to a potentially invalid form of assessment (Kaktiņš, 2018; Ross et al., 2020). Along with a convoluted understanding of plagiarism, students are very often cheating unintentionally because of the idea that resources and information on the internet or that are shared personally are available for use unless explicitly forbidden (Barnhardt & Ginns, 2017; Ross et al., 2020). The advent of social media applications, help sites, and online tutors provide an opportunity for real-time access to almost every possible test or quiz question. This study revealed that students engaged in unauthorized, simultaneous, collaborative test taking and sharing of assignments and projects that also impaired an accurate assessment of learning. Based on these findings, the researchers have consolidated the latest literature on promoting academic honesty in a technology-savvy student era as recommendations for the future.

Recommendations

Suggestions for the Future

As illustrated in the literature, research recommendations on supporting academic honesty often only focus on the characteristics of the learner and how academic institutions can better identify them (Brown et al., 2019). As demonstrated in this study, faculty typically rely upon various mechanisms to deter students from cheating, such as surveillance, modifying exam settings, and alternate assessments. However, these strategies address the mechanics of cheating rather than the root cause with little, if any, impact on the motivation to cheat. It is essential to begin to understand academic honesty as a symptom of the learning ecosystem as well as a product of pre-existing learned behaviors.

While studies continue to identify student attitudes and perspectives toward cheating as influential factors, they also provide opportunities for faculty and institutions of higher learning to facilitate academic honesty (Sefcik et al., 2020). Yu et al. (2017) and Daumiller and Janke (2019) both identified the positive impact of faculty implementation of the honor code and utilization of consequences as factors to support an environment of academic honesty. Additionally, Lang's (2013) synthesis of research on academic cheating outlines four features of learning environments associated with lowering student motivation to cheat. These supportive features include fostering intrinsic motivation, lowering the stakes, instilling self-efficacy, and supporting learning for mastery. Combining these features into a comprehensive approach has the potential to foster academic integrity and improve student learning.

Strategies to Reduce the Motivation to Cheat

While it can often be challenging to create a supportive learning environment that fosters academic honesty, the value of supporting this type of approach to learning equates to deeper learning, higher academic performance, and academic honesty (Bengtsson & Teleman, 2019). This is done through cultivating intrinsic motivation, defined as the “outcomes or conditions derived from one’s interest or satisfaction in the inherent tasks of an activity” (Locquiao & Ives, 2020, p. 4). While several theories of motivation exist and are applied to educational settings, self-determination theory (Ryan & Deci, 2019) suggests that three basic psychological needs: autonomy (control), competence (confidence in completing a task), and relatedness (connection), must be fulfilled to foster intrinsic motivation and impact other outcomes. Faculty have the ability to create a supportive learning environment, which satisfies these basic psychological needs and can reduce the occurrence of academic dishonesty. For example, Bardach et al. (2020) envision faculty and students sharing a mental model of a “motivational classroom climate focusing on learning and improvement” as the ideal. From this common understanding of learning and teaching, such an environment can be created and sustained (p. 349).

Fostering Intrinsic Motivation

Fostering intrinsic motivation involves reducing the focus of learning away from the final grade and toward content relevant to career, life, and students' interests (Khalil et al., 2018; Nuffer et al., 2017). Yu et al. (2017) termed this idea as *beyond-the-self-oriented purposes to life* (p. 419). When courses and content are viewed as instrumental to personal development with future

applicability to career success, students are more likely to value the process of learning versus at-all-cost attainment of the summative grade (Solmon, 2018). Studies on current generational student characteristics find that young adults are more motivated and committed to activities they deem relevant to their lives (Deci & Ryan, 2012). Therefore, helping students to connect what they are learning to their own social, political, and cultural settings can improve motivation for deep learning (Mäenpää et al., 2017; Ramirez et al., 2018).

Lowering the Stakes

Increasing the frequency and type of assessments has been correlated to deeper learning while reducing the pressure created by high-stakes exams (Lynam & Cachia, 2018; Norcini et al., 2018). Not only do formative assessments allow students more opportunities to earn points, but they also allow for mastery across multiple assessments, reducing the temptation to cheat (Lang, 2013). Research has revealed that testing is not solely a measurement of learning but rather an additional learning activity whereby students are required to activate their long-term memory using the recall function (Marin-Garcia et al., 2021). Long-term recall, more so than studying, is an essential factor in learning, and strategies that support repeated recall have been shown to result in deeper learning (Azzam & Easteal, 2021; McDermott, 2021; Todd et al., 2021). The act of retrieving information out of long-term memory strengthens neural pathways and results in more durable learning. (Dobson, 2019). Hence the expectation that high-stakes testing is a measure of learning may not be realized.

Instilling Self-Efficacy

Self-efficacy, posited by Bandura (1977), is the degree to which someone believes they can complete a task is directly related to task completion. In the educational setting, improved self-efficacy has been shown to positively correlate with academic success (Abdunabi et al., 2019). Additionally, improving metacognition has been positively correlated to increasing self-efficacy (Graham et al., 2019). One method of helping improve metacognition is through the use of formative assessments (Braund & DeLuca, 2018; Wafubwa & Csikos, 2021). Formative assessments give students valuable information on what they currently understand and still need to study. Formative assessments also help overconfident students identify areas of weakness and help underconfident students build confidence while providing students with opportunities to practice doing the types of tasks they may be required to do on an exam or other evaluation (Lang, 2013). Opportunities to practice and receive

immediate feedback, such as in the flipped classroom, can significantly increase learning while building confidence and self-efficacy (Chen & Wang, 2019; Väisänen & Hirsto, 2020).

Alternatively, other factors that impact student self-efficacy include faculty self-efficacy, communication, and interactions (Li & Yang, 2021; Los & Schweinle, 2019). Ferguson (2021) found that students were negatively impacted in achieving their learning goals due to failures in faculty communication, while Maiden et al. (2020) identified in a limited study that faculty support and engagement through mentoring were key elements in student self-efficacy and success. Therefore, it is vital for instructors to communicate clear instructions and encouragement through the learning process.

Learning for Mastery

Although not a new concept, the idea of learning for mastery involves allowing students to continue to try to solve problems or revisit complex concepts repeatedly until they are mastered. The concept is also known as specifications grading and is used widely in the hard sciences, although it is applicable to all disciplines (Nilson & Stanny, 2015). Mastery grading is different from the traditional points-based model, where instructors assign points to various activities in the course, regardless of true mastery. Although the process of implementing mastery grading is explained elsewhere (see Cilli-Turner et al., 2020), as viewed through the lens of motivational theory, mastery grading could provide satisfaction to all three basic psychological needs, thus potentially reducing the need to cheat. For example, competence would be satisfied by being able to continue trying a difficult task until it is mastered, while autonomy would be satisfied through the students' active choice to engage in activities that match their desired goals. Further, relatedness could be satisfied through the continued feedback and interaction between students and instructors.

Limitations of this Study

Several limitations to this study are identified. The time period of data collection, immediately following the unprecedented ETRL and during a global pandemic, influences the representation of this study. While instructor and student participants were experiencing novel and rapidly changing events, so were the researchers. Severely increased workloads, changing family dynamics, imposed isolation, and the constant fear of infection influenced the researchers' emotional labor during this study (Reed & Towers, 2021). Self-reflexivity, peer-debriefing, and virtual meetings to support each other and maintain focus on the study were strategies implemented to address the challenge of

emotional labor. Other limitations are associated with the location and timing of this study. The data collected in this investigation were specific to a geographical area thus reducing generalizability and the potential exists for the data to become outdated as the pandemic has moved into a different phase. Additionally, the student data, while including both graduate and undergraduate students, predominantly consisted of undergraduate students. Therefore, results may vary when examining graduate students where high-pressure standards exist. Lastly, the topic of academic honesty, a concept with socially derived value, invites social desirability bias (SDB) (Theofanidis & Fountouki, 2018). Measures to counteract SDB in this study included declarations of anonymity and de-identification of institutional affiliations prior to analysis (Larson, 2019).

Conclusion

From the perspective of academic honesty, the ETRL gave instructors a chance to re-examine their teaching process, how students learn, and the assessment of course outcomes. In addition, students provided perspectives on the prevalence of academic dishonesty. The results of this study indicate that not much has changed in online cheating tactics; however, the prevalence of some methods seems interestingly associated with perspectives of community, ideas of common property, and the impact of the crisis on ethical decision-making. Based on this information and the recommendations provided herein, we suggest future research continue to expand upon these perspectives to include how teaching and learning might be forever changed post-COVID, especially concerning how instructors and students foster academic honesty.

Declarations

No funds, grants, or other support were received. The authors have no relevant financial or non-financial interests to disclose. The complete dataset and materials are the property of the University System of Georgia and housed within the institutions represented by the faculty researchers. All relevant data are within the article. All authors contributed to the study's conception and design. M'Lyn Spinks, Jody Langdon, and Stacy Kluge performed material preparation, data collection, and analysis. The initial draft and all manuscript versions were written by M'Lyn Spinks, Jody Langdon, and Stacy Kluge. All authors read and approved the final manuscript. Each institution supported this study with its IRB approval. All participants completed an IRB-approved informed consent before participation. All participants consented to anonymous publication of their responses. The authors would like to acknowledge the students and instructors who contributed to the

knowledge that this study discovered. We would also like to thank the University System of Georgia participating Centers for Excellence in Teaching and Learning and faculty researchers from our respective institutions for their support.

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