ACADEMIC TRANSITION FOR VETERANS: ELEVATE, A CASE STUDY
OVERVIEW

- INSPIRATION
- PREPARATION
- CASE STUDY:
  - OVERVIEW OF ELeVATE
  - WHAT WE LEARNED
  - FUTURE PLANS
  - STUDENTS & MENTORS
- Q&A
WHO WE ARE

• HUMAN ENGINEERING RESEARCH LABORATORIES (UNIVERSITY OF PITTSBURGH, PITTSBURGH VA)

• QUALITY OF LIFE TECHNOLOGY CENTER (CARNEGIE MELLON UNIVERSITY, UNIVERSITY OF PITTSBURGH)

• DEPARTMENT OF REHABILITATION SCIENCE AND TECHNOLOGY, UNIVERSITY OF PITTSBURGH
OIF & OEF VETERANS:

- UNIQUE POPULATION – UNIQUE SET OF NEEDS
- OVER 2 MILLION SERVICE MEMBERS DEPLOYED IN IRAQ AND AFGHANISTAN
- 52% OF SERVICE MEMBERS ARE 20-29 YEARS OLD
- WOUNDED & INJURED IN OEF/ OIF: OVER 45,000
- PTSD: 40% OF OIF/ OEF VETERANS
WHY COLLEGE?

- BENEFITS FOR VETERANS:
  - EMPLOYMENT
  - USING SKILLS ACQUIRED IN THE MILITARY
  - EMPOWERMENT THROUGH EDUCATION

- BENEFITS FOR SOCIETY:
  - DIVERSITY IN POSTSECONDARY EDUCATION AND WORKFORCE
  - GLOBAL COMPETITION
WHAT IS AVAILABLE NOW

- Transition process not well understood
- Non-traditional students – unique needs
- Disability presents additional challenge
- Vets with physical disabilities: 33% higher education institutions offer special programs
- Vets with invisible disabilities: 23% institutions have programs
  - Example: TBI
    - The VA has treated 8,000 brain injuries in the TBI population
    - Affects of TBI on academic and professional experiences
- Lack of knowledge and expertise from faculty, staff, other students
WHAT IS NEEDED

ELeVATE GOALS:

- PROVIDE SUPPLEMENTAL ASSISTANCE TO VETERANS TRANSITIONING TO POSTSECONDARY INSTITUTIONS
- EDUCATE FACULTY AND COLLEGE ADMINISTRATORS ABOUT STUDENT VETERANS’ NEEDS
- DEMONSTRATE THAT PROGRAMS DESIGNED SPECIFICALLY FOR STUDENT VETERANS ARE EFFECTIVE AT PROMOTING ACADEMIC AND CAREER SUCCESS FOR STUDENT VETERANS
- CREATE A MODEL FOR VETERANS TRANSITION PROGRAMS
ELEVATE: 3-PHASE APPROACH

- PHASE 1: ACADEMIC PREPARATION
  - MONTHS 1-3
  - RESEARCH EXPERIENCE
  - TARGETED SKILLS TRAINING
  - VOCATIONAL COORDINATION
  - MENTORING (FACULTY, GRAD STUDENTS, PEERS, COMMUNITY)

- PHASE 2: ENROLLMENT
  - MONTHS 4-6
  - RESEARCH EXPERIENCE
  - VOCATIONAL COORDINATION (AS NEEDED)
  - ONE-ON-ONE TRANSITION ASSISTANCE, STUDY GROUPS, COHORT INVOLVEMENT

- PHASE 3: RETENTION
  - CONTINUING INVOLVEMENT
  - RESEARCH EXPERIENCE
  - CAREER EXPOSURE
  - INTERNSHIPS
  - VOCATIONAL COORDINATION (AS NEEDED)
LOGISTICS

- ELIGIBILITY
  - ALL VETERANS IN TRANSITION

- 10 WEEKS IN SUMMER:
  - 40 HOURS/ WEEK
  - FULL TIME

- FINANCIAL SUPPORT
  - STIPEND
  - HOUSING ASSISTANCE
  - TRAVEL ASSISTANCE
PROGRAM DESIGN

- INSPIRED BY THE RESEARCH EXPERIENCE FOR UNDERGRADS
- REAL-LIFE RESEARCH
- MENTORING
  - GRADUATE STUDENT
  - FACULTY
  - FORMER ELEVATE PARTICIPANT
  - COMMUNITY MENTOR
  - CROSS-MENTORING OPPORTUNITIES
- TIMELINE:
  - VOCATIONAL COORDINATION SESSIONS
  - COLLEGE PREP WORKSHOPS: INDIVIDUALIZED APPROACH
  - ADDITIONAL “BREADTH” WORKSHOPS
  - PROFESSIONAL DEVELOPMENT AND NETWORKING OPPORTUNITIES
- PROGRAM DELIVERABLES
- SOCIAL OPPORTUNITIES
RESEARCH

- Rehab Science and Technology
  - Personal Connection
  - Practical Solutions to Real-Life Problems
  - Creativity
  - Teamwork
  - Exposure to Other Disciplines

- Research Projects
  - Cueing Handle
  - Electronic Datalogger
  - Activity Monitoring Device
  - Throwing Chair

- Deliverables
  - Research Paper
  - Scientific Poster
  - Elevator Pitch
ACADEMIC PREPARATION

- **MATH SEMINAR**
  - 5 HOURS/ WEEK
  - ALGEBRA, PRE-CALCULUS, CALCULUS, STATISTICS
  - INDIVIDUALIZED APPROACH
  - ONE-ON-ONE

- **WRITING**
  - 3 HOURS/ WEEK
  - ONLINE AND IN-PERSON SESSIONS
  - INDIVIDUALIZED APPROACH
PROFESSIONAL DEVELOPMENT

- ESSENTIAL SKILLS WORKSHOPS
  - INTRO TO ASSISTIVE TECHNOLOGY, GOOD DESIGN PRACTICES, COMPETITIVE ADAPTIVE SPORTS, INTRO TO ORTHOTICS AND PROSTHETICS

- PROFESSIONAL DEVELOPMENT
  - CAREER AND GRADUATE SCHOOL PANEL, NETWORKING OPPORTUNITIES, MACHINING SKILLS

- CONTENT INSPIRED BY STUDENTS’ NEEDS
  - APPLYING TO COLLEGE, GI BILL BENEFITS, ETC
REHABILITATION NEEDS

- WHY VOCATIONAL COORDINATION
- ONE-ON-ONE MEETINGS
- REHABILITATION PLAN
- GROUP SESSIONS
- WEEKLY
- ATTENDED BY ALL STUDENTS AND STAFF
ENVIRONMENTAL FACTORS

- HUMAN ENGINEERING RESEARCH LABORATORIES
  - VET-FRIENDLY
  - CONNECTION TO VETS ORGANIZATIONS
  - DIVERSITY
  - RESOURCES
- PITTSBURGH
  - REHAB EPICENTER
  - COST OF LIVING
  - COLLEGES AND UNIVERSITIES: MANY OPTIONS SERVING INDIVIDUALS OF DIFFERENT ACHIEVEMENT LEVELS
  - EXCITING INNOVATIVE RESEARCH
  - TECH JOBS
PROGRAM OUTCOMES

- STUDENTS
  - 2 COHORTS
  - 11 PARTICIPANTS
  - 100% SATISFACTION
  - 73% ENROLLED IN POSTSECONDARY PROGRAMS
  - 5 PARTICIPANTS CONTINUED TO WORK ON THEIR PROJECTS UPON COMPLETION OF THE 10-WEEK SUMMER EXPERIENCE

- PROGRAM
  - TRAINING MODULES FOR VETS
  - TRAINING MODULES FOR MENTORS
  - RENEWED FUNDING FROM THE NSF
  - NEW PROGRAM: REV-T
  - NEW RESEARCH STUDY
FUTURE PLANS

- **MAIN GOAL: EXPANSION AND SUSTAINABILITY**
  - REPLICATION:
    - HOW-TO GUIDE
    - CASE WESTERN RESERVE UNIVERSITY; UNIVERSITY OF TEXAS – AUSTIN
  - ADDITIONAL SOURCES OF FUNDING
  - RECRUITING MORE STUDENTS

- **RESEARCH STUDY: DEMONSTRATE EFFECTIVENESS OF ELeVATE**

- **FATe: FABRICATION OF ASSISTIVE TECHNOLOGY**
  - FOCUS ON VOCATIONAL TRAINING
"MENTORING ELEVATE STUDENTS HAS BEEN A GREAT EXPERIENCE FOR ME AS I GET TO SHARE ASPECTS OF RESEARCH THAT TRANSLATE INTO REAL WORLD APPLICATIONS. DURING THE MENTORING PROCESS, I HAVE LEARNED A LOT ABOUT THE SKILLS THAT MANY OF OUR VETERANS HAVE AND HOW THEIR LEADERSHIP SKILLS CAN HELP THEM EXECUTE PROJECTS SUCCESSFULLY." - SHIV Hiremath

"I HAD THE PLEASURE OF WORKING WITH AN ELEVATE STUDENT DURING THE SUMMER OF 2012 ON THE CUEING HANDLE PROJECT, A WIRELESSLY TRIGGERED SYSTEM OF ILLUMINATING GRAB-HANDLES. HE ASSISTED WITH A THIRD GENERATION HANDLE CASE DESIGN AND RESEARCHED ALTERNATIVE SWITCHING TECHNOLOGY FOR THE HANDLE THAT WOULD BE LOWER COST AND EASIER TO INSTALL. I THOROUGHLY ENJOYED WORKING WITH HIM DURING THE INTERNSHIP AND WAS ABLE TO LEARN A LOT FROM THAT EXPERIENCE MYSELF." - JOSH Telson
SPECIAL THANKS

- NATIONAL SCIENCE FOUNDATION, PROJECT EEC 1036964
- HUMAN ENGINEERING RESEARCH LABORATORIES
- REHABILITATION SCIENCE AND TECHNOLOGY, UNIVERSITY OF PITTSBURGH
- QUALITY OF LIFE TECHNOLOGY CENTER, CARNEGIE MELLON & UNIVERSITY OF PITTSBURGH
- OUR PARTNERS
- OUR MENTORS
- NICOLETTE, SCOTT, MATT, JON, DUSTIN, JASON, CLARENCE, NATE, STEVE, WALLACE