

## ***Culturally Competent Materials on Communication and Dementia: Year Two***

**Boyd Davis**

**University of North Carolina-Charlotte**

All goals for Year Two were exceeded. Focus groups with Association-sponsored workshops for families and staff continued to guide materials revision. Nursing assistant students in both ESL-only and regular classes surpassed the previous year's gains, with 98% retention and 95% pass rates on State certification first-attempts: the materials, earlier approved as culturally and linguistically appropriate, can now stand alone as content. Nursing and adult educators in the region have increased requests for materials in multiple formats, from print text to power points, and from Internet-based delivery to interactive multilingual, multimedia courseware.



### **Overview: Review of Year 2 goals:**

- ✚ **All goals met and exceeded for materials development, format, and evaluation by**
  - ✓ **Association-sponsored family group workshops**
  - ✓ **Association-sponsored staff workshops**
  - ✓ **Association trainers**
  - ✓ **Community-college classes for second-language/ low-literacy Nurse Assistants**
  - ✓ **Students in US & Taiwan**
- ✚ **CD now in three languages, Class materials now in two Moodle course management packages: one for Nurse Assistants, one for Nursing**

### **Review of Year 2 Goals from Grant Workplan: DONE**

*Phase 2/Yr 2: Sequence modules into Tool Kit for delivery by CD/DVD, tapes, and Internet*

- AA-WC sites recruit direct care workforce & use modules in CE seminars
- WSSU/UNCC students review Modules 3–5; modules institutionalized in curriculum
- At CPCC: recruit, screen and enroll Trial Cohort, to use and evaluate Modules 1-5
- Train-the-trainer seminar on selecting and using modules offered for group leaders throughout AA-WC region, and for nursing homes, day care, and assisted living sites
- Follow-up evaluations with each group at 3-month intervals
- Expand website; develop prototype for CD/DVD

### **Objectives for Year 3: Listed in Grant Workplan**

- Phase 3/Yr 3: *All modules evaluated at AA-WC sites, for caregiver and family training*
- Website, CD/DVD and all modules re-evaluated at WSSU and UNCC
- Website and CD/DVD evaluated by AA-WC, other trainers, at selected sites
- At CPCC: Trial Cohort 3 uses Modules 1-5 and evaluates; course institutionalized
- Train-the-trainer seminar on selecting and using modules, offered for group leaders throughout AA-WC region, and for nursing homes, day care, and assisted living sites
- Follow-up evaluations with each group at 3-month intervals

In Year Two, as projected at the end of Year One, we committed to expanding scope and sequence of materials, deliverables, and dissemination. **Our timetable for Year 2, 2006-07, showing all goals met, is Appendix A.**

The materials are research-driven, developed from a decade of collecting and analyzing natural conversation with AD speakers, a decade which also saw a rapidly developing gerontology outreach and service learning program, and a focus on creating linguistically and culturally appropriate materials for second-language learners in the US and abroad.

Our Nursing Assistant program partner developed a regional training workshop for Nurse Aide Educators, to introduce the Internet-based materials and to preview the multimedia (**Appendix B: Workshop Flyer**). She has spearheaded the project's expansion and revision of Internet-based materials, delivered in a portable course management package for Nursing Assistant classes. The expanded materials include writing prompts and '*Put yourself in this picture*' scenarios keyed to Activities of Daily Living, to stimulate critical thinking.

We have just initiated a second course management package, a revised and augmented version of the materials adapted for first-year Nursing students, and look forward to learning from this new cohort. The PI has redesigned the materials for three audiences: first-language English speakers, English-as-second-language newcomers, and what language specialists call L1.5: people who speak another language at home but who have largely been schooled or raised in the US. We note that these categories affect attraction, retention and successful understanding by the increasing number of second-language families as well as students. Retention and pass rates by students have risen to 98% retention and 95% pass rates for State Certification: their record of success is outstanding. **Appendix C tells the story of one cohort.**

To facilitate the implementation of materials in various formats – print text for handouts, power points, audio/video clips on CD/DVD – we conducted train-the-trainer workshops with Western Carolina Chapter staff responsible for training, and developed a Manual for them that included scripts, how-to's, and similar information. We will revise the Manual during Year 3 to reflect new materials and preferences for delivery formats.

We have expanded and revised the multimedia courseware by including additional video and graphics, a special focus of the Co-Pi. The PI has redesigned the materials for delivery in multiple languages and translations, and with our Taiwan partners in IT, we have completed the implementation of Mandarin and Spanish for our stand-alone/web-deliverable courseware. Users can see it, hear it, and read it in English, Spanish or Mandarin. A new partner is translating the courseware modules into German, and we have identified a probable partner for Japanese translation. As a result of additional evaluations from students and especially from focus groups with Association-sponsored staff and family group workshops, materials include

- Module #1: Thirteen separate scenarios introducing different aspects of communicating with AD speakers from different cultures, embedded in an interactive Question-Answer format that models successful choices for viewers
- Module #2: Three Video clips of consented residents and staff illustrating successful interactions, accompanied by transcripts, points to look for, review of key concepts
- Module #3: Overview of Faith-based concerns about food and privacy, with Internet links to additional information.
- Introductions to each module, and to the whole package, each covering different aspects of language, dementia and aging, which are presented as miniature scenarios or cases that can be used for talking points.

As nursing and non-nursing students in NC review these materials, our partners in Taiwan are testing them with Nursing and non-nursing students at a Medical University and a technical university, respectively.

Our dissemination has led to identifying additional target groups who want these materials, so that in Year Three, we will be able to inventory new and expanded needs for training in communication and dementia.

Accordingly, our primary goals for Year Three are:

- to achieve the original objectives, as tabulated above, for implementation and evaluation of materials by participants in Association-sponsored workshops, in classes for Nurse Aides, and in university classes in nursing, linguistics and gerontology
- to assess the multiple delivery formats: print text, CD, DVD, power point, Internet, and interactive (CD/browser) stand-alone courseware with audio and video
- to build upon Year Two's success and increase our suitability for wider dissemination, including creating an inventory of new needs and audiences identified during this project.

We provide a breakout of Year Three's goals below.

### **Representative Dissemination**

Our presentations, posters and publications have emphasized the focus of the grant, developing materials for training in communication and dementia, across a range of audiences: healthcare communication and nursing education, dementia care, language in dementia, gerontology, medical anthropology and linguistics. The dissemination, particularly the training workshop for regional Nurse Aide educators, continues to evoke strong support, requests for extended training, requests for materials, and identification of additional training needs.

#### *PRESENTATIONS AND POSTERS*

- Mary Smith, 2006. Communication at every level: collaboration for training. International Conference for Communication in Health Care
- Boyd Davis & Margaret Maclagan. 2006. Contextualization, formulaicity, and situation-bound routines in Alzheimer's discourse. Poster, New Ways to Analyze Variation 35, Ohio State
- Dena Shenk & Boyd Davis. 2006. Using narrative to teach about aging and dementia. Gerontological Society of America, Dallas
- Dena Shenk, Boyd Davis & Shayna Quilty. 2006. Social Interaction in Dementia: Training and Working with Care Providers, Southern Gerontological Society.
- Boyd Davis. 2007. Crucial collaborations: healthcare training materials and English for Specific Purposes. Plenary, International Conference on ESP, Kaohsiung U. of Applied Sciences.
- Dena Shenk & Boyd Davis. 2007. Forgetting and (Re)membering: Conversations with people with dementia. American Anthropological Association.
- Boyd Davis, Louise Murray & Beth Croom. 2007. Reaching out across cultures: the Western Regional Chapter of NC. Poster, Alzheimer's Association Dementia Care Conference
- Louise Murray, Teresa Hoover, Boyd Davis, & Dena Shenk. 2007. Culturally competent materials on communication in dementia: what do we need? NC Conference on Aging.
- Boyd Davis & Dena Shenk. 2007. Family caregivers and dementia conversation. Gerontological Society of America
- Boyd Davis, Mary Smith, Joel Stocker & Dena Shenk. 2007. Blending low-literacy and ESL materials with technology-driven delivery for teaching health communication in dementia. Poster, International Conference for Communication in Health Care.

#### *TRAINING INSTITUTE*

Mary Smith. 2007. Coordinator, HCS Conference for Regional Nurse Aide Educators. Charlotte, NC: Central Piedmont Community College, March 16, 2007

**PUBLICATIONS**

- 2006 Boyd Davis & Lisa Russell-Pinson. Going+to: An Example of Using a Regional Corpus to Answer Questions in Preparing Healthcare Materials. *TELL 2* (2006). 1-15.
- 2007 Margaret Maclagan, Boyd Davis & Ron Lunsford. In press 2007. Fixed expressions, extenders and metonymy in the speech of people with Alzheimer’s Disease. *Phraseology: an interdisciplinary perspective*, eds. S. Granger & F. Meunier. Amsterdam & NY: John Benjamins, 22 pp.

**Envisioned Timetable for Year 3, 2007-2008**

**New component: Assess for Success**

We originally committed to evaluate content mastery, skills initiation, and attitude change as a result of using culturally competent materials that we designed and implemented, and our final report will focus on this. In addition, we will begin to address a question we have identified as crucial in the evaluation of materials: What reading, listening, writing, speaking, numeracy and technology skills are needed by entry-level direct care workers in order to be admitted to the course with a likelihood of success? [Success is defined as retention in class and content mastery at 80% or above on second try for state certification; our success across Years 1 and 2 is considerably higher]. We will focus on reading and on the entry-level tests we are administering this fall: the paper-pencil instruments of CASAS (Comprehensive Adult Student Assessment Systems) and TABE (Test of Adult Basic English), both of which are used in North America to stage newcomer literacy and the Self-assessment portion of DiaLang, sponsored by the European Union for testing foreign language proficiency, plus the online reading test by Taiwan’s NETPAW. In addition, we will do a post-test of ESL-only reading skills with TABE and NETPAW. We have chosen a mixed methods procedure on the assumption that collecting diverse types of data will support interpretive assessment of the culturally sensitive content and format for materials, some notion of preferred delivery system, and their impact in formal and informal caregiver training

**Tabular Snapshot**

Alzheimer's Association Family/ Staff	Nursing Assistant Classes at Central Piedmont Community College			Taiwan: Nursing, KMU, Others, KUAS
2006: Family	Section 1	1/17/2006	3/8/2006	Fall 2006 Evaluate materials: turn courseware to paper-pencil Spr 2007 Sims: Courseware as Booklet/text Student Writing Student simulations of scenarios
Family	Section 2	2/14/2006	5/10/2006	
Family	<b>Section 4</b>	<b>2/15/2006</b>	<b>5/25/2006</b> <b>ESL only</b>	
InService	Section 3	4/18/2006	6/7/2006	
InService	Section 5	8/21/2006	10/11/2006	
	Section 6	9/5/2006	11/22/2006	
2007 Spring	2007 NUX 7501			Fall 2007 Sims: Support pre-class; Moodle as Booklet/text Student writing, Sims: scenarios
1 Family	Section 1	1/22/2007	3/14/2007	
1 Staff	Section 2	1/29/2007	5/15/2007	
	<b>Section 3</b>	<b>2/7/2007</b>	<b>4/28/2007</b> <b>ESL only</b>	
2007 FALL	Section 4	3/26/2007	5/17/2007	
1 Trainers	Section 5	7/16/2007	9/7/2007	
1 InService	Section 6	9/4/2007	11/30/2007	
	Section 8	9/24/2007	11/16/2007	
	<b>Section 7</b>	<b>10/2/2007</b>	<b>12/13/2007</b> <b>ESL only</b>	

In January, we will move to focus on last revisions and on developing a comprehensive report of quantitative and qualitative findings, lessons learned, and recommendations for best practices.

### Goals for Year 3, 2007-2008

✓ Aug 07	Entry-level assessment, L2-only: CASAS	
✓ Sept07	Entry-level assessment, L2-only: TABE Test of Adult Basic English/reading, numeracy	
✓	Entry-level assessment, regular: TABE Test of Adult Basic English/reading, numeracy	
✓	Entry-level assessment, L2-only: DiaLang self-assessment of reading	
✓	Entry-level assessment, L2-only: NETPAW online assessment of reading	
	Pre-test, content mastery: L2-only, Regular CNAs	
✓	Pre-test, content mastery: First-year nursing students	
Oct 07	Multimedia courseware assessment:	
	North Carolina	Taiwan
	10+ L1 first-year nursing students at technical college, CPCC	10+ L2 first-year nursing students at KMU
	10+ Target Audience: L2 students taking entry course at CPCC for nurse aide certificate; 10+ First-language and L1.5 taking entry course at CPCC for nurse aide certificate	10+ L2 practicing nurses at KMU Hospital (their English should match the CPCC students: we envision half will match L1 and half will match L1.5)
	14+ L1-English majors starting grad program in English at UNCC, undergraduate at WSSU	14+ L2-advanced English majors taking Technology & English at KUAS
Oct-Nov 07	Alzheimer's Association staff-member focus group(s) to elicit revisions desired in <ul style="list-style-type: none"> <li>• Format: platform, media, portability, presentation and projection preparations (inventory equipment)</li> <li>• Delivery: stand-alone, integrated, selected</li> <li>• Techniques: how to interface with materials already in use</li> <li>• Train-the-trainer manual, script, directions, suggestions</li> </ul>	
	Post-test, content mastery, all C NA classes (L1, L2) and Nursing students	
Nov 07	Exit-tests, NETPAW and TABE, for L2 class	
	Review and insert German translations; test on sample	
Dec 07-Mar 08	Quantitative analysis, all measures for L1 & L2 C NA students (cross-cultural anxiety pre/post, content mastery pre/post, skills attainment, site observations) Qualitative analysis, L1 & L2 C NA students (weekly journals, daily logs, focus groups) Qualitative analysis, family workshops, C NA staff inservices, and Association trainers (focus groups) Revise and Update Manual; Revisions of materials as appropriate Outline institutionalization strategy for materials	
Apr-Je 08	Re-test Manual, any revisions; pre/post tests for Nursing Students; add to analyses	
Jy-Ag 03	<b>Final report for submission</b> and celebratory meeting	

## Appendix A

### Review of Goals for Year Two (announced in Y1Report) – We met them all & went beyond

✓ Fall 06 for Jan 07 > <b>Informal Talks</b>	Cross-cultural trainings on high/low context interactional styles for instructors; training in second-language writing, handling plagiarism for instructors.
Fall 06 for Jan 07 > <b>Book</b>	Training module for all: what is Nursing Culture? Medical Culture in the US?
✓ & revise Fall 06	Cultural vignettes keyed to religion: for food, gender-care preferences, clothing, privacy
✓ & revise Fall 06	Increased number of audio/video vignettes and increase A/V in the ones we have
✓ & revise Fall 06	Increased interactivity in all areas of materials
✓ & revise Fall and Win 06 <b>Spanish, Chinese</b>	Expanded translatability to other languages; vocabulary definitions in English with cursor pass-over. Chinese: two scripts (Mainland China and Taiwan), audio in Mandarin. Spanish translations. Spanish audio pronunciation is Latin American, reviewed by speakers of Mexican and continental varieties of Spanish.
✓ Fall-Win 06	Solicit Japanese and German collaboration and partnerships for translations
✓ Fall-Win 06, Spr 07	Trialing new Pre-course for L2 students as recruitment tool, focus on health career exploration. Work with and by ESL instructors to refine ESL support class
✓ & revise Fall 06	Expand overview of dementia, with illustrations: incorporate in new video vignettes
✓ <b>sample, Manual</b>	Minor revisions of pencil-paper activities: Put into Moodle for September 06
✓ & revise Fall 06	Revised Moodle section: most PowerPoints vanish; materials link to another server
✓ & revise Fall and Win 06	New media assessment process, keyed to usability of new formats incorporating new collaboration and participants from Kaohsiung Univ. of Applied Sciences, Shu Te University, Kaohsiung Medical University
✓ Fall 06 for Jan 07 <b>and manual</b>	New presentation/formats and assessment instruments for the Association's Train-the-Trainer presentation
✓ Win 06, Spr 07	Evaluations, Student Groups at CPCC, Fall 06/Spr 07; Target Group Spr 07
✓ Win 06, Spr 07	Evaluations from Chinese Nursing Students, KMU; Alzheimer's Association staffs
✓ Fall 06 - Spr 07	Implement Dissemination Goal: each team member is a presenter; each is a writer, in collaboration with each other, for local, regional, national, international dissemination.
✓ Spr 07 & <b>manual</b>	Upgrade media for Alzheimer Association Community and Professional Workshops
✓ Spr 07, Sum 07	Outline fuller implementation and seek collaboration with Latin American partners
✓ Spr 07, Sum 07	Validate pre-/post-inventory of content knowledge about communication and dementia
✓ Fall 06 – Spr 07	Implement Trial workshop for CEU for RN Instructors illustrating materials and training how to implement them in teaching about communication and dementia
✓ Fall 06 – Spr 07	Analysis of online journals to locate Buy-In to course and/or Apprehension Diminution

## Appendix B: Workshop for Regional Nurse Aide Instructors



**CENTRAL PIEDMONT  
COMMUNITY COLLEGE**

**Health and Community Services  
Continuing Education**

### Culturally Competent Communication

---

#### Workshop for Nurse Aide Instructors

An exciting and interactive workshop

Presenting communication materials developed by the Departments of Applied Linguistics and Gerontology, University of North Carolina at Charlotte and the Nurse Aide Program at CPCC. These materials were developed with grant support from the National Alzheimer's Association.

Development supported by  
alzheimer's association

[culturally.competent.materials@unc.edu](mailto:culturally.competent.materials@unc.edu)

Gerontology & Applied Linguistics  
UNCC/UNLEARN

**Date: March 16,  
2007**

**11:30 AM—4 PM**

**Contact person:  
Mary Smith 704 330 6507**

[mary.smith@cpcc.edu](mailto:mary.smith@cpcc.edu)

**Sign Up Now  
E-mail the Registration  
Form**

---

#### How the project was launched

Description of how the project was initiated and how the materials were developed

#### How the materials are used

Interactive session on use of the materials in the Nurse Aide Course

#### Evaluation of the materials

Interactive session from a student perspective

---

**Lunch from 11:30—12:30**

Courtesy of Jim DiMartino Senior Educational Representative, Elsevier Publishing

Note: Registration form attached



**Location Details:**  
Levine Campus  
Auditorium

2800 Campus Ridge Road

Matthews, NC 28105

[704 330 4200](tel:7043304200)

From I-485 take Exit 51  
B—Hwy 74 towards Monroe

Approximately 1 mile turn  
right onto CPCC Lane

Turn right 0.1 miles onto  
Campus Ridge Road

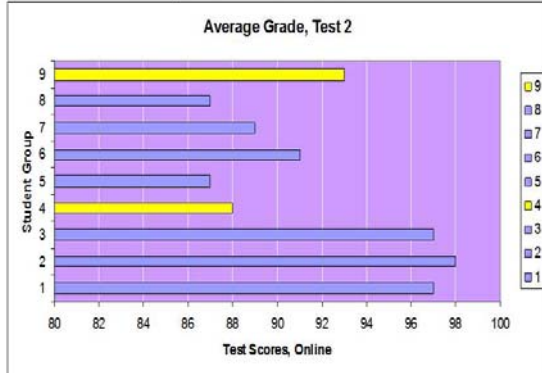
## Appendix C

### Case Study: The impact of corpus-based culturally/linguistically materials on Group 9

Group 9 was an ESL-only class. During the Nursing Assistant class, their grades for in-class tests began to slip, alarmingly. Project staff expanded current materials by an additional set of vocabulary practice exercises, keyed to corpus-analysis of the language used on sample tests and in a range of healthcare reading materials. These materials focused on vocabulary used by professionals caring for individuals with dementia. After initial vocabulary sessions conducted in the Nurse Assistant class by the Director, Group 9 improved overnight. In the slides below, ESL-only classes are colored yellow, and Group 9 is at the top. Group 9 went on to graduate and has a 95% pass rate on the State certification test.

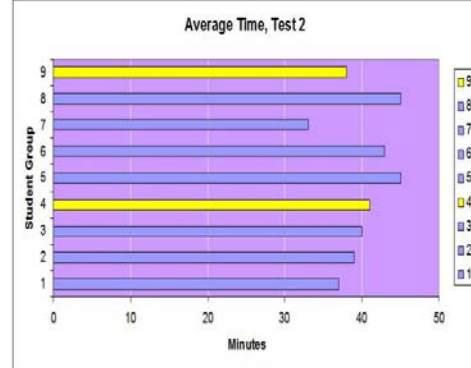
#### Grades go back up for Group 9 using the new materials: ESL-only classes are yellow

Comparison of all classes for Test 2

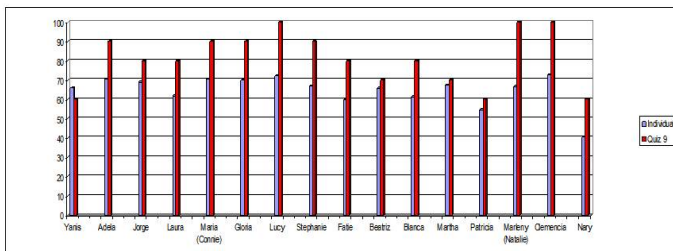


#### A new set of corpus-based materials helps Group 9 improve, literally overnight

Average Time, Test 2



#### Pencil-paper tests for Group 9 (ESL-only) show the same improvement



Unlike the daily online quizzes, the pencil-paper tests cannot be repeated. So the improvement here is suggestive.

'Yanis' did not attend the corpus-based vocabulary sessions. Hers was the only score that did not improve.

#### Group 9's Class Graduation Photo

