Program Considerations When Selecting Live Remote Proctoring (LRP):

Observations from the NCCA LRP Pilot Assessment and Special Exception Programs

November 2020
Version 1.1

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Introduction

Operational Definition for the LRP Assessment:
Live Remote Proctoring is defined by the Commission as remote proctoring that occurs with a person actively watching and monitoring a candidate during the time of the test administration and that provides safeguards for examination integrity and validity similar to in-person proctoring.

Note:

The following questions and comments draw upon existing NCCA Standards and are designed to stimulate discussion and decision-making by Certification Boards and Program Staff as they may be considering the benefits and risks to implementing LRP. They are not exhaustive and are not intended to be used to the exclusion of other information. As NCCA continues to evaluate LRP and receives information from programs and providers, these considerations may be modified.

In an attempt to provide useful focused information, guidance is provided based on program status (N, A, or E), where each is defined as follows:

New program (N) refers to those programs that have not previously applied for accreditation and, in general, plan to use only LRP as their delivery method. Programs planning to use LRP and other delivery methods may find both the (N) and (A) information useful.

Accredited program not using the Exception opportunity (A) refers to accredited programs that chose not to apply for the LRP Exception, but are considering using the LRP delivery method in addition to their current delivery method(s). An accredited program that is considering changing to an LRP method exclusively may find both the (N) and (A) information useful.

Exception program (E) refers to those programs that sought the LRP Exception that became available in March 2020. Many of the suggestions for the Exception programs may ask for more information than is required in the compliance report. Depending on how the programs decide on continued use of LRP, they may find the comments helpful in the application process for renewal when it is time to do so. Other comments may assist in providing response to compliance report questions.

Lastly, it should be noted that this document is organized in terms of general topics, not by order of the NCCA Standards.

Program Preparatory Activities (Standard 2, Standard 23)

Have all of the program policies and procedures been created or reviewed and updated before the implementation of LRP?

(N) If LRP is the only mode of delivery, the program policies and procedures should reflect the security, confidentiality, examination requirements, and quality assurance practices related to LRP.

(A) If LRP is going to be added to the current delivery methods, policies and procedures should reflect the multiple delivery methods and guidance to candidates for which method to choose.

(E) Most programs in the exception applications indicated that their current retention policies were used. As accredited programs move forward when the exception program ends, a decision should be made about whether the audio and video files should be transferred to the organization for a longer retention time or whether the vendor's policy is sufficient. This policy should consider the various ramifications including legal concerns and costs. They should also be communicated to candidates and align with the appeals policies.

Have staff and/or Certification Board members and/or other volunteers taken the examination using the platform and experienced the full process before the launch of LRP to candidates?

(N) (A) This preview of how the examination presents in an LRP environment may provide information for candidate communication to enhance the testing experience, and it might provide multiple examples of how the software and the testing process works.
(E) Use candidate feedback and any lessons learned from the LRP exception to improve the candidate experience. Once implemented, pilot test LRP with staff or volunteers before relaunching the program.

Staffing (Standard 5)

Will the implementation of LRP increase the workload for staff members?

(N) The most frequently identified impact of increased workload was from a customer service agent who addressed both certification and technical questions. In general, prepare to receive and respond to questions about LRP and to interact with your LRP service provider, as needed. In addition, administrative workload may increase due to planning, implementing and monitoring LRP including but not limited to developing policies, procedures and communications.

(A) (E) If LRP replaces other delivery modes, then additional staff may not be required. If multiple delivery and/or proctor modalities are to be used, then additional staff to provide oversight to LRP might be necessary, at least temporarily. In addition, staff may need to consider whether additional operational policies and procedures may be needed for LRP-related issues.

What are the important requirements for LRP proctors?

(N) Proctors must be trained to use the software and knowledgeable on issues related to assessing if inappropriate candidate behavior is observed.

(A) Current policies covering the training of proctors may need to be expanded to address LRP proctors. For example, proctors may need to be prepared to recognize potentially suspicious examinee behaviors during the testing session, such as eye movements away from the screen.

(E) Oversight of the proctors will need to continue. Examine any incidents that occurred during the exception program and make adjustments, as needed.

Confidentiality (Standard 10)

What is the program policy related to candidates maintaining examination confidentiality?

(N) Candidates are required to affirm that they will follow the rules disseminated by the program. These rules might include providing appropriate identification, keeping test content confidential, and not attempting to obtain test content before the examination. This affirmation must be described in candidate materials and candidate affirmation provided prior to administration of the examination.

(A) The current requirements for the administration should be reviewed and adjusted for all delivery modalities. Is it simply a notice to candidates in publicly available materials? Do the consequences for misbehavior need to be strengthened or clarified?

(E) Based on the experience with the Exception program, discipline and appeals policies might require review and revision to ensure their effectiveness.

What actions have been taken to ensure candidate privacy?

(N) Some candidates in the LRP pilot commented that the need to conduct an environmental scan by panning the room was invasive. The program must alert the candidates to all required activities that precede the start of the examination. It may be helpful to provide an explanation of why such activities are necessary. An FAQ document is another vehicle that could be considered to communicate key messages.

(A) Current practices should be examined if LRP is being added or replacing the current delivery mode.

(E) If candidates commented on privacy concerns, then plans should be made to address those issues through FAQs and/or candidate handbooks.

Conflict of Interest (Standard 11)

Does the implementation of LRP introduce additional or new issues regarding possible conflicts of interest?

(N) (A) (E) An example of a possible conflict of interest with LRP implementation is the location for where the test will be taken (e.g., in an office at an institution). Policies related to where a test might be taken should be developed. For example, a testing program that chooses not to allow candidates to test at home may specify the type of alternative location that must be excluded. If an academic institution offers the test preparation courses, prohibition of its participation in LRP would be appropriate.

Security (Standard 12)

Does the program have a written test security plan?

(N) (A) (E) A test security plan is a comprehensive collection of policies, procedures, and documents that outline a guide of actions related to exam security.

Have the security risks inherent in LRP been considered in reference to the stakes of the program and the potential negative effects of a breach?

(N) (A) (E) Every test administration method comes with strengths and weaknesses with respect to how well examination content is protected and the degree of confidence a program can have in the scores obtained by all candidates. Programs considering using LRP should evaluate whether additional and/or different risks posed by LRP are acceptable in light of the intended use of test scores, such as making candidate decisions, needs of the public for certified persons, general program policy, or financial and sustainability considerations.

What are the examination security policies and procedures to protect the examination content from being compromised?

   o   Candidates obtaining advanced knowledge of examination content and/or detection of pre-knowledge of examination content:

(N) The development of a test security plan that includes monitoring item, person and form-level performance, such as changes in item statistics, response times, score distributions, form-level statistics, repeater analyses, and/or pass rates. A test security plan should also address the capability to quickly replace/republish items and/or examination forms and all associated messaging to stakeholders.

(A) (E) A review of current security policies and procedures as they may be affected by LRP is needed. This should include a mechanism to identify which policies/procedures were revised. It might be necessary to include an "effective" date if the revisions are substantive. Routine statistical and psychometric analyses (data forensics) and regular web searches for compromised content should be conducted.

   o   Collusion:

(N) (A) (E) A policy that requires proctors to attest that the candidate and/or the test content is unknown to them is recommended. Routine statistical and psychometric analyses (data forensics) can be used to identify differential performance of examinees testing at certain test centers and/or with proctors. A review of discipline procedures related to behavior during the testing process such as review of incident reports related to other people in the room may be helpful.

- o <u>Assistance during testing</u>:

(N) (A) (E) A mechanism should be in place to prevent candidates from being able to leave the testing area (i.e., for a scheduled or unscheduled break) and then upon return, go back to previously viewed test items. This reduces potential benefits that could be derived from consulting materials or external sources of information.

- o <u>Proxy testing</u>:

(N) Develop policies related to check-in procedures that specify the number and type of allowable forms of candidate identification required. State whether candidate photographs will be taken and compared to prior/existing photos at the time of the examination.

(A) Review policies and procedures related to check-in steps at the current test centers. Are the comparisons of identification photographs dependent on human comparisons? Does the LRP provider use artificial intelligence, particularly facial recognition, as a screening mechanism? Consider the impact of the technique on the affected candidates. Is the candidate repeating the exam? If so, then large score differences between attempts may be examined for plausibility.

(E) Review incident reports and candidate comments related to problems encountered during the check-in process. Do these incidents indicate a need to change the current process? How many incidents were reported? The type of issues that occurred, whether candidate actions or technical problems, and how they were resolved should be examined. The number of candidates that were required to reschedule should be considered as well.

- o <u>Item harvesting</u>:

(N) (A) For security reasons, LRP policies prohibit candidates from reading aloud. This policy will require advance communication to candidates to prevent this behavior. Mechanisms should be in place to prevent screen captures or any recording that may be captured, relayed, or otherwise shared.

(E) Candidate response data, such as raw responses coupled with known item statistics and candidate response times, can be assessed for patterns that are consistent with item harvesting behaviors. In addition, exceptionally low scores should be looked at closely, as they may be indicative of less than sincere test taking behavior. All suspicious activity should be investigated and outcomes documented.

Is the examination delivered in a lockdown browser that prevents navigation to other computer sites and/or restricts certain functionality of the computer?

(N) (A) If the answer is no, provide details on how the test is secured, how access to other applications is prevented, and how the ability to record content is prevented.

(E) Review candidate comments and any recorded incident reports to determine how well the lock-down browser worked. Communicate any planned changes to ensure a smooth transition or implementation of a replacement lock-down tool.

What processes are in place that allow for immediate termination of a testing session if misconduct be observed?

(N) Ensure that candidates are aware of what actions/behaviors constitute reason for immediate termination of a test session. Document what the termination process will be and the consequences for the candidate. Ensure that this information is consistent with the language used in the program's test security plan.

(A) Review current policies and procedures that relate to inappropriate or unacceptable candidate behavior. Document how and under what conditions a proctor may terminate an examination session.

(E) Review incident reports to assess how well the established process worked. How many incidents were reported? What behaviors, if any, prompted a termination of the test session? Document how reported issues were resolved and how future incidents will be addressed.

Examination Design (Standards 6, 15, 16)

Does the test design for LRP-administered examinations need to be altered from other delivery methods to allow LRP to be used?

(N) The length of the test and the way items are rendered on screen may impact test time. A policy regarding breaks, whether scheduled or unscheduled, should be established. Collusion or unauthorized access to information while a candidate is out of sight from a proctor can pose great risk to several facets of the examination process including validity of the resulting scores.

(A) A test's design should be appropriate for exams that are administered in multiple sections. For example, if content is delivered by content area, then procedures for handling the time between sections need to be addressed.

(E) Review the candidate comments about the need for breaks and develop a policy that works well for the candidate population.

Is the program planning to use LRP exclusively or are other delivery modalities going to be used as well? How does the program plan to monitor comparability of scores if more than one modality is used?

(N) Tests must be designed in a way to minimize how multiple delivery modalities may adversely impact fairness to candidates and possibly bias examination outcomes.

(A) (E) Summary statistical information of examinee performance, such as average examinee scores, response time, and pass/fail rates, along with item and form performance including average item difficulty and discrimination, form-level reliability, decision consistency, and standard error of measurement (SEM)

should be used to inform future decisions.

Is there any impact to test time under LRP? Does test time vary across delivery methods?

(N) (A) Candidates need to be aware of the amount of time they are allowed for a given examination. Content time should be specific to time spent on the examination and not on log-in activities or optional tutorials. Time spent in a test session may exceed the time spent on a test due to technology issues. It is important to provide clear communication to candidates regarding technical requirements for personal computer equipment including recommended internet speeds. Because internet connectivity can be impacted by multiple factors, a statement to that regard should be considered.

(E) A review of average test time is requested as part of compliance reporting. Document (and review) candidate comments that are related to test time as well as how those comments were addressed.

Candidate Experience (Standards 6, 18)

How are requirements associated with LRP communicated to the candidates?

(N) Consider specific communication approaches before, during, and after the testing experience. Details about the login process, the check-in procedures, and the technology requirements should be communicated early. In addition, provide direction on how candidates can quickly obtain information during a test session (e.g., how to chat with a proctor). Following the administration, document how things went and what improvements may be considered.

(A) Consider how candidates currently receive information. A suggestion submitted by some pilot participants was to offer prerecorded instructional webinars.

(E) Review the information communicated to the candidates. Involve the customer service staff at your organization and/or your vendor to provide insight into what candidates need to know. It may be useful to compare outcomes and comments between candidates from test centers vs. LRP.

Does your vendor offer a preliminary test of the equipment and internet link that the candidate expects to use for the examination?

(N) Candidates seem to have the greatest difficulty with the technical setup with LRP implementation. Clear communication, including instructional flowcharts, graphics, or videos may be appropriate.

(A) Consider how technically savvy your candidates are. Some groups understand the technical requirements with little help. Others tend to need coaching to use the system.

(E) If you had a preliminary test as part of your implementation, review the experience with your customer service staff and a subset of your candidates. If the vendor captured any issues associated with

an unsuccessful examination launch, consider how you might use that information in the future. Review candidate comments for insight regarding candidates' technical skills.

How are accommodations handled?

(N) (A) The pilot assessment offered little information about accommodations because of the small number of requests received. Some accommodations are more easily handled if the candidate is at home, such as physical access or a low-stress environment. Depending on the LRP provider and the test time allowed, requests for additional time may present a problem, such as the possible need for a break, so be sure to work closely with your LRP provider to proactively address this need. Other requests, such as providing a personal reader or signer, were not made. Information provided to candidates must make it very clear what is allowed and what is not allowed in an LRP test session. Programs should be aware of vendor policies and limitations related to offering accommodations in the LRP environment.

(E) A review of the requests for accommodations and the subsequent decisions should inform future requirements. The workflows for how ADA requests will be evaluated should be detailed in work instructions, policies or procedures.

What are the privacy concerns associated with LRP and how will they be managed?

(N) If a candidate population includes international examinees, be sure to consider privacy implications in that market. For example, can candidates be required to pan their testing space? A possible work-around may be to procure a location that is candidate-neutral, such as a community college or human resources department, as the administration location. If a training school is considered, the establishment of proctor-neutral policies will be needed. Programs should consult with their legal counsel on the best approach to these issues.

(A) Evaluate the LRP capability of your current vendor. Include an evaluation of the data retention policies offered, especially for the video and audio portions of the examination.

(E) Review candidate comments related to candidate privacy and confidentiality based on your experience. Revise any policies and procedures accordingly.

What issues related to access to technology and/or a suitable environment might your candidates have?

(N) (A) Non-discrimination and fairness policies may need to be addressed.

(E) Review incident reports and candidate comments related to access to technology and a suitable environment. You may consider documenting issues and how they were resolved as part of quality assurance activities.

Vendor Information (Standard 18, 23)

What types of artificial intelligence or additional security services are included in the LRP contracted services?

(N) (A) A minimum requirement is that LRP providers must include a process to secure the computer the candidates use; a common method is the use of a lockdown browser that prevents access to external sites. Alternative and/or additional security features should be disclosed by the vendor. Optional features may include an augmented check-in process and/or proctoring assistance using AI. Ensure that your program knows what is included in your service contract and ensure that it matches your examination's requirements and candidate's needs. If the vendor offers AI as part of their product, identify the role(s) that it plays in the LRP process and its impact on candidate experience and examination outcomes.

(E) Evaluate whether the AI features offered provided the desired level of added value.

What is the proctor-to-candidate ratio?

(N) Vendors usually provide both a maximum ratio and an average ratio as part of their product information. Determine whether you can specify a customized proctor-to-candidate ratio if desired.

(A) Compare the current policies about proctor-to-candidate ratios and determine if they are appropriate with your application of LRP.

(E) Review the incidents that occurred during the exception program, if any, and determine whether a different proctor-to-candidate ratio may be needed. Use this information to avoid future incidents.

How easily will the vendor software interact with the program's security and examination delivery needs?

(N) Work in conjunction with your test design and psychometric team to ensure that the selected LRP provider aligns with your program's design and needs.

(A) Review special features, such as inclusion of special graphics, availability of certain item types, or use of special characters that may pose different technical requirements.

(E) Review the incident reports and candidate comments to determine if the delivery platform met the needs of the various stakeholders.

Has the vendor had any unsuccessful testing sessions that were so problematic that they were noticed by entities external to the program or organization? What caused the unsuccessful session and what changes were implemented so that issues will not be

repeated?

(N) (A) (E) With the onset of the COVID-19 pandemic, there were news articles describing serious issues associated with LRP. You may wish to do your research or include in RFP's an inquiry about any such incidents. Ongoing review of any examination delivery incidents and follow-up action plans are a best practice.