

**Curricular Standards: Assistive Technology (AT) Instructional Specialist**

All Curricular Standards must be fully met to receive AER accreditation.

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| Curricular Standards: Assistive Technology  |
| **I. Assessment**  |
| **Standards** |  |  |
| **The university provides learning experiences designed to enable the candidate to demonstrate knowledge and understanding of:** | **Documents Submitted** | **Met** | **Not Met** |
| a. Knowledge of the visual system (oculomotor system, eye, optic pathway, and brain)  |  |  |  |
| b. Knowledge of eye conditions and their implications including glare sensitivity, contrast sensitivity, lighting, visual fatigue and ergonomics  |  |  |  |
| c. Knowledge of how to review and interpret vision reports including abbreviations and notations that describe pathology, visual functioning and refractive error  |  |  |  |
| d. Knowledge of how to collaborate with Ophthalmologists, Optometrists and Low Vision Therapists as applicable  |  |  |  |
| e. Knowledge of appropriate interviewing techniques  |  |  |  |
| f. Knowledge of how to use interviewing techniques with the consumer and/or family for eliciting concerns and barriers to access. |  |  |  |

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| **Standards** | **Documents Submitted** | **Met** | **Not Met** |
| g. Knowledge of how to interview individuals who are visually impaired for specific feedback related to formatting and mode of preferred media.  |  |  |  |
| h. How to gain knowledge about individuals' educational background/literacy skills through chart/file review or obtained during an interview. |  |  |  |
| i. Knowledge of how to gain knowledge of individuals' preferred learning styles and implications for training. |  |  |  |
| j. Knowledge of how to interview adults to determine their vocational background. |  |  |  |
| k. Knowledge of the benefits and limitations of hardware and software. |  |  |  |
| l. Knowledge of how to state rationales for recommendations of specific devices or software.  |  |  |  |
| m. Knowledge of alternatives for various price points of technologies that can be used to accomplish tasks objective/goals.  |  |  |  |
| n. Knowledge of appropriate technologies to meet goals and needs based on the individuals operational competency. (eg. keyboarding, braille, auditory). |  |  |  |
| o. Knowledge of baseline computer skills (vision/hearing/tactile) and implications for training such as the ability to attend to synthesized speech.  |  |  |  |
| p. Knowledge of how to determine when to use magnification, speech, braille, or possible combinations. |  |  |  |
| q. Knowledge of how to analyze tasks that are typically done visually, and explore solutions for non- visual ways to perform those tasks due to contrast, visual fatigue and glare issues. |  |  |  |
| r. Knowledge of how additional disabilities affect visual functioning  |  |  |  |
| s. Knowledge of how to recognize other disabilities and make appropriate referrals to professionals  |  |  |  |

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| **Standards** | **Documents Submitted** | **Met** | **Not Met** |
| t. Knowledge of how other disabilities or factors may affect the use of specific technologies, and how to identify collaborative professionals to assist in assessment of these factors. |  |  |  |
| u. Knowledge of how cognitive disorders and/or neurological conditions impact the choice of assistive technology solutions  |  |  |  |
| v. Knowledge of how medical conditions and motor abilities such as manual dexterity, range of motion, and neuropathy relate to mode of input  |  |  |  |
|  | **Total Standards Met** | **/22** | **/22** |

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| **II. Instruction**  |
| **Standards** |  |  |
| **The university provides learning experiences designed for the candidate to demonstrate abilities (knowledge and application) related to:** | **Documents Submitted** |  **Met** |  **Not Met** |
| a. Guide individuals to make informed decisions on the most appropriate and effective toolsets for their needs and goals. |  |  |  |
| b. Provide instruction using the most effective modality(s) and assistive technology solutions (i.e. braille, visual skills, keyboarding). |  |  |  |
| c. Use techniques for individual learning styles and the integration of technology (devices and software) for vocational, avocational, and educational activities of daily living.  |  |  |  |
| d. Plan, implement, and keep records for short-term and long-term instruction based on the individual's abilities, goals and needs. |  |  |  |

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| **Standards** | **Documents Submitted** | **Met** | **Not Met** |
| e. Teach screen reading software, magnification software, stand-alone devices, and a broad spectrum of low vision and blindness specific devices.  |  |  |  |
| f. Teach general computer hardware and software basics, operating systems and accessible third party options. |  |  |  |
| g. Teach built-in accessibility software options such as screen readers, screen magnifiers, and voice recognition programs.  |  |  |  |
| h. Teach third-party assistive technology software solutions to meet the individual's ability, goals and needs.  |  |  |  |
|  i. Teach common productivity, recreation, and special accessibility applications, with the ability to access them using different input technologies (keyboard only, keyboard and mouse, alternate input devices, braille displays, voice recognition).  |  |  |  |
| j. Teach device personalization options for desktop, laptop, mobile and specialty devices  |  |  |  |
| k. Adjust scope, structure and pace of instruction based upon individual learning styles and capacity for new information.  |  |  |  |
| l. Provide resources for further learning for the learner.  |  |  |  |
| m. Teach and orient individuals to a keyboard using tactual and/or visual cues. |  |  |  |
| n. Orient an individual to a screen change using terminology and references appropriate to the assistive technology being used. |  |  |  |
| o. Teach the basic features of all of the major productivity software packages and their respective keyboard shortcuts.  |  |  |  |
| p. Teach the use of appropriate environmental modifications such as ergonomics, illumination and size control, speech output settings, tactual marking, etc.  |  |  |  |
| q. Teach basic maintenance and troubleshooting of a personal CPU (updates, configurations, malware, anti-virus, etc.). |  |  |  |
| r. Teach the appropriate configuration, updating and maintenance of assistive technology devices.  |  |  |  |
| s. Teach assistive technology solutions for various hardware and OS platforms. |  |  |  |

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| **Standards** | **Documents Submitted** | **Met** | **Not Met** |
| t. Adjust structure and pace of instruction based upon changes and advances in technology.  |  |  |  |
| u. Provide local, regional and national assistive technology resources and strategies for troubleshooting. |  |  |  |
|  | **Total Standards Met** | **/21** | **/21** |

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| **III. Configuration**  |
| **Standards** |  |  |
| **The university provides learning experiences designed to enable the candidate to demonstrate knowledge and understanding of:** | **Documents Submitted** | **Met**  | **Not Met** |
| a. How to configure and setup computers and portable devices as needed, including, but not limited to: installation of software; email functionality; account setup; folder management; disabling and removing of unneeded and inaccessible third party software, and installation of antivirus software  |  |  |  |
| b. Know the various operating systems and their available accessibility features  |  |  |  |
| c. How to install and customize various assistive technology solutions needed to meet individuals' goals and objectives |  |  |  |
| d. How to install, remove, and replace computer hardware components as needed such as hard drives, memory and sound cards  |  |  |  |
| e. Know a variety of assistive technology solutions and their required specifications  |  |  |  |
| f. How to connect peripheral devices and access points via technologies such as Bluetooth, Wi-Fi and NFC  |  |  |  |

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| **Standards** | **Documents Submitted** | **Met** | **Not Met** |
| g. How to configure operating systems to be compatible with AT and other third party applications  |  |  |  |
| h. How to track and implement hardware and software updates  |  |  |  |
| i. How to configure systems and devices for remote training and instructional purposes as needed  |  |  |  |
| j. How to effectively troubleshoot basic hardware and software problems  |  |  |  |
|  | **Total Standards Met** | **/10** | **/10** |

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| **IV. Exploration**  |
| **Standards** |  |
| **The university provides learning experiences designed to enable the candidate to demonstrate knowledge and understanding of:** | **Documents Submitted** | **Met** | **Not Met** |
| 1. Know continuing education resources
 |  |  |  |
| b. How to explore self-teaching opportunities to gain knowledge on current practices and various forms of technology  |  |  |  |
| c. Know the primary professional journals, list serves, social media, and conferences related to technology, low vision and blindness, and assistive technology  |  |  |  |
| d. Know assistive technology manufacturers  |  |  |  |
| e. Know resources to engage in beta testing or provide feedback to software developers.  |  |  |  |
| f. How to develop manuals and/or training materials  |  |  |  |
| g. Know the various assistive technology products available  |  |  |  |
| h. Know the major manufacturers and how to receive updates on new features and compatibility issues  |  |  |  |
| i. Know where to find the accessibility sites for major mainstream software providers |  |  |  |
|  | **Total Standards Met** | **/9** | **/9** |

List of Members of Institution’s Self-Study Committee:

Date Self-Study Completed: