ROBOTS, FAKERS, FAKERS, AND GHOSTS Course Enrollment Fraud in the Online California Community College System

by Ryan Tripp

Los Angeles Pierce College criminal justice faculty member Kim Rich began her path to investigating online roster robots, also known as Learning Management System (LMS) course bots, when she began teaching online courses in 2006. Perpetrators, she explained in a recent interview with *FACCCTS*, have designed programs to generate bots that automatically and rapidly perform certain tasks and functions in LMS platforms that would otherwise require user interface-that is, require human students. These bots, which were most likely not just generated in the United States, have potentially cost California community colleges millions of dollars and undermined assessments of student enrollment.

Rich distinguished the difference between these bots (or "fake-student-bots") and solely "fake students" in the online classroom. In unauthorized proxy applications of the latter, users register for the college and its courses under a composite of stolen identities, including names, dates of birth, internet photographs, and even social security numbers. Alternatively, students pay these proxies to complete their courses.

Since the COVID-19 pandemic, bots and fake students with avatars have begun to frequently appear on rosters for LMS courses. More recently, fake students post to the discussion boards and submit assignments. According to Rich, submissions of exactly the same project, presentation, or essay, most commonly by two or more such registrants, constitute circumstantial evidence pointing to fake students. Identities were frequently stolen from the deceased, although individuals with vocational home pages and personal sites became targets as well. Another iteration of fake students served as paid proxies for registered students. Rich

contended that this practice, with students paying individuals to complete courses on their behalf, was a form of academic fraud.

In November 2022, the Experience student news site at Los Medanos College (LMC) in Pittsburg reported online "ghost students," one of the first northern California college student newspapers to do so. The report indicated that, according to one administrator's review of a September (post-census) survey, approximately 530 sections had registered students who had never logged

into the Canvas course. The vice president of instruction encouraged faculty to revisit the Contra Costa Community College District's guidelines for online attendance, warning them to "drop students immediately that have not logged in" and that these numbers were "a potential sign of fraudulent enrollment for the purpose of illegally accessing financial aid resources."

Rather than bots, the Experience described LMC concerns over ghost students who registered for asynchronous online courses "just for financial aid... Most of these scammers use information like phone numbers and

the names of unsuspecting victims and even the information of people who have died to seem more legitimate." This concealment in turn resulted in a misappropriation of COVID-19 relief funds, millions of dollars in tax revenue for education, and full sections that blocked actual students from registering. In addition, the ghost students continued to disrupt data for decisions on curriculum and pedagogy. But, according to a financial aid advisor at the college, the ghost students had not yet interfered with or limited financial aid distributions for stu-

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>> continued on page 20

dents. Across the Contra Costa Community College District, the more than 40,000 fake applicants for 2020 financial aid greatly exceeded the 12,000 that applied the year before.

Another LMC administrator indicated that "the goal for future sections will be to drop no-shows early enough so that the perpetrator cannot get financial aid and the seats in the classes are left open for real students who want to learn and

A single bot was usually not relegated to only one college. The same bot could appear in rosters within the entire California community college system. truly need the financial aid resources." The college's Office of Instruction called on faculty to peruse the district's guidelines on online attendance. Financial aid representatives also asserted in the Experience article that the college's faculty, staff, and administration must take responsibility for maintaining the integrity of curricula and pedagogy. Moreover, the college administration declared its intention to join the Chancellor's Office and the Office of the Inspector General in investigating all cases of financial aid fraud. This fraud, noted a financial aid advisor, "is

considered a crime, and anyone who provides false information to receive grants or loans could face up to one year in prison and/or a maximum fine of \$10,000."

Shelter-in-place decrees during the COVID-19 pandemic spurred the rise of online courses via Zoom. This shift in turn exacerbated and even increased the number of both bots and fake students, more for financial aid purposes than for high marks in a given section. COVID-19 relief funds for students, federal, and state financial assistance, as well as supplementary aid, were all affected by bots and fake students. Since the return from shelter-inplace, Kim Rich observed bots that "adapted to what we have been uncovering, and so now they are able to do basic tasks. They can take quizzes. They can reply to discussions. They can do basic work."

Hybrid courses in certain districts required students to attend in-person class sessions prior to a district census, but not always. Rich, for instance, provided "100 percent confirmation that they [bots] have been on rosters for hybrid classes." At Pierce College in Woodland Hills, bots resulted in courses with wait lists. The college administration offered additional sections, but as soon as those sections became available for enrollment in the class schedule, bots would again fill the rosters. Based on her current research, Rich concluded that "it is not unreasonable to believe upwards of 30 percent of enrolled students are fake students."

A single bot was usually not relegated to only one college. The same bot could appear in rosters within the entire California community college system. At Chaffey College in Rancho Cucamonga, for example, multiple bots registered under the same IP and email addresses, but rarely with the same or any—phone numbers. Rich communicated with hundreds of community college faculty across the golden state who had been affected by these bots. Conversely, she also spoke with hundreds of community college faculty who were, and are not aware of the scope of the bots crisis.

Ongoing and effective communication between online instructors and their students unexpectedly became a strategy to circumvent, and even undermine, bots. Rich attested that instructors "who were doing their due diligence, and having that regular effective contact with their students, and who were doing census properly, and who were paying attention, would often articulate that, "hey, the student is not working, or the student

is not partici-

pating. I'm going to drop that person.' "

A major obstacle to that strategy was, and is, declining community college enrollment in California. Full-time faculty mem-

bers expressed anxieties over class cancellations during as well as after the pandemic. For parttime faculty, these anxieties became manifest in reduced course loads and a dearth of offered class assignments. Rich supported both full-time and part-time faculty in not assuming any type of responsibility for authenticating students. On the other hand, full-time and part-time "faculty have a legitimate expectation that students enrolled in their courses are actual students and therefore expect information supplied by the college and district to be factual, ensuring faculty have the correct information to complete their duties and due diligence."

The experience of one California community college part-time faculty member challenged the dichotomy between fake students and fake-studentbots (or bots). This part-time instructor agreed to interview with FACCCTS under the condition of anonymity. Both during the pandemic and in fall 2022, administrators at one of this part-timer's community college assignments encouraged, but neither mandated nor required, instructors to drop suspected course bots before the semester census survey for enrollment. The part-time instructor adhered to the administrative recommen dation, losing a third of registered students. The course was on the precipice of cancellation-the part-timer declined to reveal whether the course was cancelled or not. But at a meeting of full-time and part-time faculty, many of the former balked at the administration's bot warning and declined to drop suspected student bots.

In summer 2021, as faculty and students continued to obtain COVID-19 vaccinations, the California Community Colleges Chancellor's Office issued statewide reports on bots. From June to August, the Chancellor's Office surveyed online courses and determined that approximately 20% were either bots or fake students tied to financial aid fraud. The California Student Aid Commission informed the Los Angeles Times that more than 65,000 fake students or fake-student-bots applied for financial aid that summer. Most of the fake students claimed to be over age 30 and to earn less than \$40,000 annually, and sought a two-year associate degree. They frequently signed up for courses that did not contribute to the same major or general education requirements. According to representatives from six community colleges in California, hundreds of thousands of dollars in financial aid had been distributed to bots during that summer alone.

The Chancellor's Office and Student Aid Commission still hesitated in describing the situation as fraud, instead choosing the more flexible term, "fraud investigation." State officials subsequently requisitioned reports from almost every community college in California. These reports would feature statistics for alleged and confirmed bots or fake students, incidents directly connected to financial aid fraud, and the estimated misdistribution in financial aid funds. Officials also announced the implementation of new anti-bot programs and software. The reports have yet to be released publicly due to the ongoing fraud investigation taking place at the state level.

In November 2022, the California Community Colleges Technology Center Enabling Services team hosted a one-hour online session on both the fraud investigation and "tools that are available from the Tech Center to help our colleges tackle the problem." Panelists included Monica Zalaket, the Enabling Services college relationship manager, who discussed the newly introduced monthly fraud collection survey, and Jane Linder, the Student Success Suite product manager, who addressed the "spam filter utility and its significance in reducing



fraudulent applications." This utility is one of many anti-bot filters, software applications, and programs that the state Technology Center planned on rolling out in 2022 and after.

In her *FACCCTS* interview, Kim Rich emphasized the sheer magnitude of online bots in monetary terms. If "a given student received \$3,000 in financial aid," and 40,000 bots have infiltrated a given district, that's \$120 million in financial aid misdistribution for an academic year. "It doesn't take a genius," Rich mused, "to see how quickly that adds up, especially if you consider the 73 districts and 116 community colleges that comprise the state system. And what about nationwide? They're making bucket loads of money—billions, billions, and billions."

Teaching Methodologies After the Pandemic | Continued from page 19

WHICH SYSTEM?

In a report by Barnes & Noble Education titled, "Noble Education's Annual College 2030 Report," nearly 2,600 students, faculty, and administrators at colleges and universities nationwide were surveyed to gain a better understanding of how they've adapted and developed solutions to conquer higher education after the COVID-19 pandemic. Among the respondents, 49% of students said they prefer a hybrid class format. In contrast, only 35% of faculty members favor a hybrid format, and 54% prefer fully in-person instruction. Only 18% of students and 11% of faculty favor fully remote classes.

In summary, a majority of older students and faculty members apparently appreciate the convenience of online learning but still struggle with digital literacy and the lack of student "presence." Younger students and faculty find themselves familiar with technology due to the ever-evolving presence of it in their lives. Technology means flexibility; from cloudbased platforms



to videoconferencing, they've embraced the freedom of remote learning. Both younger and older faculty members and students appear to prefer the hybrid model incorporating face-to-face and virtual learning.

The COVID-19 pandemic that forced educational institutions to make decisions about face-to-face, hybrid, and virtual instruction may ultimately answer the question, "Which style is best for my class?" This author predicts the answer will be, "It depends."