# MEADURE LEARNING The 2021 Exam Conduct and Integrity Report

A Benchmarking Study of Integrity in Academic and Professional Assessment Settings

April, 2022

#### **EXECUTIVE SUMMARY**

ProctorU is the exam and assessment security and integrity service of Meazure Learning. In 2021, approximately 4,060,000 proctored exam sessions were taken on the ProctorU system by students and other test takers in academic and professional test settings. We were able to analyze nearly 3 million of these exam sessions to determine how the number of unpermitted resources, active interventions, and confirmed breaches had changed against the same metrics for exams taken in 2020 as well as for those in 2019-20, before the pandemic changed learning and assessment practices.

The data reported here is one of just many measurements to determine if the frequency of misconduct is increasing or decreasing.

According to the data reported here, the instances of unpermitted resources during test sessions and the frequency of clear misconduct has increased in 2021 over 2020.

The context of these data points is important. The following analysis is based largely on the fact that academic integrity in remote test sittings took a major hit during 2020 and throughout most of the remote learning and testing brought on by limiting face-to-face interactions and public gatherings during the pandemic. Cheating was purported to have increased during the pandemic either as reported anecdotally or via published research (see discussion).

Studying these data and data reported by other academics and testing institutions in future years may help us understand if the high frequency of misconduct was an anomaly brought about by the pandemic. And, it may shed light on steps to take to stop attempts to cheat made either by individuals or organized groups.

# **Limitations of this Report**

#### SINGLE FORM OF ACADEMIC MISCONDUCT

It is important to note that ProctorU's exam security data touches only one type of academic misconduct – use of inappropriate or banned resources or engaging in prohibited activities during a remote test session. Examples may include using a cell phone or notes even though they are disallowed by the test provider, collaboration during an exam, or attempting to impersonate a student during an evaluation. The data cannot measure other violations of academic integrity such as plagiarism, sharing of exam materials before a test, or obtaining other forms of assistance inappropriately.

#### SINGLE EXAM MODE

It is also important to note that ProctorU's data is limited to exams using ProctorU's systems. That is to say that rates of misconduct or interventions using other exam security systems, or none at all, may be different and, based on extant data, may be higher. Misconduct is more common, for example, in passive proctoring settings and it is even more common when no proctor or other integrity technology is present. Independent research (Dendir, Maxwell 2020, Dyer, Pettyjohn and Saladin 2020 and Emerson, et al 2021), as well as ProctorU's data, support this.

#### CORRELATION, NOT CAUSATION

A final point is that these data are illustrative only and not causal. Any conclusions stated here are not intended to determine the cause of misconduct.

In other words, the data and the findings or ProctorU cannot and do not represent an assessment of all test sessions or of all academic integrity, but might be useful in approximating what is happening in proctored, remote exams and assessments and how it changed in 2020 and 2021.

### **Terms and Definitions**

In addition to the simple number of proctored test sessions - approximately 4,060,000 are included in this data set from 2021 - ProctorU tracks the following:

#### **UNPERMITTED RESOURCES**

Generally, an unpermitted resources incident occurs before an exam starts, when test-takers are reminded of the rules and guidelines set by the testing authority, such as a professor.

A common type of unpermitted resource is the cell phone. A live proctor may tell a test- taker that cell phones are not allowed and nonetheless see one on a desk or nearby, prompting the proctor to request removal of the cell phone. Notes or books, when disallowed, would likewise be an unpermitted resource if they are detected during the launch or initiation of an examination.

It's helpful to think of "unpermitted resources" as prevention interventions that may otherwise have led to misconduct or the temptation to break test rules. Not all unpermitted resources lead to misconduct but a simple "put away your cell phone and notes" is clearly preventative and considered the best type of integrity intervention as it takes place before any incident takes place, before any unfair advantage can be obtained.

#### **ACTIVE INTERVENTIONS**

Generally, "active interventions" take place during an exam and can be considered a reminder or a warning - an incident in which a proctor may need to stop an exam to address a violation or potential violation as it happens.

In the cell phone example, a proctor may see a cell phone during an exam and intercede to remind the testtaker that it is not permitted. Or, the proctor may observe the test-taker in conversation or away from their computer for extended periods, prompting an inquiry and notation. An active intervention is not necessarily an indication of misconduct, though it is considered more serious because it generally happens during an exam and involves the direct intervention of a proctor during the assessment.

Active interventions also allow exam proctors to note unusual activities that, while they may be deviations from exam rules, are likely not actual misconduct - a cat jumping on a test-taker's keyboard during an exam, for example. These types of incidents are frequently noted as "active interventions" but likewise include information that the intervention was probably innocuous.

Because active interventions are from a live proctor, during an exam, proctoring systems or tools that do not include a live proctor during the exam will not record active interventions.

#### **CONFIRMED BREACHES**

Confirmed breaches are incidents in which a violation of test rules has occurred, as determined by a trained proctor. These are incidents in which proctors are highly confident that subsequent reviews will substantiate not just a violation of test protocol but actual misconduct.

Since any finding of misconduct is ultimately and entirely at the discretion of the testing authority, a confirmed breach does not mean a test-taker was judged responsible for misconduct or that any consequence was levied - only that evidence of misconduct likely exists.

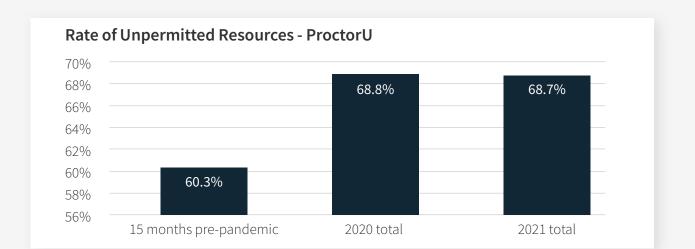
### **The Numbers**

#### **UNPERMITTED RESOURCES**

Of the 2,965,517 exam sessions that ProctorU administered in 2021 in which detecting and addressing "unpermitted resources" were possible, more than two-thirds of test sessions (**68.7%** or 2,036,511 exam sessions) included a proctor noting "unpermitted resources" before the assessment began.

This rate of pre-test, unpermitted resources in 2021 is elevated compared to pre-pandemic levels, but not exceptionally. In the 15 months that predated widespread pandemic-related remote instruction and testing (January 2019 through March 2020), the rate of "unpermitted resources" was **60.3%**.

For all of 2020, which included many months of pandemic-related remote testing, the "unpermitted resources" rate was remarkably consistent to the 2021 data at **68.8%**.



ProctorU characterizes the 2021 "unpermitted resources" data:

"A significant hidden value in having a live proctor in pre-exam onboarding is in preventing misconduct. In 2021, before the exams even started, our proctors acted to remove banned items from more than a million test sessions, preventing countless incidents of misconduct and accidental violations of exam rules. Given a choice, everyone prefers to stop cheating and reduce temptations before they become big problems.

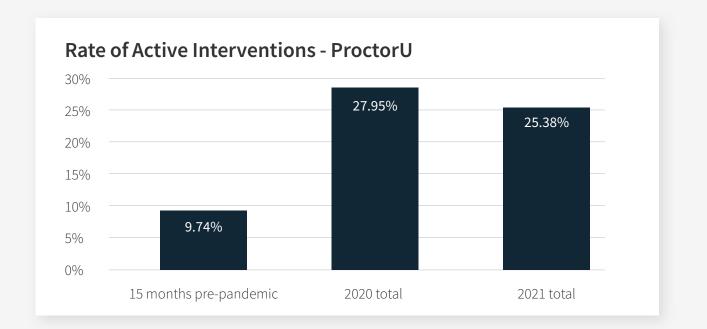
We can also comfortably say that, on average, in about two in every three remote test sessions a test taker has unpermitted resources clearly visible or accessible before the exam starts. These resources might have remained in the test setting if not for a live proctor."

#### **ACTIVE INTERVENTIONS**

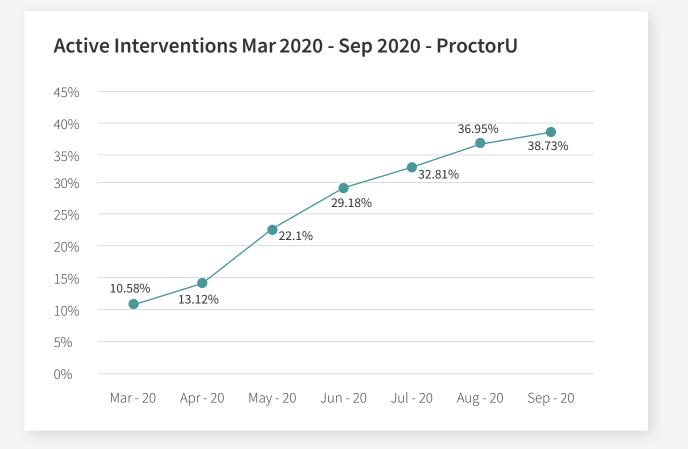
More than a quarter of the remote exams administered by ProctorU in 2021 (25.38%) required "active interventions" by exam proctors to clarify or enforce rules or disrupt potential misconduct.

This rate of intervention during an exam is relatively consistent with the annual rate in 2020 of 28% -- actually **27.95%** compared to **25.38%**.

But the rates for 2020 and 2021 are more than double the pre-pandemic rates of assessment intervention. In the 15 months before pandemic-related remote teaching and assessment – January 2019 through March 2020 – the "active intervention" rate was just **9.74%**.



To further understand the rates of interventions of live proctors and its correlation to pandemic-related assessments, consider that in March, 2020 the rate of "active interventions" was 10.58%, well in line with years of proctoring data. By September 2020, "active interventions" had increased more than 3.5x, to **38.74%**.



Considering the data from 2020, the 2021 rate of interventions at **25.38%** represents an improvement but is still about 2.5x the historic, pre-pandemic average.

ProctorU characterizes the 2021 "active interventions" data:

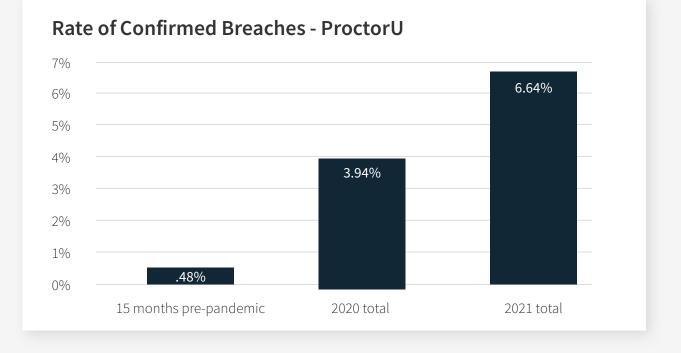
"We are still seeing abnormally high rates of testing conduct that requires proctors to intervene to enforce test rules – more than 2.5 times pre-pandemic rates. That a proctor had to intercede in one in every four remote test sessions in order to guarantee fairness ought to be highly troubling to everyone in education.

Not all of these interventions constitute misconduct, though many do. Part of the increase is lack of familiarity with remote testing and proctoring, but part is also unquestionably a rise in cheating attempts."

#### **CONFIRMED BREACHES**

In 2021, **6.64%** of exams proctored by ProctorU resulted in "confirmed breach" designation – a total of 204,977 assessments. This means that in more than 200,000 remote exam sessions, live proctors determined that evidence existed that a test-taker violated rules in ways that provided an unfair advantage, that academic misconduct likely occurred.

The 6.64% rate of test breach is more than 13x the breach rate in the 15 months pre-pandemic (January 2019 – March 2020), when it was just **.48%.** The 2021 rate is also considerably higher than the totals for 2020, in which the "confirmed breach" rate was just under **4%**.



For further comparison, in November 2021, ProctorU saw 3x more "confirmed breach" incidents – 26,543 – than in all of 2019 combined - 8,038. That's despite overseeing 5x more test sessions in 2019 than this past November.

ProctorU characterizes the 2021 "confirmed breach" data:

"The level of confirmed violations of test rules that we're seeing, incidents of what we would call provable cheating, is obscenely high – as much as 13 times what we saw before the pandemic. It's already in uncharted territory and, even more troubling, shows no signs of slowing down. For example, the two highest breach rates we've ever seen were November and December of last year.

When we see that more than one in every 20 students taking a remote exam is engaging in conduct that can be considered as cheating, that's a significant problem. And it's not just us – this increasing misconduct is something we've seen reported in other places, from other schools, providers and reported sources. It's clearly happening and it's clearly happening at an alarming rate.

Most troubling of all is that this reported breach rate is what we know is happening when test-takers know someone is watching, when they know there's a chance of being caught. We shudder to think what the rate is when no one is watching – you can probably add a zero to that 6.6%."

### **Other Data and Observations**

While the rates of "unpermitted resources" were relatively consistent across professional and academic test settings, "active intervention" incidents were slightly more common in professional testing sessions while "confirmed breach" incidents were significantly more common in exams conducted by higher education institutions.

- Professional testing, 2021:
  - Unpermitted resources 69.6%
  - Active interventions 27.1%
  - Confirmed breaches 3.8%
- Higher education, 2021:
  - Unpermitted resources 64.4%
  - Active interventions 19.1%
  - Confirmed breaches 7.2%

Comparing trends 2020 vs 2021 vs pre-pandemic:

- "Unpermitted resources" Flat in 2021. Up 8% over pre-pandemic levels.
- "Active interventions" Down slightly in 2021. Up 15.7% over pre-pandemic, which is more than double.
- "Confirmed breach" Up 2.6% in 2021, a 65% increase. Up 6.2% over pre-pandemic levels.

# Conclusions

Using this data, an awareness of the practices and trends in assessment security and related public research:

Academic integrity in remote test settings took a major hit during 2020 and throughout most of the remote learning required by the pandemic. As more remote tests were given under these conditions, unpermitted resources during test sessions and the frequency of clear misconduct increased many-fold. And while the rates of test irregularities have stabilized somewhat, they remain well above pre-pandemic levels and have, through 2021, shown no downward trend.

ProctorU's data contributes to the view that incidents of clear misconduct continue to increase and rates of misconduct in online test settings remain at levels we have never before measured.

ProctorU's data alone substantiates the premise that too many test-takers are cheating, or trying to cheat, too often – even when proctoring is in use. More than two-thirds of test sessions start with unallowed resources and our proctors see evidence of misconduct in nearly 7% of all sessions, with an ominous upward trendline.

It is fair to assume - an assumption supported by self-reported data and independent research about cheating - that the situation is clearly much worse where proctoring is absent.