

Enabling Technologies Laboratory College of Engineering

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ENABLING TECHNOLOGIES LABORATORY

Mission:

The mission of the Enabling Technologies Laboratory (ETL) is to design and develop technologies that enhance human capabilities and potentials, with a special emphasis on people with disabilities.

The ETL is unique in its operations in that it combines community service, education and research.

LAWS MANDATING ACCESSIBILITY EQUAL ACCESS & OPPORTUNITY

- **Americans With Disabilities Act (ADA)**
Built Environment
- **Section 255 Telecommunications Act**
Telecommunication Products & Services
- **Section 508 Rehab Act**
Electronic & Information Technology

- **IDEA (Education)**
- **No Child Left Behind (Education)**

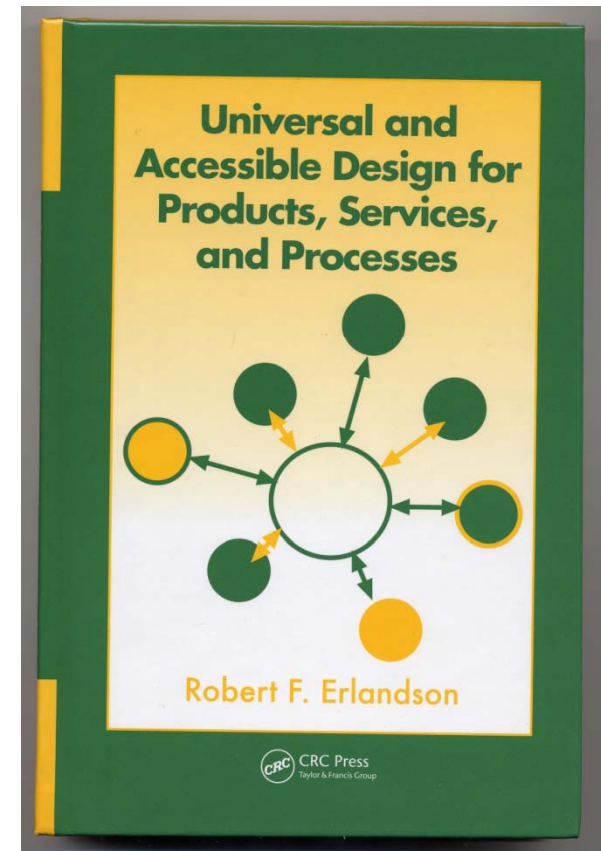
- **New Freedom Initiative**
Assistive & Enabling Technology

RESEARCH

Universal & Accessible Design

ADRC

ACCESSIBLE DESIGN RESOURCE CENTER
INCORPORATING ACCESSIBLE DESIGN INTO UNDERGRADUATE
ENGINEERING CURRICULUMS ACROSS AMERICA



Basic Research → Technology

<http://www.etl-lab.eng.wayne.edu/adrc/>



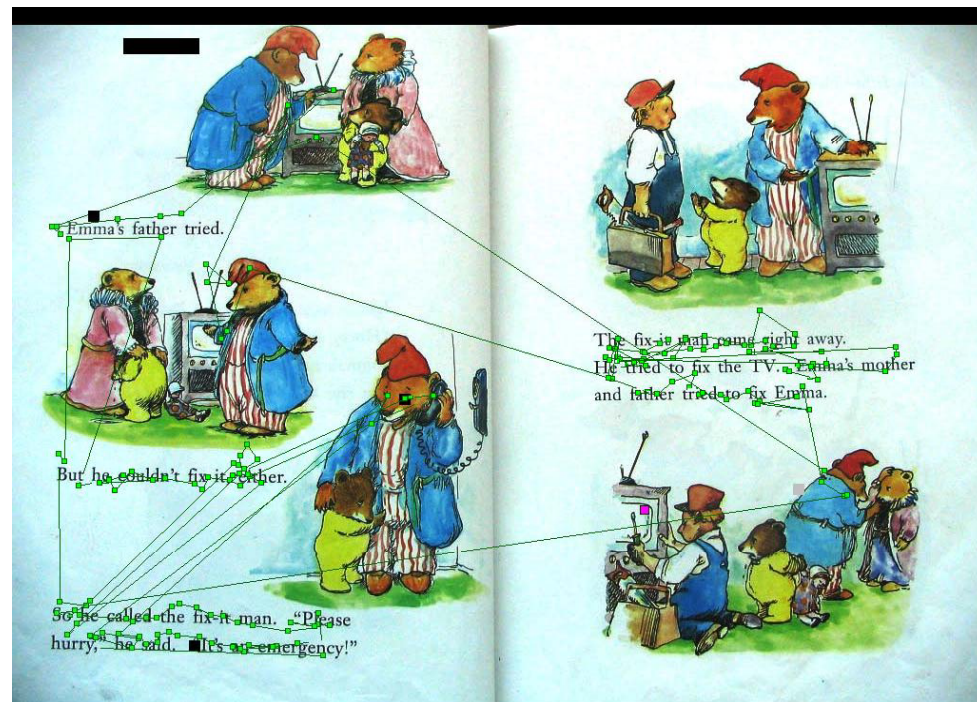
Universal Design for Learning: Reading

College of Education
Dr. Karen Feathers

& College of Engineering
Dr. Robert Erlandson

EYEMOTION

Created by Santosh Kodimiyala, College of Education, College of Engineering, Wayne State university
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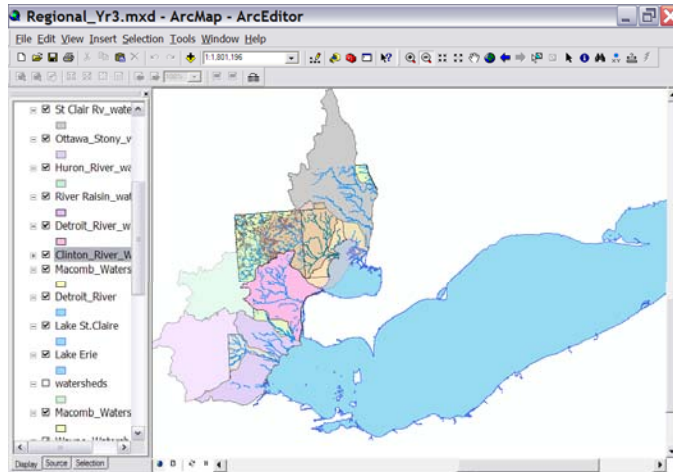




College of Education & College of Engineering

Dr. Jazlin Ebenezer

Dr. Robert Erlandson



Tests Performed:

- Dissolved Oxygen
- Turbidity
- Nitrates
- Chlorides
- Flow Rate
- Temperature
- Phosphates
- Total Dissolved Solids
- pH
- Alkalinity



<http://etl-rd.eng.wayne.edu/>

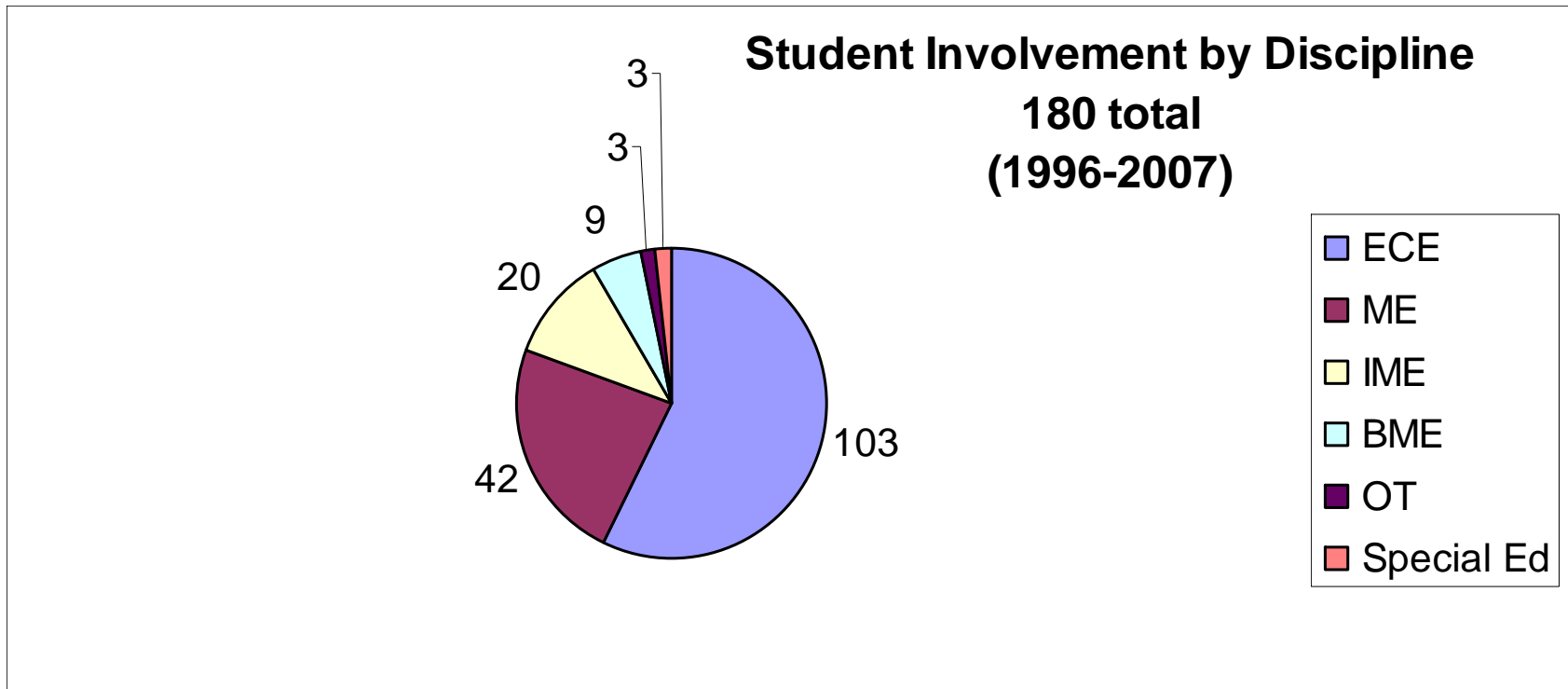


BLIND AAUDIO TTACTICAL SYSTEM

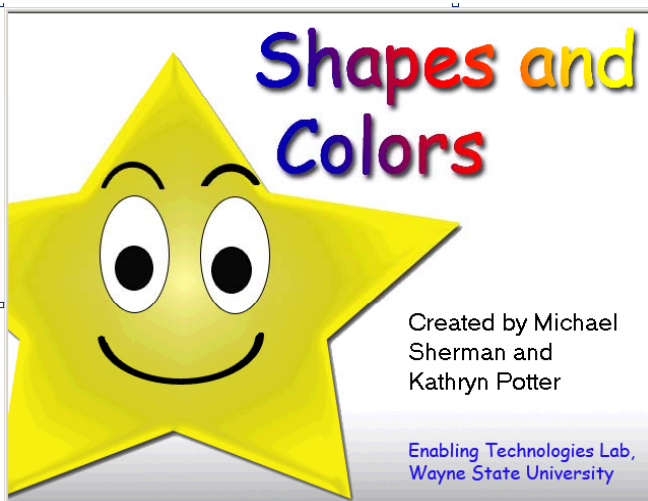
NEC Foundation of America supports programs with national reach and impact in assistive technology for people with disabilities.

ETL STUDENT DESIGN PROGRAM

**Broad base of support:
SE Michigan ISDs, Foundations, Industry and NSF**



About 100 different projects



**Received:
SBIR Phase I Grant
NIDRR, U.S. Dept of ED**

**Working with:
ADAMLAB, LLC
Troy, Michigan**

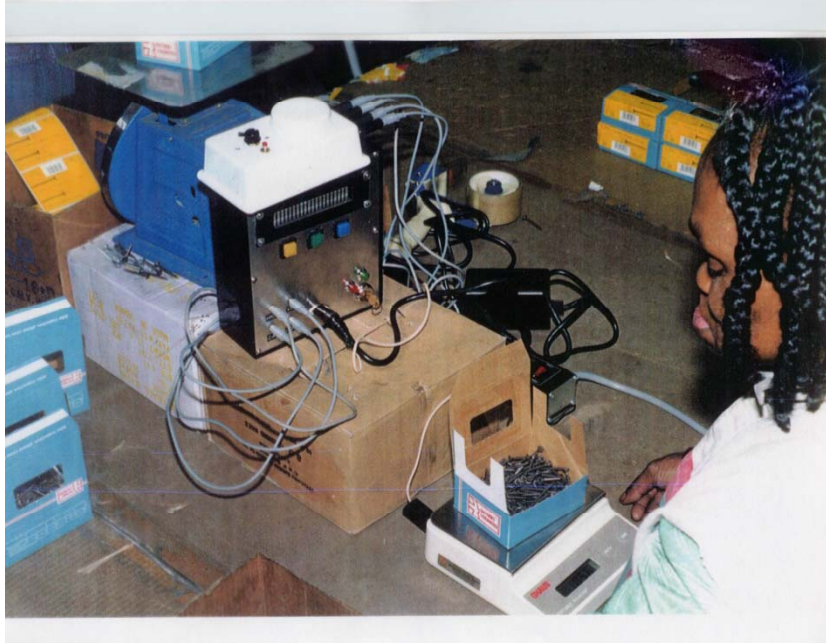


**Mission:
To employ individuals
with disabilities**

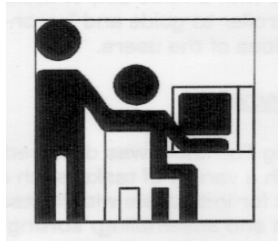
COMMUNITY SERVICE



Devices have been purchased by MRS, businesses, and Region IV Schools.



Enabling Technologies Lab



Project Enable



Quality Network



Wixom, MI

Knowledge Center, Warren, MI



CREFORM – AGILE DEVICES



Over 300 Agile Devices in Use in Southeast Michigan Schools



SEMCOG Sponsored Student Design Project

Transportation to Work Services

Ride Locator

23 Providers found. Click below for details or [Back](#) to refine your search.

Ride Locator Search Results

Click for details	Provider	Phone	Fax	TTY
details	Adult Well Being Services	(313) 924-7860		
details	Adult Well Being Services	(313) 833-3765		
details	Adult Well Being Services	(313) 273-9620		
details	Council of Action United for Service Efforts (CAUSE)	(313) 897-6500		

1 2 3 4 5 6

Ride Locator:
Is an on-line system to help the elderly and disabled find transportation to from work.

**City of Detroit
SEMCOG
Mobility Managers**

Recognition

Hardy Elementary School, South Lyon, MI



2005

**Magna Winners 2000: Macomb Intermediate School District
Kids & Kaizen Program, American School Board Association.
For innovative, advance student learning, and reproducibility.**

**Bovenschien School, 1997 Education Excellence Award
Michigan Association for School Boards.
For innovative and successful programs**

Michigan Campus Compact 2000

Faculty/Staff Community Service-Learning Award

Awarded by Michigan Universities and colleges for exemplary programs that integrate education, research and community service

2006 American Society for Engineering Educator's

ASEE Fred Merryfield Design Award

A national award for exemplary and exceptional design programs

What Next?

Michigan Consortium for Enabling Technology

Multidisciplinary center for advanced R&D in assistive and enabling technology

Design & Rapid Prototyping

Commercialization & Tech Transfer

Economic Development Goal – broaden Michigan's industrial base by growing our assistive and enabling technology companies.