

College of Education and Human Development Division of Special Education and disAbility Research

Fall 2023

EDAT 510 DL1: Introduction to Assistive Technology CRN: 70723, 3 – Credits

Instructor: Dr. Yoosun Chung	Meeting Dates: 8/21/23 – 12/13/23
Phone: (703) 988-3486 (text-relay-service)	Meeting Day(s): N/A
E-Mail: ychung3@gmu.edu	Meeting Time(s): N/A
Office Hours: by appointment	Meeting Location: N/A; Asynchronous
	Online
Office Location: Finley Building, 203B	Other Phone: N/A

Note: This syllabus may change according to class needs. Teacher Candidates/Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

Prereg	uibit.	 ,.

None

Co-requisite(s):

None

Course Description

Provides an understanding of assistive technology and application in instructional programs, career tasks, and life skills for individuals with disabilities. Presentation and exploration experiences enable students to better use assistive technology in education, work, community, and home environments.

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or speced@gmu.edu for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

Advising Tip

Mason email is the primary method of communication used by university offices. Check your Mason email regularly: http://mso365.gmu.edu/.

Course Instructional Method

EDAT 510 is an asynchronous online course. Using Blackboard, students are expected to complete assignments weekly and be engaged in course activities throughout the semester.

Course Delivery Method

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities
- 3. Small group activities and assignments
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

This course will be delivered online (76% or more) using an **asynchronous** format via the Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on the posted start date of the course.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see: <u>Browser support</u> (<u>https://help.blackboard.com/Learn/Student/Ultra/Getting Started/Browser Support</u>)
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - o Adobe Acrobat Reader: https://get.adobe.com/reader/

Windows Media Player:

 https://support.microsoft.com/en-us/help/14209/get-windows-media-player

 Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

• Course Week:

Because asynchronous courses do not have a "fixed" meeting day, due dates for each module are specifically listed in the Course Schedule on this syllabus.

• Log-in Frequency:

Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least two times per week.

• Participation:

Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

• Technical Competence:

Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.

• Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

Workload:

Please be aware that this course is not self-paced. Students are expected to meet specific deadlines and due dates listed in the Class Schedule section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

• Instructor Support:

Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

• Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

• Accommodations:

Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Service.

Learner Outcomes

Upon completion of this course, students will be able to:

- 1. Complete online assignments regarding assistive technology companies, organizations, and services.
- 2. Review and identify funding solutions for acquiring assistive technology.
- 3. Explore and integrate legislative mandates and governmental regulations related to assistive technology
- 4. Research and create a presentation on an assistive technology approved device of choice.

Professional Standards

This course is part of the George Mason University, School of Education, Assistive Technology Program. The Assistive Technology Program has developed program specific standards in accordance with NCATE requirements. The Assistive Technology Program Standards incorporate several elements within the professional standards from the Council for Exceptional Children (CEC), while also expanding upon them to meet the specific needs related to assistive technology. The primary AT Program standards that will be addressed in this class include the following: Standard 1: Characteristics and Needs and Standard 2: Knowledge and Skills.
*NOTE: NCATE Assessments (in many but not all courses) may address additional AT Program standards.

Required Texts

Bouck, E. C. (2017). Assistive technology. Los Angeles: Sage Publications.

Draper, Sharon M. (2010). Out of my mind. New York: Atheneum Books for Young Readers

Recommended Texts

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). https://doi.org/10.1037/0000165-000

Required Resources

Students are required to have consistent and reliable access to a computer with a high-speed internet connection. Students are also expected to have consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course. Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, VIA, hard copy).

VIA Performance-Based Assessment Submission Requirement

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDAT course with a required Performance-based Assessment (PBA) is required to upload the PBA to VIA/SLL (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to VIA/SLL.

For EDAT 510, the required PBA is AT Device Category Research Project. Please check to verify your ability to upload items to VIA/SLL before the PBA due date.

Assignments and/or Examinations

Performance-based Assessment (VIA submission required)

The Performance-based Assessment assignment for this course is the *AT Device Category Research Project*. Please see specific assignment description in the *Other Assignments* section below.

College Wide Common Assessment (VIA submission required) N/A

Other Assignments Weekly Assignments

Text Exploration (15 points)

Students are required to complete text assignments posted each week for the text: *Assistive Technology*, as well as other assigned readings. Assignments will be posted on Blackboard and due by the specified date and time.

Fiction Reading: Out of My Mind (15 points)

Students are required to read assigned chapters and respond to Discussion Questions posted for the book: Out of My Mind. A minimum of 2 responses should be made per week: one response directly from the question posted and at least one other in response to a classmate's posting. All responses are due by the specified time.

Online Learning (25 points)

Students are required to complete weekly online learning assignments. Assignments will contain multiple activities that cover content from books and materials distributed in class, websites, television shows, newspapers/magazines, etc. Assignments will be posted on Blackboard and due on the specified date and time. All activities within each week must be completed to receive credit.

Final Assignments

AT Funding Guide (15 points)

Students are to research a funding source for individuals in need of assistive technology and present the information found by creating a funding brochure, flyer, booklet, etc. The funding source must be approved by the instructor. Guidelines will be provided following the AT Funding course module.

AT Device Category Research Project (30 points) - VIA Assessment

Students are required to select an AT Device Category of their choice and create an AT PowerPoint Presentation. Students also need to review 2 peer presentations and fill out a Comparison Chart that will be provided by the instructor. Topics must be pre-approved by the instructor. Note that AT device topics that are already in the student's repertoire should not be selected for this project. The Project presentation should include:

- Category Overview: Provide a description of device category & a rationale for why it was chosen. The description should include the potential features of the device as well as its range in terms of size, cost, etc.
- *User Characteristics*: List user characteristics of individuals who would potentially benefit from access to this device category. User characteristics can be defined as disabilities areas or areas of human function.
- Specific Devices: Identify at least 4 specific devices that fall under this research device category. Include a description, cost, URL and vendor information.
- *Community Support*: Reflect on how the use of this device category could potentially impact a user within the home, school, work & outside community.
- Funding Sources: Locate organizational, governmental, civic funding sources appropriate for acquisition of assistive technology within this device category. Include name, contact information, and eligibility.
- Legislative Support: Identify a governmental regulation or legislative mandate that supports using devices in this category. State why & how the law provides support.
- *Resources*: Use the Internet to identify both professional & in-formational web resources for potential users of this device category. Include the source name, the URL, & contact information.

Assignment Summary

Evaluation will be based upon a point system. The point value for each assignment is as follows:

Text Exploration Activities		15 points
Fiction Reading: Out of My Mind		15 points
Online Learning Activities		25 points
AT Funding Guide		15 points
AT Device Category Research Project		30 points
	Total Points:	100 points

Student Evaluations of Teaching:

The student evaluation of teaching, or SET, is an online course survey. You are strongly encouraged to complete this form for each course as this feedback helps instructors and administrators improve your class experiences. Towards the end of the course, you will receive email and Blackboard notifications when the evaluations open. Your anonymous and confidential feedback is only shared with instructors after final grades have been submitted. More information about the SET can be found on The Institute of Effectiveness and Planning website at https://oiep.gmu.edu/set/

Course Policies and Expectations

Attendance/Participation

Students are expected to actively engage in <u>ALL</u> weekly course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions. Please note that while only certain learning elements are assessed through "grades", the instructor can still assess student involvement and engagement using other measures. Blackboard enables the instructor to view such data as login dates, duration of time spent online, access to specific content elements, and more. The instructor will use this data along with course grades to ensure that students are actively engaged in the course.

Late Work

In fairness to students who make the effort to submit assignments on time, there will be a 10% cost reduction per day for late assignments. (For example, a 10 point assignment will lose 1 point per day while a 40 point assignment will lose 4 points per day). At the instructor's discretion, students may be given the opportunity to resubmit an assignment. Resubmitted assignments are not eligible for full credit and a response cost of 10 percent will be assessed. Please note, assignments worth 1 point that are submitted late will receive a score of 0.

Other Requirements

- It is expected that students have continual access to a high-speed Internet connection and an active GMU email account for the duration of this course.
- Students are expected to be familiar with Blackboard features including downloading
 materials and submitting assignments. Students are expected to know their Blackboard
 username and password and to actively monitor the email account that is currently
 registered in Blackboard. Students who are experiencing problems using the Blackboard
 system must contact the instructor prior to the date an assignment is due for assistance.
- Please type ALL assignments unless otherwise noted. Please contact the instructor if you are using a word processing program other than Microsoft Word.
- All assignments must be posted to the Discussion Board or submitted through the "Assignment" session in Blackboard by 11:59 pm on the day the assignment is due (unless otherwise noted by the instructor) to be considered for full credit. Please note that Blackboard places a timestamp on all submitted material. If Blackboard is down for any reason at the time an assignment is due, you should email a copy of your assignment to the instructor. However, you should only email the instructor your assignment if

- Blackboard is <u>down</u>. If you are not available on the day an assignment is due, you are expected to submit that assignment early to be considered for full credit.
- All assignments should reflect graduate-level spelling, syntax, and grammar and will be
 graded accordingly. If you experience difficulties with the writing process you will need
 to document your work with the GMU Writing Center during this course to improve your
 skills.
- All references including Online references must be cited in proper APA format to avoid plagiarism (cut&paste is easy to do from the Internet).

Instructor – Student Communication.

The easiest and best way to contact me is through email. I will respond to your emails within 48 hours, if not sooner, <u>on weekdays</u>. If I will be away from email for more than two days, I will post an announcement on Blackboard.

Grading

The following grading scale will be used at the graduate level:

A = 95-100% A- = 90-94% B+ = 87-89% B = 83-86% B- = 80-82% C = 70-79% F = <70%

*Note: The George Mason University Honor Code will be strictly enforced. See <u>Academic Integrity Site</u> (https://oai.gmu.edu/) and <u>Honor Code and System</u>

(https://catalog.gmu.edu/policies/honor-code-system/). Students are responsible for reading and understanding the Code. "To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work."

Work submitted must be your own new, original work for this course or with proper citations.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See <u>Policies</u> and <u>Procedures</u> (https://cehd.gmu.edu/students/policies-procedures/).

Class Schedule

*Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

SESSION	TOPIC	READING	ASSIGNMENT
Session 1 8/23 - 8/29	AT Definition	Bouck (2017) Chapter 1: pp. 1-12 Draper (2010) Chapters 1-3	Session 1 Text Exploration Fiction Reading Online Learning
Session 2 8/30 - 9/5	History & Legislation	Bouck (2017) Chapter 1: pp. 13-16; 20-21 Draper (2010) Chapters 4-6	Session 2 Text Exploration Fiction Reading Online Learning
Session 3 9/6 - 9/12	Speech & Communication	Bouck (2017) Chapter 3 Draper (2010) Chapters 19-22	Session 3 Text Exploration Fiction Reading Online Learning
Session 4 9/13 - 9/19	Mobility & Positioning	Bouck (2017) Chapter 4 Draper (2010) Chapters 29-33	Session 4 Text Exploration Fiction Reading Online Learning
Session 5 9/20 - 9/26	Sensory: Vision	Bouck (2017) Chapter 6: pp. 125- top 138 Draper (2010) Chapters 11-14	Session 5 Text Exploration Fiction Reading Online Learning
Session 6 9/27 - 10/3	Sensory: Hearing	Bouck (2017) Chapter 6: pp. end 138-148 Draper (2010) Chapters 15-18	Session 6 Text Exploration Fiction Reading Online Learning

Session 7 10/4 - 10/10	Information Access & Input	Bouck (2017) Chapter 5 Draper (2010) Chapters 23-28	Session 7 Text Exploration Fiction Reading Online Learning
Session 8 10/11 - 10/17	Academic Instruction	Bouck (2017) Chapter 8	Session 8 Text Exploration Fiction Reading Online Learning
Session 9 10/18 - 10/31 (2-week session)	Funding Assistive Technology	Andrew Leibs Ten Ways to Fund Assistive Technology Purchases	Session 9 Text Exploration Online Learning AT Funding Topic APPROVAL DUE DATE 10/24 AT Funding Brochure DUE DATE 10/31
Session 10 11/1 - 11/7	Universal Design	Bouck (2017) Chapter 1:pages 17-20	Session 10 Text Exploration Online Learning
Session 11 11/8 - 11/14	Independent Living	Bouck (2017) Chapter 9: pp. 218-230 Draper (2010) Chapters 7-10	Session 11 Text Exploration Online Learning AT Device Topic APPROVAL DUE DATE 11/14

Session 12 11/15 - 11/21	Workplace Accommodations	Job Accommodation Network Benefits and Costs of Accommodation Equal Employment Opportunities Commission Recruiting, Hiring, Retaining, and Promoting People with Disabilities	Session 12 Text Exploration Online Learning
Session 13 11/22 - 11/28	Assistive Technology Frameworks	Bouck (2017) Chapter 2	Session 13 Text Exploration Online Learning
Session 14 11/29 - 12/5	Final Assignments	AT Device Category Research Presentation DUE DATE 12/2 (Saturday) Comparison Chart DUE DATE 12/4 (Monday) Final Class Survey & VIA Submission of AT Device Category Research Presentation (ONLY FOR 510) DUE DATE 12/5 (Tuesday)	

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: See Core Values (<a href="http://cehd.gmu.edu/values/).

GMU Policies and Resources for Students Policies

• Students must adhere to the guidelines of the Mason Honor Code. See <u>Honor Code and</u>

System (https://catalog.gmu.edu/policies/honor-code-system/).

- Students must follow the university policy for Responsible Use of Computing. See Responsible Use of Computing (http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor. See Disability Services (https://ds.gmu.edu/).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to VIA should be directed to <u>viahelp@gmu.edu</u> or <u>https://cehd.gmu.edu/aero/assessments</u>.
- Questions or concerns regarding use of Blackboard should be directed to <u>Blackboard Instructional Technology Support for Students (https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/).</u>
- <u>Learning Services (learningservices@gmu.edu)</u> Provides a variety of experience-based learning opportunities through which students explore a wide range of academic concerns. Services include support to students with learning differences, individual study strategy coaching, individualized programs of study, and referrals to tutoring resources. Presentations on a variety of academic topics such as time management, reading, and note taking are available to the university community. The programs are open to all George Mason University students free of charge.

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason's Title IX Coordinator per <u>University Policy 1202</u>. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as the <u>Student Support and Advocacy Center (SSAC)</u> at 703-380-1434 or <u>Counseling and Psychological Services (CAPS)</u> at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website College of Education and Human Development (http://cehd.gmu.edu/).

Appendix Assessment Rubric(s)

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Category	Indicator 1.1:			
Overview	Candidates	Candidate fails	Candidate	Candidate
	understand the	to identify	identifies salient	identifies salient
AT Program	similarities and	characteristics	characteristics of	characteristics of
Standard 1.1	differences in	specific to those	those with	those with
	human	with exceptional	exceptional	exceptional
	development and	needs as it	needs as it	needs as it
	the	relates to typical	relates to typical	relates to typical
	characteristics	human	human	human
	between and	development.	development.	development
	among			across
	individuals w/ &			environments,
	w/o exceptional			settings, and life
	needs.			span.
	Indicator 1.2:			
	Candidates	Candidate fails	Candidate	Candidate
AT Program	understand how	to identify	identifies	identifies
Standard 1.2	exceptional	specific and	specific features	specific features
	conditions can	related features	of assistive	of assistive
	interact with the	of assistive	technology	technology
	domains of	technology	devices and	devices and
	human	devices related	considers the	considers the
	development and	to the selected	impact of	impact of
	consider the	AT category.	utilizing the	utilizing the
	impact of	Candidate's	specified AT to	specified AT to
	utilizing specific	discussion of the	increase,	increase,
	features of	impact of	maintain, or	maintain, or
	assistive	utilizing the	improve	improve
	technology	specified AT to	functional	functional
	devices and	increase,	capabilities of	capabilities of
	strategies to	maintain, or	individuals with	individuals with
	increase,	improve	exceptional	exceptional
	maintain, or	functional	needs.	needs across

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
	improve functional capabilities of individual with exceptional needs.	capabilities of individuals with exceptional needs is limited.		environments, settings, and the life span.
User Characteristics AT Program Standard 1.2	Indicator 1.2: Candidates understand how exceptional conditions can interact with the domains of human development and consider impact utilizing specific features of assistive technology devices and strategies to increase, maintain, or improve functional capabilities of individual with exceptional needs.	Candidate fails to identify characteristics of users who could benefit from the specified assistive technology.	Candidate identifies characteristics of users who could benefit from the specified assistive technology.	Candidate identifies specific characteristics of users who could benefit from the specified assistive technology based on their understanding of exceptional conditions or other human factors.

	Assessment Criteria	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Specific Devices	Indicator 2.4:	Expectations	Expectations	Expectations
AT Program Standard 2.4	In conjunction, candidates possess a repertoire of evidences-based strategies to develop personalized supports for individuals with exceptional needs across environments, settings, and the life span.	Candidate fails to identify assistive technology tools developed to specifically provide personalized supports for individuals with exceptional needs.	Candidate identifies assistive technology tools to provide personalized supports for individuals with exceptional needs.	Candidate identifies numerous assistive technology tools to provide personalized supports for individuals with exceptional needs across environments, settings, and the life span.
Funding Sources AT Program Standards 2.2	Indicator 2.2: Candidates can identify a range of funding sources and processes of acquisition of assistive technology devices and services.	Candidate fails to identify funding sources appropriate for assisting in the acquisition of assistive technology.	Candidate identifies appropriate funding sources for assisting in the acquisition of assistive technology.	Candidate identifies a range of appropriate funding sources across domains for assisting in the acquisition of assistive technology.
Resources AT Program Standards 2.3	Indicator 2.3: Candidates are knowledgeable of and demonstrate proficiency in use of a range of assistive technology tools.	Candidate fails to identify specific and related assistive technology tools and strategy resources that enhances their knowledge of the range of AT tools available.	Candidate identifies specific assistive technology tools and strategy resources that enhances their knowledge of the range of AT tools available.	Candidate identifies a range of assistive technology tools and strategy resources that enhances their knowledge of the range of AT tools available.

	Assessment	Does Not Meet	Meets	Exceeds
	Criteria	Expectations	Expectations	Expectations
Community	Indicator 1.3:			
Impact	Candidates	Candidate fails	Candidate	Candidate
	understand how	to discuss the	discusses the	discusses the
AT Program	human diversity	impact assistive	impact assistive	impact assistive
Standards 1.3	issues can	technology can	technology can	technology can
	impact families,	have on	have on	have on
	individuals,	individuals with	individuals with	individuals with
	communities, &	exceptional	exceptional	exceptional
	cultures, & how	needs within	needs within	needs and their
	these human	various cultures	various cultures	families within
	issues in the	and	and	various diverse
	delivery of	communities.	communities.	environments,
	assistive			cultures and
	technology.			communities.
Legislative	Indicator 2.1:			
Support	Candidates are	Candidate fails	Candidate	Candidate
	knowledgeable	to identify	identifies	identifies
AT Program	of legislative	specific / related	legislative	legislative man-
Standards 2.1	mandates and	legislative	mandates and	dates and
	governmental	mandates and	governmental	governmental
	regulations	governmental	regulation	regulation
	related to	regulations	related to	related to
	technology and	related to	technology and	technology and
	their	technology	discusses their	discusses their
	implications for	and/or they	implications for	implications for
	individuals with	provide a limited	individuals with	individuals with
	exceptional	discussion of the	exceptional	exceptional
	needs.	implications for	needs.	needs giving
		individuals with		rationale within
		exceptional		environments &,
		needs.		settings through
				the life span.