# Assisting Nursing Students through Linguistic Modification of Multiple Choice Questions

## **Purpose:**

Multiple choice questions are an important means of assessing students' mastery of course content in many nursing courses. These types of questions often constitute a large percentage of the final grades in many nursing courses and comprise the largest type of test items on the NCLEX<sup>®</sup>. Kaplan Nursing is interested in determining if exposure to linguistically modified language on practice tests for the NCLEX<sup>®</sup> benefits English as a second language (ESL) or English as an additional language (EAL) students. The purpose of this whitepaper is to discuss the effect of linguistic modification on multiple choice questions.

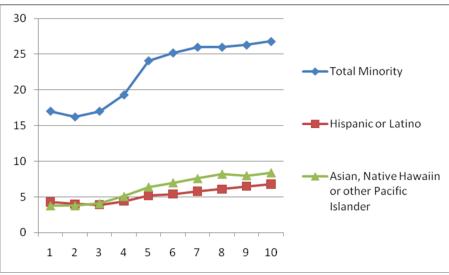
### Introduction

The difficulties encountered by nursing students to succeed in nursing school are well-documented. Challenges include but are not limited to the lack of financial resources, family pressures including single parent status, and the necessity to work while enrolled as a nursing student. Nursing faculty and students rated "taking multiple choice tests" as the most difficult task in language and culture-related skills encountered in a nursing program (Bosher, 2008).

Nursing students with English as a second language (ESL) and English as an additional language (EAL) encounter all the previously identified challenges and potentially have cultural and language issues as well. According to the National Council of State Boards of Nursing "there is some relationship between lack of English language proficiency and NCLEX<sup>®</sup> performance" (NCSBN 2005, p. 245). The English language can be divided into two levels of proficiency; conversational and cognitive academic (Cummins, 1991 and Guhde, 2003). It is noted that most ESL students possess only mastery of the conversational or "interpersonal" English (Cummins, 1991). Cognitive academic language proficiency is required to utilize the nursing process (Guhde, 2003). Students using interpersonal English spend more time "memorizing facts than understanding concepts and abstractions" (Guhde, 2003).

# Literature Review

The American Association of Colleges of Nursing's ten year report (2010) on minority students in Baccaluareate Programs demonstrates the increase in minority as well as Hispanic or Latino and Asian, Native Hawaiian or other Pacific Islanders. The increasing diversity of the



ncreasing diversity of the nursing student is encouraging as it is important to have a multicultural nursing workforce to care for the needs of our multicultural population.

Due to the cultural and language challenges of ESL students, the attrition rates "have been higher than those of students who speak English as a first language" (Klisch, 2000, pg. 1). Language enhancement has been identified as an important retention strategy for ESL nursing students by Klisch

Race/Ethnicity of Students Enrolled in Generic (Entry-Level) Baccalaureate, Master's, and Doctoral (Research-Focused) Programs in Nursing, 2001-2010. (AACN, 2010)

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(2000) as she grouped retention strategies for ESL students into six main categories:

- 1. Support for students: financial, academic, social, language enhancement.
- 2. Adaptation of teaching methods to recognize cultural differences and language challenges.
- 3. Assessment and Testing policies.
- 4. Faculty development to assure grounding in theory and cultural competence.
- 5. Curriculum inclusion of substantive cultural content and opportunities for application.
- 6. Institutional commitment; strategic management. (pg. 2)

Based on current literature by Dr. Susan Bosher and others, Kaplan Nursing determined linguistic modification could assist nursing students to answer multiple choice questions. According to Dr. Bosher (2011) every test that involves language is in part a test of language skills. Thus language can introduce measurement error into tests, threatening their validity and reliability (AERA et al., 1999). "Modifying test questions to reduce unnecessary language complexity should be a priority in the development and improvement of all large-scale assessment programs" (Abedi, 2001, p. 106). Studies have found that linguistic modification reduces the reading load on non-native English speakers and allows them to achieve scores comparable to those of native English-speaking students without affecting native English speakers' scores, positively or negatively (Abedi, 2001).

Kaplan Nursing focused on modifying multiple choice questions because according to Bosher (2011), these types of questions are:

- An important means of assessing students' mastery of course content in many nursing courses
- Contribute a large percentage of final grades in many nursing courses
- Comprise the largest type of test item on the NCLEX<sup>®</sup>

## **Product: Plain English for Nursing**

Kaplan Nursing calls this product enhancement "Plain English for Nursing". The name is derived from the movement where plain English was established as a method to make educational materials accessible to the broadest possible range of students. Thus we believe the modifications will be helpful for students when English is an additional language as well as any student experiencing difficulty in reading/answering multiple choice questions.

Dr. Bosher assisted the nursing experts at Kaplan Nursing to identify and correct item-writing flaws within multiple choice questions (MCQs). Item writing flaws can affect the difficulty of the question impacting the student's performance on MCQs (Downing, 2005). The linguistic modification provides a clear, direct and concrete question and answers. This linguistic modification is accomplished through steps identified by Dr. Bosher (2011):

- Nursing content vocabulary and terms are maintained
- Order of nursing content is sequential and straightforward
- Language is clear, direct, and concrete (impersonal constructions, vagueness, abstractions are avoided)
- Extraneous material is eliminated
- Long, complex sentences are broken down into shorter, simpler sentences
- Subordinate clauses are avoided
- Reduced, embedded clauses and participial phrases are avoided

#### Conclusion

While linguistic modification has been shown to improve nursing students' ability on multiple choice questions some nursing faculty have expressed concerns about this process. Their concerns include a "dumbing down" of nursing content, when in fact the content of the test items remains the same with only a change in the reading load of the questions. An additional concern is that modifying the school questions will not provide students with realistic NCLEX<sup>®</sup>-like practice. Our hypothesis is that students will become accustomed to language while building the content knowledge and test-taking skills necessary for success on nursing exams.

Implications for faculty point to an opportunity to revise test items for greater clarity and to reduce the language load of nursing school tests. Linguistic modification of nursing test items also provides an opportunity for nursing and language faculty to collaborate on the modification of test items.

Plain English for Nursing is an application of alternate wording that is available for all nursing students as they prepare for NCLEX® success using Kaplan's Integrated Testing products.

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