Welcome to Conducting Security Investigations

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Agenda

- **Intros**
- **Standards for Conducting Security Investigations**
  - **John Fremer, Caveon**
- **Security Investigations of School Test Administrators**
  - **John Olson, Olson Educational Measurement & Assessment Services**
- **Investigating Intellectual Property Theft**
  - **Ben Mannes, American Board of Internal Medicine**
- **Q&A**

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Standards for Conducting Security Investigations

Dr. John Fremer, Ph.D.

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Overall Caveon Standard #15 Conducting Security Investigations

The organization or state has a set of procedures in place for:

- **Determining whether a security investigation is warranted,**
- **Evaluating the extent of fraudulent activities and the damage from them, and**
- **Guiding the execution of such investigations.**

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1. Responsibility for managing the security investigation process has been clearly defined.

2. Investigation procedures have been piloted before they are used operationally

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3. Investigation procedures have received reviews from the perspective of program managers, measurement staff, communications staff, and legal staff.

4. Sufficient funds have been allocated to permit thorough investigations.

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5a. Where initial investigations are to be conducted by test administrators as is often the case with state assessment programs, an Investigations Kit has been developed.

5b. The Investigations Kit spells out
- Procedures to be followed,
- Records to be kept, and
- Laws and regulations that must be followed,
  - such as those protecting
    - the privacy of the test takers and administrators, and
    - the confidentiality of test materials.

6. Training materials have been developed and can be accessed by those who will be conducting investigations.

7. Investigation procedures are applied consistently across the state or organization.

8. Conclusions from the investigation are based on solid data and information including statistical evidence when available.

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Security Investigations of School Test Administrators

Dr. John Olson, Ph.D.

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Overview

Step 1 – Planning and Communications
Step 2 – Preparing for the Investigation
Step 3 – Conducting the Interviews
Step 4 – Summarize Information and Write Report on Security Investigation
Lessons Learned

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Step 1 -- Planning and communications with state, district, and/or schools re the investigation

- Responsibilities for conducting the investigation
- Contact person for coordination of activities
- Identification of staff to interview
- Scheduling the interviews
- Materials from state and districts
- Other logistics for security investigation

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Step 2 -- Preparing for security investigation

- Review all materials from state/district in advance
- Review all existing data, such as DF analyses, for flagged schools and teachers
- Develop an interview protocol with a standard set of questions to ask school test administrators
- Review questions with client (state or district) and get approval

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Examples of security investigation interview questions

- Were you provided with test security training? When?
- When did the testing materials arrive? Who signed for them?
- Where were the testing materials stored?
- Who had access to where they were stored?
- Describe the process on testing days.
- Describe how and when the test materials were returned after testing was completed.
- Describe the process for administering makeup tests and when this occurred.
- Describe how tests are assembled after testing for storage.
- Describe the process for boxing up the tests and shipping back to the test vendor.
- Did you observe any irregularities before, during, or after the administration of the test?

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Step 3 -- Conduct training of interviewers and coordinate on process to be used

- Conduct interviews, either in schools or at a central site
  - Set the tone for interviews
  - Capture responses from each interviewee and record them precisely
  - Do follow ups to clarify information as necessary
- Maintain confidentiality and security of information

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Step 4 --Summarize Information and Write Report on Security Investigation

- Analyze/Summarize all responses completely and clearly
- Write up draft report from security investigation – be evidence based
- Do internal reviews (expert, legal, etc.)
- Submit draft to client for review
- Revise as necessary (note that report may become a public document)
- Submit final report

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Lessons Learned from Conducting Test Security Investigations

- Be prepared
- Approach the interviews with an "innocent until proven guilty" approach, but be firm in your questioning
- Know the lay of the land and watch out for landmines!
- Be wary of the Press and know who to refer them to for their questions

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Investigating Intellectual Property Theft

A. Benjamin Mannes

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Detection

Internet:
- Chat Rooms (brain dump websites)
- Test Preparation Websites
- Basic searches for your test name in US and International Search Engines
- Craigslist® and eBay®

Tip line/ Hotline:
- Tip lines open doors to Private Tutors which are difficult to find online

Private Tutoring
- Courses taken by a private investigator- some courses provide "brain dump questions" to students in their class.

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How Cases Begin

- **Internet searches**
  - Internally (Google® Alerts, etc.), Cyveillance®, Caveon Web Patrol™, Lexis Nexis®, etc.
  - Set-up a fictitious profile
  - EBay® , Amazon®, etc.
- **Data forensics & Scoring**
  - Collusion, item exposure, traditional "cheating", etc.
- **Tipline**
  - Response infrastructure, etc.
- **Eligibility & Registration**
  - Misrepresentation, proxy testing, etc.
- **Outside entities**
  - Vendors, Licensing authorities, schools, societies, associations, etc.

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Suspect Identification & Selection

- Background investigations
  - Investigative software, web searches, database searches, etc.
- Financials
  - Is legal action your best option?
- Associates
  - Who else may be helping your suspect (codefendants) or benefitting from cheating?
- Severity of the case
  - Does the severity of the case warrant legal action?
  - Is other action legally defensible?

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Gathering Evidence

- Obtaining infringing materials
- Attending courses/engaging in proxy services
- Web history/screen caps
- Conducting interviews
- Identifying co-conspirators
- Applying for & executing warrants/seizure orders
- Analysis of evidence (with legal)

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Steps of a successful Investigation

Once you identify a website you suspect is distributing your content and that your organization is willing to go to court: Investigate thoroughly

•Download copies of the infringed content and match it to your content.
  - *•Distinguish if it is an exact match or substantially similar.*

•If the material is in a chat room:
  - *•Try and gain background information on the participants.*
  - *•Search your database for the emails or names they provide.*
  - *•Keep copies of all posts made by individuals.*

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Taking Action

Administrative:

- Invalidation of scores
- Suspension/revocation of certificate(s)
- Restriction from future testing eligibility
- Notification to stakeholders

Legal:

- Civil litigation process (public)
- Civil litigation process (ex parte)
- Notification to law enforcement agencies
- Referral to prosecutors/Attorney General

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Administrative Options

- Since Legal Action may be more costly, there are a few Administrative Actions that may be more cost effective and still get the message out that your program takes the violation seriously.
  - Score cancellations and testing bans
  - Press release
  - Notify Score/Certification Recipients

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Preparing for Court

If you decide you want to take the issue to court, take the necessary steps to ensure you are prepared for court

- Ensure you have clearly presented your evidence.
  - Side by Sides are extremely easy for the court to read.
- Screen shots of the sites materials as were present on the internet.
- Video of collusion at the test center
- Secure copyright documents for all infringed work.
- If you have sent Cease and Desist Letters, provide copies of all of that correspondence to your Legal Counsel.

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Adjudications

You may be sued by the people you investigate or threatened with legal action – *so be prepared.*

- Have a clear, fair, and firm public adjudications process in place *before* action is taken.
  - Will sanctions need to be monitored?
  - Is there an appellate process?
  - Is there a mechanism for investigative cooperation?
- Is this process managed internally or externally?
- At what point does your board get involved?

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Lessons Learned

- Was a security breach (due to a possible vulnerability in your policies or infrastructure) identified during the incident?
- If so, what can be done to change policies, procedures, or technologies to fix it?
- A cost/benefit analysis should be done to address the vulnerability identified by the incident.
- Are there other ramifications to the organization from the incident?

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Questions for presenters?

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Comments?

Please go to Caveon's Test Security Group on LinkedIn to join and post Comments!

We appreciate our @Caveon twitter followers

Look for us at ATP!

ATP Sessions

To Catch a Cheat: Building Fraud Detection into Your Exams
Liz Burns, Juniper Networks; Dennis Maynes, Caveon

Gimme Shelter: Weathering the Media Storm of a Cheating Scandal
John Fremer, Caveon; Greg Toppo - USA Today; James Vaselek, LSAC

Developing and Conducting Investigations of Testing Irregularities in High-Stakes Testing Programs
Steve Addicott, Caveon; John Fremer, Caveon; A. Benjamin Mannes, ABIM

Everything You Need to Know to Implement a Data Forensics Program
Benjamin Mannes, ABIM; Dennis Maynes, Caveon; Aimee Rhodes, CFA Institute; Jennifer Semko, Baker & McKenzie LLP

Thank you for Attending
"Conducting Security Investigations"

Upcoming Webinar will be
Feb 15th 12pm EST
'Web Patrol – Who's stealing your Tests'