Culturally Competent Materials on Communication and Dementia: Year Three

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Year Three was successful on a number of fronts. Instructional modules in print and in multimedia were evaluated by university and community college nursing and nurse-aide students in the US and in Taiwan, and by other trainers and group leaders, particularly AlzAssn staff. Two additional languages were inserted into the multimedia materials, bringing the total to five: English, Mandarin, Turkish, Tagalog and Spanish. Entry level assessments from fall, 2007, were compared with exit level assessments, with outstanding results for dementia communication skills in clinical experience as well as certification tests; increased English fluency in interacting with patients/clients/residents; and increased effort to interact with persons having dementia, signaling attitude change as well as growth in content mastery and skills development. Students using the materials continue to score at 90% and above mastery on all state testing. This was reported to the 11th Asia-Pacific Conference of Alzheimer's Disease-International in June, 2008 and at the August 2008 Dementia Care Conference.

In addition, the NC Nursing Registry validated and accredited the community college web-delivered materials and modules for Central Piedmont Community College. The materials have been institutionalized as reported to the 2008 Dementia Care Workshop (pdf attached as Appendix A)

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

With one exception, all Aims and Goals were met on time, on budget, with success. That exception is the very last one, the Re-Test of the Manual which, instead of being completed in April-June was completed in July – August, and identified a number of issues for revision.

Interestingly, in the 3 years since the project's initiation, expectations about what technology can "do" have increased, and technologies used for training have almost completely changed. When we began, NC staff (nurse educators, activity directors, and Alzheimer's Association

staff) were using paper handouts and TV-VCR equipment. Now, videotape has vanished, DVD players have replaced VCRs, paper is more expensive, and staff expects more instructions on how to interface the new materials with the print materials and delivery outlines they have been using.

What follows is the checklist projected from Year 2:

Future Aims 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 • Format: platform, media, portability, presentation and projection preparations (inventory equipment) • Delivery: stand-alone, integrated, selected • Techniques: how to interface with materials already in use • Train-the-trainer manual, script, directions, suggestions
√	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>**Tagalog and Turkish**
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, CNA staff in services, 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 **Nursing and facilities staff unable to meet deadlines for participation, resulting in retesting sessions running through August**
Jy-Ag 08	**Final report for submission** and celebratory meeting

Areas for dissemination have been identified as the 344 sites authorized by DHHS and the Nursing Registry in NC and SC for delivering training to nurse assistants seeking certification, a primary target of these materials. A number of community colleges in NC have volunteered to be test sites as needed. What follows is the tabulation of significant interactions for the multimedia

evaluations by nursing students in the US and Taiwan; several papers have been delivered, a book proposal to Health Professions Press has been submitted, and articles are under review. As accepted, they will be added to the official database. Most useful conference proceedings to date: Boyd Davis, Culturally competent training about communication in dementia care, *Proceedings 2rd* *International Conference on Medical Humanities,* Kaohsiung Medical University, Taiwan, 2008.

Figure 2, Excerpt from US-Taiwan Student Responses to Multimedia

Reliability Coefficients : total number=175; number of items=14; Cronbach's Alpha value=0.907

Group 1 : nursing undergrad students at UNCC
Group 2 : graduate gerontology students
Group 4 : gerontology undergrad students (WSS)
Group 5 : nursing undergrad students at KMU
Group 6 : nurses at YJ (Richard)
Group 7 : AFLD studeant at KUAS

Significant differences exist for the red parts in the following tables

		TW- Gp 5/6/7 number=93 USA- Gp 1/2/AT number=76	Female number=148 male number=27	Group 1 number=53 Group 5 number=13	Group AT number=16 Group 5 number=13
c1	clear info	0.513(t-test) 5.67 (0.936) 5.88 (1.083)	0.989(t-test) 5.79 (0.998) 5.67 (1.038)	0.001(t-test) 5.87 (1.194) 6.00 (0.408)	0.003(t-test) 5.75 (0.856) 6.00 (0.408)
c2	accurate content	0.003(t-test) 5.42 (1.077) 6.04 (0.855)	0.185(t-test) 5.72 (0.997) 5.63 (1.214)	0.443(t-test) 6.11 (0.913) 5.62 (0.650)	0.473(t-test) 5.69 (0.793) 5.62 (0.650)
c3	logical layout	0.164(t-test) 5.57 (1.127) 5.57 (1.398)	0.928(t-test) 5.55 (1.285) 5.52 (1.341)	0.009(t-test) 5.28 (1.645) 5.85 (0.689)	0.218(t-test) 5.69 (0.873) 5.85 (0.689)
c4	informative & rele	0.744(t-test) 6.11 (0.938) 6.14 (0.875)	0.086(t-test) 6.16 (0.850) 5.96 (1.160)	0.107(t-test) 6.15 (0.928) 6.23 (0.599)	0.360(t-test) 6.00 (0.816) 6.23 (0.599)
c5	appropriate content and vocabulary	0.002(t-test) 5.54(1.265) 6.34 (0.776)	0.608(t-test) 5.93(1.11) 5.85 (1.292)	0.280(t-test) 6.45(0.774) 6.00(0.707)	0.637(t-test) 6.13(0.719) 6.00(0.707)
a6	easy linking	0.119(t-test) 5.46(1.194) 5.20 (1.541)	0.261(t-test) 5.34(1.379) 5.30 (1.463)	0.010(t-test) 4.94(1.834) 5.85(0.689)	0.286(t-test) 5.44(0.814) 5.85(0.689)
a7	activities	0.005(t-test) 5.81(1.066) 5.34 (1.410)	0.919(t-test) 5.64(1.257) 5.41 (1.248)	0.006(t-test) 5.15(1.598) 6.08(1.038)	0.488(t-test) 5.56(0.892) 6.08(1.038)

Future Goals for Year Four, No-Cost Extension Year 2008-2009

Sept-Dec 08	Manual for Multimedia Revised for Sites and Staff offering Training; special trainer sessions for Western Carolina Alzheimer's Association staff.
Jan-Apr 09	Manual for Multimedia: final re-assessment by Staff; duplication on CDs to accompany multimedia DVD; final packaging and local dissemination

Appendix A: Dementia Care Conference 2008, Workshop

Dementia Care Conference 2008   Alzheimer's Association

TEAMWORK

What they need to lead: institutionalizing communication curriculum for nurses & nurse aides

Boyd Davis, UNCC   Mary Smith, CPCC

Improving and institutionalizing communication training for Nurses and Aides

This interactive workshop **reviews** essential components in communication as care for persons with Alzheimer's disease; **targets** curriculum in two-year nursing and aide training programs; **highlights** institutionalization

Learning objectives

- At the end of this session, you will be able to
  - Identify at least 3 features of communication in dementia care
  - Name three key steps in building and institutionalizing curriculum for nurses and aides
  - Describe at least 2 ways to use technology for effective training and assessment

Changing needs and changing demographics

- Increase in aging persons needing care

- Increase in multicultural, multilingual aging persons seeking care

- Increase in multicultural, multilingual staff who have different backgrounds, different literacies, and different expectations

State/Federal Initiatives Falling Short

Limited staffing

Nursing home staffing levels, measured by the number of hours of care each patient receives daily.

Best	Number of homes	Average staff hours per patient per day	Percentage of homes under 3 hours	Percentage of homes under 4.1 hours
Alaska	14	5.8	0.0	7.1%
Hawaii	45	4.5	8.9	53.3
Maine	118	4.3	0.8	33.9
Florida	692	4.2	1.7	39.9
Idaho	80	4.2	0.0	55
Worst				
Illinois	822	2.9	53.5%	83.3%
Rhode Island	95	3.0	30.5	85.3
Louisiana	309	3.1	45.6	88.7
Iowa	457	3.2	44.6	86.9
South Dakota	112	3.3	33.9	92.9
Michigan	431	3.7	12.3	74.9
U.S.	16,171	3.6	19.3	75.2

Out of 50 states and Washington D.C., Michigan is near the middle.
Note: Numbers are as of October 2004
Source: U.S. Centers for Medicare and Medicaid Services   *The Detroit News*

Key stakeholders: scenarios

- You will be given one of these 5 scenarios. Talk among yourselves and then be ready to share that scenario's perspective with the group. Add your experience and perspective.
  - Licensed nurse (RN/LPN)
  - UAP (unlicensed assistive personnel/aides)
  - Physician
  - Family member
  - Resident/patient/client

Licensed nurse

- Works first shift at Pleasant Meadows LTC/dementia care facility, with 6 staff members, 2 of whom are second-language and recent arrivals, 2 are new nurse aides who are not yet certified and are in their first 90 days, and 2 have worked at the facility for a year with some success. Nurse needs to delegate daily ADL care for 42 patients who are in various stages of cognitive impairment. Worried about patient safety; about patient well-being, about whether she can delegate appropriately, concerned about the information s/he is getting. Thinks MD knows all about disease and care. Knows s/he is expected to lead a team for care by facility management.

UAP Unlicensed assistive personnel

- Nurse aide, med tech, environmental tech, PT aide, restorative aide. Concerned about supervisor, frustrated and confused by responses and behaviors of RPC, doesn't know what to expect, or how to respond. Thinks RN/older staff/agency director know all about disease and care. Knows s/he is held responsible for quality of care delivery, and would like to feel valued, appreciated, seen as professional, and able to be a real working part of the health care team.

Family member

- Relative is newly diagnosed and newly placed at the facility or the family has realized/ decided that home care is needed. Needs to understand the situation, what the disease entails, what reasonable expectations are, what the (para)professional caregiver is doing and how not to get in the way. Thinks caregiver should know all about disease and care. Does not understand team concept and finds that brochures don't match reality.

Resident/patient/client

- Anxious, agitated, and aggressive – though this is usually inadvertent – confused, still trying as hard as they can to be responsive and maintain social contact even when logically delusional. We really don't know what the patient thinks in the later stages. And we too seldom ask what they think or feel in the earlier days. All too often, we fail to analyze what we do learn, or to collaborate with them for conversation.

Physician

- Diagnoses, directs care, prescribes, wants to know if treatment is having impact and if the care is competent. Thinks RN and staff are experts with dementia care.

Two areas of world-wide growth: aging & foreign workers

Patricia is one of our great CNA graduates

Direct-care workers provide an estimated 70 to 80 percent of the paid hands-on long-term care and personal assistance received by Americans who are elderly, chronically ill, or living with disabilities. NC is now in the top 10 states for both its aging population and its second language newcomers. From Patricia's journal: "I am from Mexico. I was born in a little town called San Juan del Rio; 43 years ago. I need to take this course because it will make me feel better about myself." She graduated in 2006 and now works at a local Hospital as an Aide.
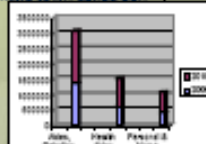
We agree with these 3 trends, & support their 3 recommendations

- Brown & Braune (*Geri&GeroEd* 2008)
  - Trends:
    - Global aging;
    - Contemporary globalization (esp. of workforce)
    - Women's immigration
  - Recommendations:
    - expand training in culture and diversity beyond competence;
    - increase training modalities;
    - review policies affecting workforce & immigration

Start with training: *communication as care*

- *A communication-driven curriculum responds to*
  - Changing health care needs
  - Changing demographics for aging persons
  - Expanded diversity in staff and care recipients
- *It draws on*
  - A range of stakeholders
  - Partnerships for training support
  - Collaboration for institutionalization

Curriculum keyed to communication

- **Needs-driven:** "the typical person in a home spent only two minutes interacting with staff or other residents over a six hour period of observation, excluding time spent on care tasks" (Alzheimer's Society, 2007, p. v; see Wray 2008 ms)
- **Integrated:** Communication needs to be **built in to** the daily routines, not dropped on top of them
- **Feasible:** Train in specific techniques which work the first time.

Specific techniques include

- 'Quilting' tiny stories about the Self
- Caregiver phrasebook with conversation-starters, topics, sayings and routines
- Two syllable 'go-aheads' and encouragers
- Wait-time and ways to count it mentally
- Indirect questions (So– Well --)
- Cultural features around privacy, food

And there are a number of memory-cuing supports for when time is available

Developing the curriculum

- Need to match content to **national standard curriculum**, regardless of state regulations for licensure
- Need to reach adults by using multiple media, multiple formats for different learners
- Integrate online and print media: Interact in face-to-face and online settings; review with online and supplementary print text (being developed)

Alzheimer's Association grant: culturally competent materials

- Materials developed for community college delivery and community-based training
- Preview sensitivity and content with:
  - Historically black US university nursing students
  - US urban university nursing students
  - US community college nurse-aide students
  - Taiwan medical university: nursing students
  - Taiwan university hospital nurses

How did we institutionalize?

Twice-yearly Interdisciplinary team meetings: Identify problems; Review new materials

- Twice-yearly Implement new Materials; Train staff; Staff evaluates
- Twice-yearly Implement new Materials; Students evaluate
- Annual Review Goals & Milestones: Year 1 by Director, Year 2 by Dean, 3 byNursing Registry
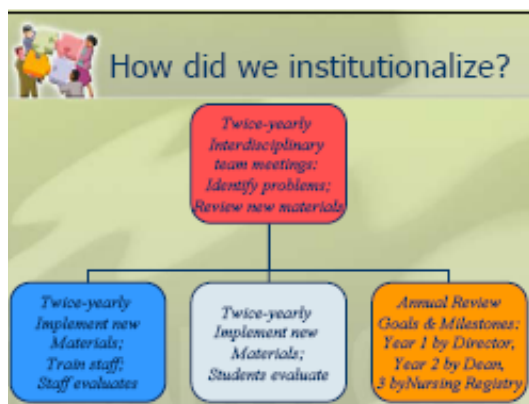
Challenges to institutionalization

- Support techniques had to be modified: originally envisioned ESL support class prior to Nurse Aide instruction; this was uneven. We recommend some kind of liaison with Academic ESL lab or tutorial support for specific purposes that are site-appropriate and some kind of liaison with a counselor supportive of second-language students who is willing to develop conversational support groups or welcome-to-college workshops.

Being flexible with changes

- Instructional techniques had to be modified: we initially asked student participants to evaluate too much, too often, which confused them, and staff had to become involved and invested with new techniques
- Technology had to be modified: multimedia is still being converted for general use across platforms, and online course package had to be speeded up.

Lessons learned: staying informed (see handout)

- Community College: monthly bulletins/presentations/reports and in-house publicity for program director, division head, deans; route external publicity through them: no surprises
- Developers and Collaborators: monthly meetings; share skill sets; collaborative reviews
- Follow-up institutional tracking: increase in Nurse Aide students going on to curriculum courses, including ESL students
- Follow-up telephone survey of Aides: Implications of wandering workforce and disconnected telephones for rate of return

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The Alzheimer's Association sponsored the development of these materials and we acknowledge that support with deep gratitude.

Handout for conference follows

Dementia Care Conference 2008

Dementia Care Conference, 2008

What They Need to Lead: Institutionalizing Communication Curriculum for Nurses and Aides

Boyd H. Davis, PhD, **Mary Smith, BSN, MBA**: UNC Charlotte and Central Piedmont Community College.

What kind of training meets the needs of multilingual, multicultural health care staff in addressing new expectations keyed to cultural diversity?

What do they need to lead?

This session summarizes a new curriculum emphasizing communication as care, approved by NC State Nursing Registry, tested and then implemented at Central Piedmont Community College across 15 courses for Nurse Aides and 3 courses for first-year Nurses.

FIVE KEYS

- **Key features about dementia care communication targeting second-language adult learners**
- **Key collaboration between a two-year community/junior college program and a research university, supported by the Alzheimer's Association**
- **Key stakeholders and their response to culturally sensitive materials and data-driven techniques for dementia care communication**
- **Key technology support for delivery, assessment, and global collaboration: a necessity**
- **Key steps in institutionalization**

INTERACTION IN SMALL GROUPS: STAKEHOLDER SCENARIOS

Licensed Nurse (RN/LPN)

Works first shift at Pleasant Meadows LTC/dementia care facility, with 6 staff members, 2 of whom are second-language and recent arrivals, 2 are new nurse aides who are not yet certified and are in their first 90 days, and 2 have worked at the facility for a year with some success. Nurse needs to delegate daily ADL care for 42 patients who are in various stages of cognitive impairment. Worried about patient safety; about patient well-being, about whether she can delegate appropriately, concerned about the information s/he is getting. Thinks MD knows all about disease and care. Knows s/he is expected to lead a team for care by facility management.

UAP

Nurse aide, med tech, environmental tech, PT aide, restorative aide. Concerned about supervisor, frustrated and confused by responses and behaviors of RPC, doesn't know what to expect, or how to respond. Thinks RN/older staff/agency director know all about disease and care. Knows

s/he is held responsible for quality of care delivery, and would like to feel valued, appreciated, seen as professional, and able to be a real working part of the health care team.

Family member

Relative is newly diagnosed and newly placed at the facility or the family has realized/decided that home care is needed. Needs to understand the situation, what the disease entails, what reasonable expectations are, what the (para)professional caregiver is doing and how not to get in the way. Thinks caregiver should know all about disease and care. Does not understand team concept and finds that brochures don't match reality.

Resident/Patient/Client

Anxious, agitated, and aggressive – though this is usually inadvertent – confused, still trying as hard as they can to be responsive and maintain social contact even when logically delusional. We really don't know what the patient thinks in the later stages. And we too seldom ask what they think or feel in the earlier days. All too often, we fail to analyze what we do learn, or to collaborate with them for conversation.

Physician

Diagnoses, directs care, prescribes, wants to know if treatment is having impact and if the care is competent. Thinks RN and staff are experts with dementia care.

Lessons Learned

Outcomes

1. Nurse Aide student outcomes at certification level: pass rates increased for nurse aide certification to 90% on average across 15 classes; previous pass rate had been 80%
2. Nurse Aide student outcomes at program level: greater retention of second language adult newcomers due to accessibility of materials and ability to practice and repeat, PLUS advance in language skills by an average jump of two years per student as demonstrated in TABE pre- and post-testing.
3. Nurse Aide instructors outcomes: focus groups reported pleasure that students taking this course of study were better prepared to care for persons with dementia during clinical rotations, had greater interpersonal skills and more positive attitudes. Students also scored higher on post-tests than previous students
4. Nursing instructors outcomes: individual instructors reported they were pleased by student involvement with online module and reported they saw transformational learning, team behaviors
5. Nursing student outcomes: expressed surprise and delight that they could implement new communication techniques during their first clinical experience and reported in online journals that they used the new communication techniques both professionally and personally.
6. Family members: focus groups reported pleasure with techniques; asked for increased audio and video to better understand interaction; interested in team approach

7. Residents/clients/patients: indirect reports from staff and student nurses/nurse aides using techniques, about perceptions of improved mood, lessened agitation, greater social interaction

Implementation

8. Support techniques had to be modified: originally envisioned ESL support class prior to Nurse Aide instruction; this was uneven. We recommend some kind of liaison with Academic ESL lab or tutorial support for specific purposes that are site-appropriate and some kind of liaison with a counselor supportive of second-language students who is willing to develop conversational support groups or welcome-to-college workshops.
9. Instructional techniques had to be modified: we initially asked student participants to evaluate too much, too often, which confused them, and staff had to become involved and invested with new techniques
10. Technology had to be modified: multimedia is still being converted for general use across platforms, and online course package had to be speeded up.
11. Assessment had to be modified: expanded to two countries, two languages, novice X expert

Institutionalization

12. Keep all collaborators in the loop, constantly, with twice-yearly meetings to review progress, to identify challenges and problems, to analyze assessment reports, and to set new goals
13. Board of Nursing: request review of materials against state requirements; self-study review
14. Community College: monthly bulletins/presentations/reports and in-house publicity for program director, division head, deans; route external publicity through them: no surprises
15. Developers and Collaborators: monthly meetings; share skill sets; collaborative reviews

Institutionalization/Follow-up and implications

16. Follow-up institutional tracking: increase in Nurse Aide students going on to curriculum courses, including ESL students
17. Follow-up telephone survey of Aides: Implications of wandering workforce and disconnected telephones for rate of return
18. Implications: need to match content to national standard curriculum, regardless of state regulations for licensure
19. Implications: need to reach out using multiple media, multiple formats for different sites
20. Implications: integrate online and print media. Interact in face-to-face and online settings; review with online and supplementary print text (being developed)