

Starting Wright

A Webcast Series to Prepare Students with Disabilities for College and Careers in STEM

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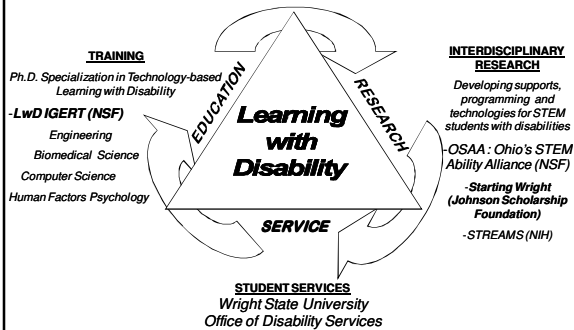


Wright State University Learning with Disability Initiative

LwD Vision

- A Center of Excellence focused on developing and applying technologies, materials, and methods to enhance formal education and life-long learning for persons with disabilities.
- Student Services
 - Continuing a 40-year tradition of innovation providing Vocational, technological, physical and academic student support -- over 7,000 graduates.
- Training
 - Multidisciplinary Doctoral Program for Future Disability Scientists
- Research
 - Assistive Technologies, Interventions and Learning Strategies for Students with Disabilities

Learning with Disability



LwD Research

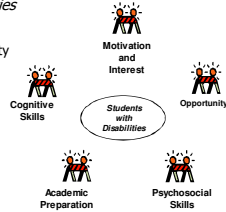
- **Current Focus**

- **Increasing the number of youth with disabilities who pursue post-secondary education and employment in Science Technology Engineering and Mathematics (STEM) disciplines**

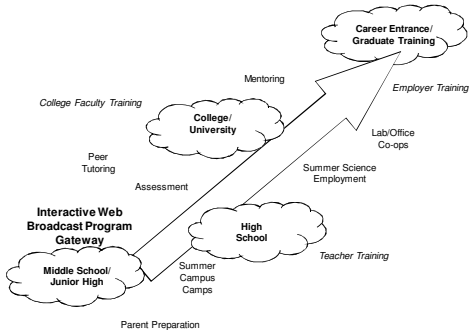
LwD Approach

-- **A longitudinal, systemic approach** to fostering success in STEM education and careers for persons with disabilities

- **Early and Progressive Interventions**
 - Middle School through College/University
- **Barrier-Targeted Interventions**
 - Motivation
 - Psychosocial Skills
 - Cognitive Skills
 - Academic Preparation
 - Opportunity
- **Stakeholder-Targeted Interventions**
 - Students
 - Parents
 - Teachers
 - Employers
- **Stakeholder Investment and Ownership**
 - All Stakeholders Engaged in Program Activities at All Levels
 - Forming Attitudes, Beliefs and Expectations
 - Reciprocal Benefits



Cradles to Careers



Wright State University Learning with Disability

Starting Wright



Getting Ready *Now* for College and Careers in Science, Technology, Engineering, and Math

Starting Wright

An Interactive Web Broadcast Program for Family-based Early Preparation for STEM College and Careers

- **Goal**
 - Increase the Numbers of Students with Disabilities that go on to STEM Postsecondary Education Programs and Careers
- **Objectives**
 - Raise Interest in Science and Technology as a Viable Option
 - Help Prepare for College
 - Build Personal Skills
 - Understand Academic Requirements
 - Raise Awareness of Assistive Learning Technology
 - Promote
- **Approach**
 - Target Students in Middle/early High School and Parents
 - Web Format to Reach Families in their Homes
 - Encourage Students and Parents to Communicate and Work Together to Make Educational and Career Decisions and Execute Plans

Wright State University Learning with Disability Program

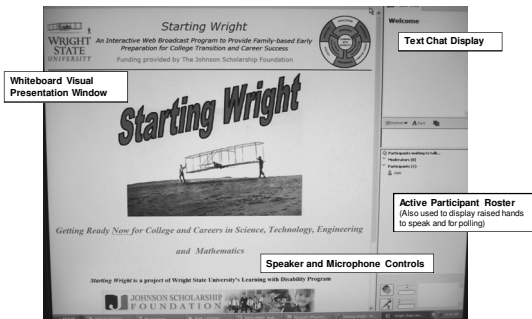
Starting Wright Program Topics (08-09)

- **STEMM Career Motivation** -- Successful college and career models, the diversity of career options available to students with disabilities, rewards of informed early decision making.
- **Independence, Self-determination, and Self-advocacy** -- Strategies for acquiring and practicing skills, attitudes and habits that are keys to success.
- **Academic Preparation** -- Secondary school coursework needed for STEM-oriented majors and careers. Scheduling, resource finding, useful technology.
- **College Life** -- What to expect, FAQs from students with disabilities, finances, personal care solutions. Social skills and interacting with faculty and fellow students.
- **STEM Career "Specials"**
 - Biology
 - Engineering
 - Geology
 - Computer Science

Starting Wright Program Format

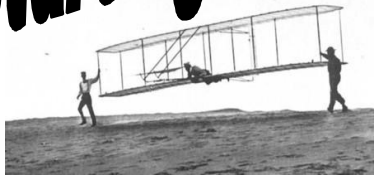
- Concepts
 - Aimed at student and parents in the home
 - 40-minute “fireside chat” programs on selected mid-week evenings
 - Visuals, music, humor and varied feature content used in effort to capture and sustain attention
- Program Features
 - STEMM field reviews
 - Interviews with STEMM Professionals, Students, Parents
 - *Great Minds in STEMM*
 - *Katherine’s Tech Tips*
 - *Hints from Miss Hannah*
 - Topical Resources
 - Family Homework Activity

Starting Wright’s Web Cast Interface*



* Superimposed window used for real-time text captioning



Starting Wright



Getting Ready Now for College and Careers
in Science, Technology, Engineering, and Math

Program 3 - Overview

Personal Building Blocks for success in college:

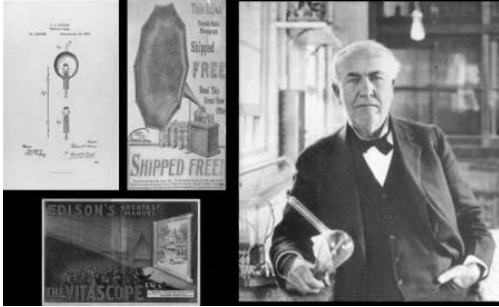
- Becoming Independent 
- Being a Good Resource Finder 
- Learning to Communicate 

Snapshots of STEMM Fields

ENGINEERING

Great Minds in STEMM

Thomas Edison



STEMM

UP FRONT AND UP CLOSE

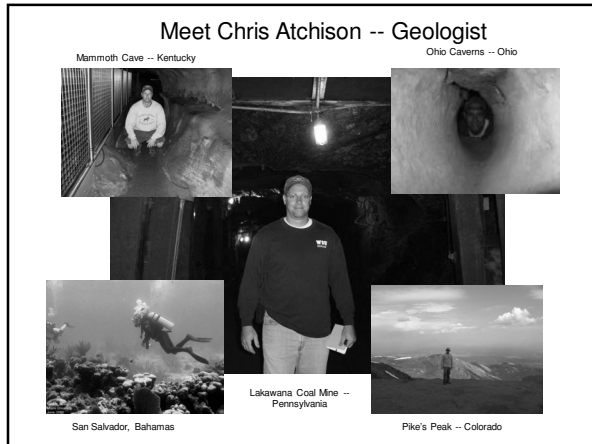
STEM Education: A Reality for Students with Disabilities



Holly Slack
STEMM Ph.D. Student



Jennifer Border
New STEMM Graduate



Being a Successful Learner in High School, and Beyond

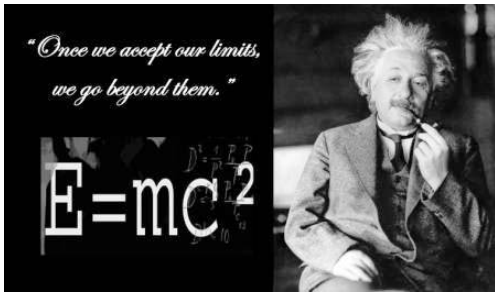
- Learning Styles:
 - Find out how YOU learn best
 - Visual Learners: Learn best by seeing
 - Auditory Learners: Learn best by hearing
 - Kinesthetic Learners: Learn best by experiencing/doing
- Start using Special Learning Technologies that will help you now and in college
 - Math aids
 - Reading Aids
 - Writing Aids



Choosing a College for STEM Studies

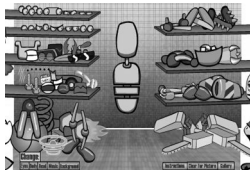
- **Two-year Community College?**
 - Associates degrees in many STEM fields
 - Examples: Computers, Nursing, Engineering Technology
- **Four-year College or University?**
 - Bachelors degrees in Sciences and Engineering
 - Examples: Biology, Psychology, Computer Science, Architecture, Mechanical Engineering
- **Technical or Vocational College?**
 - Certificates in STEM areas
 - Examples: Laboratory technicians, Veterinary assistants

Albert Einstein



STEM Online Interaction...

- <http://www.gamequarium.com/science.htm>
- <http://www.pbs.org/wgbh/nova/>



Build your own robot online



Read Articles on Deep Sea Invasion

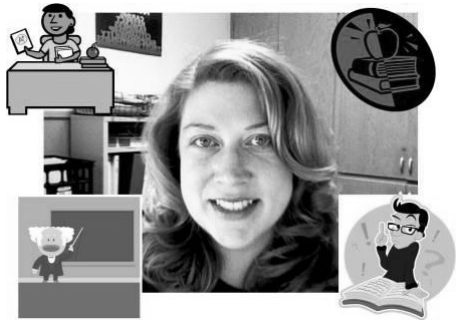
Dr. Jack Horner Paleontologist



RESOURCES

- More About Learning Styles
<http://homeworktips.about.com/od/homeworkhelp/a/learningstyle.htm>
- Math Doesn't Suck
A book by actress and mathematician Danica McKellar
<http://www.mathgoodies.com/McKellar/>
- Information on reading, writing and math aids
http://www.innosolu.com/AT_EdSoftware1-2.html
<http://www.jan.wvu.edu/>

Hints from Miss Hannah



Homework



Work together as a family to:

1. Describe one situation where I have used good communication skills to get what I needed
2. List 5 activities that I am confident that I do well
3. Give an example of a situation where I succeeded because I persisted

Send your answers to : startingwright@gmail.com

Upcoming Program!

- Getting Ready For College II - Tuesday, July 15

—Academics

- What courses do I need to take in High School?
- Interacting with my school (IEP, career planning, classroom accommodations for STEM studies)
- College Planning
- Extracurricular STEM opportunities

Congratulations...



Homework Drawing Winner
Ashley from Harveysburg, Ohio

Starting Wright

NEXT PROGRAM: Tuesday, July 15
7:00 p.m.

To see this program again go to:
<http://www.onlineconferencingsystems.com/wsu/archives.htm>

To request a copy of this program please contact
startingwright@gmail.com

Contact Us

- **Starting Wright**

- email: StartingWright@gmail.com
- Website: www.wright.edu/lwd



- **Ohio's STEM Ability Alliance**

Interventions and supports for college students with disabilities in STEM majors: Comprehensive advising, Living and learning communities, Peer and Professional mentoring, Internships

- email: OSAADayton@wright.edu
- Website: www.wright.edu/OSAA



- **Wright State Office of Disability Services**

- Email: disability_services@wright.edu
- Website: www.wright.edu/students/dis_services