

Rehabilitation Research Design & Disability University of Wisconsin-Milwaukce



	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	CO]	me	es I	Mea	ası	ure	men	t ( <b>V. 1.2.1</b> )
Year	Name/Event	Description	Significance	Fo	cus	Out Se	nues re over the over	Becessit Becessit Becomes Fromes The Deliver Mext	Actival F	Incational Las	Polices fund	with S Transie Transie Transie Street S D Service Transie Street S D Service Transie Street S D Service Transie Street S D Service S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D S D
1973	Rehabilitation Act of 1973 signed into law (P.L. 93-112)	The Rehabilitation Act prohibited discrimination against individuals with disabilities in regards to employment and academic program admission. Sections 503 (Educational Institutions) and 504 (Employers receiving federal funds) mandated reasonable accommodation and a least restrictive environment (LRE) in employment.	Due to the Rehabilitation Act of 1973, many architectural changes occurred on campuses as well as in work-based settings: - Elevators and ramps installed - Curb cuts added to sidewalks - Braille labels added to signs	X			x	X		X		Pub. L. 93-112, Sept. 26, 1973, 87 Stat. 355 Short title, see 29 U.S.C. 701 note
1975	Education for All Handicapped Children Act of 1975 signed into law (P.L. 94-142)	Extended reasonable accommodation and LRE from age 5-21 and mandated Individual Education Program (IEP) for each child.	Assistive technology provided as an intervention to help students gain access to educational programs. Prior to this law many children with disabilities did not attend school programs.	X			x			X		Pub. L. 94-142, Nov. 29, 1975, 89 Stat. 773 Short title, see 20 U.S.C. 1400 note
1982	U.S. Office of Technology Assessment (OTA) issued <i>Technology and</i> <i>Handicapped People</i>	Primary federal examination of the impact of technology for people with disabilities.	Formal look at the value of AT on a policy level.	X						X		U.S. Congress, Office of Technology Assessment. (1982). Technology and Handicapped people. Washington, DC: U.S. Government Printing Office.

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	col	me	es I	Me	as	ure	emo	ent	t ( <b>V. 1.2.1</b> )
Year	Name/Event	Description	Significance	Fo	cus	one	ones Presson	decessor decomes Delive	Nedico P	Type	a Josephines	vent	ind Transing Transies of the Particular of the Particular States of the Particular States of the Particular of the Parti
1985	ABLEDATA established	Marian Hall developed the website database to collect information about AT products.	It was the first website of its kind to collect data regarding AT products.			X	x	x	x		X		www.abledata.com
1986	Education of the Handicapped Act Amendments of 1986 enacted (Handicapped Infants and Toddlers Act) (P.L. 99-457)	Extended P.L. 94-142 to infants and to children ages 3-5 and expanded emphasis on educationally related assistive technologies.	This amendment to the Education of the Handicapped Act allowed for funds to be set aside for technology, educational media and materials. It also introduced early intervention programs for children, ages birth-3. An Individual Family Service Plan (IFSP) replaced the IEP for children birth-3 years. This service plan included information about the family's strengths and weaknesses as well as any information needed for the IEP	X			x			X			Pub. L. 99-457, Oct. 8, 1986, 100 Stat. 1145 Short title, see 20 U.S.C. 1400 note
1986	Rehabilitation Act Amendments of 1986 signed into law (P.L. 99-506)	Required all states to include provision for assistive technology services for Individualized Written Rehabilitation Programs (IWRP) for each client. Section 508 mandated equal access to electronic office equipment for all Federal employees.	This amendment had a large impact on designing computers to be accessible to people with disabilities. People with disabilities are now able to: - access and manipulate databases and application programs - transmit and receive messages via telecommunication systems.	X				x		x			Pub L. 99-506, Oct. 21, 1986, 100 Stat. 1807 Short title, see 29 U.S.C. 701 note

	<b>Historical Foun</b>	dations of Assis	stive Technology O	out	<b>CO</b> ]	me	es I	Me	eas	ur	em	en	t ( <b>V. 1.2.1</b> )
Year	Name/Event	Description	Significance	For	cus	OU	one Pro	etecesso preomet	Forus	a succision of the second seco	al an rotations	vent	with Francis December 18 9 Southeast Transformer 18 9 Southeast Transformer Property References
	Technology-Related Assistance Act for Individuals with Disabilities (The Tech Act) signed into law (P.L. 100-407)	First legislation specifically related to AT because it extended Section 508 to all funded states, and mandated client- centered AT services.	Granted funding to all states and provided assistive technology devices and services to individuals with disabilities.	X		x	X	X	X	X			
1988	AT device defined (P.L. 100-407)	"any item, piece of equipment or product system whether acquired commercially off the shelf, modified, or customized that is used to increase, maintain or improve functional capabilities of individuals with disabilities."	Becomes official federal definition.	X		x	X	X	X	X			Pub. L. 100-407, Aug. 19, 1988, 102 Stat. 1044 Short title, see 29 U.S.C. 2201 note
	AT service defined (P.L. 100-407)	"any service that directly assists an individual with a disability in the selection, acquisition or use of an assistive technology device."	Becomes official federal definition.	X		X	X	x	x	X			
1989	Matching Person and Technology (MPT) published	The MPT assessment is composed of a group of self-reported perspectives of adult individuals using AT devices and services. It looks at the strengths/capabilities, needs/goals, preferences, psychosocial characteristics, and expected technology benefits of the individual.	Scherer and Craddock report, "There is a need for improved person-AT matching and outcomes assessment process because studies show in general that there is a high level of dissatisfaction and nonuse of technology by consumers."	x		X	X	X	X			X	<ul> <li>Scherer, M.J. (1998, Revision of 1994, 1991 and 1989 Editions). The Matching Person &amp; Technology (MPT) Model Manual. Webster, NY: The Institute for Matching Person &amp; Technology, Inc.</li> <li>Scherer, M., &amp; Craddock, G. (2002). Matching person and technology (MPT) assessment process. Technology and Disability, 14, 125-131.</li> </ul>
1990	ADA of 1990 signed into law (P.L. 101-336)	The ADA is a civil rights act for those with disabilities by extending 503, 504, 508 and other provisions to all citizens in terms of public accommodation, private employment, transportation, and telecommunications.	The ADA: 1. Prohibits discrimination based on disability 2. Advocates equal access to employment, transportation, state and local government 3. Promotes public accommodations and telecommunications for people with disabilities.	x				X	X	x			Pub. L. 101-336, July 26, 1990, 104 Stat. 327 Short title, see 42 U.S.C. 12101 note

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	co	me	es I	Лe	as	ure	em	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	oute	nues Tree out of rvice I Com	Becessit Becessit	ocus Medica Fry	Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Linesius Lin	e of E	salenti Salenti Salenti Salenti Vent	with Francisco Province to S D Section Proprietor States D Section Proprietor Province to S D Section Province Province to S D Outcome Province Province to S D Outcome Province Province to S D Outcome Province Province to S D
1991	Individuals with Disabilities Education Act (IDEA) signed into law (P.L. 102-119)	Extended AT device and service definitions to education	IDEA dictates that local education agencies are responsible for providing AT devices and services as long as they are required for a portion of the child's education, related services, or as a supplementary aid/service.	X			x			x			Pub. L. 102-119, Oct. 7, 1991, 105 Stat. 587 Short title, see 20 U.S.C. 1400 note.
1992	Rehabilitation Act Amendments of 1992 signed into law (P.L. 102-569)	Defines rehabilitation technology as "rehabilitation engineering, assistive technology devices and services, and mandates rehabilitation technology as a primary benefit to be included in IWRP"	Vocational rehabilitation funds are the first source of finance for AT purchase regardless of whether or not the individual has additional funding sources.	X				X		x			Pub. L. 102-569, Oct. 29, 1992, 106 Stat. 4344 Short title, see 29 U.S.C. 701 note.
1992	Assistive Technology and the Individualized Education Program published (RESNA)	Resource for AT in the schools.	First resouce for AT in education.	X							X		RESNA. (1992). Assistive Technology and the Individualized Education Program. Washington DC: RESNA Technical Assistance Project.
1993	National Institutes of Health established research plan for National Center for Medical Rehabilitation Research (NCMRR)	As a new NIH center, develops NCMRR philosophy and framework for research directions.	Provided direction for basic research and R&D related to AT devices and interventions. Included measurement and AT as areas of intent. As a primary research agency, legitimized research in this area.	X		X			X	x			Research Plan for the National Center for Medical Rehabilitation Research. (1993). U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Child Health and Human Development.
1994	OT FACT (v 2.0) published	OT FACT version 2.0 is a comprehensive evaluation tool that has the ability to isolate the impact of interventions such as AT	OT FACT is a software-based assessment that uses dynamic questioning to target the client's individual needs. It provides a method for isolating the impact of AT.		X	X	x	X	X			X	Smith, R.O. (1993). Assessing the impact of assistive technology using OT FACT version 2.0. Proceedings of the 16th Annual RESNA Conference, Arlington, VA.
1994	Assistive Technology published editorial: Outcome measures: Are we ready to answer the tough questions? (Trachtmann)	An editorial by Larry Trachtmann initiates assistive technology outcomes measures as a critical issue in healthcare reform.	An editorial by Larry Trachtmann initiates assistive technology outcomes measures as a critical issue in the health care reform.		X	X	x	X	X		x		Trachtmann, L. (1994). Outcome measures: Are we ready to answer the tough questions? Assistive Technology, 6, 91-92.

	<b>Historical Foun</b>	dations of Assis	stive Technology O	out	CO]	me	es I	Лe	as	ur	em	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	Out Se	some Tree Cor	Becessit Becomes Becomes	Medico P	, sheating	an Polici an Polici be of E	vent	with Francisco Provinsion Report & D Seminar Provinsion Provinsion References
1994	American Medical Association (AMA) published Guidelines for the Use of Assistive Technology: Evaluation, Referral, Prescription	These Guidelines were developed for primary care physicians and other health care professionals to help them efficiently and effectively meet the needs of their patients with disabilities. They were intended to serve as a quick reference and resource, with the goal of clarifying and organizing the evaluation, referral, and prescription process.	Major acknowledgement of the role of AT in medicine. While clearly driven from a physician perspective, it provided overt acknowledgement of AT as a health intervention.	x							X		Schwartzberg, J. G., Kakavas, V. K., Furey, P., Malkind, S., & Change, C. (1994). Guidelines for the Use of Assistive Technology: Evaluation Referral Prescription. Chicago: American Medical Association.
1995	Assistive Technology published article: Evaluating outcomes in assistive technology: Do we understand the commitment? (DeRuyter)	In the article, De Ruyter proposed that stakeholders and AT providers must be prepared to show how their services or devices make a difference in the lives of patients treated.	Advanced the dialogue driving AT outcomes research.		X	x					X		DeRuyter, F. (1995). Evaluating outcomes in assistive technology: Do we understand the commitment? Assistive Technology, 7(1), 3-16.
1995	Professional Standards Board in Assistive & Rehabilitation Technology established (RESNA)	RESNA established the Standards Board to develop policies and standards for practice as well as to determine the areas of certification for service providers.	The following are areas in which service providers may earn a certificate upon completion of an exam: <b>Assistive Technology Practitioner (ATP)</b> - issued to service providers who analyze clients' needs as well as train individuals on the use of assistive devices <b>Assistive Technology Supplier (ATS)</b> - issued to service providers involved with the selling rehabilitative equipment, AT and other devices		x	x	x	x	X	x			RESNA n.d., RESNA policy on the qualification of service providers in assistive technology. Retrieved September 24, 2003, from http://www.resna.org/PracInAT/CertifiedPractice/Q ualifications.html

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	coi	me	es I	Ле	as	ure	m	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	onie	nues re ov	Becomes Becomes Delive	Medico S	Jucational Jucational Last Type	Salional Indexy Policies	salenti salenti salenti salenti vent	And Standing Decomposition of S. D. Section Transformer Property S. D. Section Transformer Property S. D. Outcome Property References
1995	Assistive Technologies: Principles and Practice (First Edition) published.	<ul> <li>This book discusses many important details regarding AT. It is split into four parts:</li> <li>1. AT industry, history, legislations, professional practice issues, and the Human Activity Assistive Technology Model (HAAT),</li> <li>2. AT consumers, human operator, service delivery system, and AT outcome measurement,</li> <li>3. AT purpose, position concepts, control interfaces, adapting computers, and auditory/visual AT,</li> <li>4. AT application, wheelchairs, AT use, low tech and high tech AT, and sensory aids.</li> </ul>	First major comprehensive AT text that is used as the source for credentializing exam reviews.	x		x	x	x	x		x		Cook, A., Hussey, S. (1995). Assistive technologies: Principles and practice. California: Mosby Year-Book, Inc.
1996	Development and experimentation of Cost Analysis Methodologies in Assistive Technology resulted in the SIVA Cost Analysis Instrument (SCAI)	SCAI measures the social costs and the financial plan of individual AT programs. - Social costs: sum of all material and human resources mobilized by the intervention - Financial plan: disbursement of money over time by all those involved	The SCAI was constructed to assist clinical practitioners to estimate the economic areas of AT devices provided for individuals. However, the intent of this instrument was not to be a decision-making tool, but as an information instrument used to make practitioners aware of the consequences resulting from their decisions.		x	x	x	X	x			X	Andrich, R. (2002). The SCAI instrument: Measuring costs of individual assistive technology programmes. Technology and Disability, 14(3), 95- 99.
1996	Special issue of Assistive Technology (v. 8.2) featured measurement of assistive technology outcomes and theoretical and practical considerations	Assistive Technology is the official journal for the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA).	First refereed journal with a focus on AT outcomes		X	X	x	X	X		X		Smith, R. O. (Ed.) (1996). Assistive technology, 8.2.

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	COI	me	s Me	eas	ure	em	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	one Se	une traces	Forus Nedica	Typ	al ocaliona Inter an Polici e of E	enterni enterni enterni vent	June During Programment & D and & During Programment & D Seminar Programment References
1996	Telecommunications Act of 1996 established (P.L. 104-104).	The Telecommunications Act of 1996 requires that telecommunication systems/devices must be accessible for people with disabilities. It also mandates that funding for telecommunications be allocated to schools and libraries.	This act gave individuals with disabilities the opportunity to have public access to telecommunication systems/devices in order to communicate with others.	X				x	x			Pub. L. 104-104, Feb. 8, 1996, 110 Stat. 56 Short title, see 47 U.S.C. 609 note
1996	Assistive Technology published: Development of the Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST).	The QUEST is an outcome measurement instrument that assesses user satisfaction regarding AT devices and services.	When used in the clinic, the QUEST can present clinicians with helpful AT satisfaction data to justify reasons for providing AT devices for clients.		X						x	Demers, L., Weiss-Lambrou, R., & Ska, B. (1996). Development of the Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST). Assistive Technology, 8, 3-13.
1996	Alliance '96 portfolio: Outcomes Measurement in Assistive Technology released.	A portfolio that consists of articles, papers, and measurement tools relating to outcomes measurement in AT.	This portfolio is a helpful resource binder that can be individualized by adding updated materials.							x		Pressman, H., Blackstone, S. (1996). Alliance '96 portfolio: Outcomes measurement in assistive technology. California: Augmentative Communication Inc.
1996	Canadian Journal of Rehabilitation published Psychosocial Impact of Assistive Devices (PIADS).	The PIADS is a questionnaire that is composed of questions asking about the affects of AT devices in regards to functional independence, well-being and quality of life.	AT devices are designed to help people with their everyday activities, yet some individuals abandon these devices. The PIADS was designed to look at the psychosocial factors that may lead to the use or disuse of AT devices.		X			x			x	Day, H., & Jutai, J. (1996). Measuring the Psychosocial Impact of Assistive Devices: The PIADS. Canadian Journal of Rehabilitation, 9, 159- 168.
1997	Institute of Medicine (IOM) issued Enabling America.	Textbook authored by expert committee defining the problems, research needs, and recommendations for methods of intervention for persons with disabilities.	Provided model of disablement that clearly stated contributions of assistive technology.									Committee on Assessing Rehabilitation Science and Engineering. (1997). Enabling America: Assessing the role of rehabilitation science and engineering. Washington, D.C.: Institute of Medicine.
1997	IDEA reauthorized (P.L. 105-17).	Reauthorization of IDEA mandated that every IEP team consider assistive technology when planning for the individualized educational needs of an individual with a disability.	First indication that AT services needed an evaluation step in order to consider AT.		X		x		X			Pub. L. 105-17, June 4, 1997, 111 Stat. 37 Short title, see 20 U.S.C. 1400 note

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	COI	m	es I	Mea	sur	en	ıen	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Foo	cus	0	Service Con	Becessit Becessit Becomes two becomes two two two two two two two two two two	incel Education	Vorsiliu Vorsiliu Int Law, Poi	not start	ine purper proving to the solution of the solu
1997	RESNA published Guidelines for Knowledge of Skills for Provision of the Specialty Technology.	Holds stakeholders focus groups on quality of AT and creates the matrix of AT outcomes areas.	<ul><li>Creates 4 sets of criteria for practitioners:</li><li>1. Access, integration, and control of computer-based technology,</li><li>2. Augmentative and alternative communication,</li><li>3. Job accommodations,</li><li>4. Seating and mobility.</li></ul>							х		RESNA. (1997). Guidelines for knowledge of skills for provision of the specialty technology. Virginia: RESNA Press
1998	Assistive Technology Act of 1998 signed into law (P.L. 105-394).	Extended funding of the 1988 Tech Act to assist states in promoting awareness of assistive technology, as well as providing technical assistance, outreach, and interagency coordination	Expanded the impact of the Tech Act to all fifty states.	X		X	x	x	X X			Pub. L. 105-394, Nov. 13, 1998, 112 Stat. 3627 Short title, see 29 U.S.C. 3001 note
1998	RESNA published three volume Resource Guide for AT Outcomes.	RESNA (1998). Volume I: RESNA Resource Guide for Assistive Technology Outcomes: Measurement Tools RESNA (1998). Volume II: RESNA Resource Guide for Assistive Technology Outcomes: Assessment Instruments, Tools, & Checklists from the Field. RESNA (1998). Volume III: RESNA Resource Guide for Assistive Technology Outcomes: Developing Domains of Need and Criteria of Services.	First scholarly work discussing instrumentation theory that catalogued existing instruments and published critical reviews.		X					x		Editor: Vitatiti, L. RESNA (1998). Volume I: RESNA Resource Guide for Assistive Technology Outcomes: Measurement Tools. Arlington, VA: author. RESNA (1998). Volume II: RESNA Resource Guide for Assistive Technology Outcomes: Assessment Instruments, Tools, & Checklists from the Field. Arlington, VA: author. RESNA (1998). Volume III: RESNA Resource Guide for Assistive Technology Outcomes: Developing Domains of Need and Criteria of Services. Arlington, VA: author.

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	CO]	me	es I	Лe	as	urer	nen	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	one	ones re-	Becessor Becomes F	ocus shedien T	Aurostioned Local Local Local Type of	and seense	wind framing from the server a so
1998	Rehabilitation Act Amendments of 1998 signed into law (P.L. 105-220).	Section 204-17B states activities carried out under the research program may include the following: (i) the development of methodologies to evaluate rehabilitation technology products and services and the dissemination of the methodologies to consumers and other interested parties, (ii) identification of models for service provider training and evaluation and certification of the effectiveness of the models, (iii) identification and dissemination of outcome measurement models for the assessment of rehabilitation technology products and service, (iv) development and testing of research- based tools to enhance consumer decision making about rehabilitation technology products and services.	This act added language that led to NIDRR representation on AT outcomes research projects. It also favored product/service competence in order to find the most effective rehabilitation products and services for consumers.		x	x	x	X	X	X		Pub. L. 105-220, title IV, Aug. 7, 1998, 112 Stat. 1092 Short title, see 29 U.S.C. 701note
1998	Quality Indicators for Assistive Technology (QIAT) Services first drafted.	The QIAT Consortium is nationwide and includes hundreds of individuals who provide input into the ongoing process of identifying, disseminating, and implementing a set of widely-applicable Quality Indicators for Assistive Technology Services in School Settings that can be used as a tool to support school districts, AT service providers/consumers, universities, professional developers, and policy makers.	It includes four functional areas: Consideration, Assessment, Intervention (later changed to implementation), and Evaluation of Effectiveness. This version includes written Scenarios which illustrate the possible impact of the quality indicators on assistive technology practices and student learning.	X			X			X		University or Kentucky Department of Special Education and Rehabilitation Counseling, (n.d.) Quality indicators for assistive technology services in school settings Retrieved September 24, 2003, from www.qiat.org

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	<b>CO</b> ]	me	es I	Me	as	ure	em	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo		Out Se	somes free O	decession neones	I west was	a succession	an of F	d dent	ning transformers of the solution of the solut
				FU	I		Cor	<mark>itext</mark>	1	Typ		vent	
1998	Assessment of Life Habits (LIFE-H) published	The Assessment of Life Habits (LIFE-H) can be used as a tool to determine the impact of AT provision on social participation.	Noreau, Fougeyrollas and Vincent note, "By documenting the degree of accomplishment of specific life habits and the resulting level of satisfaction, LIFE- H is presented as a potential tool to determine the impact of AT provision on social participation."		x				x			x	Fougeyrollas, P., Noreau, L., Bergeron, H., Cloutier, R., Dion, S., & St-Michel, G. (1998). Social consequences of long tem impairments and disabilities: Conceptual approach and assessment of handicap. International Journal of Rehabilitation Research 21:127-41.
1999	AT Outcomes website: <u>www.utoronto.ca/atrc/reference/atoutc</u> <u>omes/index.html</u> established	This website features: 1. Current outcome instruments and researchers in various AT outcomes fields 2. Resources 3. Upcoming events 4. Funding 5. New topics in the AT Outcomes field	This website is a helpful resource for learning about AT outcomes.		x	x	x	x	x		x		Adaptive Technology Resource Centre, (n.d.). Assistive Technology Outcomes. Retrieved September 25, 2003, from http://www.utoronto.ca/atrc/reference/atoutcomes/i ndex.html

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	col	me	s I	Лe	as	ure	m	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	oute	nues re over the over	Delive ttext	ocus Medica F	La durations	norsimal Interview	onden 1 i So Stand	with Stranger Mercenter Bar Description of the Desc
1999	NIDRR issued Department of Education Long-Range Plan (1999 - 2004)	As stated in the Federal Register, listed below are the purposes of the five-year Plan: 1. To set broad general directions that will guide NIDRR's policies and use of resources as the field of disability enters the 21st century, 2. To establish objectives for research and dissemination that will improve the lives of individuals with disabilities and from which annual research priorities can be formulated, 3. To describe a system for operationalizing the Plan in terms of annual priorities, evaluation of the implementation of the plan, and updates of the plan as necessary, 4. To direct new emphasis to the management and administration of the research endeavor.	NIDRR supports the investigation of methodologies and models for the assessment of AT performance in order to promote quality assurance.		x	x	x	x	X	x			Federal Register/Department of Education/National Institute on Disability and Rehabilitation Research (NIDRR); Notices of Final Long-Range Plan for Fiscal Years 1999-2004. (1999).
2000	National Assistive Technology Research Institute (NATRI) established	Office of Special Education Programs in the US Department of Education funds major research center with AT research and impact mandate.	First major research effort examining AT outcomes in education.		x							X	NATRI. (2000). National Assistive Technology Research Institute: Mission and Overview. Retrieved December 23, 2003, from the World Wide Web:
2000	Summer 2000, Diagnostique v.25 no.4 Special Issue: Technology and Assessment published.	Diagnostique is the official quarterly journal of the Council for Educational Diagnostic Services. (renamed: Assessment for Effective Intervention.)	Four articles featured in this special issue contributed to the understanding of the effectiveness, impact and value of assistive technology with regards to the education system.		X		X				X		Edyburn, D. (Ed.). (2000) Technology and Assessment [Special issue]. Diagnostique, 25(4).

	<b>Historical Foun</b>	dations of Assis	stive Technology O	ut	<b>CO</b> ]	me	es I	Мe	as	ure	em	en	t (V. 1.2.1)
Year	Name/Event	Description	Significance	Fo	cus	one	ones or	heces of hec	ocus Medica Fry	Typ	ad ocationa Index Index Index	vent	wine Provide Providence & P and & Provide Providence & P Section Provide Management & P Section Provide Management & P Section Provide Management & P
2001	Commission on Accreditation of Rehabilitation Facilities (CARF) issued Employment and Community Services Standards Manual	CARF accreditation process developed a method to review and accredit AT intervention teams.	Demonstrates needs for quality control of AT intervention teams and criteria for measuring accuracy.		X					X			CARF. (2001). Employment and Community Services: Standards Manual July 2001-June 2002. Tucson: Commission on Accreditation of Rehabilitation Facilities.
2001	Assistive Technology Outcomes Measurement System (ATOMS) Project established	ATOMS is a five-year project researching AT outcomes. It is funded by the National Institute on Disability and Rehabilitation Research (NIDRR)	The goal is to find the relationships of AT outcomes factors to help create a better understanding of AT use and disuse.		X	X	X	X	X			X	ATOMS Project at the University of Wisconsin- Milwaukee. (2001). Assistive Technology Outcomes Measurement System. Retrieved September 25, 2003, from http://www.uwm.edu/CHS/atoms
2001	Consortium for Assistive Technology Outcomes Research (CATOR) established	CATOR is a five-year research program that aims on improving measurement science for AT, reducing barriers to the use of AT outcome measures, and understanding the processes for AT use and disuse.	CATOR's goal is to help the following: Consumers (device users) - identify and measure consumer's unmet needs, AT service providers - develop recommendations for reliable, valid, and practical ways of measuring outcomes, as well as how to manage and communicate outcomes information, Decision-makers - may be consumers, service providers, service managers, funders, or government agencies who want to know that they are basing their decisions on the best available evidence, Researchers - use theory and methodology to advance the AT field.		x	x			x			X	CATOR. (n.d.). Consortium for assistive technology outcomes research. Retrieved September 25, 2003, from www.atoutcomes.org
2001	Assistive Technologies: Principles and Practice (Second Edition) published.	Major AT text revised to focus on current research	Text discussion on AT outcomes.		X	x	x	x	X		x		Cook, A., Hussey, S. (2001). Assistive technologies: Principles and practice (second edition). California: Mosby Year-Book, Inc.
2001	World Health Organization (WHO) developed International Classification of Functioning, Disability, and Health (ICF)	The ICF is a guide that uses standard language to help individuals better understand health and health states, outcomes, and determinants.	By providing a common language, data can be compared across countries, health care disciplines, services, as well as time. It includes discussion and taxonomy of AT.		X	x	x	x	X	x			World Health Organization. (2001). International Classification of Functioning, Disability and Health: ICF. Geneva, Switzerland: author.

Historical Foundations of Assistive Technology Outcomes Measurement (V. 1.2.1)													
Year	Name/Event	Description	Significance	Fo	cus	one	outs Tre O	Beliver Deliver	uest cos	atreation Typ	and investioned	vent	wing transmerror and the second second
2001	Special Education Technology Practice featured technology outcomes (Jan/Feb Issue 3.1).	Special issue of journal on AT outcomes topic	Prioritized discussion of AT outcomes for education and service context.		X		X				X		Edyburn, D. (Ed.). (2001). What types of outcomes should be expected when students use assistive and instructional technologies? Special Education Technology Practice, 3.1.
	The Technology for Independence Projects established	To examine innovative research in technology for the independence of persons with disabilities, NIDRR funded four five-year projects to explore community-based research or participatory action research in the study of AT.	These research initiatives engage the disability community with the research process at all stages by emphasizing collaboration with community-based disability organizations to strengthen research through including the expertise of the community and the lived experience of disability.		x				X			x	Community Research for Assistive Technology. (2001). NIDRR Program Directory: Disability and Rehabilitation Research Projects. Retrieved December 23, 2003, from http://www.naric.com.
	1) Technology for Independence: Community-Based Resource Center	Provides technical assistance, dissemination of research products, and networking for the three research projects described below, as well as assistance to other disability research projects participating in the CBRC trainings.	Facilitates the development of real-world, scientifically rigorous knowledge and research on assistive technology and environmental access for persons with disabilities in partnership with disability researchers, disability advocates, community-based organizations, and other disability community members.		x				X			x	TI:CBRC. (2002). Technology for Independence: A Community-Based Resource Center. Retrieved December 23, 2003. from http://disability.law.uiowa.edu/cbrc/
2001	2) Community Research for Assistive Technology (CR4AT)	CR4AT is a collaborative research project of the California Foundation of Independent Living Centers and the California State University at Northridge. The goal of the project is to increase the capacity of the independent living community to work with its members and stakeholders to collect research data on access and use of AT to improve the lives of people with disabilities.	NIDRR's decision to award the grant to CFILC recognizes the type of infrastructure already in place by the non-profit organization and its independent living center members. CFILC's approach allows researchers to train community advocates throughout the state for a larger and more representative sample of persons with disabilities who use AT.		X				X			X	http://www.atnet.org/CR4AT/home.html

Historical Foundations of Assistive Technology Outcomes Measurement (V. 1.2.1)													
Year	Name/Event	Description	Significance	Fo	cus	oute Se	nues Ires over the over the ov	decessit decessit decomes decomes	Inedice of the second	Listerstope	ocational Indexes	anden Li Sa Stands	with Transie Proving the Proving the Proving The Proving Proving the Proving t
	3) Information Technology for Independence	A partnership between the University of Pittsburg School of Health and Rehabilitation Sciences and several community based organizations to evaluate the barriers to computer and information technology use experienced by persons who are deaf/hard of hearing, blind, or deaf/blind.	Proposes to develop a gateway server that makes any web site accessible to individuals with these impairments, regardless of the inaccessibility of the web site itself.		x				x			x	University of Pittsburgh, Health Information Management
	4) Assistive Technology in the Community	A collaborative effort between a Center for Independent Living (Paraquad) and an institution of higher learning (Washington University) to bring together the strengths of the independent living movement with the scientific expertise of the academic community. The goal of the project is to promote assistive technology (AT) as a method of increasing the participation of people with disabilities in major life activities.	Conducting research on the type of assistive technology used and the influence AT has on major life activities will make a major contribution to the understanding of what technologies work in community settings.		X				X			X	http://enablemob.wustl.edu/Research/NIDRR/at_co mmunity.htm
2002	Professional Standards Board in Assistive and Rehabilitation Technology established Rehabilitation Engineering Technologist (RET).	Certificate for AT technologists.	Rehabilitation engineers now have a method to obtain credentials.	X		X	x	x	x	X			RESNA n.d., RESNA Policy on the Qualification of Service Providers in Assistive Technology. Retrieved September 24, 2003, from http://www.resna.org/PracInAT/CertifiedPractice/Q ualifications.html
2003	American Academy of Physical Medicine & Rehabilitation (AAPM&R) published Access to assistive technologies: Improving health and well-being for people with disabilities.	Document commissioned by the AAPM&R and the Foundation for Physical Medicine and Rehabilitation following their Summit in November of 2002 designed to be the first in a series of converstations focused on the unique needs of people with disabilities.	Summary of issues related to AT and the health and well-being of people with disabilities from the national medical society representing more than 7,000 physicians who are specialists in the field of physical medicine and rehabilitation.	x							X		Thomas, P. W., & Davis, L. S. (2003). Access to assistive technologies: Improving health and well- being for people with disabilities: American Academy of Physical Medicine and Rehabilitation. http://www.aapmr.org/hpl/legislation/AT03.htm

Historical Foundations of Assistive Technology Outcomes Measurement (V. 1.2.1)												
Year	Name/Event	Description	Significance	Fo	cus	outcol	Producers Outcome Ce Delir Context	s forus heaten	Burstion?	a sional positional Interenterit N. Tolicies Stant e of Event	wind from the former of the part of the pa	
2003	Special issue of Disability Policy Studies devoted to AT outcomes and cost.	Special issue devoted to AT outcomes and cost	Provides a comprehensive examination of issues associated with measuring the costs and benefits of AT		X					X	(2003). Journal of Disability Policy Studies, 12(2), 66-129.	