Developing CSD Education Collaborations in China
CAPCSD Meeting April 19, 2012
Dianne Meyer, PhD, Patricia McCarthy, PhD, Richard Peach, PhD, Emily Wang, PhD

What do you know about China?
Trivia questions

What does China look like?

What are the four great Chinese inventions?
- Papermaking (Han Dynasty, 206 B.C. -220 A.D.)
- Compass (Qin Dynasty, 200 – 206 B.C.)
- Gunpowder (Tang Dynasty, 618 – 906 A.D.)
- Printing (Tang Dynasty, 618 – 906 A.D.)

What is the population in China?
Chinese population: 1.33 billion people.
American population: 311 million people

How many provincial level of divisions in China?
- 23 provinces
- 4 municipalities (Beijing, Chongqing, Shanghai, Tianjin)
- 5 autonomous region
  - Xinjiang Uyghur
  - Inner Mongolia
  - Tibet
  - Ningxia Hui
  - Guangxi Zhuang
- 2 special administrative regions
  - Hong Kong
  - Macau
What is the official language in China?

Mandarin Chinese
Hello! 你好!
Next, Dr. McCarthy will speak.
下面，麦卡锡博士发言.

Rush University Faculty Visit to China:
The Back Story, the Visit and Future Collaborations

The Back Story
Professional Collaboration
• Hanjun Liu, PhD, post-doctoral fellow in the Northwestern University (2005-2008)
  • Worked in lab of Dr. Chuck Larson
  • Collaborated with Emily Wang project examining effects of auditory feedback on the speech of patients with Parkinson's Disease.

Dr. Wang & Dr. Liu Collaborating

The Back Story
• Dr. Liu returned to China
  — Professor & Director of Research, Dept of Rehabilitation Medicine at Sun Yat-sen University (SYSU)
• Dr. Emily Wang invited to present her research at SYSU
  — Appointed as Visiting Professor
• Began discussion re: possible academic collaborations
  — Possible enrollment of Chinese students in the RU master’s degree program
  — RU faculty assist in developing master’s degree program at SYSU

Visit to RU (2010)
• Dongfeng Huang, MD, RM, visited RU for 2-day visit while in USA
  — Professor and Head of the Department of Rehabilitation Medicine at SYSU
• Met with RU faculty in speech-language pathology, audiology, rehabilitative medicine, geriatrics, neurology, and orthopedics
  — Noted similarity to SYSU
  — Teacher-Practitioner Model in academic medical center
  — Continued discussion of academic collaboration with possible visit to China in 2011
The Back Story

The Invitation

- RU faculty members invited to SYSU (May 2011)
  - Present a symposium
  - Meet with SDSU faculty
  - Discuss consider possible collaborations
- Four CDS faculty members and RU Neurologist invited to present on research and clinical issues:
  - Early hearing detection and intervention (Meyer)
  - Adult Rehabilitative audiology (McCarthy)
  - Aphasia (Peach)
  - Motor speech disorders (Wang)
  - Treatment of Parkinson’s Diseases (Verhagen-Metman)
- Presentations sent for translation into Mandarin

The Symposium

Mandarin and Chinese PowerPoints
The Visit: SYSU Tour

The University & Hospital

- Sun Yat-sen University
  - Named after its founder, Dr. Sun Yat-sen in 1924
  - Chinese physician, revolutionary and political leader
- SDSU: 23 schools and colleges
  - Medicine, law, dentistry, and business
  - Provides bachelors, masters, and PhD degrees
  - Ranked seventh among all Chinese universities

The First Affiliated Hospital of SYSU founded 100 years ago
- Approximately 4500 staff with over 60 clinical departments
- 1,850 open bed
- 2,760,000 outpatient and emergency visits/year
- 21,000 surgeries/year

Important base for research, medical service, medical education, preventive care and rehabilitation in south China

SYSU School of Medicine

The University & Hospital

- Department of Rehabilitation Medicine at SYSU: WHO Collaborating Centre for Rehabilitation
- Dahong Zhuo, MD, Director of Centre, WHO Expert Advisory Panel on Rehabilitation
  - Responsible for projects on community-based rehabilitation
  - Developed training programs for the provision of services in physical therapy (PT), occupational therapy (OT), and speech therapy
  - Expanded applied research in rehabilitation medicine
Dahong Zhuo, MD

Pediatric OT Services

SLP Providers

Current SLP providers:
- 40% are MDs
  Rehabilitation, ENT, Neurology
- 30% are nurses
- 20% are OTs
- 10% specialized in SLP

SLP Caseload at SYSU

Master’s trained OT/SLP
- 38% aphasia, post-stroke
- 40% dysarthria and swallow, post-stroke
- 10% child language delay
- 8% child functional dysarthria
- 4% stuttering and other

SYSU Faculty

The Visit: Culture

Guangzhou
- Capital and largest city of the Guangdong province
- Third largest city in China and southern China’s largest city
- Population of 12.78 million
- Part of Pearl River Delta
- Located just south of the Tropic of Cancer
- Humid subtropical climate
- Known for gourmet Cantonese food
Dinner Cruise on Pearl River

Guangzhou at Night

Guangzhou at Night

Downtown Guangzhou at Night

Guangzhou at Night

Gourmet Cantonese Food

4/21/2012
Speech Language Pathology Programs in China

Division of Speech & Hearing Sciences
The program was established in 1988. It has 10 doctoral level faculty, 7 post-doc and 4 clinical instructors.

Speech Language Pathology Programs in China

The Centre for Communication Disorders was established in the Faculty of Education, University of Hong Kong, in 2005. This is their out-reach community center.

Speech Language Pathology Programs in China

• Undergraduate
  o Bachelor of Science in Speech and Hearing Sciences (4-year), accepting 40 students each year
• Graduate level degree
  o Master of Science in Audiology (2-year), accepting 4 students each year
  o Doctoral of Philosophy (Ph.D.) Research degree
  o Master of Philosophy (MPhil) (part-time & full-time) in both Audiology and Speech-language pathology, 20 students combined currently

Speech Language Pathology Programs in China

• Basic and clinical multidisciplinary research
• Needs of people in Asia with speech, language and/or hearing disorders
• Linguistic, social, health or economic barriers in Asia that may prevent effective treatment of speech, language and hearing disorders
• Areas of research: Aphasia, Child language disorders, Hearing disorders, Motor speech disorders, Speech science and Voice disorders
Speech Language Pathology Programs in China

The ECNU SLP program was established in 2004
- The program became a department in 2009
- It has three degree programs:
  - Undergraduate (4 years), accepting 20 students each year
  - Master's degree (3 years)
  - Ph.D. degree (3 years post Master's degree)
- It has over 50 students who graduated with Master's or Ph.D. degrees since 2005
- The graduates mainly work in schools of special education.
- Graduates do not work in hospital settings and there is currently no professional license.

The China Rehabilitation Research Center was established in 1988. Deng Pufang, Chairman of China Disabled Persons' Federation, son of Den Xiaoping, who received surgical treatment with Dr. Armstrong, and experienced and benefited first-hand from rehab training, in Ottawa, Canada in 1980, decided to push for the center's establishment upon his return.

Dr. Sheng-li Li Director of Hearing and Speech Rehab Department, Professor of Rehabilitation Medicine of Capital University of Medical Sciences, Beijing, has had trained over one thousand health professionals to work in the capacity of speech therapists in their short-term non-degree workshops (21 so far) in the hospital.
Possible Models for Collaboration and Development of Speech-Language Pathology in China

1. Estimation: Over a quarter million SLPs are needed.
2. Need vs. Demand
   - Culture, views on disability
   - Desirability of jobs and associated salaries
3. SLP as a new specialty. Before 1980s:
   - Language-impaired children did not go to school or they attended schools for “mentally retarded.”
   - Aphasia, dysarthria, dysphagia were not concerns.
Some Basic Considerations

4. Modifying the American model of SLP education
   - Local culture, language considerations, society values, access to interventions, views on disability
   - Advanced degrees, accreditation...how do they fit in? Recall the history of the SLP profession in the US.

Preparation of SLPs

- The programs that Emily described
- At SYSU
  - A general rehabilitation degree (bachelor's)
  - Limited amount of coursework on SLP
  - Followed by on-the-job training
  - Master's degree in rehab therapy (briefly in early 1990s)

Caseload at SYSU

Master’s trained OT/SLP
- 38% aphasia, post-stroke
- 40% dysarthria and swallow, post-stroke
- 10% child language delay
- 8% child functional dysarthria
- 4% stuttering and other

Addressing SLP Education in China: Our Ideas and Discussions

Overarching Concept: Assist China (or regions) with methods to educate and train knowledgeable, skilled SLPs until the Chinese programs become independent.
- Build on existing systems, including the many current providers
- Methods/approaches must be sustainable
  - The US programs “in for the long haul”?
  - Need is immediate – rapid start-up

Addressing SLP Education in China: Our Ideas and Discussions

1. Master’s (PhD?) students come to the US and enroll in programs here.
   - Requires fluency in oral and written English; complete prerequisites
   - They return to China after training – go on to teach and train others.

Chinese Students Enroll in US Program

DRAWBACKS:
- Trains only a few at a time.
- Relies on strong English skills for didactics and clinic
- Clinical experiences the students receive in the US may not be fully applicable to the Chinese culture and health care delivery system to which they return.
Addressing SLP Education in China

2. Strengthen the SLP portion of the curriculum that comprises the BSc in Rehabilitation Therapy already in use at SYSU.
   - Currently one survey course on SLP disorders – add additional coursework.
     - 11 hours lecture
     - 7 hours case-study
     - 18 hours self-study

Strengthen the BSc Degree

ADVANTAGES:
- Students are already in the pipeline.
- Immediate improvement in the training of new clinicians.
- Facilitates a timeline for starting a master’s degree
  - For example, with clinicians better trained in SLP at the bachelor’s level, a master’s program may be initiated a couple years later.

DRAWBACKS
- US program commits to sending faculty to teach the new BSc courses and to developing the Master’s degree.
- “Teach the Teacher” concept may not be operational until after the Master’s degree is fully operational.
- Can the US program sustain for 5-10 years?
  - Faculty resources and training

Regional Education Programs

ADVANTAGES:
- May be efficient way to reach dozens of practicing clinicians at one time. Improves the knowledge/skills of many at once.
- Could combine didactic with hands-on
- Within a short time (5 years?) there could be a large group of better trained SLP providers.

DRAWBACKS:
- May not help the “teach the teacher” concept
- US Faculty spends time developing and delivering these regional programs.
  - How are the needed resources covered?
  - US faculty must be well-versed in cultural, social values that may impact the subject matter; understand the SLP service delivery model in China.
- May not increase the number of providers.
Addressing SLP Education in China

4. Develop "fellowship" programs at US sites. Chinese practitioners see and experience practice in US.

5. Technology and Distant Education

6. Recent consideration by SYSU to develop 4-5 year post-bachelors degree, Doctor of SLP.

Your Thoughts?

- How can China best be helped in efforts to quickly increase the number of SLP providers and to develop training programs?
- Combination of approaches?

Recommended Guidelines for Education of Rehabilitation Therapists in China re: SLP

1. Structure of the Course: 4-year course in tertiary setting leading to B.Sc.

2. Skills Required to Teach and To Be Acquired:
   a. Assessment of functional capability including communication
   b. Training with simple speech therapy procedures

3. Core Academic Courses/Subjects Studied: “Speech therapy”

4. Clinical Studies and Practice Period: Education of speech therapists in China will start in many universities in 8-10 years

Research Needs and Priorities for Community-Based Rehabilitation (CBR)

Hypothesis 2: Diversity in formats of CBR is unavoidable and beneficial

*In research, assessment tools with simplified and unified methods and standards should be developed*

*The effectiveness and value of CBR has to be assessed from new dimensions, not only looking at biomedical aspects, but also focusing on its social implications*
**Challenge: Develop Appropriate Assessment Tools**

- Translation of test batteries into languages other than the one in which they were constructed is inadequate
  - Stimulus items may be culturally inappropriate
  - Might test items (e.g., grammatical constructions) that present very different levels of difficulty than the original
  - Tasks (e.g., minimal pairs, rhymes) may not work in other languages
  - Vocabulary controlled for psycholinguistic variables (e.g., frequency of use) may be more or less common
  - Structural complexity and relevance of structures may vary
- Corresponding items in another language should be selected to tap the same information as the original

**Cognitive Tests Available in Chinese**

- Behavioral Assessment of the Dysexecutive Syndrome (BADS)
- Bilingual Aphasia Test
- Bilingual Verbal Ability Tests
- Boston Diagnostic Aphasia Examination
- Rivermead Behavioral Memory Test
- Test of Everyday Behavioral Attention
- Western Aphasia Battery

**Measures of Chinese Discourse Production**

- Cantonese Linguistic Communication Measure
- Main Concept Analysis
- Narrative Assessment for Cantonese-Speaking Children

Kong & Law, 2004; Kong, 2009, 2011; Kit-Sum To, 2010

**Research Needs and Priorities for Community-Based Rehabilitation (CBR)**

Hypothesis 4: In CBR, technical things are as important as, if not more important than, the social and organizational things...

A number of research areas could be listed as follows:

To identify basic rehabilitation skills necessary for local supervisors
To develop more types of simplified technology
To refine traditional rehabilitation methods in order to improve functional recovery

**Challenge: Identify adequate evidence base**

- Virtually all of the articles appearing in ASHA publications over the past five years are limited to description or assessment of communication disorders in China
- Rehabilitation approaches currently used in China (e.g., Constraint Induced Aphasia Therapy) appear to be drawn from English language international journals (cultural issues?)
- Unknown to what extent treatment approaches for Chinese speakers are available and/or published in Chinese journals

**New York, NY (October 5, 2010)**

Ovid Signs Agreement with China’s Institute of Science & Technology to Provide Access to the World’s Most Prestigious Medical, Nursing, and Patient Care Journals

LWW Journal Definitive Archive Collection Represents the First US-Published Medical Content to be Delivered through China’s National Science and Technology Library (NSTL) for Higher Education and Scientific Research Institutions
LWW Journals Related To CSD

• Ear and Hearing
• Hearing Journal
• Journal of Head Trauma Rehabilitation
• Neurology
• Stroke
• Topics in Language Disorders

IOS Press and NSTL sign 3 year contract for China wide access

IOS Press and NSTL (National Science and Technology Library) have signed a 3 year contract for the access to all of IOS electronic publications. NSTL and IOS Press would like to thank Swets for their active involvement in bringing both parties together and supporting the process throughout.

PRESS RELEASE
April 8, 2009
Lisse, The Netherlands

IOS Journals Related to CSD

• Journal of Alzheimer’s Disease
• Journal of Parkinson’s Disease
• Journal of Pediatric Neurology
• Journal of Pediatric Rehabilitation Medicine
• NeuroRehabilitation

July 05, 2011 News
ASHA Journals Now Available in the People’s Republic of China

The American Speech-Language-Hearing Association is participating in an important trial initiative to gauge interest by Chinese researchers and faculty in the research published in ASHA’s four journals. The International Scholarly Publisher’s Group (ISPG), a consortium of 19 Science, Technical, and Medical publishers that includes ASHA, has reached an agreement with the National Science and Technology Library (NSTL), the primary purchaser of academic journals in the People’s Republic of China, to permit access to 49 journals for a limited trial period.

Challenge: Overcoming language differences

• Chinese students may speak different dialects and have limited English proficiency
• All lecture materials may need to be provided well in advance for translation; despite this, much information may still present difficulties for translation
• How do cultural differences influence teaching methods or styles?
• Can these issues be addressed through distance education?

Challenge: Determining benefits of collaboration

• The economic climate in China has spurred multinational investment in numerous industries
• What are the benefits to faculties/programs/universities for educational collaboration?
  – Financial
  – Professional
  – Educational
  – Cultural
• How do these activities align with the missions of individual institutions?
Challenge: Identify/address any ethical concerns

- Are newly-developed Chinese training programs in speech-language pathology (and audiology) sustainable?
- As educational collaborations are concluded, what will be the main issues for succession?
- What steps need to be taken to develop the workforce continuously?

http://www.onlineuniversity.net/america-meet-china