Improving Health Education for ELL Students in the Mainstream Classroom

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ABSTRACT

Culturally diverse students, as a collective group, are a sizable and growing population. Large numbers of students with language and cultural experiences different from the mainstream population will continue to enter schools in growing numbers throughout the next decades. Historically, their level of academic achievement has lagged significantly behind that of their English language-dominant peers. If schools are to meet the challenge of educating culturally diverse student populations, teachers must embrace instruction and curricula that engage and encourage all students. This article gleans from the discussed research ten strategies that all school health education teachers should utilize in their language- and learning-diverse classrooms that can increase the learning, achievement and success of English Language Learners (ELL) and other low-literacy students. Some of these strategies include: linking health concepts with the students' backgrounds, providing appropriate speech for ELL students, incorporating scaffolding techniques, using hands-on materials and/or manipulative for practice, clearly defining the language objectives, and providing multiple avenues for assessing learning. Many mainstream health education teachers who utilize these specific strategies report that all of their students experience a higher level of performance.

INTRODUCTION

One of the most important factors affecting education today is demography. Each year, the United States becomes more ethnically and linguistically diverse, with more than 90 percent of recent immigrants coming from non-English-speaking countries.[1] From the 1991–1992 school year through 2001–2002, the number of identified students with limited English proficiency in public schools (K–12) grew 95 percent while total enrollment increased by only 12 percent.[2] According to Ruiz-de-Velasco and Fix,[3] culturally diverse students, as a collective group, are a sizable and growing population.

While the number of students with limited proficiency in English has grown exponentially across the United States, their level of academic achievement has lagged significantly behind that of their English language-dominant peers. One congressionally mandated study reported that these students receive lower grades, are judged by their teachers to have lower academic abilities, and score below their classmates on standardized tests of reading and mathematics.[4]

Culturally diverse students with limited English proficiency are referred to as English Language Learners (ELL). An ELL is defined as a learner who: a) first learned a language other than English, comes from a home where a language other than English is usually spoken, or does not use English as a primary language; and b) lacks the necessary English skills to fully participate in classes taught in English. All ELLs in schools today are not alike. However, there are several common threads that place them at risk for school failure and placement into special education: 1) lack of English proficiency, 2) behavior characteristics, and 3) socioeconomic status.[3,5]

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English proficiency

Many students from culturally diverse backgrounds have linguistic differences that play a role in their ability to succeed in an English-dominant classroom. Language performance is closely linked with academic success.[6,7] Research with children learning English as a second language has shown that they typically achieve at lower levels than do native English-speaking children, especially in language-related areas.[8] Yet, we may find at one end of the spectrum among immigrant students some English language learners who had strong academic backgrounds before they came to the United States and entered our schools. They are literate in their native language and may already have begun the study of a second language. At the other end are those who are not literate in any language. They have mastered neither English nor their home language.[1]

Behavior characteristics

The culture in which students grow up influences the way they interact with their environment. Many minority students come from cultures where competition, individualization and strict adherence to time are not common. In contrast, the American middle-class culture values individual effort, structure (time limits) and competition. In addition, many culturally diverse students have been described as being more likely to react to support or doubt from others, prefer more personal relationships with teachers, and work cooperatively with others. On the other hand, they have more difficulty with school activities such as lectures, competitive and individualized work (worksheets and seatwork), and timed assignments. In contrast, American middle-class students are task-oriented, more independent of external judgment, prefer formal relationships with teachers, and work independently and for individual recognition.[9]

Culturally and linguistically different students often are referred to special education because of certain behavioral characteristics that appear abnormal in U.S. classrooms but are considered appropriate in their native culture, or that may be nor-mal reactions in the process of acculturation.[10] For example, a Hmong student may emit self-berating remarks, refuse to attempt new tasks, and give up easily on assignments at school.[11] This behavior may be reinforced at home where self-effacement and modesty are accepted parts of the family's cultural heritage. Many abnormal behaviors, including withdrawal, defensiveness, disorganization and aggression, can also be attributed to various socio-cultural influences. These same students may arrive in our classrooms with very limited formal schooling experiences, such as sitting at desks all day, changing teachers per subject, and/or taking district or national standardized tests.[1]

Socioeconomic status

Finally, socioeconomic backgrounds must be considered when working with culturally diverse student populations. Some minority students are from middle-class or upper-class families, but a large percentage of them come from poor homes and have little preparation for school.[12] It is often assumed that these families fail to prepare their children for school and do not teach them the value of education.[12] Teachers may fail to recognize that economic differences affect cognitive and learning styles of students, causing them to respond differently to instruction.[12]

Many poor and culturally different students do not succeed in American schools and leave high school before they graduate.[14] Research has shown that many culturally diverse students fail in school because the school culture ignores and devalues the students' own cultural backgrounds and seldom adapts to students' individual differences.[13,15,16] When the language, cultural and socioeconomic characteristics of culturally diverse populations are combined with the school's lack of understanding of different cultures and increased academic standards, a situation results that facilitates dropping out.

BACKGROUND

Given the variability in these students' backgrounds, they often need different pathways for academic success. To meet this challenge, fundamental shifts need to occur in teacher development, program design, curricula and materials, and instructional and assessment practices. Teachers will need to adjust to the different cultural backgrounds of their students or both the teachers and the students will suffer. Multicultural education must help students increase their academic achievement through the use of teaching approaches and materials that are sensitive and relevant to the students' socio-cultural backgrounds and experiences.[1] No longer can teachers afford to teach all students the same knowledge and skills in the same ways. If schools are to meet the challenge of educating increased numbers of children and youth from diverse cultures, teachers must embrace instruction and curricula that engage and encourage all students.[17]

The ethnic and linguistic diversification of the U.S. population presents a clear call for health educators to reach non-English-speaking students with appropriate strategies.[18] High population growth and increasing numbers of first-generation immigrants with low educational levels have provided the impetus for health professionals to design educational materials that are literacy-appropriate for diverse populations. Professional literature clearly establishes the need, opportunity and methods for addressing ethnic diversity in education including health.[19,20,21] There are numerous articles that identify planning, instructional and assessment strategies that can be employed to increase the learning, achievement and success of ELL and other low-literacy students.[1,22,23,24,25,26,27] Few articles, however, have been written about multicultural health education and the methodologies for dealing with diverse populations.[28]

The primary overarching instructional goal for school health education teachers is to build health education literacy in all students. In the health education classroom, literacy begins with building background knowledge. Often, ELL students require a more conscientious approach to building background knowledge. Mainstream health

education teachers can build background knowledge in at least two ways, including: 1) teaching vocabulary and 2) providing experiences (e.g., field trips, classroom projects and experiments, and role-playing). Building health education literacy requires the students' exposure to, and engagement in, reading, writing, listening and speaking activities.

Strategies for learning language are highly individual. Strategies are a means to learning outcomes; they are not outcomes themselves. Teachers are encouraged to select and teach strategies from good practices that are appropriate for their learners' development and language levels. This article will glean from the research[29,30] numerous strategies that all school health education teachers should utilize in their language- and learning-diverse classrooms. Over the past four years, the authors have conducted numerous seminars focusing on ELL instruction in the mainstream classroom. These seminars included large- and small-group instruction, classroom observations and post-observation teacher conferences. The K–12 teachers who participated in these seminars consistently reported that all of their students— not just the ELL and other low-literacy students— experienced a higher level of performance when using these strategies.

METHOD

The list of strategies and a brief explanation for each follows:

1. *Every day, every class should have clearly defined learning objectives.* The learning objectives should include language objectives and/or content objectives.[31] Meaningful content and language instruction guides ELLs toward mastery of the English language and grade-level content and concepts. This usually involves both ESL/bilingual teachers and subject-specific (content) teachers, providing comprehensible input through appropriate instructional strategies and scaffolding.

Language objectives are measurable statements that clearly state what the learner is expected to know and/or be able to do

while using English. These statements should support each student's language development in areas of reading, writing, listening and speaking. An example of a language objective in health education class might be: "The students will be able to describe orally the difference between a lifestyle risk factor and a genetic risk factor."

Content objectives are measurable statements that clearly state what the learner is expected to know and/or be able to do as a result of his/her participation in the lesson. Content objectives are typically derived from the National Health Education Standards, State Health Education Standards, or District/School Health Education Standards. Some content objectives may focus on low-level learning objectives such as list, define or label, whereas others may focus on high level learning objectives such as compare, prioritize or evaluate. An example of a content objective in health education class might be: "The students will be able to name five lifestyle risk factors associated with cardiovascular disease." Or, at a higher level, "The students will be able to evaluate strategies to manage stress."

2. *Every day, every class should inform the students, in a clear and concise manner, the lesson's learning objectives.* These objectives should be given both in writing and orally.[32] From the authors' experience and teachers' feedback, it becomes increasingly clear that when students are informed of their learning expectations, they are more likely to achieve them.

3. *Use caution and patience with academic language.* As with most academic disciplines, school health education has an associated professional and unique language. This is often referred to as "academic language." If students are expected to achieve the health education content, they first must master the health education language applied to the content.

As an example, a school health teacher should not ask his/her students to "name four lifestyle risk factors associated with cardiovascular disease" until the students have a secure understanding of the associated terms. It would be very difficult for an

ELL or low-literacy student to achieve this learning objective without first clearly understanding the terms such as 'lifestyle,' 'risk factor' and 'cardiovascular disease.'

4. *Teach process skills.* School health teachers may ask their students to compare two specific diseases, two brands of athletic shoes, or two fast-food restaurants. Unfortunately, some teachers incorrectly assume that their students have the previous knowledge and ability to "compare." Many ELL and other low-literacy students do not have this declarative or procedural ability. The process, strategy and suggested product(s) of "comparing" must be taught.

5. *Use appropriate speech.* Listed below are some general guidelines for making the school health education content more comprehensible for ELL and other low-literacy students.

a. Speak slowly.

b. Pause frequently to check for understanding and clarify meaning.

c. Use short phrases with simple sentence structure.

d. Provide visual aides (e.g., books, posters, checklists) while speaking.

e. Make a visual list on the chalkboard, whiteboard or overhead projector that students can follow as you orally give directions or instructions.

f. Paraphrase and repeat.

g. Use a simple sentence structure, such as subject-verb-object.

h. Monitor vocabulary.

i. Enunciate clearly.

j. Explain and teach idioms (e.g., "do not put all of your eggs in one basket").

k. Explain and teach acronyms (e.g., CDC, FDA, ACS) before use.

l. Reduce the use of slang terms (e.g., pot, Mary Jane, going all the way).

m. Use fewer pronouns.

6. *Scaffold your instruction.* In construction, a scaffold is often erected to support individuals working (e.g., painting) on a new building. In the classroom, teachers scaffold instruction when they provide substantial amounts of support and assistance in the earliest stages of teaching a new con-

cept or strategy, and then decrease the amount of support as the students acquire experience through multiple practice opportunities.[33] Scaffolding instruction may include: 1) one-on-one teaching, coaching and modeling; 2) partnering/small group instruction; and 3) independent application in practicing a newly learned strategy/skill with another more experienced student.[34]

The primary purpose of instructional scaffolding is to increase the students' learning independence.[35] Likewise, instructional scaffolding is used to assist and support ELL and other low-literacy students in mastering school health education content. Scaffolding a lesson typically involves four steps: 1) teaching; 2) modeling; 3) practicing and 4) applying. Notice in the emergency care example below the students' progression from dependence to independence.

Content Objective: Students will be able to demonstrate the steps for aiding an adult choking victim.

Step 1: The teacher teaches (e.g., through readings, lectures, videos) the signs of choking and the associated emergency care steps.

Step 2: The teacher models (e.g., with manikins) the steps for aiding an adult choking victim.

Step 3: Students are provided, with the teacher's guidance, opportunities to practice the steps for aiding an adult choking victim.

Step 4: Students are assessed in their abilities to demonstrate the steps for aiding an adult choking victim. (Note the alignment between content objective and assessment).

7. *Whenever possible, use visuals.* School health education instruction can be enhanced with the use of visuals. Visuals, in this context, mean all instructional supports that the student can see. Common visuals such as posters, video, slides, magazines, newspapers and maps should be used when appropriate. In addition, health education teachers should create ways to incorporate and "see" visuals such as demonstrations, modeling, guided practice, role-playing, skits and TV commercials.

One of the most useful visual tools is a graphic organizer. Graphic organizers provide a visual representation of facts and concepts and also the relationships that link them together.[36] Graphic organizers can be used and illustrated in many different forms such as webs, T-charts, matrix grids, sequence chains and Venn diagrams.

There are numerous concepts in school health education in which graphic organizers can be used effectively.[37] Sequence chains may be helpful in representing the process of infection; webs may be useful in representing the contributing risk (or risk reduction) factors associated with cardiovascular disease. Graphic organizers should not be limited to teacher use. Teachers should also provide multiple opportunities for their students to practice using graphic organizers as well as encourage students to construct their own graphic organizers.

8. *Use hands-on activities.* Over and over again we hear about the educational benefits of actively engaging students in the learning process.[38] Active learning should be the norm in school health education classrooms. Active, hands-on learning activities take students out of their books, sometimes out of their seats, the school building and sometimes their familiar ways of thinking. Teachers who have incorporated a majority of active learning strategies in their classroom report that: 1) students try harder and are more interested in their studies,[39] 2) students behave better,[40] 3) absenteeism and tardiness drop and 4) students seem to accept more responsibility for their learning.[41] Some characteristics of active learning classrooms include:

• A variety of room and seating arrangements.[42]

• A variety of student grouping (i.e., individuals, pairs, small groups, etc.).[34,43]

• A variety of student mixing (i.e., ELL and non-ELL students).

• Frequent opportunities for student/teacher and student/student interaction.[44]

• Cooperative learning activities.[45-47]

• The option for students to choose individual pathways to learning.

• Options for students to demonstrate learning.[48]

• Learning tasks that require several classes/hours to complete and require multiple integrated skills such as decision making, problem solving, inquiry, self-direction and communication. As a word of caution about active learning, remember that your school health education classroom is a learning center and not an entertainment center. Without proper teacher planning and guidance, students may become so involved in the "active" part that they forget about the "learning."[27]

• Frequent and multiple methods of assessment. Assessing students is merely gathering information that will assist in making educational judgments about an individual student or groups of students. Assessments can be informal (e.g., "thumbs-up," "thumbs-down") or formal (e.g., standardized test).

From a school health education teacher and classroom perspective, formal assessments such as unit tests and graded projects should be developed BEFORE instruction begins. This will enable the teacher to inform the students clearly and precisely of their short and long-term objectives (refer back to strategy #2). Pre-developed assessments, along with the corresponding evaluation criteria, will provide the teacher with a clear instructional path. There should be multiple assessments along the way to confirm that students are making appropriate progress.

When appropriate, students should be given optional ways to demonstrate their learning. What if the only way your teacher would allow you to demonstrate your knowledge about how blood circulates throughout the body was to "sing" your answer using proper "singing guidelines"? Many of us would fail; some would fail because we would be too embarrassed to even try. However, many of us would have some success if we were allowed to demonstrate our knowledge in other ways, such as through a model, a poem, a research report, a skit or a video.[49]

9. *Strive for a relaxed, low anxiety, but enthusiastic learning environment.* Most of us prefer a work environment that is condu-

cive to our task. School health education teachers can improve student success by following a few simple guidelines.

• Be fair in the treatment of all students.

• Design lesson activities in which all students have opportunities to be successful.

• Strive to develop an appropriate educational rapport with students.

• Strive to consider student backgrounds when developing student-learning tasks.

• Teachers and students should work together to ensure a safe classroom.

• Use appropriate classroom management skills that prevent student misbehavior.

• Use displays, posters and student work to enhance the learning environment.

CONCLUSION

The school health education program cannot solve all of the educational issues affecting ELL and other low-literacy students. However, it can play a significant role in reducing the number of ignored, low-performing or failing students. By incorporating a few simple strategies, school health education teachers can provide learning experiences that will increase the health literacy of ALL students.

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