## Voluntary Product Accessibility Template (VPAT)

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| **Name of Product** | HESI Exam VPAT (later shortened to “HESI”) |
| **Date** | **April 21, 2015** |
| Completed by | Ted Gies, Elsevier UCD, Dayton |
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| **Product Version Number** | 1st Edition |
| **Testing Tools and Methods** | **Hands-on keyboard operation Firebug/Code inspection JAWS 11, JAWS 15 on Mozilla Firefox 29 and MS IE 9 on Windows 7 Open Ajax Alliance (OAA) side bar Wave toolbar** |
| **Guidelines Used to Complete this VPAT** | **SSA guide to filling out a VPAT:** [http://www.socialsecurity.gov/accessibility/files/ SSA\_guide\_to\_completeing\_the\_voluntary\_product\_accessibility\_template.pdf](http://www.socialsecurity.gov/accessibility/files/SSA_guide_to_completeing_the_voluntary_product_accessibility_template.pdf)  Webaim.org Section 508 checklist: <http://webaim.org/standards/508/checklist>  Jim Thatcher’s online course on Section 508 Guidelines: <http://jimthatcher.com/webcoursec.htm>  The W3C WCAG 2.0 scripting techniques used to guide the scripting section: <http://www.w3.org/TR/WCAG20-SCRIPT-TECHS/client-side-script.html>  Elsevier Accessibility Checklist: <http://romeo.elsevier.com/accessibility_checklist/> |
| **Pages Covered** | HESI Examination, Test Results. |
| **Pages on Accessibility Roadmap** |  |

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| Applicable Sections | | |
| Section | Supporting Features | Remarks |
| Section 1194.21 [Software Applications and Operating Systems](#_Section_1194.21_) | Supports: B, E, F, G, I  Supports with exceptions:  A, C, D  Does not support: L  Not applicable: H, J, K | a) Most UI elements and controls are accessible with the keyboard.  b) HESI should not interrupt any APIs/operating system (OS) functions.  c) All elements have some form of visible focus, although it is a default focus given by the browser. Most elements follow a logical tab order.  d) HESI communicates most of its interface and navigation to Assistive Technology.  e) HESI uses several background and static images that identify as controls or UI elements, and they are consistent throughout the website.  f) Users with screen readers can access almost all textual information.  g) HESI will not interfere with any contrast settings, magnification settings or keyboard sensitivity settings set by the OS.  h) Not applicable.  i) Elements do not use color coding as the only means of conveying information.  j) Not applicable  k) Not applicable  l) Forms can be accessed and submitted by keyboard. Forms do not have proper labels. |
| Section 1194.22 [Web-based Internet Information and Applications](#_Section_1194.22_) | Supports:  C, D, K, L, M, P  Does not support: A, B, G, N, O  Not applicable:  E, F, H, I, J | a) Images are used in the examination without proper alt text.  b) Videos are used with synchronized audio. These videos do not use closed captioning or plain text alternatives.  c) Elements do not use color coding as the only means of conveying information.  d) HESI uses external style sheets instead of inline styles.  e) Not applicable  f) Not applicable  g) A few tables exist without table headers. Tables exist in the exam, but they are used for layout.  h) Not applicable  i) Not applicable.  j) Not applicable  k) HESI does not have any primary functionality that warrants a separate text-only page.  l) JavaScript functions are keyboard operable.  m) HESI requires several different plug-ins to be on the client system. A compatibility check exists for users to check their systems to see if it is ready for the exam. Links to the plug-ins are given if they are missing.  n) Forms can be accessed and submitted by keyboard. Forms do not have proper labels.  o) No headings exist and no specific "skip link" exists.  p) Timed responses exist, but time limits are provided beforehand, and extending the time limit would invalidate the activity. Users have a time limit of 20 minutes before they are timed out and must re-enter the exam. |
| Section 1194.23 Telecommunications Products | Not Applicable |  |
| Section 1194.24 Video and Multi-media Products | Not Applicable |  |
| Section 1194.25 Self-Contained, Closed Products | Not Applicable |  |
| Section 1194.26 Desktop and Portable Computers | Not Applicable |  |
| Section 1194.31 [Functional Performance Criteria](#_Section_1194.31_) | Supports: B, D  Supports with exceptions: A, F  Does not support: C  Not applicable: E | A) HESI is a website that uses HTML, CSS, and JavaScript. HTML and JavaScript are both supported by screen readers such as JAWS and by Braille displays. The UI itself uses standard HTML controls such as links, buttons, and form controls which are all identifiable by screen readers. A few exceptions concerning alt text exist. Additionally, operation of some functionality requires the use of a mouse and cannot be done with a keyboard.  B) All content and controls should be compatible with screen enlargement software from the OS.  C) HESI requires the use of audio in some of its examination questions.  D) In the areas where audio is essential for use of the product, audio controls are available and accessible to users.  E) Not applicable  F) Nearly all of HESI's controls and links are keyboard operable, except for a few items defined in 1194.21 (A). Some functions require fine motor control as well. |
| Section 1194.41 [Information, Documentation and Support](#_Section_1194.41_) | Supports: A, C  Does not support: B | A) Support documentation is available in a variety of formats including HTML, image, and video tutorials through Evolve.  B) HESI does not have a description of the accessibility and compatibility features of the product.  C) A contact page is provided for users to contact HESI directly through email, phone, or live chat. |

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| Legend | | | |
| **Not Applicable** | Supports, or  Supports with assistive technology | Supports with exceptions | Does not support |

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| Section 1194.21  Software Applications and Operating Systems | | |
| Criteria | Supporting Features | Remarks |
| (a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually. | Supports with exceptions | Most elements are accessible by keyboard.  Exceptions:   * The Show Calculator and Show Ruler buttons. * Mouse-only sections, such as clicking on a specific part of an image. * Drag and drop questions. * Moving the ruler can only be done with a mouse. * The "Get Help" and "Exit" buttons for the browser itself. |
| (b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer. | Supports | HESI does not have features that would interfere with standard API features of an OS including the MSAA (Microsoft Active Accessibility).  Users may have issues activating assistive technology after an exam is started, but the application will not interfere with those already activated. |
| (c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes. | Supports with exceptions | All elements have some form of visible focus, although it is usually a default focus given by the browser.  Most of the site has a logical tab order.  Exceptions:   * The tab order should match the visual representation of the page (i.e. top to bottom, left to right). The Submit and Continue, Submit and Pause/Leave Exam buttons are tabbed to after the Exit button. |
| (d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text. | Supports with exceptions | HESI communicates most of its interface and navigation to Assistive Technology.  Exceptions:   * The video player's controls are unlabeled. * The Calculator does not communicate state of values to AT. * Drag and drop buttons do not communicate their state or identity to AT. |
| (e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance. | Supports | HESI uses several background and static images that identify as controls or UI elements, and they are consistent throughout the website. |
| (f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes. | Supports | Users with screen readers can access all textual information. |
| (g) Applications shall not override user selected contrast and color selections and other individual display attributes. | Supports | HESI will not interfere with any contrast settings, magnification settings or keyboard sensitivity settings set by the OS.  The exam opens a new browser, so any user-selected options for their browser will not apply during the exam. |
| (h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user. | Not applicable | Not applicable. |
| (i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. | Supports | HESI does not use color coding to convey information. |
| (j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided. | Not applicable | HESI does not offer any options to adjust color and contrast settings. |
| (k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz. | Not applicable | HESI does not have any flashing or blinking texts or objects. |
| (l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues. | Does not support. | Forms can be accessed and submitted by keyboard.  Forms do not have proper labels. |

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| Section 1194.22  Web-based Internet information and applications | | |
| Criteria | Supporting Features | Remarks |
| (a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content). | Does not support | Many images are used in the examination, but they all either have null or no alt text.  Many of these images are important to the examination, and therefore need a text equivalent to properly represent their purpose.  No alt text for the "Show Calculator" and "Show Ruler" images. |
| (b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation. | Does not support | Videos are used with synchronized audio. These videos do not use closed captioning or plain text alternatives. |
| (c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup. | Supports | HESI does not use color coding to convey information. |
| (d) Documents shall be organized so they are readable without requiring an associated style sheet. | Supports | HESI uses external style sheets instead of inline styles. |
| (e) Redundant text links shall be provided for each active region of a server-side image map. | Not applicable | HESI does not have any server-side image maps. |
| (f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape. | Not applicable | HESI does not have any client-side image maps. |
| (g) Row and column headers shall be identified for data tables. | Does not support | Exam grade PDF has a table with no structure or headers.  Tables exist in the exam, but they are used for layout. These tables should have a role="presentation" so the tables are ignored, but the content is still acknowledged by assistive technology. |
| (h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers. | Not applicable | No tables used on the site have two or more logical levels or row or column headers. |
| (i) Frames shall be titled with text that facilitates frame identification and navigation | Not applicable. | Not applicable. |
| (j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz. | Not applicable | HESI does not use any images that flash, blink or flicker. |
| (k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes. | Supports | HESI does not have any primary functionality that warrants a separate text-only page. |
| (l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology. | Supports | Many parts of the UI and displayed content utilize JavaScript. The information supplied by these scripts is available and conveyed to Assistive Technology. |
| (m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l). | Supports | HESI requires several different plug-ins to be on the client system. A compatibility check exists for users to check their systems to see if it is ready for the exam. Links to the plug-ins are given if they are missing. |
| (n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues. | Does not support | Forms can be accessed and submitted by keyboard.  Forms do not have proper labels. |
| (o) A method shall be provided that permits users to skip repetitive navigation links. | Does not support | Headings do not exist in the examination.  There is no specific "skip link" on any page. |
| (p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required. | Supports | Test pages exist which may have required timed responses and the time limit is provided beforehand. Extending the time limit would invalidate the test.  Users have a time limit of 20 minutes before they are timed out and must re-enter the exam. |

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| Section 1194.31  Functional Performance Criteria | | |
| Criteria | Supporting Features | Remarks |
| (a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided. | Supports with exceptions | HESI is a website that uses HTML, CSS, and JavaScript. HTML and JavaScript are both supported by screen readers such as JAWS and by Braille displays.  The UI itself primarily uses standard HTML controls such as links, buttons, and form controls which are all identifiable by screen readers.  The exceptions to the vision requirement include a few items concerning alternative text as described in 1194.22 (A). Additionally, operation of some functionality requires the use of a mouse and cannot be done with a keyboard as described in 1194.21 (A).  The text-to-speech feature is a welcome addition and a step in the right direction, but requires the use of a mouse, which defeats the purpose of text-to-speech. |
| (b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided. | Supports | Users cannot apply their own style sheets.  OS features such as Windows 7 Magnifier are compatible with the HESI application.  HESI is usable with screen magnification software such as ZoomText. |
| (c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided | Does not support. | HESI requires the use of audio in some of its examination questions. |
| (d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided. | Supports | In the areas where audio is essential for use of the product, audio controls are available and accessible to users. |
| (e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided. | Not applicable | HESI does not require any speech input for operation. |
| (f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided. | Supports with exceptions | Most of HESI's controls and links are keyboard operable, except for a few items defined in 1194.21 (A).  Some functions require fine motor control using the mouse, also described in 1194.21 (A). |

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| Section 1194.41 Information, documentation, and support | | |
| Criteria | Supporting Features | Remarks |
| (a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge. | Supports | HESI provides support documentation with HTML text instructions, accompanying images and video, through the Evolve help content. |
| (b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge. | Does not support | HESI does not have a description of the accessibility and compatibility features of the product. |
| (c) Support services for products shall accommodate the communication needs of end-users with disabilities. | Supports | Evolve provides a searchable Q&A database where users can ask additional questions or peruse the already asked questions. HESI is included in this help area.  Users can get help during an exam through a submission form. |

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