

Ashland University
Dwight Schar College of Education
Department of Curriculum and Instruction
Course Syllabus

Graduate: Undergrad: X
Credit Hours: 3
Field/Clinical Hours: 15

Course Number: EDCI 253

Course title for the catalog: Assistive and Instructional Technology for Intervention Specialists

Catalog description:

This course is designed to help students in the Intervention Specialist Program to use technology and materials specifically to teach and assist exceptional learners. Adaptations to typically available technology and materials and those specifically designed to assist the learner with challenges will be studied.

The prerequisite (s) for this course is (are):

EDCI 131, 232; concurrent with EDCI 230 IS, EDCI 257.

The Intervention Specialist team has chosen the Taskstream system to support the comprehensive program outcomes of the licensure programs. Taskstream is a subscription online portfolio system that provides students with lesson, unit, and portfolio building tools through their website, www.taskstream.com.

Please note there will be required Taskstream class assignments and program portfolios that will be due during students' course of study at Ashland University. While some classes will not have Taskstream assignments, students are responsible for maintaining their completed assignments for possible future use in the online program portfolio.

The enrollment restriction (s) for this course is (are):

Course and field/clinical experience objectives (including knowledge, skills, and dispositions):

KNOWLEDGE:

The teacher education student will have knowledge of:

1. Legislation and regulations related to technology in special education.
2. Ethical, legal, and human issues related to school purchasing and policy decisions

- regarding assistive technology.
3. Characteristics of learners that influence the use of adaptive and assistive technology.
 4. Uses of technology in assessment and evaluation of students with learning challenges.
 5. Procedures for evaluating computer software and other technology for potential application in special education programs.
 6. Assistive technologies that protect, stabilize, and support the body in static positions, during transfer, and aid during travel.

SKILLS:

The teacher education student will have skills to:

1. Articulate a philosophy and goals for using technology in special education.
2. Use terminology related to technology and computers appropriately in written and oral communication.
3. Describe legal mandates and governmental regulations and their implications for technology in special education.
4. Match characteristics of exceptional learners to appropriate software features.
5. Analyze, summarize, and report student performance data to aid instructional decision-making.
6. Use evaluation findings to recommend modifications in technology implementation.
7. Interpret and use multidisciplinary evaluation results in the development of an assistive technology implementation plan, acquiring information from multiple sources (e.g., medical, educational, vocational records and plans).
8. Identify functional needs, screen for functional limitations, and identify if the need for a comprehensive assistive technology evaluation exists.
9. Refer for additional evaluation if sufficient data are not available to develop an assistive technology plan.
10. Refer to appropriate professionals for further evaluation for appropriate assistive technology.
11. Recognize poor outcomes and reevaluate/reinitiate assistive technology planning as indicated by performance data.
12. Assist the consumer in clarifying and prioritizing functional intervention goals based on evaluation results.
13. Work within an assistive technology team to identify any and all assistive technologies that can help individuals meet the demands placed upon them in their environments.
14. Evaluate abilities and functional deficits as they relate to the use of specific adaptive/assistive technologies.
15. With other team members assess tasks, functional demands, and resources in all environments in which the individual participates in which assistive technology is intended to be used.
16. In collaboration with consumer, significant others, and evaluation team, conduct a basic assistive technology evaluation.

17. Use multiple assessment strategies to acquire information necessary for evaluation (e.g., interviews, record examination, direct assessment).
18. Coordinate assistive technology evaluations with interdisciplinary team members.
19. Design a set of evaluation strategies and methods that will assess the effectiveness of assistive technologies to meet individual needs.
20. Identify elements of the special education curriculum for which technology applications are appropriate and ways they can be implemented.
21. Use technology to compensate for learning and performance barriers.
22. Identify and use assistive technologies that can provide access to educational materials otherwise inaccessible to a student with challenges.
23. Justify the provision of assistive technology for reimbursement and describe mechanisms for obtaining reimbursement for assistive technology and services.
24. Participate in consumer advocacy activities on an individual and at a systems change level.
25. Design and recommend procedures for the organization, management, and security of hardware and software.
26. Serve as a resource to parents of exceptional children who plan to and/or currently use assistive technologies with their children.

DISPOSITIONS:

The teacher education student will:

1. Promote chronological age-appropriate activities for all students.
2. Assume competence for all students in situations where competence is unknown.
3. Promote social competence and the dignity of risk for all students.
4. Promote at least partial participation in all typical activities in the natural environment for students with moderate to intensive need for educational intervention.
5. Advocate full inclusion in the natural proportion with typical peers in all typical environments for students with moderate-intensive need for education intervention.
6. Promote increasing responsibility for individual educational decisions by students with moderate to intensive needs for education intervention.
7. Advocate for the right of the individual to make personal choices and decisions as affect his/her educational programs.
8. Act ethically and professionally in all situations involving the education of students with moderate-intensive needs for educational intervention.

Suggested texts and/or references:

Lewis, R.B. (1993). Special education technology. Pacific Grove, CA: Brooks/Cole Publishing.

Suggested instructional strategies:

Lecture, discussion, demonstration, reading, class presentation, speakers, field trips, modeling, clinical application

Description of field/clinical experiences:

FIELD EXPERIENCE

CLINICAL EXPERIENCE

Students will contact vendors and arrange for presentation with clinical demonstration of selected adaptive technology. Students will prepare a database of adaptive technology products and vendors, culminating in a class database of such products and resources for information on available technology resources for individuals with learning challenges. Students will each summarize an interview with at least one individual with learning challenges who is dependent on adaptive technology to obtain an appropriate education.

Evaluation of Students:

Faculty who frequently teach the course:

Edwards,Chapple

Licensure programs in which course is required:

Intervention Specialist Moderate / Intensive
Early Childhood Intervention Specialist

If the course is offered for either undergraduate or graduate credit identify the respective difference in expectations:

Undergraduates are expected to complete projects related to direct applications of assistive technology with students who demonstrate moderate to intensive need for educational intervention. Projects might include, but not be limited to: identifying a selected student's need(s) for assistive technology (AT), developing a plan and proposal (funding) to secure needed AT, evaluating software/hardware features for appropriate use in classrooms and community, locating vendors and arranging for group presentation of available AT products, using personal productivity tools in the classroom, using telecommunications tools in the classroom, using multimedia tools for designing instructional materials appropriate to the needs of exceptional learners.

Graduate students are expected to complete all undergraduate requirements for the course and in addition are expected to select a topic with the assistance of the instructor, prepare an inservice training program for building/district professional staff, deliver the program, and evaluate the professional growth of participants.

Bibliography (Learned Societies, Etc.)

Any article from The Journal of Special Education Technology, a refereed publication of the Division of Technology and Media, Council for exceptional Children, Reston, VA.

Any of the “for Dummies” series

Any publication by the following authors:

Michael Behrmann
Edward Balckhurst
Gayl Bowser
Rosemary Crossley
Ted Hasselbring
Elizabeth Lahm
Cheryl Wissick

Proceedings (any year):

The Annual Conference of Technology and Persons with Disabilities.
The Closing the Gap Conference
The Annual Conference of the Technology and Media Division, Council for Exceptional Children.

Books and Journal Articles

Baumgart, D., & Helmstetter, E. (1990). Augmentative and alternative communication systems for persons with moderate and severe disabilities. Baltimore: Paul H. Brookes.

Beukelman, D. R., & Mirenda, P. (1998). Augmentative and alternative communication: Management of severe communication disorders in children and adults. (2nd ed.). Baltimore, MD: Paul H. Brookes.

Biklen, D. (1993). Communication unbound. New York: Teachers College Press.

Biklen, D., & Cardinal, D. (1997). Contested words, contested science. New York: Teachers College Press.

Blackstone, S.W. (Ed.) (1986). Augmentative communication: An introduction. Rockville, MD: American Speech Language Hearing Association

Brown, L., Branston, M.B., Hamre-Nietupski, S., Pumpian, I., Certo, N.M., & Gruenewald, L. (1979). A strategy for developing chronological age-appropriate and functional curricular content for severely handicapped adolescents and young adults. Journal of Special Education, 13, 81-90.

Burkhart, L.J. (1985). Homemade battery powered towns and educational devices for severely handicapped children (all editions). College Park, MD: Author.

Church, G., & Glennen, S. (1992). Handbook of assistive technology. San Diego: Singular Publishing.

Cook, A. M., & Hussey, S. M. (1995). Assistive technologies: Principles and practice.

St. Louis: Mosby.

Crossley, R. & McDonald, A. (1984). Annie's coming out. Australia: Penguin Books.

Crossley, R. (1994). Facilitated communication training. New York: Teachers College Press.

DiPietro, L., Williams, P., & Kaplan, H. (1991). Alerting and communications devices for hearing impaired people: What's available now. Washington DC: NCID, Gallaudet College.

Dixon, J.M., & Mandlebaum, J.B. (1990). Reading through technology: Evolving methods and opportunities for print-handicapped individuals. Journal of Visual Impairment and Blindness, 94 (10), 493-496.

Hawkrige, D., & Vincent, T. (1992). Learning difficulties and computers: Access to the curriculum. London: Jessica Kingsley Publishers.

Johnson, B., Bumgart, D., Helmstetter, E., & Curry, C. A. (1996). Augmenting basic communication in natural contexts. Baltimore: Paul H. Brookes.

King, T. W. (1999). Assistive technology: Essential human factors. Needham Heights, MA: Allyn and Bacon.

Kurzweil, R. (1990). The age of intelligent machines. Cambridge: MIT Press.

Male, M. (1997). Technology for inclusion: Meeting the special needs of all students. (3rd ed.). Boston: Allyn and Bacon.

Norris, G.H. (1995). Welcoming students who are deaf-blind into typical classrooms. Northridge, CA: California State University

Prentke Romich Company. (1992). Changing lives. Wooster, OH: Author.

Reichle, J., York, J. & Sigafos, J. (1991). Implementing augmentative and alternative communication: Strategies for learners with severe disabilities. Baltimore: Paul H. Brookes.

Scherer, M.J. (2000). Living in the state of stuck: How assistive technology impacts the lives of people with disabilities. (3rd ed.). Cambridge, MA: Brookline Books.

Trefler, E., Hobson, D., Taylor, S.J., Monahan, L., & Shaw, C.G. (1993). Seating and mobility for persons with physical disabilities. Tucson, AZ: Therapy Skill Builders.

Williams, D. (1994). Somebody somewhere: Breaking free from the world of autism. New York: Times Book.

Journals

ASHA

Education and Training in Mental Retardation

Educational Research Journal

Exceptional Children

Focus on Exceptional Children

Intervention in School and Clinic

Journal of Autism and Developmental Disorders

Journal of Special Education

Journal of Speech and Hearing Disorders

Journal of Visual Impairment and Blindness

Journal of the Association for Persons with Severe Handicaps

Journals of the American Deafness and Rehabilitation Association

Language, Speech, and Hearing Services in Schools
RE:View
TASH
Teaching Exceptional Children
Technology and Learning

World Wide Web Sites

Assistive Technology

[<http://Peabody.Vanderbilt.edu/itc/hasselbringt/resource.html>]

Council for Exceptional Children (CEC) [<http://www.cec.sped.org/home.htm>]

CEC Technology and Media Division (TAM) [<http://www.tamcec.org>]

ERIC Clearinghouse on Disabilities and Gifted Education (ERIC EC) [<http://www.ericec.org>]

ERIC/OSEP Special Project [<http://www.ericec/osep-sp.htm>]

Family Village: A Global Community of Disability-related Resources
[<http://www.familyvillage.wisc.edu/>]

Federal Resource Center for Special Education [<http://dssc.org/frc/>]

IDEA §97 [<http://www.ed.gov/offices/OSERS/OSEP/Programs>]

An Introduction to the World Wide Web with Terms and Links to Tutorials
[<http://www.ed.sc.edu/caw/webstuff.html>]

Links to Interactivity, Case Studies, Simulations on the Web
[<http://www.sc.edu/cawsim.htm>]

Links to Teaching and Learning with the Web
[<http://www.sc.edu/caw/teach.html>]

List of Books on HTML and Use of the Internet
[<http://www.se.edu/caw/books.html>]

National Clearinghouse for Professions in Special Education [<http://www.specialedcareers.org>]

National Information Center for Children and Youth with Disabilities [<http://www.nichcy.org.>]

Net Connections for Communication Disorders and Sciences
[<http://www.mankato.msus.edu/dept/comdis/kuster2/welcome.html>]

Online Links for HTML and Graphics

[<http://www.sc.edu/caw/ref.html>]

A Sampling of Categories on the Web

[<http://www.sc.edu/caw/weblinks.html>]

Special Education: A SHORT List of Links

[<http://www.sc.edu/caw/assist.html>]

Special Education Resources on the Internet (SERI) [<http://www.seriweb.com>]

Speech Technology Hyperlinks Page

[<http://www.fortis.speech.su.oz.au/comp.speech/SpeechLinks.html>]

State Education Agency--Ohio

[<http://www.ode.state.oh.us/>]

A Task Analysis for learning to Use the World Wide Web

[<http://www.ed.sc.edu/caw/webta.html>]

Thematic Units: Links for Websites and Ideas for Software

[<http://sc.edu/caw/theme.html>]

Learned Societies and Professional and Related Organizations

American Occupational Therapy Association Inc.

American Physical Therapy Association

Assistance Dog Institute

The Autism Society

The Council for Exceptional Children

Easter Seals

Federal Resource Center for Special Education

International Hearing Dog, Inc.

Multiple Sclerosis Society

National Organization for Rare Disorders

National Rehabilitation Information Center

Office of Special Education and Rehabilitative Services (OSERS)

Rehabilitation Services Administration

U.S. Office of Special Education Programs (OSEP)