

Wheelchair content integration in formal curricula: Universidad CES experience

María Luisa Toro-Hernández, PhD

Instructor Department of Physical Therapy and Department of
Medicine

October 31st, 2017



Learning objectives

- Describe the steps taken by CES towards the integration of wheelchair provision-related content in the physical therapy and medicine undergraduate programs
- List two challenges towards the integration of wheelchair-related content in undergraduate programs





Study programs



Medicine
(1978)



Dentistry
(1978)



**Veterinary Medicine
and Animal Science**
(2000)



Psychology
(2000)



Law
(2001)



**Pre-Hospital Care
Technology**
(2001)



Nursing
(2016)



Biology
(2003)



**Physical
Therapy**
(2008)



**Business
Management**
(2011)



Pharmacy Technology
UNAB – U. CES
(2011)



**Pharmaceutical
Chemistry**
(2012)



Ecology
(2013)



**Nutrition and
Dietetics**
(2015)



**36 Clinical
specializations**



**26 Other
specializations**



**1 Virtual
specialization**



19 Masters



3 Doctorates



UNIVERSIDAD CES
Un compromiso con la excelencia
Resolución del Ministerio de Educación Nacional No. 1751 del 25 de marzo de 2007

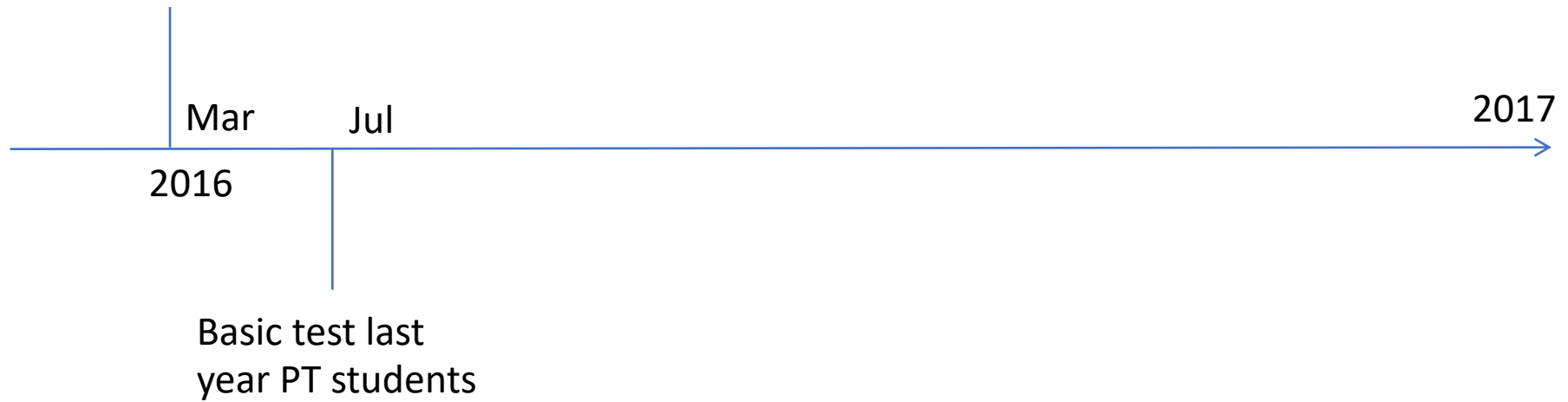
1977

40 AÑOS

2017

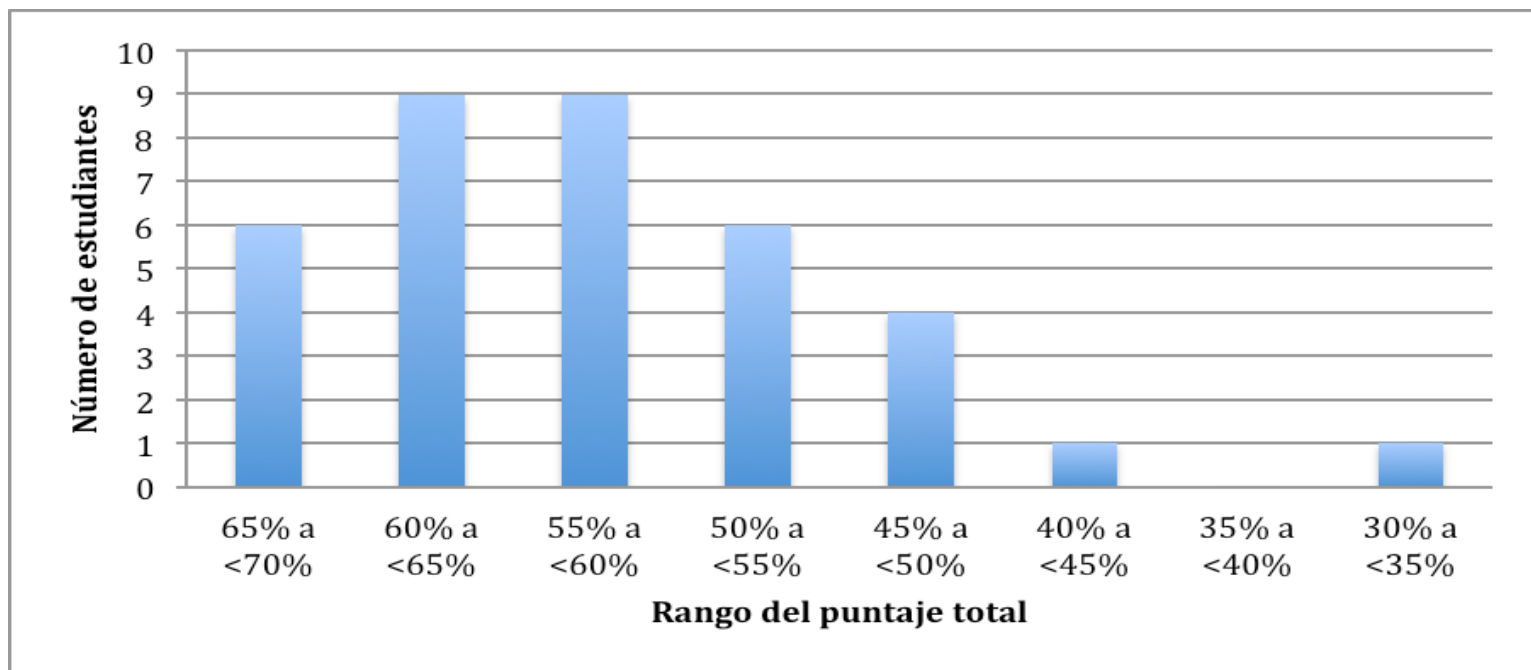
Integration efforts department of physical therapy and medicine CES

Participated in ToT training:
1 basic and 1 M/S



ISWP basic test as diagnostic tool

- N=40
- 38 attended and 36 finished
- Average % total score $57,4 \pm 7,8$ (70% needed to pass)



BASIC LEVEL
WHEELCHAIR
SERVICE TRAINING PACKAGE



1 Cita y derivación



2 Estudios



3 Prescripción (selección)



4 Financiamiento y pedido



5 Preparación del producto (silla de ruedas)



6 Prueba de ajuste



7 Capacitación del usuario



8 Mantenimiento, reparación y seguimiento

Traducción del original en inglés Wheelchair Service Training Package - Basic Level
publicado por WHO con el permiso de la OMS, la Organización Mundial de la Salud
2014



Problematic topics

Assessment Domain

Prescription Domain

Fitting Domain

Production Domain

User Training Domain

Process Domain

Follow Up Maintenance and Repair Domain

Integration efforts department of physical therapy and school of medicine CES

Participated in ToT training:
1 basic and 1 M/S

Interview head of PT
undergraduate

WHO Stakeholders meeting

Mar

Jul

Sep

Oct

2017

Feb

Aug

2016

Jun

Basic test last
year PT students

Hybrid basic training:
1 PT, 1 Eng, 1 PM&R
trainers
2 PT instructors
participated
Procured tools and
donated WCs

Pilot: ICF and
basic WC
provision (20 hrs)

PT (20 hrs) and MD
(4hrs): ICF and
basic WC provision



Pilot 1: only PT

- Class size 38 students (Total 20 hrs allocated)



- ICF online portion (4hrs)
- ICF workshop (2hrs)
 - Core sets
 - Case study

ICF eLearning Tool



World Health Organization

Oprima aqui para empezar

Contacto

Ayuda

Referencias

Glosario

Créditos

Nota legal

Mapa de la página

<http://icf.ideaday.de/es/index.html>



UNIVERSIDAD CES

Un compromiso con la excelencia
Resolución del Ministerio de Educación Nacional No. 1751 del 25 de marzo de 2009

1977

40 AÑOS

2017

Pilot 1: only PT

- Class size 38 students (Total 20 hrs allocated)
 - ICF online portion (4hrs)
 - ICF workshop (2hrs)
 - WC ISWP basic online portion (6 hrs), activities:
 - Embedded questions
 - Discussion board

Wheelchair users

Wheelchair services

Wheelchair mobility

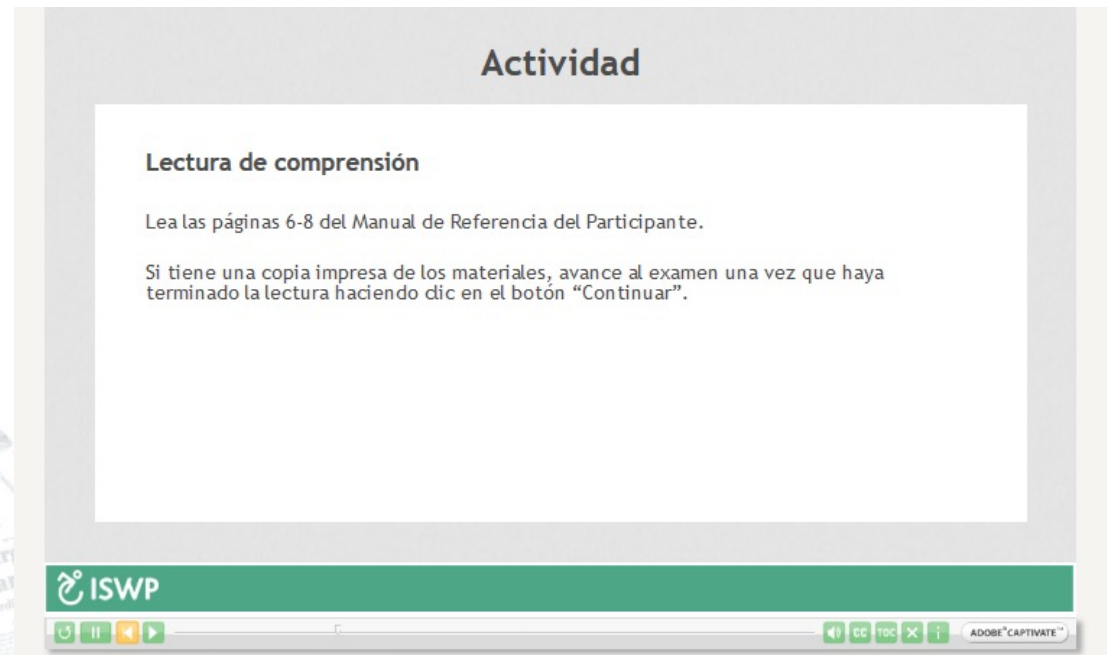
Sitting upright

Pressure ulcers

Appropriate wheelchair

Cushions

Transfers



Pilot 1: only PT

- Class size 38 students (Total 20 hrs allocated)
 - ICF online portion (4hrs)
 - ICF workshop (2hrs)
 - WC ISWP basic online portion (6 hrs), activities:
 - Embedded questions
 - Discussion board
 - In-person workshop (4 hrs)
 - Instructor:student ratio - 2:20, one PT and one engineer
 - Role play case study through the 8 steps using WHO forms
 - Movie forum (2 hrs)
 - Murderball documentary
 - Final online exam 20 questions
 - All passed
 - Optional: ISWP basic test



Pilot 2: PT and Medicine

PT (n=45)	MD (n=70)
Readiness for interprofesional learning scale	Readiness for interprofesional learning scale
Online ICF (4 hrs)	Online ICF (4 hrs)
ICF workshop (2hrs)	
Online wheelchair (6 hrs)	
Wheelchair workshop (4 hrs)	Wheelchair workshop (4 hrs)
Movie murderball (2 hrs)	

Wheelchair workshop: instructor:student – 3:30

Instructors: 1 PT, 1 eng, 1 PM&R MD

Groups of 5 students with 2 wheelchairs



Basic wheelchair skills:
 Propulsion; Going through doors; Popping front casters;
 Navigating thick carpet; Transfera



Students feedback

- “More time is needed”
- “This is content that all PTs should have in depth”
- “More user’s involvement”
- “It was interesting to solve problems with students from other majors”
- “It is important to learn, for PTs, how to accommodate users with complex positioning needs”



Challenges

- Trained instructors
- Time constraints
- Online engagement
- Access to appropriate wheelchairs and cushions
- Wheelchair users' time
- Tensions: who is the profesional responsable of the wheelchair
- Students too focused on the impairment, instead of activity limitations and participation restrictions



V3: PT and Medicine, proposal

- More structure in the in-person portion
- Additional 4 hr wheelchair skills training for PTs
- Curricula committee evaluation in early December



Supporting others into Integration

- ISWP basic test
- 80 students
- 13 instructors
 - 3 instructors passed
- Currently: analysing results by sub-domain to inform curricula changes
- Next phase: study in all PT programs in the country (n=37)



Universidad del
Rosario



Questions



María Luisa Toro Hernández, mhtoro@ces.edu.co