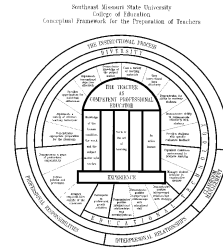


COURSE SYLLABUS

SOUTHEAST MISSOURI STATE UNIVERSITY

Department of Elementary, Early & Special Education
Course: Integrating Assistive Technology

Course No. EX612
New: Sp 99



“The Teacher As Competent Professional Educator”

I. Catalog Description and Credit Hours of Course:

This class will provide a hands-on examination of assistive technology usage related to teaching and learning and successful integration of people with disabilities. (3)

II. Prerequisite(s):

Admission to graduate program or consent of instructor.

III. Purposes or Objectives of the Course:

By the end of the course, the student will have demonstrated acquisition of the knowledge base and skills necessary to:

- A. identify and evaluate technologies that maximize the potential of people with disabilities.
- B. facilitate the team decision-making of appropriate assistive technology for students with disabilities.
- C. evaluate teaching and learning processes using assistive technology for students with disabilities.
- D. describe and demonstrate the use of assistive technology solutions that facilitate language skills, both written and oral, remedial skills, functional skills, and life skills.
- E. describe and demonstrate the use of assistive technology solutions that facilitate inclusion in academic learning settings.
- F. describe and demonstrate how people with disabilities can access and benefit from telecommunication technologies and the Internet.
- G. describe and demonstrate the use of multimedia and hypermedia for people with disabilities.
- H. describe and demonstrate the use of assistive technology which provides access to careers for people with disabilities.
- I. identify methods for facilitating change in schools created by technology.
- J. develop methods of using technology to access learning for people with disabilities.
- K. compare cultural implications of assistive technology usage in academic and community settings.

IV. Expectations of Students:

Students will

- A. complete all assigned readings in textbook, handouts and relevant professional journal articles.
- B. participate in classroom discussions and activities.
- C. demonstrate achievement of course objectives through exams and projects.
- D. use instructional technology to develop class-assigned projects.
- E. develop a research paper about assistive technology for people with disabilities.

V. Content or Outline:

Hours

- | | | |
|----|---|---|
| A. | Types of disabilities | 6 |
| | 1. Academic disabilities | |
| | 2. Visual disabilities | |
| | 3. hearing impairment | |
| | 4. Communication disorders | |
| | 5. Physical disabilities | |
| B. | Legal and policy foundations of assistive technology | 6 |
| | 1. Legislative foundations of assistive technology | |
| | 2. Current legislation governing assistive technology | |
| | 3. Multidisciplinary teams and assistive technology | |
| C. | Instruction and assistive technology | 9 |
| | 1. Impact of computers on instruction | |
| | 2. Instructional delivery formats | |
| | 3. Multidisciplinary teams and assistive technology | |
| | 4. Planning for individual needs in software and hardware | |
| D. | Instructional software | 9 |
| | 1. Computer Assisted Instruction/Computer Managed Instruction | |
| | 2. Authoring packages | |
| | 3. Hypermedia concepts | |
| | 4. Evaluation of software | |
| E. | Assistive hardware and software | 9 |
| | 1. Assistive solutions for visually impaired | |
| | 2. Assistive solutions for hearing impaired | |
| | 3. Assistive solutions for physically disabled | |
| | 4. assistive solutions for academically disabled | |
| F. | Current assistive technology issues | 6 |
| | 1. Financing assistive technology | |
| | 2. Assistive technology training | |
| | 3. Family issues dealing with assistive technology | |
| | 4. Inclusion and assistive technology | |
| | 5. Cultural issues and assistive technology | |

VI. Textbook(s) and/or Other Required Materials or Equipment:

Ray, J. & Warden, M.K. (1995). *Technology, computers and the special needs learner*. Albany, NY: Delmar.

Flippo, K., Inge, K., & Barcus, J.M. (1995). *Assistive technology, a resource for school, work, and community*. Baltimore, MD: Brookes.

VII. Basis for Student Evaluations:

- A. Performance assessment in word-processing, database use, presentation package, spreadsheet, Internet, educational software, and multimedia.
- B. Tests.
- C. Interactive hypermedia lesson.
- D. Resource paper on assistive technology.

VIII. Knowledge Base:

Ager, A.K. (1986). The role of microcomputers in teaching mentally retarded individuals. In J. Berg (Ed.), *Science and service in mental retardation* (pp. 224-231). London: Methuen.

Aldinger, L.E., Warger, C.L., & Eavy, P.W. (1995). Expert systems software in special education. *Teaching Exceptional Children*, 27(2), 58-62.

Alliance for Technology Access (1994). *Computer resources for people with disabilities*. Alameda, CA: Hunter House.

Alliance for Technology Access (1995). Real people, real technology, real solutions. *Exceptional Parent*, 25(11), 30-31, 32, 34.

Anderson, C. & McMahan, G. (in press). Storybook CD-ROMs for bibliotherapy. *Intervention in School and Clinic*.

Anderson, K. & Anderson, C. (1997). Helpful Web Sites for parents of Children with Disabilities. *Intervention in School and Clinic*, 33(4), 40-43.

Anderson, M. (1997). *Partnerships: Teambuilding at the computer*. Arlington, VA: Ma-jo Press.

Anderson, M. (1995). *Using Hyperstudio in a resource room*. Presentation at San Jose State University.

Armstrong, J. & Jones, K. (1995). Using family dreams to develop meaningful goals involving assistive technology. *Closing the Gap*, 14(2), 1, 6.

Batavia, A.I., & Hammer, G.S. (1990). toward the development of consumer-based criteria for the evaluation of assistive devices. *Journal of Rehabilitation research and Development*, 27, 425-436.

Bowser, G. & Reed, P. (1995). Education TECH points for assistive technology planning. *Journal of Special Education Technology*, XII(4), 325-338.

Burcat, B. (1995). Technology provides independence. *TECH-NJ*, 6(1), 4-5.

Burgstahler, S. (1994). Focus on Technology. In N.G. Haring, L. McCormick, & T.G. Haring (Eds.), *Exceptional children and youth. An introduction to special education* (pp. 58-61). New York: Merrill.

Bergstahler, S., & Comden, D. (1994, October). *Network communication and information resources: What's in it for students with disabilities?* Paper presented to the 1994 Closing the Gap Conference, Minneapolis, MN.

Burkhart, L. (1982). *More homemade battery powered devices for severely handicapped children with suggested activities*. College Park, MD: Author.

Button, C. (1991). Fast facts on individualized education programs. *A.T. Quarterly*, 2(5), 5-6.

Carey, D.M., & Sale, P. (1994). Notebook computers increase communication. *Teaching Exceptional Children*, 27(1), 52-69.

Carey, D.M., & Sale, P. (1994). Practical considerations in the use of technology to facilitate the inclusion of students with severe disabilities. *Technology and Disability*, 3, 77-86.

Center for Special Education Technology (1991). *Computers and cooperative learning*. Reston, VA: Council for Exceptional Children.

Church, G., & Glennen, S. (1992). *The handbook of assistive technology*. San Diego, CA: Singular Publishing Group.

Condry, S. (1989). *A literature review of topics concerning children who are technology-supported and their families*. Lawrence, KS: Beach Center on Families and Disabilities.

Enders, A., & Hall, M. (Eds.). (1990). *Evaluating the technology*. In *Assistive Technology Sourcebook* (pp. 102-121). Washington, DC: RESNA Press.

Galvin, J.C. (1990). *Evaluation of assistive technology*. Washington, DC: Request Rehabilitation Engineering Center.

Holder-Brown, L., & Parette, H.P. (1992). Children with disabilities who use assistive technology: Ethical considerations. *Young Children*, 47, 73-77.

Hutinger, P.L. (1994). *State of practice: How assistive technologies are used in educational programs of children with multiple disabilities. Final report for the project effective use of technology to meet educational goals of children with disabilities* (PR#180R10020). Macomb, IL: Western Illinois University.

Holzburg, C. (1998). Helping all learners succeed: Special education success stories. *Technology and Learning*, 18(5), 52-58.

Holzburg, C. (February, 1995). What works: Technology in special education. *Technology and Learning*, 18-23.

International Society for Technology in Education recommended foundations in technology for all teachers. [online] 2. Available: <http://www.iste.org/specproj/standard/found.html> [Accessed October 28, 1997].

Judge, S.L., & Parette, H.P. (Eds.). (in press). *Assistive technology for young children with disabilities: A guide to providing family-centered services*. Cambridge, MA: Brookline.

Klein, C.E., Walker, D.W., & foster, I.R. (1994/95). Accessing alternative assistive technology funding sources. *Case in Point*, 9(1), 33-40.

Lewis, R. (1993). *Special education technology: Classroom applications*. Belmont, CA: Wadsworth Publishing.

- Luborsky, M. R. (1993). Sociocultural factors shaping technology usage. Fulfilling the promise. *Technology and disability*, 2(1), 71-78.
- Male, M., Johnson, D., Johnson, R., and Anderson, M. (1986). To cooperate or not to cooperate in CAI: That is the question. *Journal of Educational Research*, 60(2), 68-72.
- McCain, G. (1995). technology-based assessment in special education. *T.H.E. Journal*, 23(1), 57-59.
- Mann, W.C., & Lane, J.P. (1991). *Assistive technology for persons with disabilities. The role of occupational therapy*. Rockville, MD: American Occupational Therapy Association.
- Morris, M., & Golinker, L. (1991). *Assistive technology: A funding workbook*. Washington, DC: RESNA Press.
- National Center to Improve Practice in special education through technology, media, and materials*. [online] 2. Available: <http://www.edu.org/FSC/NCIP/> [Accessed March 29, 1998].
- Parette, H.P. (in press). Effective and promising assistive technology practices for students with mental retardation and developmental disabilities. In A. Hilton & R. Ringlaben (Eds.), *Effective and promising practices in developmental disabilities*. Austin, TX: PRO-ED.
- Parette, H.P., Hofmann, A., & VanBiervliet, a. (1994). the professional's role in obtaining funding for assistive technology for infants and toddlers with disabilities. *Teaching Exceptional Children*, 26(3), 22-28.
- Parette, H.P., Hourcade, J.J., & VanBiervliet, A. (1993). Selection of appropriate technology for children with disabilities. *Teaching Exceptional Children*, 25(3), 18-22.
- Parette, H.P., Murdick, N.L., & Gatrin, B. (in press). Using community resources to obtain assistive technology devices for children with disabilities. *Teaching Exceptional Children*.
- Ray, J., & Warren, M.K. (1995). *Technology, computers, and the special needs learner*. Albany, NY: Delmar.
- RESNA Technical Assistance Project. (1994). Technology and the individualized education program: A primer for parents and professionals. *Technology and Disability*, 3, 100-108.
- RESNA. (1994). *Project Reaching Out: Technology training for minorities with low incidence disabilities. Part I: African American curriculum*. Washington, DC: RESNA Press. (ERIC Document Reproduction Services No. ED 364003).
- Rotheray, D.R., Sewell, D.F., & Morton, J.R. (1986). The design of educational software for children with severe learning difficulties. *Programmed Learning and Educational Technology*, 23, 119-123.
- Schwartz, A. (1994). Computer or related technology use at home by children and youth with disabilities: A survey of parents. *Dissertation Abstracts International*, 54(12), 4408-A.
- Sharp, V. (1996). *Computer education for teachers* (2nd ed.). Madison, WI: Brown & Benchmark.
- Sitko, C., Sitko, M., & McBride, A. (1992). Using technology to help learning disabled students access a process approach to functional writing skills, *Closing the Gap*, 11(3), 12-14, 36.
- Technology-Related Assistance for Individuals with Disabilities Act of 1994, P.L. 103-218. (March 9, 1994). 29 U.S.C. 2201 et seq: *U.S. Statutes at Large*, 108, 50-97.
- Torres-Davis, A., & Trivelli, L.U. (1994). *Project Reaching Out: Technology training for Hispanics with disabilities*. Arlington, VA: RESNA.

Trivelli, L.U. (1994). The impact of human and multicultural diversity on assistive technology outreach and services. *NARIC Quarterly*, 4(3), 1, 6-8, 14-16.

Willis, W. (1998). Speech recognition: Instead of typing and clicking, talk and command. *T.H.E. Journal*, 25(6), 18-22.