These guidelines will assist schools in determining how specific assistive technology (AT) applications may be used by students with disabilities for computer-based RICAS testing. Assistive technology includes applications such as text-to-speech, word prediction, speech-to-text, screen readers (for students with visual impairments), screen magnification; as well as devices like adaptive keyboards, mouse, monitors, and switch interfaces.

Accommodations that require Assistive Technology (AT) devices, applications, and adaptive hardware must be listed in the student’s IEP or 504 plan before they may be provided to the student for RICAS testing.

Assistive Technology can be sorted into four broad categories for the purpose of RICAS testing:

1. Accessibility features and accommodations (tools and supports) that are embedded in the TestNav8 computer-based testing platform, including web extensions for speech-to-text and word prediction (more information on web extensions later in this document).
2. AT that is external to TestNav8 but compatible with the test platform and can be used on the same computer used for computer-based testing.
3. AT that may be compatible with TestNav8 but must be tested by the school prior to RICAS testing.
4. AT that is incompatible with TestNav8 (i.e., cannot be used with TestNav8) must be used on a separate or additional device during testing.

All RICAS testing must be completed using the TestNav application (app), which may or may not work as expected with the student’s own AT device or program. Therefore, all external AT devices should be tested by the school before RICAS testing using the same computer that will be used during testing (see Category Two below). Trying out the student’s own AT device with TestNav before RICAS testing is described in Appendix A.

**Category One:**
**Accessibility features and accommodations already included in TestNav8**

Many universal accessibility features and accommodations are embedded within the TestNav8 testing platform. Universal accessibility features can be used by any student taking the computer-based test, regardless of disability status.

Some features must be selected before testing begins in the Student Registration/Personal Needs Profile (SR/PNP) within PearsonAccessnext (marked by an asterisk below) while others are available automatically to all students.

**Accessibility Features available to all students in TestNav8:**

- Screen magnification
- Alternative background and font color (color contrast)*
● Answer masking*
● Line reader tool, which hides portions of the text not being read by the student
● Calculator (for the calculator session of the Mathematics tests)
● Item flag/bookmark/highlighting
● Notepad (only available for ELA tests)
● Highlighter tool
● Enlarged cursor/mouse pointer, which allows students to use a medium, large, or extra-large and/or alternate colored cursor/mouse pointer*

* Must be selected in the Student Registration/Personal Needs Profile (SR/PNP) before the student begins testing as this affects the testing platform format. Please verify all test settings are correct before testing students. If the student starts a session without the proper settings, that is considered a testing irregularity for which RIDE must be contacted.

Students should view the TestNav8 tutorial and participate in RICAS practice tests to become familiar with these tools and features prior to testing. These are available at ricas.pearsonsupport.com/student/.

Accommodations for students with disabilities who have one or more of these listed in their IEP or 504 plan. For more information about specific accommodations and their assignment, go to www.ride.ri.gov/Accommodations.

The following are embedded in TestNav8, but must be selected before the student begins testing in the Student Registration/Personal Needs Profile (SR/PNP):

● Text-to-speech, for which text is read aloud to a student using an electronic voice, highlighting each word as it is read. This is a standard accommodation for Mathematics tests but is a special access accommodation for ELA.
● Spell-checker on the ELA tests (special access accommodation)
● Calculator, for use on the non-calculator session of the Mathematics test (special access accommodation)
● Web extensions described below for students who have speech-to-text and/or word prediction listed in their IEP or 504 plan. It is not necessary for Co:Writer Universal and/or Read&Write to be installed on a student’s browser or computer. Web extensions are supported on Windows, MacOS, iOS (iPad) and ChromeOS only. TestNav web extensions are NOT supported on Android tablets.

Please verify all test settings are correct before testing students: If a student signs into TestNav and begins testing without the proper accommodations (or with an accommodation not listed in their IEP or 504 plan), that is a testing irregularity. Scores from test sessions where accommodations or test settings were not properly set up will be invalidated. If a student has taken an entire session or test in that case, and their family decides to allow the student to retest the full session or test using the correct settings to receive a score report, scores from these test sessions may also be invalidated for school accountability purposes.
<table>
<thead>
<tr>
<th>Web Extension</th>
<th>Expected user experience</th>
</tr>
</thead>
</table>
| **Co:Writer Universal:** Word Prediction or Speech-to-Text tools | - After logging into the TestNav app, students can access the Co:Writer Universal feature by selecting the Co:Writer web extension (explained in Appendix B).  
- The web extensions are supported on Windows, Mac, iOS (iPad) and Chromebook operating systems. They are NOT supported on Androids. Android users will need to refer to Categories 2, 3, and 4 for how AT may be used.  
- The web extensions will work on all ELA tests.  
- **The web extensions will NOT function for open response test questions on ANY mathematics tests,** because it will interfere with the Equation Editor used on constructed response items. Therefore, web extensions will not be available on these tests. **Students may instead need a scribe or an external speech-to-text or word prediction device for the mathematics tests.**  
- Word prediction and speech-to-text are standard accommodations for mathematics tests but are special access accommodations for ELA. Please be aware of additional eligibility requirements for the use of special access accommodations.  
- See detailed directions for accessing web extensions in Appendix B.  
- Web Extensions must be designated in the student’s SR/PNP for the Co:Writer or Read&Write options to appear on the student’s computer-based test. **Do not order the AT test form for this accommodation.**  
- The student should attempt the practice test prior to actual testing using this accommodation. |
| **Read&Write:** Word Prediction or Speech-to-Text tools | - After logging into the TestNav app, students can access the Read&Write Universal features by selecting the Read&Write web extension (explained in Appendix B.).  
- The web extensions are supported on Windows, Mac, iOS (iPad) and Chromebook operating systems. They are NOT supported on Androids. Android users will need to refer to Categories 2, 3 and 4 for how AT may be used.  
- The web extensions will work as intended for all ELA tests.  
- **The web extensions will NOT function for open response test questions on any mathematics tests,** because it will interfere with the Equation Editor used on constructed response items. Therefore, web extensions will not be available on these tests. **Students may instead need a scribe or an external speech-to-text or word prediction device for the mathematics tests.**  
- Word prediction and speech-to-text are standard accommodations for mathematics tests but are special access accommodations for the ELA test. Please be aware of additional eligibility requirements for the use of special access accommodations.  
- See detailed directions for accessing this web extension in Appendix B.  
- Web Extensions must be designated in the student’s SR/PNP for the Co:Writer or Read&Write options to appear on the student’s computer-based test. **Do not order the AT test form for this accommodation.**  
- The student should attempt the practice test prior to actual testing using this accommodation. |
Category Two: Assistive Technology Already Confirmed as Compatible with TestNav8

This category includes assistive technology used by the student that is known to be compatible with TestNav8 for RICAS testing and can run on the same computer at the same time as the RICAS test. **If the assistive technology appears on the list below, its compatibility has been confirmed for RICAS testing with TestNav8.**

If any of the assistive technologies listed below are listed in the student’s IEP or 504 plan, and the student plans to use it during RICAS testing, then the appropriate assistive technology program(s) must be installed on the student’s device (e.g., laptop, desktop, etc.) by the district.

**Either the Assistive Technology (AT) or the Screen Reader form of the test must be pre-selected, as appropriate, in the Student Registration/Personal Needs Profile (SR/PNP) so the correct accommodated test edition of the computer-based test is available to the student. If a student signs in to TestNav and starts a session without the correct accommodated test edition, that is considered a testing irregularity and may result in score invalidation for accountability purposes because the student will need to retake that session with the correct accommodated test form (the student will still receive a score for the session they take with the correct accommodation).**

<table>
<thead>
<tr>
<th>Assistive Technology</th>
<th>Expected user experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaws 2019, 2020, 2021 (screen reader)</td>
<td>Students able to use as expected.</td>
</tr>
<tr>
<td>NVDA 2020.2 (screen reader)</td>
<td>Students are unable to change user settings in NVDA once form is loaded but user experience is expected to be positive.</td>
</tr>
<tr>
<td>Dragon Professional 14 (Speech-to-text)</td>
<td>Students able to use as expected.</td>
</tr>
<tr>
<td>ZoomText 2018 (screen magnification)</td>
<td>Student can use pre-set features during testing. Students cannot make adjustments during testing with the exception of magnification levels that can be increased using keyboard commands.</td>
</tr>
<tr>
<td>Fusion (Combination JAWS &amp; ZoomText)2020</td>
<td>Screen reader (JAWS) is able to be used as expected.</td>
</tr>
<tr>
<td></td>
<td>ZoomText 2020 pre-set features can be used during testing. Students cannot make adjustments during testing with the exception of magnification levels that can be increased using keyboard commands.</td>
</tr>
<tr>
<td>Hardware-based technology (special equipment used with the computer, such as alternate keyboards or mouse)</td>
<td>Assistive devices that are hardware based should work with the TestNav app.</td>
</tr>
</tbody>
</table>
Category Three: 
Assistive Technology that may be compatible with TestNav8, but must be tested by the school to determine its compatibility

This category includes assistive technology used by the student that may be compatible with TestNav8 for RICAS testing. Schools and districts must verify that the assistive technology works as expected with TestNav8 prior to actual testing.

The process for determining whether a specific AT program is compatible can be performed on the RICAS Training Site using the step-by-step directions shown in Appendix A. School staff should conduct this check using the same device the student will use for testing.

Once the application is tested and found to be compatible, the student will be able to access and use their AT software and/or hardware on the same computer on which the computer-based test is taken. In addition to verifying compatibility, please ensure the appropriate test form was also selected through the SR/PNP before allowing the student to begin testing.

If the technology is tested and found to be incompatible, see Category Four below for instructions on using the technology at a separate computer station.

Category Four: 
Assistive Technology confirmed as requiring a separate computer station for use with TestNav8

This category includes assistive technologies that cannot interact directly with TestNav8 and therefore must be accessed by the student using a separate external (i.e., stand-alone) computer station. In this case, the test administrator may be required to assist the student in transitioning between the external device used for the student’s AT and the computer used by the student for the computer-based or the paper-based test. All responses generated using an external assistive technology device must be transcribed verbatim by a test administrator (or the student) onto the student’s computer-based test or into the student’s test/answer booklet.

Do not select the Assistive Technology form in the SR/PNP if the student will use stand-alone external assistive technology, since a special form of the test is not required. Programs that have been tested and confirmed as unable to interact directly with TestNav8, and will require a stand-alone computer station, are listed on the following table.

<table>
<thead>
<tr>
<th>Assistive Technology</th>
<th>Expected user experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chrome and other Web Extensions</td>
<td>No web extensions other than the Co:Writer Universal and Read&amp;Write described in Category One will work with the TestNav application.</td>
</tr>
<tr>
<td>Other proprietary software not previously mentioned</td>
<td>It is not likely that any other proprietary software programs, applications, or extensions will work with TestNav.</td>
</tr>
</tbody>
</table>
APPENDIX A

Guide for Checking the Compatibility and Proper Operation of Assistive Technology Prior to RICAS Testing

THE INFORMATION BELOW WILL GUIDE SCHOOLS IN DETERMINING WHETHER AN ASSISTIVE TECHNOLOGY APPLICATION AND/OR HARDWARE WILL OPERATE CONCURRENTLY WITH TESTNAV8. ONE GRADE LEVEL AND SUBJECT TEST IS AVAILABLE ON THE PEARSONACCESSNEXT TRAINING SITE WHERE THIS CHECK CAN BE PERFORMED. THIS CHECK SHOULD BE PERFORMED BY THE SCHOOL OR DISTRICT ON THE DEVICE THE STUDENT WILL USE DURING TESTING.

Step 1: Download the TestNav8 app to the student’s computer. The TestNav app download can be found in various app stores or at https://download.testnav.com/#.

Step 2: Sign in to the RICAS PearsonAccessnext Training Site.
- The RICAS PearsonAccessnext Training Site is found at http://trng-ricas.pearsonaccessnext.com. Your username and password should match your login for the operational site.
- Select the Spring 2022 RICAS Gr. 3–8 Administration from the dropdown in the top right-hand corner.

Step 3: Create a student and assign a test.
- Click the Setup dropdown and select Students.
- Select Create / Edit Students, Register Students and Manage Student Tests from the Select Tasks dropdown and click Start.
- Populate the student’s demographic information on the Create / Edit Students tab and click Create.
- Select the Register Students tab at the top of the screen. Click the Registered checkbox, choose the Student Grade, and click Save.
- Select the Manage Student Test tab and populate all required fields. You must select either Grade 3 ELA or Grade 3 Math in the test dropdown; ensure that the test format is online; and add the appropriate accommodations. When finished, click Create. When you see the green “Success” notification, click Exit Tasks in the top right.
  - Note: In the training site, the Screen-Reader version is only available for the Grade 3 Mathematics test; the Compatible Assistive Technology version is only available for the Grade 3 ELA test. Both accommodations will be available for all grades 3-8 in ELA and Mathematics tests during operational testing.

Step 4: Create a test session and add students.
- Click the Testing dropdown and select Sessions.
- Select Create / Edit Sessions from the Select Tasks dropdown and click Start.
- Populate all required fields.
  - Note: In the training site, the Screen-Reader version is only available for the Grade 3 Mathematics test; the Assistive Technology version is only available for the Grade 3 ELA test. You must select the correct test assigned for the accommodated form you plan to use with the student (i.e., Grade 3 Mathematics for Screen Reader).
- In the Students box at the bottom, click in the box to select the student created in step 1. Click Create. Once you see the green “Success” message, click Exit Tasks at the top right.
Step 5: Start the test session and access student testing tickets.
- Select **Show Students in Sessions & Control Sessions** from the **Select Tasks** dropdown and select your session name on the left-hand side of the screen.
- Click the **Prepare Session** button and then the **Start** button when it appears.
- Select **Student Testing Tickets** from the **Resources** dropdown. These provide the username and password needed to log into TestNav.

Step 6: Log into the practice test from student’s device.
- Use the Student Testing Ticket to log into the practice test.
- Practice using the AT technology to determine if it works as expected within the TestNav app.
APPENDIX B

Guide for Accessing Co:Writer Universal and Read&Write “Web Extensions” in the TestNav Desktop App

Step 1: The student’s SR/PNP must designate that the student will have access to web extensions for the specific test (e.g., Grade 5 ELA) in PearsonAccess

Step 2: After the student logs in (the TestNav App must be installed on their device), the test administrator (or student) must select the appropriate web extension to be used during the assessment. (Note: If the screen below does not appear, then “web extensions” was not properly designated in the student’s SR/PNP.)

- Do not enable both web extensions; only one should be selected. Both extensions have similar features, but the student should select the web extension they are most familiar with.
- Do not assign a web extension to a student on the day of the test if the student is unfamiliar with its use.

![Select Extensions](image)

- Select the “Install” button next to the correct extension –
  - for Read&Write, continue to Step 3.
  - for Co:Writer, skip to Step 4 (next page).

Step 3: If selecting Read&Write, complete the following steps:

- If selecting Read&Write for TestNav, no further action is necessary, the student may continue to the exam using the Read&Write toolbar (select “Continue to Test”).

![Success](image)
Step 4: If selecting Co:Writer Universal, complete the following steps:

- The administrator (or student) must toggle off Word Prediction or Speech-to-Text if the student is not approved for both features.

- Select the “Next” button.
- On the Load Personal Settings screen, there are two options:
  - The student does not need a license to use Co:Writer Universal on the assessment. If the student does not have a license, or chooses not to load their settings, the test administrator (or student) can click the “SKIP” button.
  - If the student has an existing license for Co:Writer, they can click the “LOAD SETTINGS” button to log into their account (the login screen will appear, as below on right). This will load their previously selected user settings for the assessment.

- The student may now continue to the test using the Co:Writer toolbar (select “Continue to Test”).