Infrastructure Trial Readiness Guide for Spring 2020 RICAS Computer-Based Testing

February 2020

Important Contact Information and Resources

Test Administration Information and Online Services
RICAS Service Center: Contact the RICAS Service Center with questions on the RICAS Resource Center website, PearsonAccess[next], passwords, and questions about the SR/PNP.

Telephone:	855-222-8936
	Monday – Friday; 7:00 a.m.–5:00 p.m.
Email:	ricasservicecenter@cognia.org
Fax:	603-749-5108
RICAS Resource Center:	http://ricas.pearsonsupport.com/ Use this site to access PearsonAccess[next] and the PearsonAccess[next] Training site. Training modules, manuals, and other materials to support the infrastructure trial and test administration can also be found here.

RICAS Policy Information
RIDE: Office of Instruction, Assessment, and Curriculum: Contact RIDE with any questions on policy or accommodations. Questions regarding student registration data should be directed to the district's data manager.

Web:	www.ride.ri.gov/RICAS
Email:	assessment@ride.ri.gov
Telephone:	401-222-8413
Fax:	401-222-3605

Table of Contents

I. Infrastructure Trial Overview

A. Purpose and General Overview

An Infrastructure Trial is an opportunity for districts, schools, and students to prepare for RICAS computer-based testing (CBT) by simulating test-day network utilization. This "dress rehearsal" will help to confirm that all testing devices are properly configured, that school and district networks can handle online testing, and that staff members are familiar with their role in administering an online test.

This trial is also an opportunity to introduce students to TestNav and practice using the online tools.

Conducting an Infrastructure Trial provides the school with a scheduled opportunity to practice administering a test in a low-stakes environment that can identify possible problems with technology and communication. This process will help avoid delays or issues during operational testing. Unlike during an operational administration, this trial will not use real student information (sample students will be created in the PearsonAccess[next] training site), but many of the other steps for an operational administration will be followed.

The Infrastructure Trial confirms:
- TestNav is configured correctly
- If proctor caching is used (see Appendix B), the ProctorCache machine is properly configured to deliver test content to devices
- Devices can successfully run TestNav
- Participating staff know how to monitor and manage a computer-based RICAS assessment
- Students are familiar with the computer-based tools and format

Note that students participating in the Infrastructure Trial practice test will not receive a score at the end of the session; if schools would like for students' practice tests to receive a score, schools should also administer the practice tests outside of the infrastructure trial. Scorable Practice tests are available in the RICAS Resource Center and the TestNav Application login screen under the **Sign In** button as shown below.

B. Scheduling the Infrastructure Trial

RIDE recommends that schools conduct an Infrastructure Trial approximately two weeks prior to CBT administration.

The Infrastructure Trial should take approximately 60 minutes to administer. However, additional time is needed for the following set-up tasks prior to administration: training staff, creating sample student records, creating sessions, and configuring the network. The time involved will vary depending on the size of the school/district and the number of students testing at a given time.

C. Individuals to Include in the Infrastructure Trial

Everyone who will be involved in operational testing should be involved in the Infrastructure Trial. This may include the following:
- District test coordinator
- Principal or school test coordinator
- Test administrators
- Technology coordinator
- Students

D. Planning an Infrastructure Trial

Steps for the district test coordinator or principal/school test coordinator

1. **Create a communication plan for the Infrastructure Trial.**
   A best practice for computer-based testing is developing a communication plan for all of the staff members who have a role in administering computer-based tests.

   Principals or test coordinators should establish communication with technology staff before the test schedule is set. The plan should document how to reach technology staff during operational testing as well as which individual (the technology coordinator or designee) will be designated to contact the RICAS Service Center in case of technology issues.

2. **Schedule the Infrastructure Trial.**
   Schedule the following activities as part of the Infrastructure Trial:
   - Consult with the technology coordinator, and confirm that all of the student testing devices meet the technical specifications.
   - Designate appropriate testing locations.
   - Ensure technology staff have set up, installed, and configured all necessary software.
   - Train all staff involved in the Infrastructure Trial.
   - Identify all students who will participate in the Infrastructure Trial.
     A trial can be conducted with any number of students, but it is recommended that you select the maximum number of students you expect to be testing at the same time so that your trial approximates the actual anticipated load on your network.
   - Have students practice TestNav navigation and tools by using the tutorial found at ricas.pearsonsupport.com/student/.

   Once test sessions are created and the technology set-up is completed, plan approximately 60 minutes to administer the Infrastructure Trial.

Districts with a district test coordinator should inform their schools whether there will be a district schedule for administering the Infrastructure Trial.

II. Using the PearsonAccess^{next} Training Site

Steps for the district test coordinator, principal/school test coordinator, test administrators, and the technology coordinator

The PearsonAccess^{next} (PAN) training site is used for the Infrastructure Trial (instead of the operational site) to create sample students, create PearsonAccess^{next} Sessions, set up TestNav configurations, and monitor student test progress.

RIDE created PAN user accounts for district coordinators in each organization. Districts are responsible for creating accounts for any other necessary staff members, following instructions in the *Guide to Importing Users into PearsonAccess^{next}*, available online in the RICAS Resource Center under the User Information dropdown.

Confirm that all staff members participating in the Infrastructure Trial have a user account for the training site and have been assigned their appropriate roles. To find a user in PearsonAccess^{next}, select **Users** from the **Setup** dropdown menu. Here, search by last name or select **Show All** (the dropdown arrow next to the **Search** button). To see a user's assigned role, click on the 🛈 icon and select the **Roles** tab. Refer to the *User Role Matrix* and the *Guide to Importing Users into PearsonAccess^{next}* in the RICAS Resource Center for more information about creating users and assigning roles, if needed.

Note that users with accounts from last school year may have been created with an "Active End Date." When that date has passed, the user will not be able to gain access to their accounts. This can also happen when users have not logged into their accounts for a period of time. Test coordinators should edit these accounts through the user interface or a file upload to update the date or remove the Active End Date. Once this is completed, users should update their passwords.

To log in to the training site for the first time (if you received a new PAN account email notification):
- Click on the link in the email.
- Create a password. You will be prompted to enter it twice; then, click **Set Password**; and then, click **OK**.
- To return to the training site, go to **https://trng-ricas.pearsonaccessnext.com/**.
- Click **Sign In**, and enter your username and password on the next screen. Then select **Login**. Read the Privacy Policy and Terms and Conditions of Use, and then click **Accept**.

To log in to the training site for the first time (if you received an email notifying you of updated permissions to your PAN account):
- Go to **https://trng-ricas.pearsonaccessnext.com/**.
  Click **Sign In**, and on the next screen enter your username and password from the operational site. Then select **Login**.

To reset your password (if needed):
- Go to **https://trng-ricas.pearsonaccessnext.com/**.
- Click on the **Forgot Password** link.
- Enter your username and email address (typically these will be the same), and then click **Request Password Reset**.

Notes on logging in:
1. If you reset your password to the training site, you will automatically reset your password for the operational site, since usernames and passwords for both sites will always match.
2. Users have five opportunities to log in correctly. After five unsuccessful attempts, the account will be locked, and the user will need to click **Forgot Password** on the home screen to reset the account.

III. Technology Set-Up

Steps for the technology coordinator before, during, and after the Infrastructure Trial

1. Review responsibilities for the Infrastructure Trial.
The technology coordinator and technology staff will need to review roles and responsibilities for preparing schools to conduct the Infrastructure Trial, and inform principals in the district. The technology coordinator and technology staff will need to determine local responsibilities, including configuring devices and how information will be shared across the team for preparing the school to conduct the Infrastructure Trial. Once these roles and responsibilities have been established, they need to be shared with the principal.

2. Configure Internet firewalls, content filters, and spam filters.
- Configure Internet firewalls, content filters, or spam filters to allow access to the Pearson domain. Verify content filter/firewalls and allow the appropriate sites, including:
    - *.testnav.com:80
    - *.testnav.com:443
    - *. pearsontestcontent.com
    - *. usertrust.com
    - *. comodoca.com
    - *. thawte.com
    - *. google-analytics.com (recommended, but not required)
  Allow local file access to the home directory.

- Configure the common applications listed below so that they will **not** launch on any student testing devices during the Infrastructure Trial or during operational testing:
    - Anti-virus software performing automatic updates
    - Power management software on laptops warning of low battery levels
    - Screen savers and sleep mode
    - Email with auto message notification
    - Calendar applications with notifications, such as Google Calendar
    - Pop-up blockers
    - Set automatic updates (iTunes)
    - Windows Accelerator
    - Mac OS three finger tap gesture on Macintosh computers with trackpads
    - Any other application that could have a popup message

3. Download the device-specific TestNav app.
For desktop computers, laptops, iPads, Chromebooks, or Androids, download a device-specific TestNav application from the Apple Store, the Google Chrome Web Store, Google Play, or go to http://ricas.pearsonsupport.com/technology-setup/. Instructions on setting up and managing these devices are available at https://support.assessment.pearson.com/x/HgACAQ.

4. Test the "lock down" settings.
   Student testing devices must be able to operate in a "lock down" state to temporarily disable
   features and applications that could present a security risk.

   Schools can test the security lock down settings following these steps:

   - For the TestNav app, open TestNav and navigate to the Rhode Island sign in page, and then click
     the user icon in the top right and choose "App Check" from the menu.
   - A success message should display within a few seconds.
   - If there is an error message, review the [device setup instructions for the TestNav app](#) or contact
     the RICAS Service Center.
   - If the Configuration Identifier is entered, the App Check will also verify that the device has the
     appropriate permissions to the primary and if specified, the secondary save locations. The
     identifier can be found in PAN on the **Create/Edit TestNav Configuration** page (Setup > TestNav
     Configurations > Create/Edit TestNav Configurations).

   Note for ChromeOS devices: If peer-to-peer (P2P) networking is available, devices can automatically
   update Chrome from nearby devices of the same model. This option reduces external network
   traffic. If P2P automatic updating fails or isn't possible on your network, devices will update as usual.
   Turning off this option is a setting that is in the Google Admin Console and would help with the
   following:
     1. The very process of updating operating systems uses a fair amount of network resources
     2. The device could update from an OS that is compatible with TestNav to one that is not
     3. OS updates or notifications regarding updates can cause TN to lose focus and error out
   What does this mean for the testing experience? If a student has the P2P available, it may slow down
   TestNav or they may receive errors while testing. If several students have this option available, it will
   slow down TestNav for all students and these students may receive errors throughout testing.

**5. If using proctor caching, download and install ProctorCache software and take the
following Steps. See Appendix B for details.**

**Note: If you used proctor caching last year and are not planning to use it this year, take the
following actions to disable any existing ProctorCache configuration for TestNav (these
actions and a screenshot are also provided in Appendix B). Then skip to and complete only
part c of Step 6, and skip Step 7.**
   - Click on **Setup** and **TestNav Configuration**.
   - Click the dropdown next to the **Search** button, and click **Show All Results**.
   - Select your configuration and click the **Select Tasks** dropdown, select **Create/Edit TestNav
     Configurations**, and click **Start**
   - Select your configuration on the left side of the screen and scroll down to the **Precaching
     Computers** section.
   - Delete the content in the **IP Address** and **Port** fields and then click Save.

6. Create the TestNav configuration.
   The TestNav configuration will notify the student device where to access test content once content
   becomes available. You may also change the default save location for encrypted backup files for
   TestNav in the TestNav configuration.

To create a TestNav configuration for your organization, select **TestNav Configurations** from the **Setup** menu on the PearsonAccess^next homepage, and select **Create/Edit Configurations** from the **Select Tasks** dropdown menu, and complete the following steps.
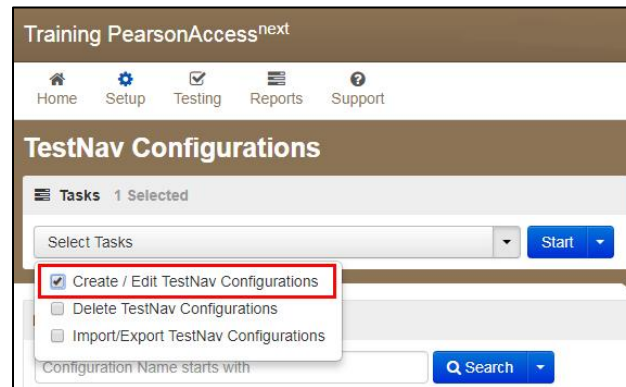
a. **Complete the "Details" fields.**
   - Enter a Configuration Name.
   - Select the Precaching Computer Override option (recommended for most devices/configurations). If selected, this will allow students to continue testing, even if they lose connection to the ProctorCache computer. This may slow the loading time of the tests as the testing devices will no longer be getting content from a local device, but there will be no testing disruption.
   - Select the school/organization that will use this configuration from the **Organizations** dropdown menu.

b. **Complete the "Default Precaching Computer" fields.**
   - Enter a **Computer Name** for the precaching machine.
   - Enter an internal network **IP Address** of the precaching machine.
   - Enter the **Port** number for the precaching machine, which will be 4480 for Pearson supplied ProctorCache software. If you will be using a non-Pearson supplied caching solution, uncheck the box next to "Uses Pearson Precaching Software" and then use the correct port for the non-Pearson software.

c. **Complete the "Response File Backup Locations" fields.**
Note: If you are not using ProctorCache, and you do not already have Primary and Secondary save locations set up, you will need to enter a Configuration Name, Organization, and Computer Name for the locations to be saved. Except for the Organization, these names do not have to be actual names used for the purposes of testing.

- Enter the **Primary** and **Secondary** save locations for the students' backup files, which will be encrypted. There are options for Windows, Mac, and Linux devices, and there is an option to use an SFTP file backup location for mobile devices.
- For the primary location, the Pearson default location (i.e., the Pearson folder in the user's home directory) is recommended. RIDE recommends that a secondary save location also be designated on an internal network location.

d. **Click "Create" (or "Save") to complete the configuration.**

7. **(If using proctor caching) Precache test content by using the "Precache by Test" function.**

a. **Select "Precache by Test" from the "Setup" dropdown menu.**
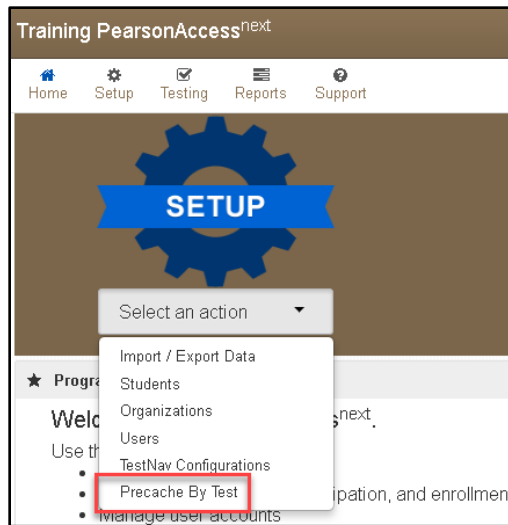
b. Select the test(s) to cache and the "Precache Server," and then click "Precache."

c. Click "Precache" in the pop-up message confirming the precaching computer.

d. A new window will open the ProctorCache diagnostic screen showing the precaching status.
You may need to enable pop-ups in your browser for PearsonAccess^next to see this screen.

8. Perform a "Preliminary System Test" (recommended).

Prior to students taking part in the Infrastructure Trial, the technology coordinator should perform a Preliminary System Test. The Preliminary System Test is an informal, small-scale Infrastructure Trial to help ensure systems are set up and in place before students participate. Technology coordinators should work with the principal or school test coordinator to follow the steps to create sample student records and a PAN Session. Then, technology staff will log into several student devices and access a practice test to confirm that they are able to connect.

9. Perform the following steps during the Infrastructure Trial.

    a. *If using proctor caching*, **ensure ProctorCache software is running.**
    Locate the caching computer's IP address and, then in your browser, type **http://<IP address>:4480** and then press **Enter** to view the ProctorCache interface. View three tabs: Tests, Clients, and Help. Select the **Tests** tab for information about test content and caching status. Select the **Clients** tab to monitor client connectivity.

    b. **Monitor network performance for slowdowns or ISP bandwidth usage.**
        • If testing devices are using a wireless connection, monitor the connections and verify that access point placement is sufficient for online testing
        • Provide technology support as needed to the principal or school test coordinator and to test administrators.

10. Perform the following steps after the Infrastructure Trial.

    a. *If proctor caching was used*, **purge cached test content (recommended).**
    Note that if content is not purged, it will show in the caching interface in the next CBT administration.

    In your browser, type **http://<IP address>:4480** and press **Enter** to view the ProctorCache interface. Choose the **Tests** tab to select the content to purge. A password is required to purge; the default password is **t35t1n6**.

b. **Follow up on any issues that were identified.**
Following the Infrastructure Trial, there may be a need for technical follow-up and resolution prior to the operational test administration. Feedback from staff and students regarding TestNav performance, device connectivity, network performance, and access point placement, should be used to conduct follow-up activities with the Infrastructure Trial team.

IV. Generating Sample Student Records

Steps for the district test coordinator or principal/school test coordinator

RIDE recommends using sample student records instead of actual student data. Schools should determine the maximum number of expected concurrent testers during operational testing (i.e., 300 students testing on one day at 10 a.m.) in order to conduct their Infrastructure Trial with the same number of concurrent testers. The principal or test coordinator will then need to create sample student records in the training site, creating as many sample records as the number of students expected to participate in the Infrastructure Trial, as well as a 10 percent overage in case of login complications.

Note: The ability to generate sample student records exists only on the PearsonAccess^next training site (this cannot be done in the operational site).

To create sample student records:
1. **Log in to the RICAS training site.**
   Confirm that the correct administration is selected in the top right hand corner of PearsonAccess^next.

2. **Click "Setup," and then select "Students" from the dropdown menu.**
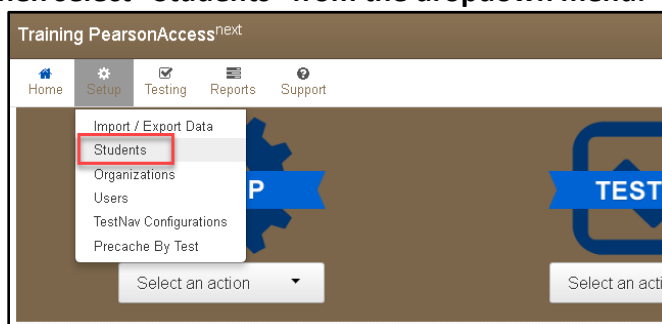
3. **Select "Generate Sample Students" from the "Select Tasks" dropdown menu, and then click "Start."**
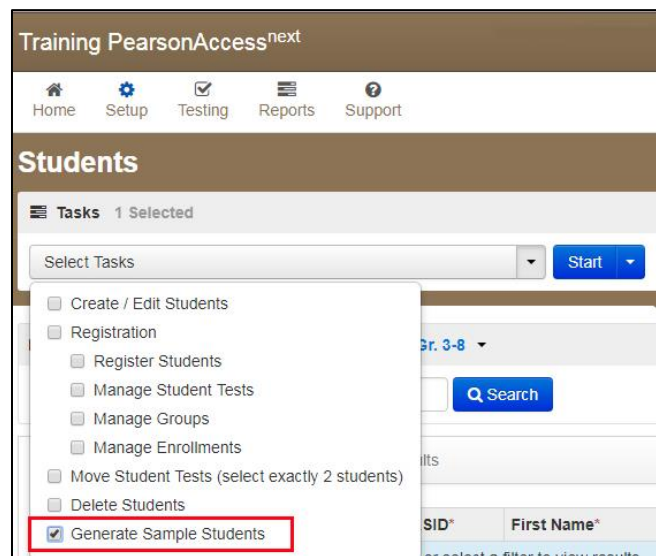
4. **Populate the following fields in the "Generate Sample Students" screen, and then click "Generate."**
   - **Organization**: Select your school/organization.
   - **Group**: Select **Create New Group,** and enter a group name that is easy to find (e.g., grade, subject, and location). This will be used later to add students to a PearsonAccess^next Session (see Section VI on p. 14-18).
   - **Student Grade**: Select the grade for which the students are reported in the eRIDE enrollment census.
   - **Test**: Select the appropriate subject area test from the dropdown menu.
   - **Test Format**: Select **Online.**
   - **Number of Students**: Enter the number of students. It is recommended that you create at least 10 percent more students than needed, in case additional student testing tickets are needed.

Repeat steps 2–4 for each grade/subject group of sample students to be created.

V. Administering Accommodated Practice Tests

Steps for the district test coordinator or principal/school test coordinator

Most, but not all accommodations and accessibility features are available for the practice tests administered as part of the Infrastructure Trial. All accommodated tests can be taken on the TestNav app for the spring 2020 CBT administrations, although it is recommended to test third party software and hardware prior to live testing to ensure compatibility with the app.

The following PNP-enabled accessibility features are available for practice tests in the Infrastructure Trial:

- **Alternative Background and Font Color**: The Alternative Background and Font Color is available for the all of the grades 3–8 practice tests.
- **Answer Masking**: Answer Masking is available for all of the practice tests (listed above).

The following accommodations are available for practice tests in the Infrastructure Trial. Where noted by an asterisk, practice test editions are only accessed in the Infrastructure Trial and not via the app or in the RICAS Resource Center.

- **Text-to-Speech**: Text-to-Speech is available for all of the practice tests.
- ***Assistive Technology**: The Assistive Technology (AT) accommodation is available only for the grade 3 ELA practice test; it is meant to be a sample for school staff to ensure that students' external AT software/hardware function as expected with TestNav prior to operational testing.
- ***Screen Reader**: The Screen Reader accommodation is available only for the grade 3 Mathematics practice test; it is meant to be a sample for school staff to ensure that students' external Screen Readers (e.g., JAWS) function as expected with TestNav prior to operational testing.
- **Human Reader/Human Signer**: These accommodations involve assigning a proctor ticket, so the students ***must*** be placed in a separate PearsonAccess[next] Session marked as a Human Reader/Human Signer session. More information on this can be found in the *[Guide to the Student Registration/Personal Needs Profile (SR/PNP) Process](#)*, available under the "PearsonAccess[next] Guidance" section. These accommodations are available for all of the practice tests (listed above).
- **Spell-Checker**: The Spell-Checker accommodation is available for all grades 3–8 practice tests.

For more information about accessibility features and accommodations, refer to the *[Guide to the SR/PNP Process](#)* available at the location above. For information about assistive technology, refer to the [Guidelines for Using Assistive Technology as an RICAS Test Accommodation](#), available under the "Technology Guidelines" location.

These accessibility features and accommodations, including accommodated test forms, **must be assigned prior to preparing and starting a PearsonAccess[next] Session**. Use the following steps to assign accessibility features and accommodations.
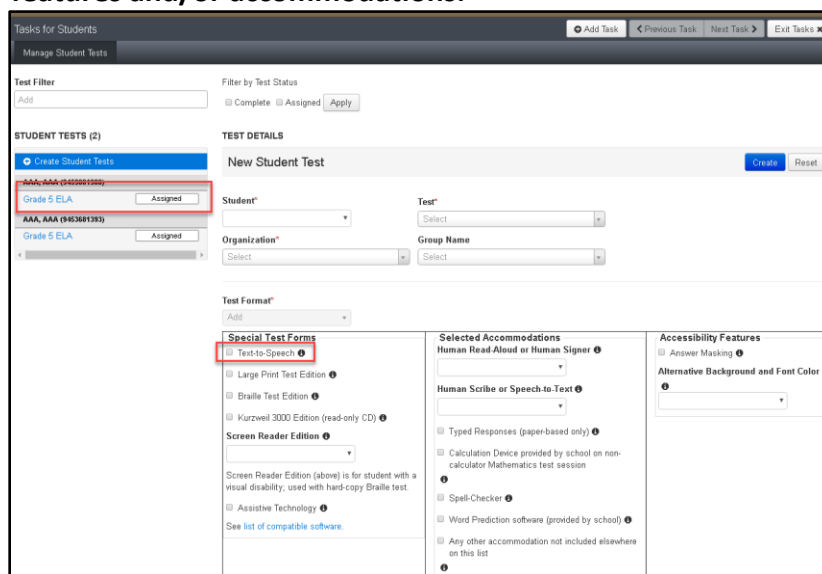
1. **Click "Setup," and then select "Students" from the dropdown menu.**
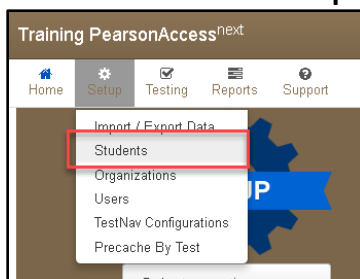
2. **Select the student whose test will be assigned an accommodation, and select "Manage Student Tests" from the "Select Tasks" dropdown menu.**
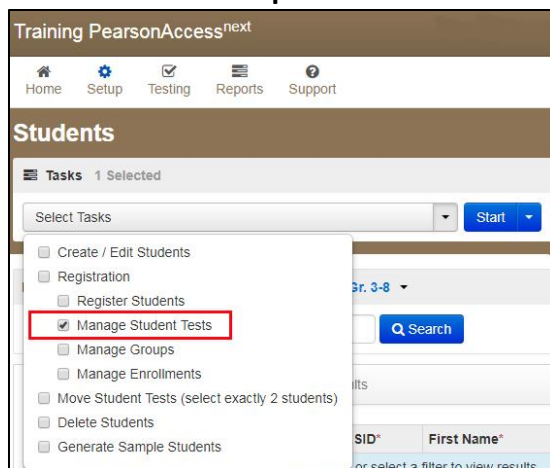
3. **Select the subject area test on the left-hand side of the screen, and select the appropriate accessibility features and/or accommodations.**

4. **Recommended: Rename the student so that the accommodated test is easier to find. Select the "Add Task" button on the top black bar, and then select "Create/Edit Student" and select the student record on the left to update the name and click "Save."**

VI. Creating PearsonAccess^next Sessions

Steps for the district test coordinator, or principal/school test coordinator

After sample student records have been created, the district test coordinator, principal or school test coordinator will need to create online PearsonAccess^next Sessions for the sample student practice tests, which are grade- and subject-specific. A PearsonAccess^next Session is a group of students in PearsonAccess^next who will be testing at the same time and place. (This is different from the actual test session, a term used for administration.)

Recommendations for creating PearsonAccess^next Sessions:
*   Create a unique PearsonAccess^next Session for each group that will be testing.
*   Include the testing location and the name of the test administrator in the name of the PearsonAccess^next Session.

1. **Create PearsonAccess^next Sessions.**
    a. **Click "Testing," and then select "Sessions" from the dropdown menu.**
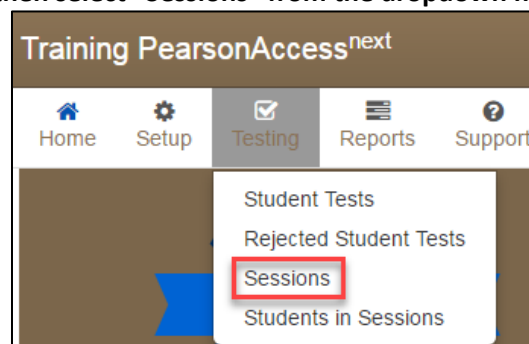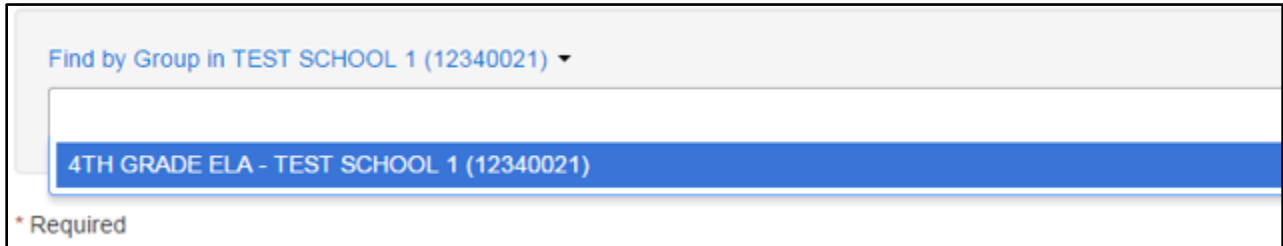
b. Click "Select Tasks," select "Create/Edit Sessions," and then click the blue "Start" button.
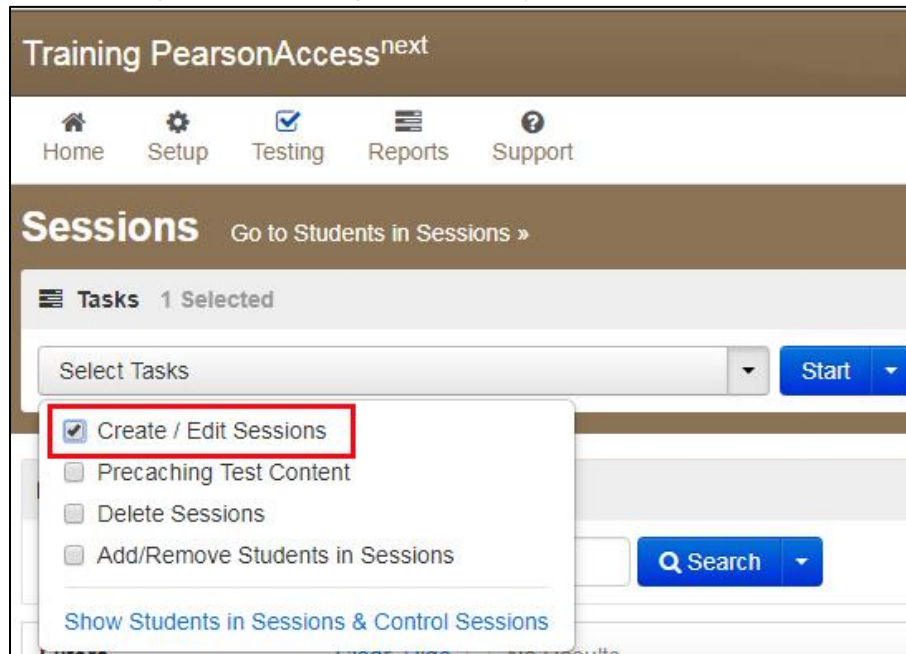
c. Complete the "Details" screen.
- Enter the **Session Name**, and then select the **Organization** from the dropdown menu.
- Complete the **Test & Form** section by selecting the **Test Assigned** dropdown menu and choosing the appropriate practice test from the dropdown.
- Set **Form Group Type** to **Standard** from the **Form Group Type** dropdown.
- *If proctor caching is used*, select the **Precaching Computer** from the dropdown menu (if there are no options in the dropdown, see page 6 ["Create the TestNav configuration"] to create the precaching computer configuration).
- Enter the **Scheduled Start Date** and the **Scheduled Start Time**. (These are meant to be used for planning purposes only; entering incorrect information will not have an effect on when the practice tests can actually be administered.)
- Click in the box underneath "Students" to add individual students or click on the dropdown arrow next to the school code to instead find by group name (as shown in the following step).

d. **When selecting the option to find groups, the screen changes as shown below:**


e. **Click "Create."**

2. **How to add additional sample student records to a PearsonAccess[next] Session that has already been created (if necessary).**

    Follow the steps below to add student records to PearsonAccess[next] Sessions, if the students were not included in the Session when it was created.
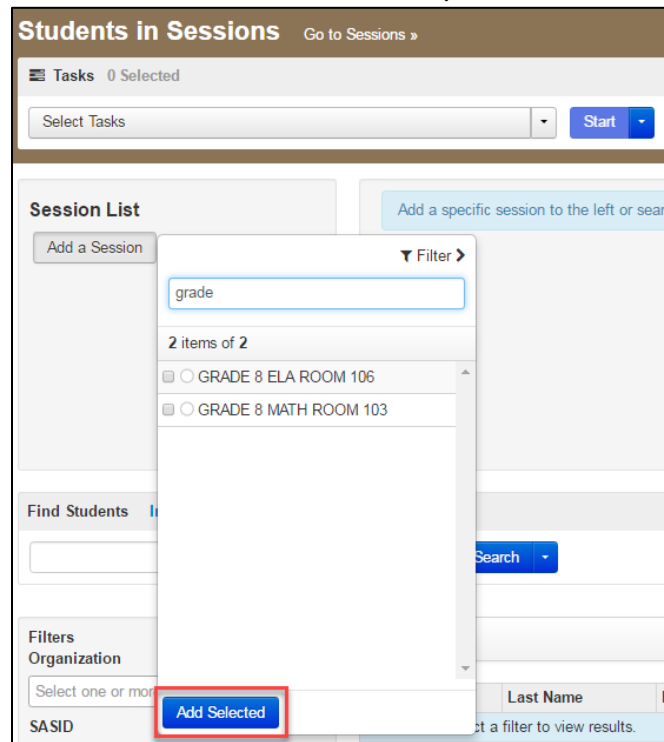
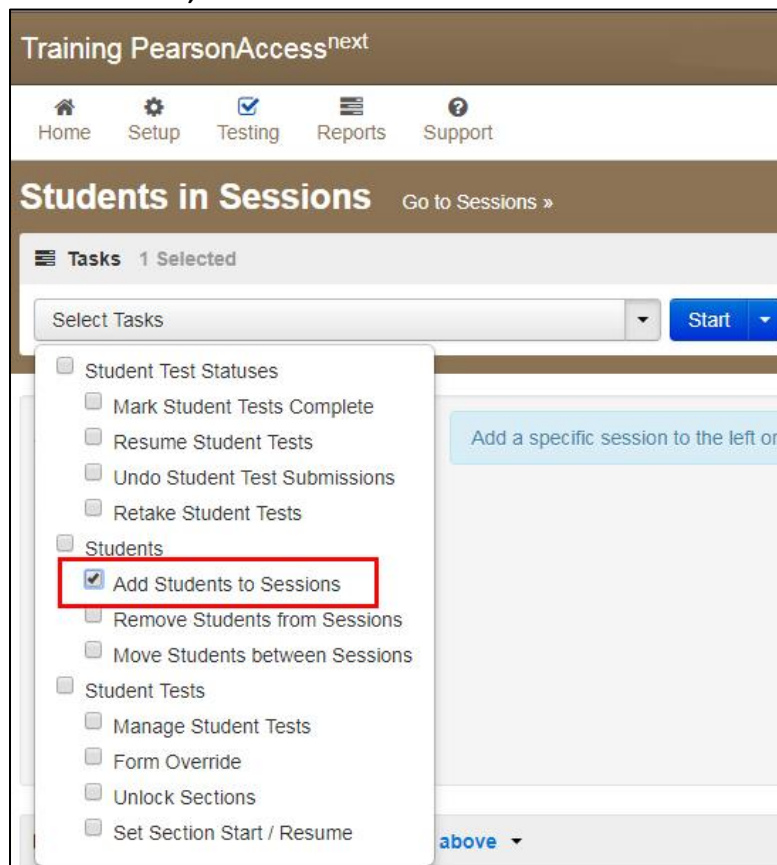   a. **Click "Testing," and then select "Students in Sessions" from the dropdown menu.**
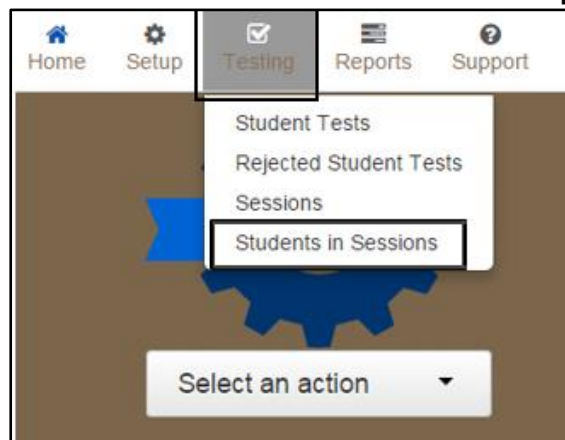
    b. **Select "Add a Session," and search for the name of the Session to which you will add students.**
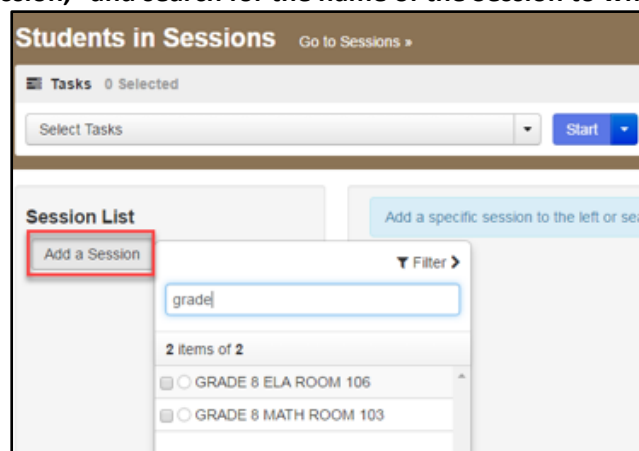
c. **Select the checkbox next to the name of the Session, and then click "Add Selected."**

d. **Click on the "Tasks" menu, and select "Add Students to Sessions." Then click "Start."**

e. **In the "Find Available Students" box, find students to add to the Session.**
Search for students by last name or select the "Show all Results" checkbox to see all available students. To add students from a previously created group, select the blue dropdown and select the "by Group" option.

f. **Select the student(s) to be added and click the "Add" button.**

VII. Preparing and Administering the Infrastructure Trial

Steps for the district test coordinator or principal/school test coordinator

1. **Prepare each PAN Session.**
PAN Sessions must be prepared by the principal or school test coordinator before they can be started. Preparing a test session assigns the test form for the students, so it is important to make sure PNP information has been updated so sample students can be assigned an accommodated form, as necessary. Preparing a test session may take a few minutes depending on the number of students in the session, preparing multiple sessions may take a longer time. It is recommended to prepare sessions the day before planned testing to ensure that all forms are assigned correctly.

    a. **Go to the "Testing" tab and click "Students in Sessions".**
    b. **Locate and click the session name from the Session List.**
    The **Sessions Details** screen will appear for the session selected. If multiple sessions are selected, the option to **Combine View** and **Prepare all Sessions** appears.
   c. **Click the blue "Prepare Session" or "Prepare All Sessions" button**.
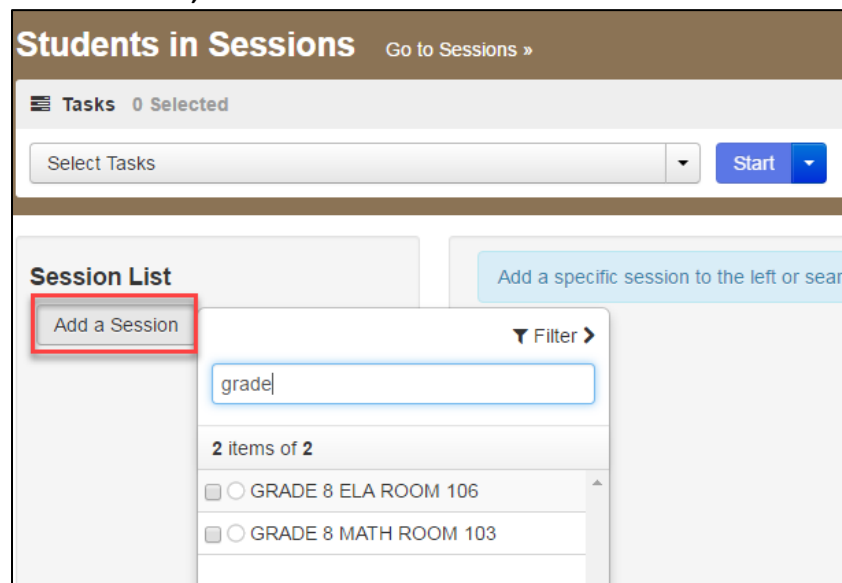
2. Print student testing tickets.

Student testing tickets include a login ID and password to log in to the practice tests, and are generated for each student added to a PAN Session.

Note: Seal codes will not be used during the 2019–2020 administrations.

a. **Once logged in to the training site, click "Testing," and then select "Students in Sessions" from the dropdown menu.**
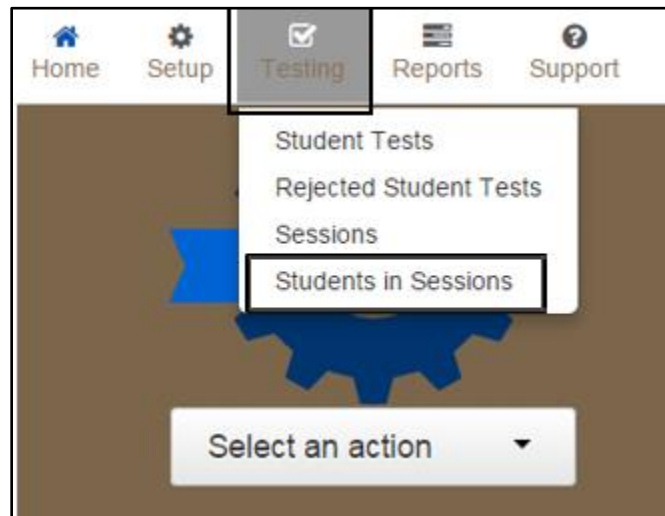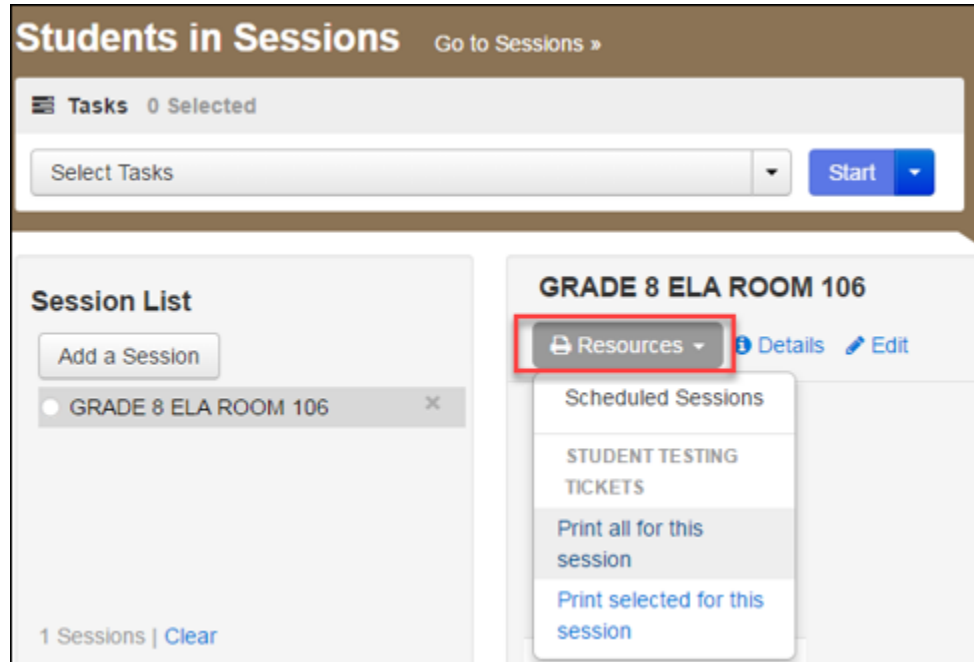

b. **Select "Add a Session," and then search for the PearsonAccess^next Session.**

c. **Select the checkbox next to the Session name, and click "Add Selected."**

d. To print student testing tickets, click on the "Resources" dropdown. There will be options to print tickets for all students or selected students.

3. **The principal/school test coordinator or test administrators should verify the following with technology staff:**
   - all devices to be used for testing are charged.
   - sufficient power cords and power strips are available.
   - accessories, such as external keyboards for tablets and headphones for students using the text-to-speech edition, are available and in working order prior to testing.

VIII. The Day of the Infrastructure Trial

Steps for the district test coordinator or principal/school test coordinator

1. Start the PAN Session.

a. **Click "Testing", and then select "Students in Sessions" from the dropdown menu.** (See a screen shot on page 17.)

b. **In the "Session List", click on the names of the Sessions to start**.
The **Session Details** screen will then appear for the selected Session(s). (If two or more Sessions were selected, options to **Combine View** and **Start All Sessions** will appear.)

c. **On the "Session Details" screen, click on the green "Start Session" (or "Start All Sessions" button).** After clicking this button, it will change to a **Stop Session** button.
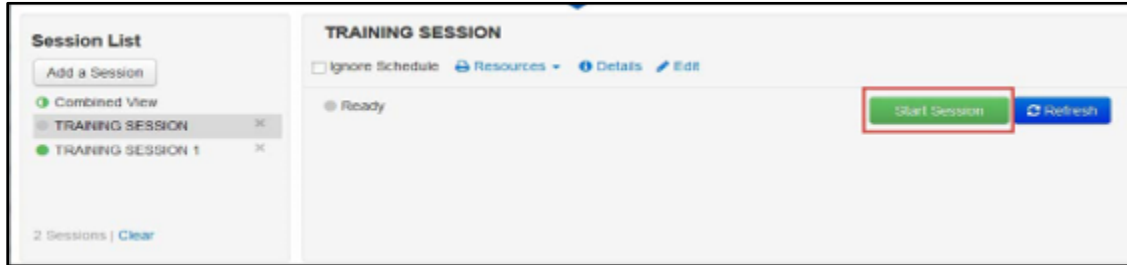
2. **Prepare testing devices:** Launch the TestNav app on all testing devices.

3. **Distribute student testing tickets and proctor testing tickets if applicable:** Ensure that test administrators have the student testing tickets for all students assigned to them, and proctor testing tickets for the Human Reader or Human Signer accommodations.

4. **Direct test administrators and students to testing locations:** Direct test administrators and students to their assigned computer lab or other testing location.

5. **Conduct the test sessions:** Test administrators will unlock the sessions and have the students log into TestNav. This marks the beginning of the test session. The following section contains steps for test administrators during the infrastructure trial session.

6. **Oversee test administration**: During each test session, principals or school test coordinators should monitor the administration to ensure that testing is being completed as expected.

7. **Complete testing**: Students will complete two sessions for Mathematics and one for ELA.

IX. Steps to Administer the Infrastructure Trial Practice Tests

## A. Materials Needed for Infrastructure Trial

1. **You will need the following materials available in your testing space prior to the Infrastructure Trial:**
   - testing devices for students
   - a computer with which to monitor testing sessions

2. **Prior to the Infrastructure Trial, you will receive the following materials for students assigned to you by the principal or school test coordinator:**
   - student testing tickets
   - proctor testing tickets for Human Reader or Human Signer accommodations, if applicable
   - scratch paper

3. **Additional Preparations for Computer-Based Testing**

- Ensure all devices to be used for testing are charged.
- Make sure sufficient power cords and power strips are available.
- Confirm that accessories, such as external keyboards for tablets and headphones for students using the text-to-speech edition, are available and in working order prior to testing.

B. Before Students Arrive

1. **On the test administrator device, log into the PearsonAccess[next] training site (https://trng-ricas.pearsonaccessnext.com/) and view your PAN Session on the Students in Sessions page.**

2. **Start your session.**

3. **Unlock students' tests.**

Students' tests will be locked, by default, in the **Students in Sessions** screen when a PearsonAccess[next] Session is started. Students will not be able to log in until the first test session has been unlocked by the test administrator. The test administrator can unlock a test session for the entire class by selected the unlock bar at the top of the **Students in Sessions** page.
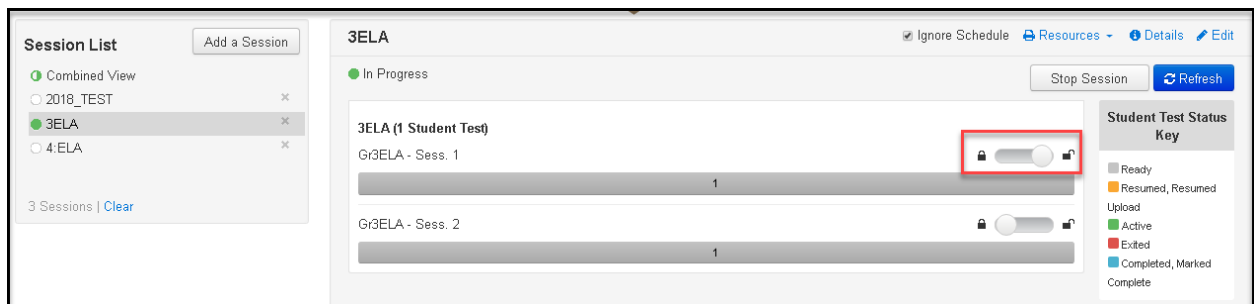
Individual students' tests can also be unlocked one at a time by selecting the lock dropdown for a test session found to the right of the student's name on the **Students in Sessions** page.

C. Administer Infrastructure Trial (use of the script is optional)

The following script is provided in order to assist test administrators with the administration of the Infrastructure Trial practice test. Unlike the scripts in the *Test Administrator's Manuals* for use during testing, test administrators are not required to read the script verbatim.

1. Say to students:

   "**Our school is about to begin a practice session for the computer-based RICAS test. This is an opportunity for you to practice RICAS questions in an environment similar to that of the real test. You should use this practice test**

22

to become more familiar with the computer-based testing system, and with RICAS questions. Your responses on this practice test will not affect your actual RICAS scores in any way."

2. Then say to the students:

   "I will now distribute scratch paper for you to use during the session. If at any point you need more, raise your hand and I will give you an additional sheet. You may have up to three pages of scratch paper at one time."

3. For students using the text-to-speech or screen reader accommodation, which requires headphones, say:

   "Put on your headphones and make sure they are plugged in. On your screen underneath the 'Sign In' button, click the link that says 'Test Audio.' Ensure you can hear through your headphones and adjust the volume as needed."

4. Then say:

   "I will now distribute the student testing tickets. Do not sign in until I instruct you to do so."

5. Distribute the student testing tickets. Testing tickets may or may not have student names on them depending on how the tests were set up for the Infrastructure Trial. Make sure you do not hand out proctor testing tickets since responses are not saved in a test accessed with a proctor testing ticket.

6. Say to students:

   "Now, on the computer, enter the username that is shown on your student testing ticket. Your username is a number that is 10 digits long."

   Assist any student who needs help entering his or her username. Then say:

   "Now, on the computer, enter the password that is shown on your student testing ticket."

   Assist any student who needs help entering his or her password.

   Then say:

   "Now, click the button that says 'Sign In.'"

   Walk around the room and make sure that all students have successfully signed in. Assist any students who did not successfully sign in. You may retype usernames and passwords for students, if necessary.

7. Once students are properly signed in, say:

   "Your computer screen should now be at the 'Available Tests' screen."

8. Say to the students:

"Please keep your testing ticket with you and do not use it for scratch paper. I will need to collect it at the end of this test session.

Click the blue button on the screen that says 'Start.' You should now see a screen that says 'Welcome.'

Click the box in the middle of the screen that says 'Start.' You should now see a screen that says 'Session 1' at the top and states the number of questions below. If your screen does not say 'Session 1,' please raise your hand."

Assist any students who are not at the correct screen.

9. Then say to all students:
   "Please read the directions that are on your screen."

   Pause to allow students to read the directions.

10. Then say to all students:
    "Click the 'Start' button. You may now begin your test."

11. At the **end of the session,** say to any students still working:
    "This is the end of the time scheduled for this session. At the top of the screen, click 'Review' and then click 'End of Section.' Click the 'Submit Final Answers' button to submit your answers. On the popup screen, confirm you'd like to 'Submit Final Answers.' When you've submitted your answers, exit the test by going to the User Dropdown Menu at the top, right hand corner of the screen and click 'Sign out of TestNav.'"

X. Monitoring the Infrastructure Trial

Steps for the Test Administrator to Monitor a Practice Test Session as Part of the Infrastructure Trial

A. How to Monitor PAN Sessions

Once an online test session has started, there are several tasks the test administrator may be responsible for, including resuming students, locking/unlocking sessions, and marking tests complete. The test administrator must have his or her own device to monitor the session and perform these actions.

The test administrator can use the **Students in Sessions** page to monitor students as they progress through each test session. The top of the **Students in Sessions** page contains a status bar for each test session. Underneath the status bar, each student will be listed, and the test administrator will be able to see the status of any particular student, as shown on the following page.

B. Test administrator Tasks in PAN

The following table lists the statuses that may appear for a student in the **Session Details** and a description of what each status indicates.

Student Status Key	
Status	Description
Ready	The student has not logged in to the session yet, but is ready to log in.
Active	The student is currently in the test.
Exited	The student has exited the session, but has not submitted his or her responses yet. Students in Exited status will need to be resumed by a test administrator to re-enter the test.
Completed	The student has completed the test and has successfully submitted his or her responses.
Marked Complete	The student's test has been marked complete by the test administrator rather than being submitted through TestNav.
Resumed	The student is ready to log back in to the session.
Resumed-Upload	The student is ready to log back in to the session and some responses may not have been sent to Pearson servers before exiting. When the student logs on to a test with a Resumed-Upload status, a staff member must be present. TestNav will prompt the user to locate the saved responses from the designated save location and uploaded them to TestNav before resuming the test. This insures no student responses are lost if the testing device was unable to connect to Pearson servers.

C. How to Resume Students' Tests

If students exit the test for a break, or due to technical error, they will need to be resumed prior to reentering the test. Students can be resumed one at a time, or many at a time.

To resume one student at a time, go to **Testing > Students in Sessions** and select **Resume** from the dropdown next to the student's name.

To resume more than one student's test, go to **Testing > Students in Sessions**. Be sure the PAN Session is selected in the **Session List**. Check the box next to the student names whose tests are to be resumed, and select **Resume Student Tests** from the **Select Tasks** menu. Click **Start**.

Select the students whose tests you would like to resume, and click **Resume**.

After clicking Resume, a message will display stating **Success, changes saved.** Click **Exit Tasks** to return to the **Students in Session** screen. The resumed student(s) will now be able to reenter the test.

D. How to Stop a PAN Session

Before a PAN Session can be stopped, all students in the PAN Session must be either in Completed or Marked Complete status. You may also need to remove any Ready students who received testing tickets but did not log into the test.

To remove "Ready" students from a PAN Session:
- Go to **Students in Sessions** and check the box next to the student record(s) to be removed.
- Select **Remove Students from Sessions** from the **Select Tasks** dropdown and click **Start**.

Check the box besides the student record(s) and click **Remove**. Click **Exit Tasks** to return to the **Students in Session** screen.

To mark a student's test complete for a student who logged on, but did not complete the test:
Go to the **Student in Sessions** page and check the box next to the student record(s) that need to be marked complete.

Select **Mark Student Tests Complete** from the **Select Tasks** dropdown. Click **Start**.

Enter the reason for marking the test complete. Click the **Mark Complete** button.

Once all students in a Ready or Exited status have been removed, or are in a Completed or Marked Complete status, select the **Stop Session** button on the **Students in Sessions** page.
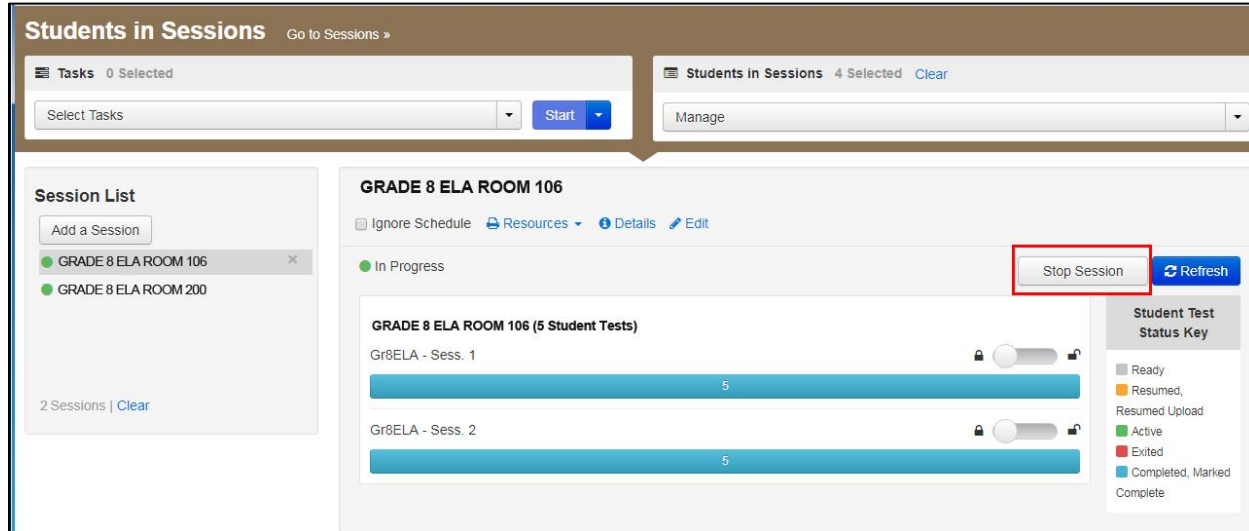
XI. Follow-up

Steps for the district test coordinator, principal/school test coordinator, test administrators, and the technology coordinator

Once the school's Infrastructure Trial has been completed, staff participating in it should review their notes. Follow-up steps include the following:

- Share any notes regarding the need for support with the principal or test coordinator.
- Report to the principal or test coordinator any issues that could not be resolved with assistance from the RICAS Service Center.
- If needed, schedule a call with Pearson's technology support specialists to review any issues with the Infrastructure Trial and to prepare for the test administration.

Appendix A: Terms Related to Computer-Based Testing

PearsonAccess^next (PAN): The online test management system for principals/test coordinators, technology coordinators, and test administrators to manage user accounts, register students, and upload selected accessibility features and accommodations via the Student Registration/Personal Needs Profile (SR/PNP), assign student tests, and set up Sessions. The PAN operational site is available at ricas.pearsonaccessnext.com/.

PearsonAccess^next Training site: The online practice site to run the Infrastructure Trial. Usernames and passwords for the training site will match those for the live site. The training site is available at trng-ricas.pearsonaccessnext.com/.

PearsonAccess^next Session: An assigned group of students in PearsonAccess^next who will be testing at the same time and place. (This is different from the actual "test session.")

TestNav: This is the online test delivery platform for students. Technology requirements and set-up instructions can be found at [ricas.pearsonsupport.com/technology-setup/.](ricas.pearsonsupport.com/technology-setup/)

Appendix B: Proctor Caching

Proctor caching or precaching is the process of loading (i.e., "caching") test content locally to a desktop computer at a school that will be designated as the precaching computer. For proctor caching, RIDE recommends installing and using ProctorCache software to locally deliver test content to student testing devices. ProctorCache is loaded by the school or district to a designated desktop computer (that will not be used as a student testing device), which downloads test content prior to testing and delivers the test to student devices.

This year, districts which have a minimum of 100 Kbps/student can choose whether to use ProctorCache for spring 2020 RICAS administration. ProctorCache is only recommended for the scenarios in the table below, instead of for all schools. (Kbps refers to kilobits per second and is a measure of bandwidth.)

To determine whether your school meets the 100 Kbps/student threshold for Internet speed, divide the school's bandwidth in Kbps by the number of students, and use a tool of your choice to test your school's bandwidth. The following is an example of how a school with a bandwidth of 60 Mbps might determine whether it meets the 100 Kbps/student threshold:
- Convert 60 Mbps to 60,000 Kbps.
- Divide 60,000 Kbps by the number of students in the school using the Internet on a given day.
- If 500 students will be using the Internet on a given day, divide 60,000 by 500.
- In this example, the school has a bandwidth of 120 Kbps/student.

School's Bandwidth (Kbps per student at all times)	ProctorCache Recommendation for Schools That Used ProctorCache in 2019	ProctorCache Recommendation for Schools That Did NOT Use ProctorCache in 2019
Less than 100 Kbps/student	Use ProctorCache.	Install/use ProctorCache.
100–200 Kbps/student	Disable the 2019 configuration for ProctorCache prior to the Infrastructure Trial (see instructions below). Use the Infrastructure Trial to determine if ProctorCache is needed. During the Infrastructure Trial, if students experience a lag time waiting for the next screen to load, re-enable ProctorCache and conduct a second, smaller-scale trial to confirm that the issue is resolved (ProctorCache may be needed).	Do not install ProctorCache software. Use the Infrastructure Trial to determine if ProctorCache is needed. During the Infrastructure Trial, if students experience a lag time waiting for the next screen to load, install ProctorCache and conduct a second, smaller-scale trial to confirm that the issue is resolved (ProctorCache may be needed).

More than 200 Kbps/student	Disable the 2019 configuration for ProctorCache software prior to the Infrastructure Trial (see instructions below). During the Infrastructure Trial, if students experience a lag time waiting for the next screen to load, re-enable ProctorCache and conduct a second, smaller-scale trial to confirm that the issue is resolved.	Do not install ProctorCache software. Use the Infrastructure Trial to determine if ProctorCache is needed. If students experience a lag time during the Infrastructure Trial waiting for the next screen to load, install ProctorCache and conduct a second, smaller-scale trial to confirm that the issue is resolved.

Instructions to Disable and Re-Enable the ProctorCache Configuration

To disable the 2019 ProctorCache configuration in PearsonAccess Next, follow these steps:
1. Click on **Setup** and **TestNav Configurations.**
2. Click the dropdown next to the **Search** button, and click **Show All Results**.
3. Select your configuration and click the **Select Tasks** dropdown, select **Create/Edit TestNav Configurations**, and click **Start.**
4. Select your configuration on the left side of the screen and scroll down to the **Precaching Computers** section.
5. Delete the content in the **IP Address** and **Port** fields and then click **Save**.

To re-enable ProctorCache after disabling, follow the same steps and re-apply the **IP Address** and **Port** fields (these fields are shown in the screenshot below).

Schools using Mac OS devices for their ProctorCache machine should note that they will need to use a previous version of ProctorCache software since ProctorCache software for MacOS is not being updated. Contact the RICAS Service Center at 855-222-8936 for instructions.

Best Practices for Using Proctor Cache

It is recommended that precaching be done at the **school level** instead of the district level in order to reduce bandwidth issues and to limit the risk of a connection-related disruption to testing. Using ProctorCache at the school level instead of the district level allows for continued connectivity during an Internet outage (if students have already logged in). **Students configured to connect to a district ProctorCache machine may lose connection during an outage.** Schools with district configurations have also reported connectivity issues, as well as log-in issues with larger numbers of students connecting to a single ProctorCache, which can overload the machine.

Each school should have its own ProctorCache configuration set up on a local (school) machine. The device selected to act as a ProctorCache during testing should be reserved for only this purpose. A device performing other functions in the school can result in delays when students navigate from one question to the next during testing.

Most desktop computers can serve as the precaching device; review the technology specifications for the minimum requirements.

ProctorCache software for Windows operating systems can be downloaded from http://download.testnav.com/, where system requirements are also posted. For more information on installing and using ProctorCache, refer to the TestNav User Guide.

Schools using Mac OS devices should note they need to use the previous version of ProctorCache software, since ProctorCache software for Mac OS is not being updated for 2020. Contact the RICAS Service Center for instructions.

Once installed, ProctorCache provides access to a diagnostic monitoring web page, which allows school technology staff (if caching at the school level) or district technology personnel (if caching at the district level) to verify that test content has been successfully cached prior to testing.

During testing, locate the caching computer's IP address, type **http://<IP address>:4480** in your browser, and then click **Enter** to view the caching interface. You will see three tabs: **Tests**, **Clients,** and **Help**. Select the **Tests** tab for information about test content and caching status. Select the **Clients** tab to monitor client connectivity.