

Technology Skills Checklist for Online Assessment



Background Information

The Office of Special Education Programs, US Department of Education, awarded the University of Kentucky, in collaboration with CAST, a Directed Research Project grant entitled *Universal Design of Assessment: Applications of Technology*. This three-year project is examining the role of computers in increasing access to large-scale assessments for students with disabilities. One of the research activities of this project is to identify the prerequisite skills for students to successfully access and use a computer-based assessment, more specifically, Kentucky's CATS (Commonwealth Accountability Testing System) Online.

Purpose

The resulting *Technology Skills Checklist for Online Assessment* is intended for use by school staff in Kentucky and elsewhere in preparation for and in administration of electronic accessible assessments. This checklist provides a tool with which to: 1) analyze a specific online assessment to determine what skills are necessary for all students; and 2) assess each student who will be taking the online assessment to determine what skills are necessary for all students demonstrates and what skills the student needs to acquire prior to taking the assessment. The skills are divided into five areas: Basic Computer, Keyboarding, Word Processing, Text-Reader/Screen-Reader, and Interaction with Online Assessment.

Instructions for Use

Analyze Skill Requirements of A Specific Online Assessment



Skills Needed for a Specific Online Assessment. Identify each skill that is required of all students taking a specific online assessment. Check the box in this column if students need that skill in order to take the assessment.

Additional Skills for Specific Online Assessment. Since each online assessment has unique characteristics, additional skills may be needed on the checklist. In each of the five areas, space has been provided to add skills for the specific assessment that the student will be taking.

Determine Prerequisite Skills of An Individual Student

Skills Demonstrated by Individual Student. For each skill checked in the "N" column, check
the box in this column if the student currently demonstrates the skill.

Skills To Be Acquired by Individual Student. For each skill checked in the "N" column, check the box in this column if an individual student does not demonstrate the skill. The checked skills in this column represent those the student needs to acquire prior to taking the online assessment.

Check Hardware, Software, Environment

In addition to student prerequisite skills, areas that require attention prior to and during administration of an online assessment include: Hardware/Software Operation, Screen-Reader/Text-Reader Features, LEP Considerations, and Environmental Concerns. For items in these areas, follow the above procedures for: 1) determining if the item needs to be checked, 2) if it is operational, and 3) if it needs additional attention prior to and/or during the assessment.

The Universal Design of Assessment: Applications of Technology Project is supported through a cooperative agreement through the US Department of Education, Office of Special Education Programs (Grant Number H324D020016). However, the contents of this document do not necessarily represent the positions or policies of the Office of Special Education or the US Department of Education, and readers should not assume endorsement by the federal government. The Universal Design of Assessment: Applications of Technology Project is affiliated with the Interdisciplinary Human Development Institute at the University of Kentucky.

Technology Skills Checklist for Online Assessment developed by: Jo Fleming, PhD; Jacqueline Kearns, EdD;, Preston Lewis, MA; Ashley Dethloff, MA; Robert Dolan, PhD; Linnie Lee, BME.



Technology Skills Checklist for Online Assessment



Student	Date	_
School	Grade Level	_
Teacher	Assessment	

Skills Needed by Student for Online Assessment

N Check in this column each skill that is **needed** for the **specific assessment** that the student will be taking.

- + Check in this column each skill that the student currently **demonstrates**.
- Check in this column each skill that the student needs to acquire before taking the assessment.

Write in additional skills that are specific to the assessment that the student will be taking.

Basi	c Computer Skills	Ν	+		
1.	Demonstrate correct use of computer (clean hands, no food/drinks, press keys gently, no magnets, etc.)			IC	ב
2.	Identify parts of a computer system (e.g. monitor, keyboard, mouse and/or trackball, printer, headset and/or speakers, CD-ROM drive, disk drive, etc.)]
3.	Identify storage media (e.g., floppy disk, CD-ROM)			IC	
4.	Start up computer]
5.	Shut down computer]
6.	Move mouse pointer on screen (i.e., demonstrate pointing accuracy)]
7.	Use a mouse to single-click]
8.	Use a mouse to double-click]
9.	Use a mouse to right-click				
10.	Use a mouse to highlight text on a screen]
11.	Use a mouse to click and drag				ן
12.	Start a program from the Program Menu]
13.	Start a program by activating an icon on the desktop				
14.	Exit a program				
15.	Close a file]
16.	Switch between two open programs				
17.	When working in a program, return to program menu and/or main menu (specific to on-line assessment)]
18.	Open a window (dialogue box) in a program				
19.	Close a window (dialogue box) in a program]
20.	Save file to the desktop]
21.	Save file to a folder on the computer hard drive]
22.	Print a document]
23.	Use a word processor to create a document (see word processing section for more specific items)				<u>]</u>

Basi	c Computer Skills - Continued	Ν	+ •
24.	Access information on-line – use a web browser (see interaction with assessment section for more specific items)		
25.	Use the scroll bar to move up and down on a screen		
26.	Use the scroll bar to move left and right on a screen		
			
			

Key	poarding Skills	Ν	ł	5	
27.	Identify, locate, and use letter, number, and punctuation keys to enter characters][
28.	Use enter/return key			ונ	
29.	Use space bar			ונ	
30.	Use delete key			ונ	
31.	Use backspace key			ונ	
32.	Use shift key			ונ	
33.	Use caps lock key			ונ	
34.	Use escape key			ונ	
35.	Use tab key			ונ	
36.	Use number pad			ונ	
37.	Use keyboard to type letters and numerals			<u>][</u>	
38.	Use keyboard to type first and last name][
39.	Enter characters with reasonable accuracy (i.e., 85%)][
40.	Enter characters with reasonable speed (i.e., 11-15 words per minute)][
41.	Use single-click function of the mouse][
42.	Use double-click function of the mouse			ונ	
43.	Use click and drag function of the mouse][
\$][
\$][

Wor	d Processing Skills	Ν	÷	
44.	Start a new word processing file			
45.	Open existing document from a specific location (e.g., desktop, folder on hard drive, floppy disk)			
46.	Use cursor (flashing I-beam) to type/insert text			
47.	Use keyboard to type words/sentences/stories			
48.	Locate and enter punctuation marks			
49.	Compose at the keyboard (i.e., create an open response without first writing on paper)			
50.	Insert letters, words, etc.			
51.	Delete letters/words, etc.			

Wor	d Processing Skills - Continued	Ν	-	-	
52.	Replace letters/words, etc.		L		
53.	Copy letters, words, etc.				
54.	Paste letters, words, etc.			וב	
55.	Use the spacebar correctly to separate words			וב	
56.	Use the shift key for capitalization			וב	
57.	Revise a document (correct spelling, change, delete, move, insert, etc.)		Ľ	וב	
58.	Edit for spelling using the spell checker (i.e., identify misspelled words and choose appropriate correction)			וב	
59.	Save a document to a specific location (e.g., desktop, folder on hard drive, floppy disk)		Ľ	וב	
60.	Print a file		Ľ	<u>ן ר</u>	
61.	Close a file		Ľ	וב	
62.	Exit a program		L	וב	
63.	Undo last text entry, commands, etc.		L	וכ	
64.	Format text (e.g., font, font size, bold, italics, justification)		L	וכ	
\			L	וכ	
\$			Ľ		

Text	-Reader or Screen-Reader Skills	Ν	+	
Text-	Reader – Read and Write (Texthelp Systems)			
65.	Highlight text (single words, single sentences, entire item)			
66.	Read highlighted text (with text/screen reader)			
67.	Use word prediction feature			
68.	Use spell checker			
69.	Use dictionary			
70.	Review story			
71.	Change voice quality of text/screen reader (e.g., voice, speed, volume)			
72.	Understand mispronunciation of words by text/screen reader			
73.	Switch between online assessment and Microsoft Word			
74.	Cut and paste text from Microsoft Word into online assessment response box			
75.	Use word prediction for misspelled or unfinished words			
76.	Use thesaurus			
77.	Use word wizard to search for words			
78.	Use spell checker			
79.	Use text reader			
80.	Use screen reading options			
81.	Use speech options			
82.	Read selected text			

Text	-Reader or Screen-Reader Skills - Continued	Ν	ł		
83.	Read specific words][
84.	Read specific sentences][
85.	Read specific paragraphs][
86.	Stop reading][
87.	Pause reading][
88.	Adjust system voice settings][
89.	Choose character settings][
90.	Activate link to graphic descriptions][
91.	Navigate table][
92.	Turn on/off screen reading function for alt text][
93.	Turn on/off auto-read next block of text][
94.	Turn on/off Web highlighting][
95.	Adjust "speak as I type" for letter, word, sentence][
96.	Open dictation tool][
97.	Turn microphone on/off][
98.	Set up microphone for dictation][
99.	Dictate and make corrections to text][
100.	Highlight text for copying into document][
\$][
\$			Г	ונ	
Scree	en-Reader – JAWS (Freedom Scientific)		_	_	
101.	Start JAWS][
102.	Exit JAWS][
103.	Start other applications (e.g., Microsoft Word)][
104.	Use JAWS keystrokes for reading text][
105.	Use JAWS keystrokes for working with text][
106.	Use JAWS keystrokes for navigation in online test][
107.	Modify voice settings (e.g., rate, pitch)][
\$][
][

Inter	action with Online Assessmer	nt Skills (CATS Online)	N + -	
108.	Click in text box			
109.	Type in assessment URL			
110.	Enter Student login ID			
111.	Type in login password (Enter test session pa	assword)		
112.	Click button to enter password			
Univers	ity of Kentucky, 2005	Technology Skills Checklist	Page	5

Interaction with Online Assessment Skills (CATS Online) - Continued			+	
113.	Select link to Set Preferences			
114.	Change preferences (font size, style, color)			
115.	Enter Practice Area			
116.	Enter lithocode and bar code from front of printed test booklet			
117.	Mark open response questions to be answered offline			
118.	For open response questions answered offline, find correct page in printed test booklet			
119.	Scroll to view complete question			
120.	Scroll to navigate to a response section			
121.	Click on answer preview button to view response in text box			
122.	Click on save answer button			
123.	Resize windows in a split screen			
124.	Scroll within each box of a split screen			
125.	Read question			
126.	Locate response			
127.	Click button to indicate correct answer			
128.	Click right and left arrow keys to move through questions			
129.	Close a dialogue box			
130.	Click on underlined text to activate a text link			
131.	Review questions			
132.	Enter text by typing directly into text response box			
133.	Enter text by typing response into Microsoft Word, printing document, attaching to response booklet			
134.	Enter text by typing response into Microsoft Word, copying text, pasting into online response text response box			
135.	Review text passage to answer a question			
136.	Graph data on paper/response booklet			
137.	Wait for responses to be recorded, or "clicks" to activate			
138.	Mark question to be reviewed later			
139.	Navigate through questions answered, unanswered, and marked to review (bottom right boxes)			
\$				
\$				

Items to Check Before and During the Online Assessment

- **N** Mark this column if an item needs to be checked prior to student interaction with the specific assessment.
- + Mark in this column each item that is operating properly and ready to be used in the specific assessment.
- Mark in this column each item that needs additional attention prior to the assessment.
- Write in additional items that are specific to the assessment that the student will be taking.

Hard	ware/Software Operation Check	N	÷	
140.	Headphones			
141.	Keyboard (standard or alternative)			
142.	Mouse (or trackball)			
143.	Screen-reader, text-reader, screen magnification software			
144.	Word processing software			
145.	Printer			
146.	Computer system (CPU, monitor)			
147.	Internet connection			
148.	Web Browser			
\otimes				
\otimes				

Scre	en-Reader/Text-Reader Check	Ν	÷	
149.	Set image text (e.g., color, size, contrast)			
150.	Set screen color and contrast			
151.	Set voice quality of screen reader (e.g., voice, speed, volume)			
\otimes				
\diamond				

LEP		Ν	+	
152.	Open/close translator tool			
153.	Highlight individual words for translation			
\otimes				
\diamond				

Environmental Check		Ν	+	
154.	Chair			
155.	Workstation			
156.	Monitor height			
157.	Table height			
158.	Lighting			
159.	Noise reduction			
160.	Glare reduction			
161.	Keyboard position			
162.	Stagger proximity of students to avoid visual access by students taking same test form			
\otimes				
\otimes				

During Assessment Check		Ν	÷	
163.	Log students into test/out of test			
164.	Check case-sensitive password			
165.	Check students' login for correct name at Main Menu			
166.	Verify entry of lithocode and bar code that matches individual test booklet			
167.	Verify that open response answers are inserted in test booklet in proper location			
168.	Check/adjust volume of headphones			
\diamond				
\diamond				