SLPs and AUDs Go Global
A Research-Based Cross-Linguistic Curriculum
Disclosure

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Need for a Global Training Curriculum

• “shrinking world” – technology (i.e., Internet, Skype, online telepractice) and media connect people globally
• Increase in number of people who speak and understand more than one language
  – US 2010 census: almost 20% of people speak a language other than English in the home
• Increase in international adoptions (more than doubled in the last decade)
• International outreach and development activities
• International collaboration and networking of researchers (particularly in standardization of clinical procedures)
ASHA’s Strategic Plan

• Designing ASHA’s Future (Lemke & Dublinske, 2010)
  – Encourage academic programs to include elements related to the practice of SLP/A globally (p. 33)
  – Provide opportunities for faculty and students to visit developing countries and provide practicum to facilitate global practices in SLP/A (p. 33)
  – Promote collaboration with the international research community, focusing on clinical practice research needs (p. 35)
  – Strengthen our advocacy for the rights of people with disabilities around the world (p. 35)
It is essential for clinicians in a multicultural society to develop skills in interacting with clients from a variety of cultures who come to us with a multitude of cultural and linguistic factors.

Lynch and Hanson (2011)
Designing a Global Curriculum

• The need for a global curriculum to address ASHA’s strategic plan calls for a unique, sustained approach to training future SLPs/AUDs

• Requires a collaborative and integrated curriculum that exists beyond an exchange
  – Change mindset of future clinicians from “one-time” exchange experience to enduring professional global attitude
  – Create broader and deeper learning opportunities
Development of a Global Curriculum

• Multi-institutional partnership jointly funded by US Department of Education and Brazilian Ministry of Education

• ETSU and UNI (US); UFSM and USP (Brazil)

• Exchange and non-exchange students

• Consortium for Promoting Cross-Linguistic Understanding of Communication Disabilities in Children
Goals of Consortium

1. Promote cultural and research competence in SLP/A students

2. Internationally integrated coursework

3. Promote language and cultural skills

4. Student exchange
Theoretical Framework

International Classification of Functioning, Disability, and Health: Children and Youth version (ICF-CY; WHO, 2007)

Bronfenbrenner’s Bioecological Model of Child Development

Evidence-Based Practice
4 Key Activities of Global Curriculum

Research-Based Curriculum

Internet Course “Different Languages, One World”

Language and Cultural Training

Student Exchange
Research-Based Curriculum:
3 Primary Objectives

**Objective 1**
To investigate the association between communication disorders in children and limitations to life activities within the theoretical framework of the ICF-CY.
- Families
- Social
- Educational
- Cultural differences

**Objective 2**
To understand the social and cultural aspects of assessment and intervention for children with communication disorders across different etiologies (e.g., cleft lip/palate, SSD, HI)
- Models of intervention
- Barriers to access or implementation

**Objective 3**
To explore and identify resilience and risk factors in the different social and cultural contexts across different subgroups of communication disorders from a strength-based approach.
Research Teams

- **ICF-CY in CLP (Objective 1 and 2)**
  - Cleft Lip/Palate Team 1

- **Nasometry in US and Brazil (Objective 2)**
  - Cleft Lip/Palate Team 2

- **Prevalence of SSD in English-speaking countries and Brazil (Objective 1 and 3)**
  - Speech Sound Disorders Team

- **Prevalence of HI in English-speaking countries and Brazil (Objective 1 and 3)**
  - Hearing Impairment Team
### Review Studies
- Descriptive and Narrative syntheses of literature (cf., Dunst & Trivette, 2010) in English language journals and Brazilian journals related to Research Objectives

### Research Studies
- Survey studies, including SLP/parent practices or perceptions in US and Brazil
- Norming studies of nasality across different regions within US and Brazil
Research Teams and Technology

- **Skype**
  - Weekly team meetings across 4 universities and 2 continents
- **Google Docs**
  - Shared Word documents
- **Wikispaces**
  - Shared research articles
- **Adobe Connect**
  - Faculty planning meetings
Student Research Presentations

• 11º Congresso da Fundação de Otorrinolaringologia in Foz do Iguaçu (June 2012)
• ASHA Convention in Atlanta (Nov 2012)
• Student webinar (Feb 2013)
• Multicultural conference at ETSU (May 2013)
• 12th ICCLPRCA conference in Orlando (May 2013)
Internet Course

DIFFERENT LANGUAGES, ONE WORLD
<table>
<thead>
<tr>
<th>Course Objectives</th>
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<tbody>
<tr>
<td>1. To obtain a general understanding of the relatedness of the professions in Brazil and the US within a global context.</td>
</tr>
<tr>
<td>2. To apply theoretical frameworks that incorporate social and cultural factors in assessment and intervention with children who have a communication disorder.</td>
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<td>3. To adopt an evidence-based approach when using the audiology and speech-language pathology knowledge base, with particular attention to diversity issues and its relevance to globalization.</td>
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<tr>
<td>4. To expand knowledge of literature and researchers in the professions across the world.</td>
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Instructional Technology

- PowerPoint Lectures
  - Asynchronous learning
    - Wikispaces

- Monthly Webinars
  - Synchronous learning
    - Adobe connect
<table>
<thead>
<tr>
<th><strong>PowerPoint Lectures</strong></th>
<th><strong>Monthly Webinar</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research design and methodology</td>
<td>Cross-linguistic aspects of communication development (Sharynne McLeod, Australia)</td>
</tr>
<tr>
<td>ICF-CY as a framework for working with children with communication disorders</td>
<td>Cross-linguistic assessment of CLP speech (Anette Lohmander, Sweden)</td>
</tr>
<tr>
<td>Working with children and families from Bronfenbrenner’s bioecological model</td>
<td>Application of ICF-CY in CLP (Sandra Neumann, Germany)</td>
</tr>
<tr>
<td>EBP and PBE</td>
<td>Genetic syndromes in SLP/A (Luciano Maximino, Brazil)</td>
</tr>
<tr>
<td>Working with translators</td>
<td>Interface between lexicon and phonology (Carol Stoel-Gammon, USA)</td>
</tr>
<tr>
<td>Assessment (SSD, CLP, HI)</td>
<td>Student webinars on research</td>
</tr>
<tr>
<td>Social and cultural aspects of communication disorders in children</td>
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</table>
Course Components

• Weekly Lectures
  – Activities (flipped classroom)
  – Students reviewed PowerPoint slides outside of class meetings
  – Incorporated interactive learning activities within class meetings

• Academic credit (6 credits: Independent Study)
CULTURAL AND LANGUAGE TRAINING
Objectives

• Language (Portuguese)
  – Core vocabulary of terminology in SLP/A
  – Functional language skills for clinical and curricular purposes
  – Development of strategies for working with interpreters/ translators during assessment and intervention

• Cultural and Social
  – Competency in cross-cultural interactions
  – Development of Inter-cultural sensitivity
    • Progress through ethnocentric to ethnorelative orientations
      (Bennett’s Developmental Model of Intercultural Sensitivity)
Bennett’s Developmental Model of Intercultural Sensitivity

ETHNORELATIVE STAGES
- integration
- adaptation
- acceptance

ETHNOCENTRIC STAGES
- behavioral
- affective
- cognitive
- denial
- defense
- minimization

Adapted from Hammer, Bennett, & Wiseman (2003)
Language Training

• Tutor (twice weekly meetings for one semester)
• Rosetta Stone
  – Levels I-III
• Interaction with exchange students and research teams
Cultural Activities

• Exploring own culture
  – e.g., family history, family celebrations, family stories

• Exploring Brazilian culture
  – e.g., holidays, food, families, politics and religion
  – Culture of the profession

• Exploring health beliefs across cultures

• Social activities
  – Brazilian night: dinner and a movie
  – Musical heritage (bluegrass, country)
  – Appalachian Story-telling
STUDENT EXCHANGE
<table>
<thead>
<tr>
<th>Objectives of Student Exchange</th>
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<tbody>
<tr>
<td>• <strong>Academic</strong></td>
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<tr>
<td>– Attend classes, observe clinics, participate in research teams</td>
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<tr>
<td>• <strong>Cultural</strong></td>
</tr>
<tr>
<td>– Awareness of cultural attitudes and beliefs related to communication disorders</td>
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<tr>
<td>– Actively engage and participate in the culture of host university (sports, holidays, meals)</td>
</tr>
<tr>
<td>• <strong>Professional</strong></td>
</tr>
<tr>
<td>– Awareness of Brazilian professional organizations for audiology and speech-language pathology</td>
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<tr>
<td>– Code of ethics</td>
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<tr>
<td>– Understanding of the training and practice of the professions in Brazil</td>
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<tr>
<td>Year 1</td>
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<tr>
<td>-----------</td>
</tr>
<tr>
<td>From ETSU</td>
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<td>From UNI</td>
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<tr>
<th>Year 2</th>
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<tbody>
<tr>
<td>From ETSU</td>
<td>2</td>
<td>1</td>
<td>6 weeks</td>
<td>3</td>
</tr>
<tr>
<td>From UNI</td>
<td>1</td>
<td>2</td>
<td>6 weeks</td>
<td>3</td>
</tr>
</tbody>
</table>
## Exchange Students: Brazil to US

<table>
<thead>
<tr>
<th>Year 1</th>
<th>To ETSU</th>
<th>To UNI</th>
<th>Length of exchange</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>From UFSM</td>
<td>1</td>
<td>0</td>
<td>4 months</td>
<td>1</td>
</tr>
<tr>
<td>From USP</td>
<td>2</td>
<td>2</td>
<td>4 months</td>
<td>4</td>
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### Year 2

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<tr>
<th>Year 2</th>
<th></th>
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<th>Length of exchange</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>From UFSM</td>
<td>2</td>
<td>2</td>
<td>4 months</td>
<td>4</td>
</tr>
<tr>
<td>From USP</td>
<td>1</td>
<td>1</td>
<td>4 months</td>
<td>2</td>
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Assessment Instruments

• Intercultural Development Inventory (IDI)
  – 50 item self assessment that measures orientations toward cultural difference based on Bennett’s Developmental Model of Intercultural Sensitivity
  – quantifies the subjective experience of cultural difference
  – currently most widely used measure

• Questionnaire
  • M/C questions related to social, cultural, language training and exchange experience

• Journal and Reflection paper
  • encompassed students’ growth and development and included a discussion of their experiences in terms of concepts and themes that they synthesized from their journaling

• Language test
Outcomes: IDI

- Fellows in both programs showed growth post-course
  - Program 1 Fellows exhibited more growth than Program 2 Fellows (post-exchange scores fell within high minimization on the intercultural continuum compared to polarization, or defense)

- Combined, little change in the Developmental Orientation across all Fellows between baseline and post-exchange
  - Non-exchange students in both programs demonstrated regression post-course
Intercultural Competence

- Not all students’ scores support the developmental model
- Gamma change theory (Ingraham & Peterson, 2004) indicates that students’ initial measurement is revised following post-study and post-exchange to more accurately reflect cultural sensitivity rather than expectations held prior to study and exchange experiences
Outcomes: M/C Questionnaire

Themes identified related to:

• Increased self awareness of own culture
• Increased awareness of similarities between cultures (similar purpose and goals in life)
• Acknowledgement of IDI as a tool to learn own cultural awareness
• Increased professional awareness of similarities in knowledge base and practices
Outcomes: Journal/Reflection Paper

Personal:
• “expanded my views on how different and similar our cultures are”
• “I learned more about myself than I ever have before”
• “Accepting that I belong to my own culture and am shaped by this in a very different way than by witnessing differences through exchange”

Professional:
• “helped me understand that there are both similarities and differences between a clinic in the US and that in Brazil”
• “while similarities between clinics (and cultures) are important to be recognized, their differences should not be glossed-over; because these differences shed light on the values of the culture”
Overall

- Change was not linear, which reflects complexity of cultural awareness and sensitivity
- Increased awareness of own culture
- Increased awareness of cultural and professional similarities
LESSONS LEARNED
Challenges and Lessons Learned

- Scope
- Technology Challenges
- Management Challenges
- Research Challenges
- Curriculum Challenges
Scope

- Review Study + Research Study
  - Completion in 2 semesters was over-ambitious

- Time
  - Commitment to entire project was considerable for both faculty and students
  - Unanticipated time costs to resolve arising issues
Technology and Support Challenges

- We had to learn new and varied types of technology
- Technology support across university partners was not equivalent
Management Challenges

- Scheduling project and team meetings (time zone and academic calendar differences between northern and southern hemispheres)
- F2F meetings critical, but required time and structure to be effective
- Communication among university grant accounting and administrative offices
- Collaborations across many institutions increases complexity exponentially
- Central challenges involved time, flexibility, and follow-through
Research Challenges

- Coordination and timing of ethics approval for human subject research
- Sharing files electronically
- Journal articles/reviews in different languages
- Different levels of student research training and experience
- CITI training for all students
Curriculum Challenges

- Modifications of approved programs of study
- Evaluation of student participation and contributions
- Language training
NEW OPPORTUNITIES
New Opportunities in Research

- Additional funding opportunities
  - Fogarty International NIH Research Grants (e.g., R03, D48, D71)
- Faculty exchange
- Research collaborations
- Joint presentations and publications
- Other international collaboration opportunities
New Opportunities for Students

- Student mentoring from other countries
- Continuation of exchanges (non-funded)
- Curriculum changes
- International PhD collaborations
New Opportunities for Development of Clinical Materials

- Development of cross-cultural and translated clinical tool and materials (e.g., ICS, PVM, SPAA-C)
- Translation of therapy materials to Portuguese
- Sharing clinical materials and resources
Conclusions

- Novel approach to global training of SLP/A
  - More intensive and integrated curriculum
- Cultural and research competence beyond exchange
  - Researchers around world
- EBP
  - Translating clinical materials (for example: ICS-Portuguese)
  - Position paper on multilingual SSD
- Building international research collaborations
  - Expanded beyond FIPSE grant project
  - Global networking
Big Picture
Information on Our Project
