



TESTING INDUSTRY PLEDGE RELATED TO ONLINE PROCTORING SERVICES

Over the past decade or more, testing programs have begun to use online proctoring (also called remote proctoring) as a viable and cost-effective alternative to proctoring in-person testing at testing centers. This evolution is part of a long trend in digitization of society, including the proliferation of hybrid learning, blended learning, and fully online learning methods which is occurring throughout testing.

As such, the Association of Test Publishers (“ATP”) has recognized the need for an industry standard around the emerging technologies and methodologies related to online/remote proctoring services. Work is under way on such a technical standard, being jointly developed by the ATP and the National College Testing Association (“NCTA”).¹

While an Online Proctoring Standard is being developed to address the technology and associated best practices, the COVID-19 pandemic created a significant urgency for many testing organizations to begin to use or increase the use of online testing – along with the companion need to use online proctoring for many high-stakes, secure tests where the integrity of test results and promotion of a positive testing experience are of paramount importance. While the ATP believes strongly that human involvement in teaching and learning will never be totally replaced, research continues to indicate that younger generations coming of age in the post-secondary and continuing (professional) education phases of their lives have an expectation and comfort level with online learning that prior generations did not share. For many test takers, then, there are significant advantages to online testing, such as being able to take a test from any location at any time (so-called “on-demand testing”). For these reasons, the ATP points to evidence that strongly suggests that online testing and online proctoring will continue to be used even after the pandemic has been brought under control.² Supervision of test administration events equally has moved from in-person to online in many settings, from primary and secondary schools, to higher education institutions, to educational and professional admissions testing at all levels, especially by certification/licensing/credentialing bodies and by employers. Online proctoring helps provide assurance that no test taker has an unfair advantage over another and provides information a testing organization can use to detect and respond to improper test taker behavior - it is imperative that test takers achieve test results based on their individual merit and are not disadvantaged by the improper actions of a few. Moreover, online proctoring is useful to

¹ ATP previously partnered with NCTA in 2015 to develop a set of best practices for online proctoring [see Bibliography]. The new standard, when complete, is expected to enhance the best practices to provide requirements and recommendations for proctoring service providers and users of those services.

² The fundamental requirements for secure test administration that supports valid and reliable outcomes have not changed as a result of this emerging trend toward online proctored assessments. In most cases, the needs for on-line assessment are comparable to those of in-person proctored testing, irrespective of the setting in which the test is to be administered.

confirm the test taker's identity, thereby assuring that the individual taking a test is indeed the individual who registered or applied for the test.

Despite the advantages of on-demand testing and online proctoring, criticism has arisen claiming that proctoring software may be inherently biased or trained to discriminate against some test takers, and in some cases is violating individuals' privacy rights. The most notable example is a December 2020 letter from six United States Senators sent to three proctoring providers, seeking responses to specific concerns. Similar concerns have arisen in Europe and Asia/Australia, that online proctoring may not adequately protect the privacy rights of individual test takers.

In light of these developments, to facilitate a coordinated response to such criticism, and in recognition of the likely continued need for secure online testing and programs to use proctoring services, the ATP firmly believes it is in the best interests of all testing organizations and other users of online proctoring to articulate a set of guiding parameters for the responsible deployment of remote proctoring solutions. Developing a comprehensive series of independent, foundational guidance components related to online proctoring services will enable the industry to address the concerns and perceived problems with these services, to clarify the fundamental purposes for online proctored assessments, and to establish focused policy parameters that guide test owners/sponsors and service providers in the development and provision of these services - while providing test takers with reasonable assurances about the privacy of their data and the validity of their testing outcomes.³ Thus, the ATP Pledge seeks to articulate a balanced evaluation of all of the relevant factors at play in the use of online proctoring.

The ATP is uniquely positioned to coordinate and develop this effort to produce an industry Pledge having universal application around the world. The ATP is the only testing organization covering the entire global spectrum (e.g., North America, Europe, China, India, the Middle East, and other countries), giving it immediate access to over a hundred test owners and testing vendors who are ATP members, as well as the ability to address many other non-member testing organizations who are interested in collaborating with the ATP on a project of this nature.

⁴Moreover, since the use of online proctoring is global, the issues being raised are in fact shared in common by members of the testing industry and community around the world. Among the

³ The ATP acknowledges the difficulty for any set of principles to provide absolute "assurances" to test takers; however, the ATP firmly believes that adoption of this Pledge will help adopting organizations protect the personal information and test results of test takers and thus contribute to a fair online proctoring environment.

⁴ For example, online proctoring may be used to confirm the test taker's identity, thereby assuring that the individual taking a test is the individual who registered/applied for the test (i.e., preventing an imposter from taking the test). Moreover, online proctoring provides test integrity documentation that helps assure that no test taker has an unfair advantage over another; this information enables a testing organization to detect improper test taker behavior and, in the process, equally confirm the lack of improper actions by test takers in the same cohort group. It is imperative that test takers achieve test results based on their individual merit and are not disadvantaged by the improper actions of a few.

most pressing issues surrounding online proctoring are helping manage services and contribute to results that can:

1. Assure that results of tests taken using online proctoring are valid, achieved with integrity, and safely used to make education and employment decisions or to award credentials, certifications, or licenses.
2. Assure that only test taker personal information (PI) necessary for the process is collected and used to minimize the exposure of PI;
3. Assure that test takers understand what PI is being collected, how it is being used, where it is being stored, and with whom it is being shared;
4. Assure, to the maximum extent possible, that the outcomes of tests taken using online proctoring are statistically comparable to tests taken via other established proctoring modalities, such as in-person proctored testing;
5. Assure that online proctoring solutions do not introduce bias into the testing experience that adversely and unequally impacts test taker outcomes;
6. To the extent online proctoring solutions utilize artificial intelligence (AI) systems, the developer of the AI system, as well as any user (e.g., test sponsor) has a responsibility to understand and explain if such uses are for the purposes of processing data unrelated to an eventual report, making designations or reporting back to a test sponsor, or when and how it may contribute to any decision making or the eventual evaluation of a test takers performance,
7. Protect, to the maximum extent possible, test takers' PI and their privacy rights, including data security to prevent or deter unauthorized release or sharing of PI;
8. Assure that test takers are not falsely accused of anomalous test results and have a process to challenge adverse testing decisions; while equally protecting the value of the test for test takers.⁴
9. Assure that all assessments are accessible and that test takers who may need accommodations are treated equitably; and
10. Assure that, in the process of addressing these test taker issues, secure test content is protected from disclosure that would invalidate the test as well as harm the reputation of the testing program.

In addressing such a broad array of relevant factors, the ATP seeks to enable test sponsors and test vendors to better carry out their respective missions and responsibilities. Articulation of an industry-wide Pledge means there is an open process for ALL interested parties to endorse and adopt this Pledge as a mechanism of self-regulation and accountability to supporting the appropriate use of online proctoring. In that regard, it is equally important to realize that the ATP Pledge is based on well-recognized testing industry and community documentation, as well as a variety of regulatory pronouncements and decisions from jurisdictions around the world.⁵

⁵ A bibliography of resources from which this Pledge drawn is found in Appendix A at the end of this document.

I. General Framework

1. The ATP Pledge seeks to engage all testing industry and community members who provide and/or consume online proctoring services,⁶ and is designed to establish a neutral and balanced evaluation perspective, free of any advantages to individual members or technologies.
2. The ATP Pledge centers on the interests of test takers, to safeguard test takers and to promote ethical test taker conduct, while seeking to provide the necessary balance to protect test content and program integrity.
3. The ATP Pledge represents a series of foundational best practices and guidance related to online proctoring services, independent of any preferences for particular solutions or business models; accordingly, some components of the Pledge may not be relevant to each proctoring service provider or end user.
4. The ATP Pledge can be used by every provider and consumer of online proctoring services (i.e., proctoring service providers and test sponsors and test delivery/administration vendors); while the ATP Pledge is voluntary in nature, it is intended to encourage the testing industry to adopt comprehensive self-regulatory practices adhering to the components of the ATP Pledge.
5. The ATP Pledge seeks to provide the means for all parties involved in the delivery of an online proctored assessment to demonstrate their respect for the rights of individual test takers and to provide a fair test process, as well as to build and maintain a relationship of trust with test takers when it comes to judging the fairness of the use of online proctoring in providing a secure test environment that protects test takers' personal information.
6. The ATP Pledge makes it clear that proctoring service providers are responsible for educating users about available mechanisms by which the user may customize exam settings that provide the needed level of exam security without compromising test-taker privacy.
7. The objectives of the ATP Pledge are to:
 - a. protect the fundamental rights of each test taker, including privacy rights;
 - b. establish the parameters for assuring that every online proctored assessment is fair and equitable for each test taker;
 - c. provide a baseline for assuring that every online proctored assessment delivers meaningful and trusted results to test takers and the public, while protecting test content security and the integrity of each testing program;

⁶ Online proctoring is a delivery model where proctors remotely manage and supervise test takers (i.e., test takers and proctors are not physically at the same location as with in-person testing), in most cases requiring an Internet connection, secure browser, microphone, and a general purpose webcam. Test takers may take the assessment in any suitable environment, including at home, but monitoring the testing event is accomplished primarily using video streaming and remote support methods, such as a remote administration and/or form of automated decision-making/artificial intelligence (AI). The term "online proctoring" is used to emphasize that the test is proctored over the Internet, which therefore aligns with test takers' understandings and preferences. In some cases, test takers are observed by a remote human proctor, while in other cases, test takers are recorded for potential later human review.

- d. enable any online proctoring provider, including resellers of services, to evaluate how to adopt the ATP Pledge; and
 - e. enable each user of online proctoring services (e.g., test sponsor, test administrator) to evaluate the level of adoption of any proctoring service provider with the ATP Pledge as a means to learn how to responsibly deploy remote proctoring solutions.
8. The ATP Pledge creates an expectation that an online proctoring service provider or a user of those services will conduct a careful evaluation of the Pledge to determine exactly how it applies to its business, products, and services.
 9. The ATP Pledge applies internationally, independent of privacy and other laws in each jurisdiction, which testing organizations would have to follow.
 10. Where online proctoring is used in the workplace, testing organizations are encouraged to follow the international standard ISO 10667:2020 (Assessment service delivery — Procedures and methods to assess people in work and organizational settings).
 11. The ATP Pledge encourages all proctoring service providers to undergo third-party audits for compliance with security standards (e.g., ISO 27001, ISO 27701, SSAE 16, SOC 2 Type 1, SOC 2 Type 2) and to make the results of such audits available to users of proctoring services, and on a summary level, to test takers.⁷

II. Notice to Test Takers

1. The owner of the online proctoring personal information (PI) needs to determine what PI is truly necessary for the testing process, in order to minimize the collection and use of PI.
2. The collector and the user of online proctoring data must collaborate in determining who has the responsibility to provide advance notices to each test taker in conformance with applicable law based on the categories of data being collected. Either entity may be responsible, but the involved testing organizations need to agree which of them will provide the advance notice for a given assessment, which determination must be in writing.
3. Advance notice must be given to each test taker (or to parents/guardians in the case of assessing minors)⁸ by the responsible party determined above, covering the following information:
 - a. the precise types and categories of personal information (PI) that will be collected during the provision of online proctoring services;
 - b. a clearly defined purpose or purposes for which the PI will be used;
 - c. a clear statement as to with whom the PI will be shared;

⁷ Such certification/attestation provides strong evidence of the technical and operational security employed by the testing organization. However, it would not be appropriate to make the complete audit results available to test takers, inasmuch as that information could be used to exploit any identified vulnerabilities and enable unauthorized access to the testing organization's systems and databases.

⁸ In assessing children under the age of 18 (e.g., educational testing K-12, certain admissions testing, clinical diagnostic testing), a testing organization may be required to provide notice to (or even obtain consent from) the child's parents/guardians). For ease of reference in the ATP Pledge, use of the term "test taker" is subject to this understanding regarding under-age test takers.

- d. a clear statement as to where the PI will be stored and how long it will be retained;
 - e. a clear statement of what security measures are in place to protect the PI;
 - f. other information defined by relevant international/US federal and state laws and regulations (consistent with this Pledge), where necessary and appropriate; and
 - g. to the extent an AI solution is being used, a clear statement that explains how it is used and how it operates so that test takers have this information prior to taking the test (see III I below).
4. Every online proctoring service provider and user of such services should explicitly include these advance notices within their respective Terms of Service, Terms of Use, Test Taker Agreement, or in its Privacy Policy cited in the Terms of Service/Terms of Use.⁹
 5. Related to such test taker notice, both the collector and the user of test taker PI must only use test taker PI in relation to the assessment purpose(s) articulated in IIIb. If any additional new purpose(s) arise, the involved testing organizations are expected to provide an updated notice to all affected test takers.
 6. If the collector or user of test taker PI intends to use that data for research purposes or for product improvement purposes, such use must be communicated to test takers in the advance notice, even if such research will use anonymous and/or pseudonymous data.
 7. Both the collector and the user of test taker PI are expected to make a commitment to each test taker not to sell any collected PI/derived PI from the online proctoring services; any deviation of this commitment must be disclosed in the advance notice. Using individual test taker PI to communicate information about a specific assessment or related future assessments to that test taker is not deemed to constitute a sale of data or use for a marketing purpose.
 8. Each test taker is expected to be advised about his/her rights and responsibilities regarding the assessment, including the use of online proctoring, the process for obtaining technical support before, during, and following the online test event, and the details of a fair process for making complaints and appeals (e.g., re-scoring, re-testing, escalation).
 9. In communicating such rights and responsibilities, the responsible testing organization also is expected to provide all necessary information related to the test takers' responsibilities for protecting the intellectual property rights of the assessment owner.
 10. When online proctoring involves installation of monitoring software on the test taker's personal computer, the notice in subsection 3b (above) must disclose this, and the monitoring software must only be active during the test, and shall not collect data at other times; indeed, the test taker should be able to uninstall such software once the testing event is completed.

III. Use of Automated Decisions/Biometrics

1. The use of automated decisions or forms of artificial intelligence (e.g.,

⁹ Advance notice requirements are often made available by testing organizations at the time a person initially registers for a test. Thus, the types of information (see points 4-10) covered in this section actually are shared with individual test takers well in advance of the testing event; furthermore, many testing organizations also repeat these notices before the test administration commences.

machine learning, algorithms), biometrics¹⁰ and software profiling combined with video/audio recording with online proctoring, must be transparent and accompanied by appropriate research (e.g., bias studies, empirical research, third-party validation) to support the decision and to document that bias and discrimination surrounding such use(s) have been adequately addressed.¹¹ Specifically, appropriate research using an adequately diverse and statistically significant sample size, is expected to be undertaken around the use of such software to ensure that the proposed use has been carefully vetted, internally or by third-party experts, with multiple validations across multiple trials for the purpose of minimizing or removing bias/discrimination against individual test takers. Suitable documentation about such research is expected to be available and shared with testing organizations (i.e., test sponsors, users/customers, test administrators) considering the use of biometrics, AI, and/or automated decision-making;

2. A testing organization should carefully evaluate the scope of the use of biometrics (e.g., facial recognition, voice recognition, and keystroke fingerprinting), or forms of AI systems as part of an online proctoring solution to determine what privacy impacts and/or repercussions may exist – to achieve these results a data privacy impact assessment should be performed. For example, if the use of a facial screen shot is merely to enable a comparison match of an ID with the individual test taker,¹² then such use does not involve the same privacy concerns as the use of facial or voice recognition or fingerprint analysis as part of an automated decision-making solution used during the test administration (e.g., profiling a test taker, making decisions about the test taker).
3. The testing organization that decides to use biometrics and/or AI systems, or the organization that employs biometrics and/or AI systems, must collaborate to determine which organization will provide full and adequate notice to each test taker, including the need to obtain appropriate consent from test takers for the collection and use of biometrics. Either entity may be responsible, but those testing organizations need to

¹⁰ The use of artificial intelligence, which may include biometrics, is generally defined under applicable privacy laws, but covers such technologies as machine learning, software algorithms, artificial intelligence, deep data analytics, neural networks for profiling people (collectively defined in this Pledge as “AI”), any of which may be components of different types of online proctoring. The ATP Pledge seeks to assure that users of online proctoring providers AND test takers are informed about the use of any AI technology and the purpose of its use (e.g., to authenticate the test taker); the Pledge does not attempt to make any judgments about how any online proctoring provider should handle the use of such technology and the details of what information constitutes proper notices. Significantly, while the use of automated decision-making is not generally considered to be AI, test takers must also be notified about these uses and the purposes for their use.

¹¹ It should be clear that remote “live proctoring” and some types of video/audio surveillance performed without the use of software profiling does not constitute automated decision-making; in these setting the online proctoring service is serving the same function as in-person test proctoring. Consequently, no research is required related to these non-automated decision situations.

¹² When the testing organization is comparing a photo ID presented by the test taker at the time of the test administration with the photo ID uploaded by the test taker when s/he registered to take the test, that action merely provides an assurance that it is the same individual. That use is not the same purpose as other AI software (e.g. facial recognition) used as part of the assessment (e.g., profiling).

resolve which of them will provide the advance written notice expected under II2b and II3g.

4. The responsible testing organization (see above) also is expected to determine the scope of the privacy notice regarding the use of biometrics and/or AI (see II2b and II3g).
5. Details on the use of biometrics and/or AI must be shared with each test taker. To the extent that any form of automated decision-making is utilized, the responsible testing organization also should provide reasonable and adequate information to enable the test taker to understand what automated decision-making (or biometrics) will be used and how it will be used for: (i) test administration; (ii) test scoring; and (iii) identification of test irregularities that may be deemed to constitute evidence of cheating on the assessment.¹³ The responsible testing organization also needs to provide information on the steps it takes to eliminate bias/discrimination against individual test takers. The information covered in this section III5 is expected to be part of the test taker notice (see II2).
6. Related to the use of automated decision-making, including as part of the use of biometrics, the organization responsible for determining the use of that technology should carefully consider when and how any such use will be subject to human review, as well as who will have access to these images and recordings, including the establishment, documentation, and implementation of procedures governing when and how such human intervention occurs, how an individual may appeal to have an automated decision considered by a human reviewer (where not part of the standard review process), and what protections are in place to provide assurance that a final decision about a test taker is made after human involvement, not solely through the use of biometrics and/or automated decisions.
7. If a video/audio recording of a test taker is made as part of the online proctoring (regardless of whether it is combined with AI or not), the responsible testing organization must establish, document, and implement procedures to allow an individual test taker to request access to those records¹⁴ and, where appropriate, deletion of them (see V, PI Retention). The information covered in this section III6, including the purpose of the video/audio recording and how it may be used in any decision-making about test takers' outcomes, should be part of the test taker notice (see II2).
8. If the online proctoring service provider makes changes to its platform or service, it is expected that these changes will be communicated timely to any test sponsor or testing vendor that is using these services. While it may not be appropriate to communicate directly with test takers, the test sponsor (or testing vendor using proctoring services if its contract requires it) should consider posting a form of release or update notes available on their public webpages. With the rate of change of technology, an assumption should

¹³ In the process of disclosing reasonable and adequate information about the use of biometrics and/or automated decision-making technology, a testing organization is not expected to release any IP or other proprietary information.

¹⁴ Providing access to, or even a copy of, applicable video/audio recordings is a decision for the individual testing organization, based on applicable privacy laws/regulations. If access to such a recording is given, the testing organization will want to take appropriate steps to protect the security of the test content and process.

not be made that an online proctoring service is static and that from one year, or one testing event, to the next, the capabilities or limitations of a platform or service remain exactly the same.

IV. Decisions about Test Accommodations

1. All parties involved in the delivery of an online proctored assessment need to seek to assure that every individual is provided with equitable and fair access to take an assessment.¹⁵ Consideration should include establishing a fair way in which individuals with disabilities and/or varying abilities can take assessments, how individuals are able to honor religious or cultural belief systems (e.g., a candidate who wears religious attire or requests monitoring from a proctor of a certain identity).
2. Other issues, such as where a test taker has a limited environment in which to take a test (e.g., a room with others present), or where the individual is without access to high-speed bandwidth, do not qualify as legal “disabilities” that require accommodation, but testing organizations should be cognizant of, and take appropriate steps to solve for, these limitations.
3. As with all testing situations, it shall be the responsibility of each test taker to provide the online proctoring service provider or the proctoring service user (e.g., test sponsor, institution, or test administrator) with the information necessary to support a requested accommodation. Such a request for accommodation is usually expected to be given at the time the individual registers to take the test (or registers for the certification or educational institution or program associated with the test), which request will be reviewed by the test sponsor (see IV3).
4. The test sponsor usually has the initial responsibility to determine which accommodations are valid and appropriate for a specific online assessment; only the information required to fulfill the accommodation should be shared with the test administrator and the online proctoring service provider.
5. The test administrator/proctoring service provider needs to coordinate with the test sponsor and test administrator to establish, document, and implement procedures to address how to resolve test taker requests for an accommodation, whether the requested accommodation is already a validated option, or if the requested accommodation has not been previously validated, to assure that such request is fairly considered. Those testing organizations need to articulate clearly such procedures, which determination shall be in writing.
6. The test administrator/proctoring service provider needs to coordinate with the test sponsor to establish, document, and implement procedures to enable each individual test

¹⁵ In many assessments, the remote proctoring component is not a limiting factor, so there is no additional burden on the proctoring service provider to provide accommodations that are distinct from those provided for a particular assessment itself. Indeed, the use of remote online proctored assessment previously has been considered an accommodation for an in-person paper-based test. Indeed, online proctored systems are more user-friendly, or have the potential to be more user-friendly, to meet the accommodation needs of the test taker than the typical testing center. And many test takers who need such accommodations likely have already had their homes and computer systems modified to help them work or study at home, as well as to take tests.

taker to request an accommodation and receive a response, which information shall be covered in the advance notice to test takers (see II3). Those testing organizations need to resolve clearly which of them will provide the advance notice of these procedures to test takers, which determination shall be in writing.

7. A written response to the test taker's request for accommodation must be provided in a reasonable and timely manner (e.g., prior to the testing event); provided, however, that if a request for accommodation is made at the time of a test administration/event, the response may not be possible in time for the test taker to take the assessment as requested. In such cases, the test taker must be informed if the test administration will be rescheduled or what other options are available.
8. Proctoring providers are encouraged to solicit the support of third-party experts and auditors to provide accommodations and/or alternative assessments for test takers as needed.

V. Decisions about Testing Irregularities

1. The online proctoring service provider is responsible for coordination with the test owner/sponsor and the test administrator to identify what irregularities (i.e., any deviations to standard test administration of that assessment)¹⁶ are capable of being identified by the online proctoring service, including through the use of automated decision-making software and/or video/audio recording, and the established process for reviewing and/or addressing those irregularities.
2. When human remote proctors are used, the online proctoring service provider is responsible for assuring that every proctor assigned to the specific assessment has been trained on appropriate application of the services in conformance with the established guidelines and the service provider's own customer service policies and procedures. (see IX).
3. Consistent with the final decision as to anticipated irregularities associated with a given assessment, to the extent human proctors are utilized for observing the assigned test taker(s), with or without the assistance of automated decision-making, they should be provided with documented steps for flagging and recording testing irregularities and communicating that information for the test event to the test sponsor/test administrator.
4. The online proctoring service provider and the test owner/sponsor organization need to agree on the data and metrics that will be provided as part of agreed reporting processes, which determination shall be in writing; the service provider should document for the test owners/sponsors what audit processes it has in place to validate individual compliance with these standards/requirements.
5. In responding to questions from the client/user about a collated report of test irregularities, the online proctoring service provider is expected to cooperate with the client/user to provide proctor reports as they have agreed, including where appropriate,

¹⁶ The term "test irregularity" is historically an ambiguous one, often referring to a violation of a test security rule, in other instances referring to the loss of power, or even getting sick on the keyboard. For the purposes of the ATP Pledge, the term "irregularity" means both a disruption of other normal test administration processes and not in accordance with designated security/privacy procedures.

having access to the video/audio recording of a test taker whose conduct has been flagged for irregularities or identified as potentially cheating.

6. The test owner/sponsor should have an established process for making any final determination as to the existence of an irregularity, as well as determining the sanction or penalty that is proposed for the individual test taker related to the irregularity. A test taker must be given appropriate notice of any adverse determination, as well as the procedures for challenging such adverse determination.
7. The test owner/sponsor, or in some instances the test administrator, must develop, document, and implement uniform fair procedures for a test taker to challenge a determination of a test irregularity and/or adverse decision. In a situation where the irregularity has been determined in whole or in part on the basis of a video/audio recording, the test owner/sponsor is expected to make arrangements to share a copy of the recording with the test taker, taking appropriate steps to protect the privacy rights of other test takers and/or the proctor, as well as protecting the secure test content from exposure.

VI. Protection of Test Taker PI and Test Results

1. Each testing organization involved in the online proctoring of test takers needs to take appropriate steps to assure the security of test takers' PI, including video/audio recordings, as well as of test data (e.g., test scores, reports, credentials). Depending on the type and circumstances, test data may not be test taker PI but is nevertheless confidential information that must be protected by each testing organization.
2. Each testing organization involved in online proctored assessment must have in place a written security plan ("Security Plan") to identify how it will manage the security of its products and services, networks, platforms, communications protocols, and databases, whether internal or remotely hosted.¹⁷ For a proctoring service provider, its Security Plan must also include a detailed protocol to prevent a possible breach of data, and how the provider will respond in the event a breach does occur.
3. Only the minimum test taker PI necessary to support the effective administration of testing services should be collected, shared, or stored by the testing services provider
4. Access to test taker PI should be limited to those (e.g., employees, contractors) who have a need to know and be protected with appropriate authentication and authorization measures set out in the Security Plan.
5. Each testing organization that handles PI and confidential test results should implement appropriate encryption technology, including a key management system, to assure that all relevant data is protected while data is at rest (e.g., stored) or in transit (e.g., exchanged between two parties).
6. Each testing organization involved in an online proctored assessment should apply appropriate technical and operational security measures in protecting PI and test results. Testing organizations should consider use of ISO 27000 *et seq.*, including the certification option of ISO 27001, as well as the privacy certification extension found in ISO 27701, or the use of a SOC 2 Type II audit accreditation for protection of their

¹⁷ The ATP recognizes that a written Security Plan for online proctoring is likely to include different products and services than those used for in-person testing. The Pledge does not cover what specific topics should be covered in this Security Plan because that information will be different for each service provider.

systems, platforms, and databases.¹⁸ Each testing organization and proctoring provider is strongly encouraged to obtain an external, independent third-party audit of its security measures and to publish the results of such an audit or certification.

7. As part of its technical and operational security measures, each testing organization involved in an online proctored assessment should consider the need for physical security measures, as well as the use of well-configured firewalls and other network/server security measures, rigorous patch management procedures, strong passwords, two factor authentication, periodic checks to review who has access to data, and other methods of limiting access to PI and confidential test data.
8. The online proctoring service provider is expected to limit the use of test taker PI to the maximum extent possible; as part of such limitation, each proctor is expected to sign a written non-disclosure agreement committing the proctor to protecting the security and confidentiality of test taker PI and confidential data.

VII. Handling a Data Breach

1. As a further component of its Security Plan, each testing organization involved in the use of online proctoring must have in place a written incident response plan (“IRP”), to identify how it will handle and respond to a data breach (i.e., an unauthorized disclosure or use of test taker PI or other confidential data whose security is protected under section VI).¹⁹
2. Each testing organization is expected to have documented and tested its IRP to assure that it functions in the intended manner, which IRP should be maintained on a periodic basis (at least once a year).
3. In the event of a suspected breach of PI and test data under its control, a testing organization is expected to conduct a forensic investigation to determine if a breach occurred and what data was compromised (e.g., whether any test taker PI was accessed or stolen).
4. In the event of a confirmed breach, the testing organization that was breached must give notice to the impacted test sponsor(s) promptly, usually within 48 hours after an actual breach of PI is confirmed, so the test sponsor can take steps to determine if the breach affected test taker PI and, if so, what breach notification laws/regulations must be followed. The testing organization responsible for a database of test takers’ PI that is breached is likely to have a legal obligation to notify the relevant regulators and is expected to notify all affected test takers in a timely manner if their data is exposed or leaked in an identified and unencrypted form.
5. In the event of a confirmed breach, the testing organization that was breached must promptly take all necessary steps to remedy the cause of the breach to assure it has returned to a secure infrastructure.

¹⁸ See ATP Privacy in Practice Bulletin #7: Security Standards and the Assessment Industry (ATP, 2020) for more information on ISO 27001 and SOC 2 in the context of the assessment industry.

¹⁹ Much as with a written Security Plan, an appropriate IRP for use in online proctoring may differ from one used by in-person testing organizations. Accordingly, the ATP Pledge does not dictate the contents of the IRP (see fn. 17).

6. In the event of a confirmed breach, the testing organization that was breached must promptly take steps to update and modify as necessary its Security Plan in order to minimize and avoid future security incidents/breaches, including informing its customers of such changes to its Security Plan and/or IRP.

VIII. PI Retention Policy

1. The testing organizations involved in using/providing online proctoring services for a given assessment must coordinate on the establishment, documentation, and implementation of a policy addressing how long any test taker PI collected and used, and, for the services including video/audio recordings, how long some or all of those recordings are expected to be retained. While the needs for such PI may vary from organization to organization, a coordinated policy ensures that all of the involved testing organizations are aware of how PI is used throughout the process, and what retention time frames apply in each situation. The retention policy needs to recognize that test taker PI, including video/audio recordings, should not be retained any longer than necessary, which will be based on a justification for the retention period(s) chosen.
2. The retention policy also needs to take into account that the relevant appeal process for test takers may require that the relevant PI must be retained until the expiration of such appeal process. Otherwise, the necessary data may not be available for use by the testing organizations in making a test decision, or to the test taker to challenge such a decision.
3. After the applicable retention period has expired, the testing organization is expected to deliver the encrypted data to the user, or to delete or destroy, to the extent required by applicable law or regulation, the relevant PI promptly and irrevocably.
4. The information on the applicable retention policy is expected to be part of the test taker notice (see II2b).

IX. Human Proctor Training

1. The user of an online proctoring service must have a written agreement with the vendor covering all necessary terms and conditions, including a requirement that human proctors be trained appropriately for the particular category of assessment, where applicable, as well as to assure that all proctors are covered by non-disclosure/ confidentiality provision, or have undergone any required background checks and fingerprinting that may be required by the testing organization.
2. The online proctoring service provider is expected to assure that each proctor receives training as appropriate for its technology/methodologies in order to assure that all human proctors are trained on a common standard protocol, appropriate for a particular test, which should include, to the extent applicable, the following areas:
 - a. setting up a test taker's computer system and all necessary software, or troubleshooting set-up problems experienced by the test taker, or verifying if the test delivery vendor has completed the set-up of the test to be delivered on the test taker's computer in the testing event;²⁰

²⁰ In some remote proctoring settings, the technical specifications required for the test taker's computer are shared with each individual test taker in advance; in such settings, there is no set-up required by the human proctor, although the proctor may have to verify that the test taker's computer is set up properly.

- b. confirming the identity of the test taker and assuring that the test taker is provided the intended test;
 - c. is familiar with all operating procedures and policies in order to provide all relevant instructions and information regarding the ability to provide appropriate responses to issues that a test taker may raise during the testing session, especially questions about test taker accommodations and/or privacy concerns.
 - d. auditing the functioning and activation of any video/audio recording throughout the test;
 - e. helping to troubleshoot any technical issues that may arise during the testing session;
 - f. managing, responding to and reporting all incidents (e.g., irregularities misconduct, disruptive behavior, incidents that impact standardized and fair test administration of each particular test), and completing an incident report and providing the report to the service provider or test sponsor, as instructed;²¹ and
 - g. understanding the applicable procedures for transferring a test taker to another human proctor during a testing event.
3. During the test administration, the proctor should, at a minimum:
 - a. continuously monitor test taker behavior;
 - b. pay close attention to the test taker and the testing environment to ensure there is no unauthorized access to prohibited items.
 4. During a test, the proctor should not engage in any activities unrelated to his or her duties in administering and proctoring the test. Engaging in unrelated behavior increases the risk of missing test irregularities, which could invalidate results for the test being administered, or even distracting the test taker.

²¹ Trained proctors, when assisted by use of a video record of an online test, are in a position to verify strange, unexpected, or unfair circumstances that can negatively impact a test taker. In fact, proctors often speak up for test takers that provide a benefit to the test takers in the session, as well as report test irregularities.

Appendix A Bibliography

ISO 10667-1:2020 Assessment service delivery — Procedures and methods to assess people in work and organizational settings — Part 1: Requirements for the client

ISO 10667-2:2020 Assessment service delivery — Procedures and methods to assess people in work and organizational settings — Part 1: Requirements for the service provider

Standards for Educational and Psychological Testing, American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014).

Rights and Responsibilities of Test Takers: Guidelines and Expectations, Joint Committee on Testing Practices of the American Psychological Association (2000).

Code of Fair Testing Practices in Education, Joint Committee on Testing Practices of the American Psychological Association (2004). <https://asha.org/policy/rp2004-00195>, as downloaded on January 19, 2021.

“Proctoring Best Practices,” Association of Test Publishers and National College Testing Association (2015).

“Operational Best Practices for Statewide Large-Scale Assessment Programs (2nd edition),” Security (Chapter 8), Technology-based Assessments and Technical Support (Chapter 15), and Assessment of Special Populations/Accessibility for all Learners (Chapter 19), Council of Chief State School Officers and Association of Test Publishers (2013).

Handbook of Test Security, Wollack, J.A. and Fremer, J., Routledge Publishing (2013).

“EU General Data Protection Regulation Compliance Guide,” Association of Test Publishers (2017).

Privacy in Practice Bulletin # 2: What is Personal Data in Testing? (ATP, 2019).

Privacy in Practice Bulletin #3: Obligations of Processors in Assessment Services (ATP, 2019).

Privacy in Practice Bulletin #4: Deletion Request From a Test Taker (ATP, 2019).

Privacy in Practice Bulletin #5: Breach Management: Step 1- Preparation (ATP, 2019).

Privacy in Practice Bulletin #7: Security Standards and the Assessment Industry (ATP, 2020).

Privacy in Practice Bulletin #8: Privacy By Design And By Default - Demystified (ATP, 2020).

Privacy in Practice Bulletin #9: Privacy Considerations in Online/Remote Proctoring (ATP, 2020).

Privacy in Practice Bulletin #10: Breach Management: Step 2 - Investigation and Notification (ATP, 2020).

“Privacy Guidance When Using Video in the Testing Industry,” (ATP, 2020).

ISO/IEC 27001:2013, Information technology — Security techniques — Information security management systems — Requirements, International Organization for Standardization and International Electrotechnical Commission (2013).

ISO /IEC 27701:2019, Information technology — Security techniques — Information privacy management systems — Requirements, International Organization for Standardization and International Electrotechnical Commission (2019).

AICPA System and Organization Controls (SOC), (Association of International Certified Professional Accountants, 2020).

<https://www.aicpa.org/interestareas/frc/assuranceadvisoryservices/sorhome.html>

NIST Special Publication 800-53, Revision 4, Security and Privacy Controls for Federal Information Systems and Organizations (National Institute of Standards and Technology, 2013).

1. We will notify test taker if biometrics or artificial intelligence is used in connection with the testing process, including if software is used for automated decision-making.
2. We will notify test takers if video or audio recordings are to be made of a testing event, including the legal basis (i.e., legitimate basis, consent) for such use.
3. If monitoring software is installed on a test taker’s computer, we will ensure that the test taker has the ability to uninstall the software after the exam event.
4. We will provide test takers with a procedure for asking questions and receiving answers about their rights and responsibilities.
5. We will comply with applicable laws, including those related to providing reasonable accommodations for individuals with disabilities and sincerely held religious beliefs.
6. We will adhere to the following privacy and data protection principles:
 - a. lawfulness, fairness and transparency (e.g., test takers have the right to know and understand what data is collected, how it is stored, used, and transferred);
 - b. purpose limitation (e.g., test takers have the right to expect that their data will not be sold or used for other purposes without their permission);
 - c. data minimization (e.g., no test taker data will be collected during the testing process beyond what is necessary to render a reliable and valid result, and to evidence a fair and secure testing experience);
 - d. accuracy of the online proctoring services and the data collected, stored, and used;
 - e. storage limitation (retention periods) (e.g., test taker data will be stored for no longer than is necessary);
 - f. integrity and confidentiality of the data (e.g., test takers’ personal information and test data will be secured using reasonable operational security measures, and test

takers will be notified about any confirmed breach to their personal information);
and

- g. accountability of the online proctoring services as used in a testing program.
- 7. Research will be conducted to address potential bias and discrimination before using biometrics or artificial intelligence software during the testing event.
- 8. Periodic auditing and unannounced secret shopping of the testing processes should be undertaken.
- 9. Individuals involved in securing and delivering exams should be made aware of their responsibilities with respect to test taker privacy and test content confidentiality and security.

Individuals involved in securing and delivering exams should be trained for their role. Individuals involved in real-time proctoring of exams should not engage in activities unrelated to their duties in administering and proctoring the test.