IPRO309: Orthotics and Prosthetics Education in Latin America and US

Professor Meade
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Maas

Untreated

With orthosis
Problem

- 2.5 million people with disabilities and unmet needs
- One accredited O&P educational program
- Less than 50 certified practitioners and 1,500 uncertified practitioners
Purpose

• To improve the opportunities to learn about orthotics and prosthetics in Latin America and the United States
• Support development of first Category III International Society for Prosthetics and Orthotics (ISPO O&P Technician) program in Latin America (Bogotá, Colombia)
• Support development of the orthotics and prosthetics technician program at Joliet Junior College (similar to the program in Colombia)
IPRO 309 History

- **First IPRO 309** - Spring Semester 2006
  - Conference in Bogotá in May 2006 (5 IIT students attended and presented modules)
- **Continuation of IPRO 309 in Fall Semester 2006 and Spring Semester 2007**
  - Conference in Bogotá in May 2007 (5 IIT students attended and presented modules)
- **Continuation of IPRO 309 in Fall Semester 2007**
  - Material to be presented at Joliet Junior College in December
- **IPRO 309 continuing through Spring Semester 2008**
- **Similar program to begin Spring 2008 at Universidad de los Andes (Colombia)**
Goals

• 3 educational modules:
  – Club foot
  – Spinal Trauma
  – Stroke

• Translate modules into Spanish for use in Latin American schools and Joliet Junior College (JJC)

• Presenting at an open house this fall at JJC (recruiting students)
Team Organization

3 Subgroups
- Club Foot
- Spinal Trauma
- Stroke

Deformities in Club Foot
- Ankle joint is flexed (Equinus deformity)
- Heel is turned in (Varus deformity)
- High medial arch (Cavus deformity)
- Foot is bean shaped and curled outer border (Adductus deformity)

Denis I – Anterior compression
- An anterior compression fracture is an injury of the spine in which the front side, or anterior column, of the vertebra is injured. The spine is bent, or flexed, when a force is applied to the spine.

What happens when you have a stroke?
- The rupture or blockage prevents the brain from getting the blood and oxygen that it needs to function in a healthy way.
- There are two types of stroke: hemorrhagic and ischemic.
Team Leadership

• Project Manager: Allison Bagby
• Content Manager: Eduardo Aramayo
• Webmaster: Lydia Benger
• Vocabulary Manager: Ryan Yarzak
• Minutes Recorder: Heather Selby
• Poster Designer: Heather Selby and Stefanie Rozborski
Research Methodology

- Overview of disease
- Physical effects
- Pharmacological/Non-pharmacological treatments
- Orthotic Treatment
- Fabrication of device
- Case study throughout each step
- Vocabulary/Notes sheet
- Overview Brochure
Obstacles

- Broad topic
- High school and first year college students
- Vocabulary
- Language Barrier
- Case studies
- Website
Results

- Three educational modules:
  - Club foot
  - Spinal Trauma
  - Stroke

- Guest speaker:
  Bryan Malas, MHPE, CO, CPed

- Case studies presented by:
  Dr. Kevin Meade
Laboratorio Gilete - Bogotá
What’s Next?

- Conference in Bogotá May 2008
- Open house at Joliet Junior College
- New Modules Next Semester
  - Pediatric
  - Adult
  - Geriatric
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- Illinois Institute of Technology; Chicago, IL
- Joliet Junior College
- La Escuela Comombiana de Rehabilitación; Bogotá, Colombia
- Laboratorio Gilete, Bogotá; Colombia;
- Michael Brncick, M.Ed., CPO
- Northwestern University Prosthetics and Orthotics Center (NUPOC); Chicago, IL
- Universidad de los Andes; Bogotá Colombia