



**Standards and Guidelines
for the Accreditation of Educational Programs in
Assistive Technology**

Standards initially adopted in 2016

**Adopted by the
*Rehabilitation Engineering and Assistive Technology Society of North America
Committee on Accreditation for Rehabilitation Engineering and Assistive Technology Education
and
Commission on Accreditation of Allied Health Education Programs***

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the **Committee on Accreditation for Rehabilitation Engineering and Assistive Technology Education (CoA-RATE)**.

These accreditation **Standards and Guidelines** are the minimum standards of quality used in accrediting programs, which prepare individuals to enter the Assistive Technology profession. Standards are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations, which elaborate on the Standards. Guidelines are not required, however, may assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. *Guidelines* are printed in italic typeface in narrative form.

Preamble

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) cooperate to establish, maintain, and promote appropriate standards of quality for educational programs in Assistive Technology, and to provide recognition for educational programs, which meet or exceed the minimum standards outlined in these accreditation **Standards and Guidelines**. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These **Standards and Guidelines** are to be used for the development, evaluation, and self-analysis of Assistive Technology programs. On-site review teams assist in the evaluation of a program's relative compliance with the accreditation Standards.

Description of the Profession

Professionals who work in the Assistive Technology field come from a variety of professional and technical backgrounds and work in interdisciplinary teams to analyze the needs of clients with many types of impairments. They assist in the selection of appropriate assistive technology to reduce impairments related to the effects of disability, helping clients identify their goals, and collaborate in meeting a client's needs through acquisition, set-up and installation, and training in the use of the selected device(s), measuring outcomes, and understand evidence based process. People who work in the field of Assistive Technology assess the person's abilities and goals, determine the need for assistive technology, and incorporate that technology to prepare for, and maintain employment.

I. Sponsorship

A. Sponsoring Educational Institution

A sponsoring institution must be at least one of the following:

1. A post-secondary academic institution accredited by an institutional accrediting agency which is recognized by the U.S. Department of Education, and authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of a certificate at the completion of the program.
2. A foreign post-secondary academic institution acceptable to CAAHEP, which awards a minimum of a certificate at the completion of the program.
3. A hospital or medical center accredited by a healthcare accrediting agency or equivalent that is recognized by the U.S. Department of Health and Human Services, and authorized under applicable law or other acceptable authority to provide healthcare, and authorized under applicable law or other acceptable authority to provide the post-secondary program, which awards a minimum of a certificate at the completion of the program.
4. A branch of the United States Armed Forces or Canadian Armed Forces, which awards a minimum of a certificate at the completion of the program.

B. Consortium Sponsor

1. A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring institution as described in I. A.
2. The responsibilities of each member of the consortium must be clearly documented in a formal affiliation agreement or memorandum of understanding, which includes governance and lines of authority.

C. Responsibilities of Sponsor

The Sponsor must ensure the provisions of these **Standards and Guidelines** are met.

II. Program Goals

A. Program Goals and Outcomes

There must be a written statement of the program's goals and learning domains consistent with, and responsive to, the demonstrated needs and expectations of the various communities of interest served by the educational program. The communities of interest served by the program must include, but are not limited to: students, graduates, faculty, sponsor administration, employers, related healthcare professionals, rehabilitation professionals, engineering and/or education professionals, physicians, and the public.

Program-specific statements of goals and learning domains provide the basis for program planning, implementation, and evaluation. Such goals and learning domains must be compatible with the mission of the sponsoring institution(s), the expectations of the communities of interest, and nationally accepted standards of roles and functions. Goals and learning domains are based upon the substantiated needs of health care providers and other relevant professionals/employers, and the educational needs of the students served by the educational program.

B. Appropriateness of Goals and Learning Domains

The program must regularly assess both goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of at least each of the communities of interest named in these **Standards and Guidelines**, must be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change.

Advisory committee meetings may include participation by synchronous electronic means.

C. Minimum Expectations

The program must have the following goal defining minimum expectations: "To prepare entry-level Assistive Technology practitioners who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains".

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.

Nothing in this Standard restricts programs from formulating goals beyond entry-level competence.

III. Resources

A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program's goals and outcomes. Resources must include, but are not limited to: faculty; clerical and support staff; curriculum; finances; offices; classroom, laboratory, and, ancillary student facilities; clinical affiliates; equipment; supplies; computer resources; instructional and reference materials, and faculty/staff continuing education component.

Educational materials and activities must be designed in a manner that makes them readily accessible to students with disabilities.

B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program's stated goals and outcomes.

1. Program Director

a. Responsibilities

The Program Director must:

- 1) coordinate all aspects of the program including the organization, administration, continuous review, planning, development and achievement of program's goals and outcomes;
- 2) establish criteria for those sites which provide clinical experiences for students;
- 3) evaluate on an annual basis and planned interval basis all clinical affiliates;
- 4) provide a clinical instructor orientation and evaluation program;
- 5) ensure regularly planned communication between the program and the clinical instructor;

- 6) ensure all clinical experience of students occur under supervision of an Assistive Technology practitioner; and
- 7) manage program budget.

b. Qualifications

The Program Director must:

- 1) possess a minimum of a Bachelor's Degree;
- 2) have a minimum of three (3) years of relevant professional experience;
- 3) demonstrate background in education theory and practice;
- 4) possess a credential from a related profession.

A credential from a related profession may include, but is not limited to, public instruction license, OTR/L (registered occupational therapist), OT(C)/L (licensed occupational therapist), or certification such as a RESNA Assistive Technology Professional, Certified Rehabilitation Counselor, or speech therapist.

2. Faculty and/or Instructional Staff

a. Responsibilities

Faculty and other instructional staff must provide instruction and assess students' knowledge and practical proficiencies, and where appropriate mentor students in the development of effective assistive technology professional practice competencies.

b. Qualifications

Faculty and instructional staff must:

- 1) possess a minimum of a Bachelor's Degree;
- 2) be knowledgeable in the subject matter taught;
- 3) have a minimum of three (3) years of related field experience, which includes a minimum of one (1) year of providing assistive technology services to clients;
- 4) possess a professional registration, license, or certification.

3. Clinical Instructor

a. Responsibilities

Clinical Instructors must:

- 1) supervise students during clinical experiences and be consistently and physically present (i.e. provide face-to-face supervision and evaluation, etc.) and have the ability to intervene on behalf of the student (or client) to provide on-going and consistent education;
- 2) participate in regularly planned communication between the program and the clinical instructor;
- 3) provide instruction and experience in relevant practice competencies delineated in the Curriculum in Appendix B;
- 4) evaluate students' performance; and
- 5) assure students complete a self-assessment of practice competencies at the completion of the clinical experience.

b. Qualifications

Clinical Instructors must:

- 1) possess a minimum of a Bachelor's degree; and
- 2) be appropriately credentialed in their field of practice for one (1) or more year(s) and have a minimum of one (1) year of providing assistive technology services to clients.

Clinical Instructors should have competency in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, described in Appendix B, for Assistive Technology practice.

C. Curriculum

The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory, and practical activities. Instruction must be based on clearly written course syllabi which include course description, course objectives, evaluation methods, topic outline, and competencies required for graduation.

The curriculum must include clinical experience with opportunities for students to perform all components of Assistive Technology practice and be evaluated by a clinical instructor on their performance.

The program must demonstrate by comparison that the curriculum offered meets, or exceeds, the content specified in Appendix B.

Clinical experience may be provided via many avenues. The program should strive to use realistic and simulated and actual clinical Assistive Technology fieldwork opportunities. However, use of audio/video recording of students' work, documented realistic simulation activities, or comprehensive interactive case study scenarios may be considered as alternatives.

D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these **Standards and Guidelines**. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented and results measured by ongoing resource assessment.

IV. Student and Graduate Evaluation/Assessment

A. Student Evaluation

1. Frequency and Purpose

Evaluation of students must be conducted on a recurrent basis and with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students' progress toward and achievement of the competencies and learning domains stated in the curriculum.

2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements and shall be secured in accordance with all existing privacy acts and statutes.

B. Outcomes

1. Outcomes Assessment

The program must periodically assess effectiveness in achieving stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments must include, but are not limited to: national credentialing examination(s) performance, programmatic retention/attrition, graduate satisfaction, employer satisfaction, job (positive) placement, and programmatic summative measures. The program must meet the outcomes assessment thresholds.

"Positive placement" means that the graduate is employed full or part-time in Assistive Technology or in a related field; or continuing his/her education; or serving in the military. A related field is one in which the individual is using cognitive, psychomotor, and affective competencies acquired in the educational program.

2. Outcomes Reporting

The program must periodically submit to the CoA-RATE the program goal(s), learning domains, evaluation systems (including type, cut score, and appropriateness), outcomes, its analysis of the outcomes, and an appropriate action plan based on the analysis.

Programs not meeting the established thresholds must begin a dialogue with the CoA-RATE to develop an appropriate plan of action to respond to the identified shortcomings.

V. Fair Practices

A. Publications and Disclosure

1. Announcements, catalogs, publications, and advertising must accurately reflect the program offered;
2. At least the following must be made known to all applicants and students: the sponsor's institutional and programmatic accreditation status as well as the name, mailing address, web site address, and phone number of the accrediting agencies; admissions policies and practices, including technical standards (when used); policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees.
3. At least the following must be made known to all students: academic calendar, student grievance procedure, criteria for successful completion of each segment of the curriculum and for graduation, and policies and processes by which students may perform practical work while enrolled in the program; and
4. The sponsor must maintain, and make available to the public, current and consistent summary information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these Standards.

The sponsor should develop a suitable and fully accessible (W3C) means of communicating to the communities of interest the achievement of students/graduates (e.g. through a website or electronic or printed documents).

5. The sponsor must provide applicant and student materials that are designed to be readily accessible to student with disabilities.

B. Lawful and Non-discriminatory Practices

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be nondiscriminatory and in accord with jurisdictional statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty, and a similar procedure for non-remunerated adjunct personnel.

C. Safeguards

The health and safety of clients, students, faculty, and other participants associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

D. Student Records

Satisfactory records must be maintained for student admission, advisement, counseling, and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.

E. Substantive Change

The sponsor must report substantive change(s) as described in Appendix A to CAAHEP/CoA-RATE in a timely manner. Additional substantive changes to be reported to the CoA-RATE within the time limits prescribed include certificate awarded.

F. Agreements

There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities which participate in the education of the students describing the relationship, roles, and responsibilities of the sponsor and that entity.

Appendix A

Application, Maintenance and Administration of Accreditation

A. Program and Sponsor Responsibilities

1. Applying for Initial Accreditation

- a. The chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form and returns it electronically or by mail to:

CoA-RATE
1700 North Moore Street, Suite 1540
Arlington, VA 22209

The "Request for Accreditation Services" form can be obtained from the CAAHEP website at <http://ras.caahep.org/>.

Note: There is **no** CAAHEP fee when applying for accreditation services; however, individual committees on accreditation may have an application fee.

- b. The program undergoes a comprehensive review, which includes a written self-study report and an on-site review.

The self-study instructions and report form are available from the CoA-RATE. The on-site review will be scheduled in cooperation with the program and CoA-RATE once the self-study report has been completed, submitted, and accepted by the CoA-RATE.

2. Applying for Continuing Accreditation

- a. Upon written notice from the CoA-RATE, the chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form, and returns it electronically or by mail to:

CoA-RATE
1700 North Moore Street, Suite 1540
Arlington, VA 22209

The "Request for Accreditation Services" form can be obtained from the CAAHEP website at <http://ras.caahep.org/>.

- b. The program may undergo a comprehensive review in accordance with the policies and procedures of the CoA-RATE.

If it is determined that there were significant concerns with the conduct of the on-site review, the sponsor may request a second site visit with a different team.

After the on-site review team submits a report of its findings, the sponsor is provided the opportunity to comment in writing and to correct factual errors prior to the CoA-RATE forwarding a recommendation to CAAHEP.

3. Administrative Requirements for Maintaining Accreditation

- a. The program must inform the CoA-RATE and CAAHEP within a reasonable period of time (as defined by the committee on accreditation and CAAHEP policies) of changes in chief executive officer, dean of health professions or equivalent position, and required program personnel (Refer to Standard III.B.).
- b. The sponsor must inform CAAHEP and the CoA-RATE of its intent to transfer program sponsorship. To begin the process for a Transfer of Sponsorship, the current sponsor must submit a letter (signed by the CEO or designated individual) to CAAHEP and the CoA-RATE that it is relinquishing its sponsorship of the program. Additionally, the new sponsor must submit a "Request for Transfer of Sponsorship Services" form. The CoA-RATE has the discretion of requesting a new self-study report with or without an on-site review. Applying for a transfer of sponsorship does not guarantee that the transfer of accreditation will be granted.
- c. The sponsor must promptly inform CAAHEP and the CoA-RATE of any adverse decision affecting its accreditation by recognized institutional accrediting agencies and/or state agencies (or their equivalent).
- d. Comprehensive reviews are scheduled by the CoA-RATE in accordance with its policies and procedures. The time between comprehensive reviews is determined by the CoA-RATE and based on the program's on-going compliance with the Standards, however, all programs must undergo a comprehensive review at least once every ten years.
- e. The program and the sponsor must pay CoA-RATE and CAAHEP fees within a reasonable period of time, as determined by the CoA-RATE and CAAHEP respectively.
- f. The sponsor must file all reports in a timely manner (self-study report, progress reports, probation reports, annual reports, etc.) in accordance with CoA-RATE policy.
- g. The sponsor must agree to a reasonable on-site review date that provides sufficient time for CAAHEP to act on a CoA-RATE accreditation recommendation prior to the "next comprehensive review" period, which was designated by CAAHEP at the time of its last accreditation action, or a reasonable date otherwise designated by the CoA-RATE.

Failure to meet any of the aforementioned administrative requirements may lead to administrative probation and ultimately to the withdrawal of accreditation. CAAHEP will immediately rescind administrative probation once all administrative deficiencies have been rectified.

4. Voluntary Withdrawal of a CAAHEP- Accredited Program

Notification of voluntary withdrawal of accreditation from CAAHEP must be made by the Chief Executive Officer or an officially designated representative of the sponsor by writing to CAAHEP indicating: the desired effective date of the voluntary withdrawal, and the location where all records will be kept for students who have completed the program.

5. Requesting Inactive Status of a CAAHEP- Accredited Program

Inactive status for any accredited program may be requested from CAAHEP at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to CAAHEP indicating the desired date to become inactive. No students can be enrolled or matriculated in the program at any time during the time period in which the program is on inactive status. The maximum period for inactive status is two years. The sponsor must continue to pay all required fees to the CoA-RATE and CAAHEP to maintain its accreditation status.

To reactivate the program, the Chief Executive Officer or an officially designated representative of the sponsor must provide notice of its intent to do so in writing to both CAAHEP and the CoA-RATE. The sponsor will be notified by the CoA-RATE of additional requirements, if any, that must be met to restore active status.

If the sponsor has not notified CAAHEP of its intent to re-activate a program by the end of the two-year period, CAAHEP will consider this a “Voluntary Withdrawal of Accreditation.”

B. CAAHEP and Committee on Accreditation Responsibilities – Accreditation Recommendation Process

1. After a program has had the opportunity to comment in writing and to correct factual errors on the on-site review report, the CoA-RATE forwards a status of public recognition recommendation to the CAAHEP Board of Directors. The recommendation may be for any of the following statuses: initial accreditation, continuing accreditation, transfer of sponsorship, probationary accreditation, withhold of accreditation, or withdrawal of accreditation.

The decision of the CAAHEP Board of Directors is provided in writing to the sponsor immediately following the CAAHEP meeting at which the program was reviewed and voted upon.

2. Before the CoA-RATE forwards a recommendation to CAAHEP that a program be placed on probationary accreditation, the sponsor must have the opportunity to request reconsideration of that recommendation or to request voluntary withdrawal of accreditation. The CoA-RATE reconsideration of a recommendation for probationary accreditation must be based on conditions existing both when the committee arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors’ decision to confer probationary accreditation is not subject to appeal.

3. Before the CoA-RATE forwards a recommendation to CAAHEP that a program’s accreditation be withdrawn or that accreditation be withheld, the sponsor must have the opportunity to request reconsideration of the recommendation, or to request voluntary withdrawal of accreditation or withdrawal of the accreditation application, whichever is applicable. The CoA-RATE’s reconsideration of a recommendation of withdraw or withhold accreditation must be based on conditions existing both when the CoA-RATE arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors’ decision to withdraw or withhold accreditation may be appealed. A copy of the CAAHEP “Appeal of Adverse Accreditation Actions” is enclosed with the CAAHEP letter notifying the sponsor of either of these actions.

At the completion of due process, when accreditation is withheld or withdrawn, the sponsor’s Chief Executive Officer is provided with a statement of each deficiency. Programs are eligible to re-apply for accreditation once the sponsor believes that the program is in compliance with the accreditation Standards.

Note: Any student who completes a program that was accredited by CAAHEP at any time during his/her matriculation is deemed by CAAHEP to be a graduate of a CAAHEP-accredited program.

APPENDIX B

Curriculum for Educational Programs in Assistive Technology

A curriculum which prepares students for entry level practice as Assistive Technology professionals must address the following six domains, which are mastered as students acquire skills and knowledge based on the tasks which follow:

1. Domains

- a. Assessment of Needs
- b. Development of Intervention Strategies – Action Plan
- c. Implementation of Intervention (Once Funded)
- d. Evaluation of Intervention (Follow-Up)
- e. Professional Conduct
- f. Evidence Based Practice

2. Tasks

- a. Assessment of Needs
 - 1) Interview the client and consult with other team members as needed (e.g., caregivers, educational, family, medical professionals, therapeutic, vocational, and workplace, etc.) to determine client needs and expectations.
 - 2) Review relevant records and plans (e.g., caregivers, educational, family, medical professionals, therapeutic, vocational, and workplace, etc.)
 - 3) Ensure sufficient time is allotted during the assessment to accommodate the client needs, learning style, impairments, environments, languages, and schedules.
 - 4) Assess environmental factors (e.g., behavioral, educational, personal assistance, physical, social, and support in the environment) pertaining to the use of the assistive technology.
 - 5) Collaborate as needed with other team members.
 - 6) Relate abilities and limitations to the use of specific assistive technology. Assess functional capacities for future needs and anticipated transition.
 - 7) Refer clients, initiate requests for service/consultation, or make recommendations on the referral process for further support as needed.
 - 8) Assist the client and other stakeholders as appropriate in clarifying and prioritizing goals/needs.
 - 9) Assess the effectiveness of prior and existing technology.
 - 10) Facilitate the decision making process of the team providing the assessment and implementation of assistive technology products and services
 - 11) Present/explain findings and assessment outcomes, as well as demonstrate/explain recommendations to the client and other team members as appropriate in an accessible and appropriate format.
- b. Development of Intervention Strategies – Action Plan
 - 1) Define potential intervention strategies and services using systematic method from lowest to highest levels of technology as appropriate.
 - 2) Identify product(s), which match technology features given the client's functional abilities, capacities and limitations, as well as goals, personal preferences, environmental factors, and applicable standards.
 - 3) Determine the appropriateness of commercially available, modified, and/or custom solutions.
 - 4) Compare technology being considered with client's current and/or previously used technology (including but not limited to what is readily available in the client's environment).
 - 5) Conduct appropriate demonstrations, trials, and simulations (with basic training for devices/strategies).
 - 6) Document measurable objectives as appropriate and conduct subsequent analyses of data to select possible technology solutions.
 - 7) Identify issues of integration crossing all impacted environments in which the client interacts (e.g., community, home, school, social, workplace, vocational, etc.).

- 8) Seek and integrate client and team member's feedback during trial opportunity.
- 9) Identify or assist in determining training and support needs.
- 10) Identify measurable outcomes from trials to monitor progress toward achieving stated goals and milestones, including relevant data needed for determining progress and final solutions.
- 11) Assist clients in making final selections by explaining the relevant aspects (advantages and disadvantages) of different technology solutions, e.g., reasonable useful life, cost effectiveness, availability of support, and financial implications.
- 12) Document recommendations (e.g., sources of technology, related services, training, implementation and trials, costs, and follow-up).
- 13) Identify and advise the client of the procurement process.
- 14) Submit recommendations for procurement as appropriate.

c. Implementation of Intervention (Once Funded)

- 1) Review and confirm the implementation plan with client and team members.
- 2) Initiate and monitor the order process.
- 3) Verify product for safety, function, performance, and quality.
- 4) Prepare, install, fit and adjust the technology to client requirements.
- 5) Train the client and other stakeholders in device operation, adjustment, care, maintenance, and the troubleshooting process across all impacted environments in which the client interacts.
- 6) Provide information on device warranty, scheduled maintenance, and follow-up needs.
- 7) Verify the client's ability to use equipment consistent with their goals once training has been completed.
- 8) Provide or make recommendations, as appropriate, regarding on-going training or services to achieve goals.
- 9) Educate client and team members on identifying changes, which may necessitate follow-up to make adjustments or modifications.
- 10) Document the implementation process and progress as appropriate, and communicate to interdisciplinary team members and other stakeholders as required.
- 11) Inform client and appropriate team members of their rights and responsibilities and applicable complaint processes.

d. Evaluation of Intervention (Follow-Up)

- 1) Document outcomes (both qualitative and quantitative) and communicate to interdisciplinary team members and other stakeholders as appropriate.
- 2) Troubleshoot equipment failure and initiate repair and/or warranty process as needed.
- 3) Modify intervention strategy, as requested or required, ensuring follow-up in place to address changing client goals, as necessary.
- 4) Use a quality assurance plan to review achievement of client goals and the service delivery process.

e. Professional Conduct

- 1) Participate in opportunities to advance the field of assistive technology (e.g., mentoring/supervision, education, research, industry affairs, advocacy, policy, and legislation, etc.).

f. Evidence Based Practice

- 1) Describe basic research methodologies including group and single subject methods
- 2) Read, interpret and evaluate AT intervention research studies
- 3) Describe various outcomes assessment instruments applicable to AT
- 4) Collect data for not only service provision, but for assessing the effectiveness of AT interventions.

3. Knowledge

a. Human Anatomy and Physiology

- 1) Circulatory System
- 2) Digestive System
- 3) Endocrine System
- 4) Integumentary System
- 5) Lymphatic System
- 6) Muscular System

- 7) Nervous System
 - 8) Respiratory System
 - 9) Sensory System
 - 10) Skeletal System
 - 11) Urogenital System
- b. Human Development Through the Lifecycle
- 1) Typical and atypical development (e.g., adaptive, cognitive, communication, emotional, language, motor, sensory, social, etc.)
 - 2) Developmental stages (e.g., neonatal, infancy, early childhood, school age, adolescence, adulthood, senior adults)
- c. Psychology and Sociology
- 1) Social, emotional, and behavioral development
 - 2) Cognitive development (e.g., attention span, comprehension, literacy, memory, perception, processing, etc.)
 - 3) Cultural awareness
 - 4) Disability culture
 - 5) Interpersonal relationships
 - 6) Mental health (e.g., anxiety, dementia, depression, etc.)
- d. Fundamental Functional Abilities, Capacities And Limitations
- 1) Sensory and perception (e.g., body awareness, neurosensory, proprioception, sensory processing, spatial relations, tactile, visual, etc.)
 - 2) Oral motor function
 - 3) Biomechanics of posture, movement, and function
 - 4) Physical (e.g., balance, coordination, endurance, muscle tone, range of motion, strength, etc.)
 - 5) Communication (e.g., receptive/expressive language, verbal/non-verbal, written, etc.)
 - 6) Cognition and learning (e.g., attention, executive function, literacy, organization, etc.)
 - 7) Behavioral/Emotional (e.g., emotional vulnerability, self-control, self-management, etc.)
 - 8) Environmental interactions and access (e.g., community, home, school, social, transportation, workplace, etc.)
 - 9) Etiology, pathology, and characteristics of different diagnoses (e.g., congenital, degenerative, developmental, effects of co-morbidities, progressive, etc.)
- e. Interventional Services
- 1) Psychological, behavioral, and neuropsychological
 - 2) Medical (E.g., nursing and palliative care, nutrition therapy, pharmaceutical, respiratory, surgical, etc.)
 - 3) Therapeutic (e.g., occupational, physical, recreational, and speech therapy, etc.)
 - 4) Educational and school-based services
 - 5) Vocational rehabilitation (e.g., counseling, evaluation, training, etc.)
 - 6) Assistive technology services (e.g., Complex Rehabilitation Technology (CRT), Durable Medical Equipment (DME), engineering etc.)
 - 7) Alternative and culturally sensitive interventions (e.g., acupuncture, herbal treatments, reflexology, etc.)
 - 8) Social Services
 - 9) Orthotic/prosthetic services
- f. Principles of Learning and Teaching
- 1) Principles of learning for age appropriate groups (e.g., childhood, adulthood, etc.)
 - 2) Learning styles (e.g., aural, logical, physical, social, solitary, verbal, visual, etc.)
 - 3) Hierarchy of learning (e.g., Bloom's taxonomy, Brown's stages of language development, etc.)
 - 4) Motivation (e.g., intrinsic and extrinsic motivation)
 - 5) Abilities and challenges to learning (e.g., attention, cognitive, language, physical, etc.)
 - 6) Accommodation versus modification (e.g., assignments, materials, work stations, etc.)
 - 7) Training strategies and methods (e.g., modeling, multi-sensory and visual supports, positive behavioral supports, prompt fading, task analysis, etc.)

- g. Assessment Procedures
 - 1) Client's current level of function across environments (e.g., community, home, school, work, transportation, etc.)
 - 2) Client's abilities/challenges, capacities/ limitations
 - 3) How to assess client tasks, activities, and participation considering environmental factors
 - 4) Technology/device features which match the client's needs
 - 5) Data collection and measurement procedures
 - 6) Analysis and synthesis of information to determine recommendations
 - 7) Application of theoretical frameworks and models such as the Student, Environment, Task, Tools Framework (SETT) or Human Activity Assistive Technology (HAAT) model or IMPACT2 Model to assess clients

- h. Service Delivery and Outcomes
 - 1) Awareness and investigation of all avenues of procurement applicable to the individual client
 - 2) Principles of quality assurance and client satisfaction
 - 3) Awareness of ongoing resources and services such as supplier, fellow clinicians, community resources
 - 4) Awareness of, and advocacy for, client rights and responsibility
 - 5) Roles and responsibilities of individuals with disabilities and others (e.g., academics, caregivers, designers, distributors, educators, engineers, fabricators, manufacturers, medical professionals, technicians, researchers, etc.)
 - 6) Sources, procedures, documentation, and eligibility for AT procurement
 - 7) Rules, regulations, laws, and statutes relating to procurement
 - 8) Application of outcome measures for evidence based practice and accountability within a service setting

- i. Principles of Design, Development and Application
 - 1) Universal design concepts
 - 2) Architectural accessibility (E.g., community, home, school, workplace, social, transportation, etc.)
 - 3) Environmental considerations
 - 4) Factors which contribute to the cost of devices
 - 5) Factors which contribute to usability in particular or multiple environments
 - 6) Relationship of material and design to function
 - 7) Properties and strength of materials
 - 8) Electrical circuits, systems and components (e.g., batteries, chargers, fuses, microprocessors, etc.)
 - 9) Responsibilities, limitations, and violation of warranty
 - 10) Preventative maintenance and repair schedules for mechanical, electric, and electronic equipment
 - 11) Tools and their purpose and use (i.e., which tools perform which functions).
 - 12) Ergonomic functions

- j. Knowledge of Assistive Technology Devices
 - 1) Categories, features and applications of available assistive technologies (e.g., communication, control of environment, mobility, posture, sensory function, etc.)
 - a) AAC (Augmentative/Alternative Communication)
 - b) Accessible transportation
 - c) ADL (Aids to Daily Living, e.g., dressing, bathing, etc.)
 - d) Cognitive aids (e.g., day-organizer, pill minder, travel application, etc.)
 - e) Adaptive interfaces including computer access (e.g., eye gaze, adaptive mouse, adaptive keyboard, voice recognition, etc.), hardware, software, and mobile device access (e.g., cell phones, tablets, etc.)
 - f) Interactive technology systems (e.g., compatibility of interactive systems, programs, platforms, and equipment)
 - g) Technology access with consideration for cognition
 - h) EADL (Electronic Aids to Daily Living, e.g., TV, light, door controls, etc.)
 - i) Education/learning/accessible instructional materials
 - j) Environmental access, modification, utilization

- k) Mobility assistive equipment
 - l) Orthotics/prosthetics (i.e. overview of devices with emphasis on referral to orthotist/prosthetist for provision of, or modification to, orthoses or prostheses)
 - m) Seating and positioning
 - 2) Sensory aids (e.g., vision, hearing, tactile, etc. — such as refreshable Braille displays, weighted vests, tactile manipulatives, noise cancelling/amplification, alternative lighting, etc.)
 - 3) Recreation
 - 4) Worksite modification
 - 5) Credible and vetted sources of information regarding products and technical standards acquired through researching, updating, and upgrading one's own knowledge, in order to provide best practice recommendations to clients and colleagues
- k. Environmental Integration (Person, Technology, Human Device Interface)
- 1) Identification of benefits and limitations of appropriate AT devices, and client access to them
 - 2) Inter-relationship and compatibility issues among various technologies in meeting the needs of the client through the use of appropriate assessment and integration models such as the SETT Framework and the HAAT Model, International Classification of Function (ICF), and IMPACT2 models (e.g. communication access, mobility, seating, etc.)
 - 3) Relationship between educational, medical, therapeutic, and vocational goals, and assistive technology interventions for both short and long term involvement
 - 4) Impact of assistive technology on access to education, employment, and independent living
 - 5) Describe specific AT applications for specialized urban, suburban, and rural environments. E.g. farms, ranches, apartments, single family residences.
- l. Professional Conduct and Standards of Practice
- 1) Maintain current knowledge of features and functions of emerging technologies and products
 - 2) Maintain professional knowledge, skills, and on-going education in all areas relevant to an individual, ranches, apa
 - 3) Application of standards of practice to an individual's discipline(s) and field(s)
 - 4) Roles and responsibilities of other professionals for referral purposes and collaboration
 - 5) Apply a client-centered approach with active engagement of all relevant team members