Developing an English Curriculum for a Premedical Program

Blessy George, M.A.

Background

The Kasturba Medical College - International Center started as a twinning Program between Manipal University and the American University of Antigua. The programs offered in this Institute are Premedical and MBBS. Premedical is an academic program that serves to fulfill the prerequisite for joining the Medical Program. The duration of the premedical program was 2 years.

The subjects and distribution of credits in the first two semesters of the Premedical Program is shown in Table 1.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credits</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Biology</td>
<td>6</td>
<td>5 Theory + 2 hour tutorial</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>6</td>
<td>5 Theory + 2 hour practicals</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>6</td>
<td>5 Theory + 2 hour tutorial</td>
</tr>
<tr>
<td></td>
<td>Pre Calculus</td>
<td>5</td>
<td>4 Theory + 2 hour tutorial</td>
</tr>
<tr>
<td>2</td>
<td>Biology</td>
<td>6</td>
<td>5 Theory + 2 hour tutorial</td>
</tr>
<tr>
<td></td>
<td>Chemistry</td>
<td>6</td>
<td>5 Theory + 2 hour practicals</td>
</tr>
</tbody>
</table>
Students are admitted into the 1st & 3rd semesters of the premedical program and into the first semester of the MBBS program. After the four years, students return to the United States of America to enter into the clinical rotations after passing a qualifying examination, namely the USMLE Step 1. At the end of the program they obtain a MD degree.

The Problem

Students coming from the United States of America are considered to have a strong foundation in the English language since that is language of their school education and spoken in most American, even Indian American homes. Therefore a variation in the expertise of the English language was noticed in this setting.

Students entering the premedical program may have come after completing senior high school, or may have taken some courses in college. Some students were already graduates in other fields and wanted to move into medicine. A number of students found the English syllabus that was offered at KMCIC redundant and uninteresting, mostly because it was a repetition of what they had already done in senior high school and college.

About 15% of the students had studied in an Indian system of school education before moving to the United States of America. While a good number of students were able to keep pace with the level of learning followed at KMCIC, some were seen to be struggling even in English.

This mix of students coming in to medical school made the teaching of English at a relevant and current level a daunting task. The syllabus being followed in this premedical program seemed repetitive and simple to most of the students. Despite the adoption of creative methods in the teaching of the language skills, it did not produce much effect.

There were two specific complaints from the students: (i) that the course seemed irrelevant and (ii) that the skills that were taught would most likely not be used in the practice of Medicine. Despite these complaints, it was noticed, after a diagnostic essay assignment, that the majority of the students were deficient in essay writing skills. Most of the students were not adept with the grammar rules either. An improper understanding in the framing of sentences was also noticed.

The Solution

1. Inclusion of Medical Terminology as a major component of the English Curriculum: The Medical terminology course was designed to equip the student in the use of medical terms. The Language of Medicine is very different from the normal English language spoken on a daily basis. Most of the terms that are used in the medical world are borrowed from the Latin and Greek and many of them are transliterated into English. Understanding the meaning and
derivation of words would help provide a strong foundation for better learning in Medicine. All the body systems were covered in this syllabus with all medical terms analyzed and learnt not just for their medical significance but also their English significance.

**Example:** The term “lacunae” refers to gaps, spoken in the medical world particularly with regard to bone morphology. Lacunae are spaces that the osteocytes (mature bone cells) have migrated into and get trapped in. This word has been used in medicine for almost 150 years and is still used in contemporary English with the same meaning and significance.

The detailed study of each organ system included anatomical parts, the function of each of these parts, common disorders associated with the system, common diagnostic terms and type of treatment given to a patient presenting with these disorders. The students were tested in Medical Terminology using Multiple Choice Questions.

2. **Developing Essay writing skills with a medical relevance:** Essay writing skills are necessary in order to write case reports, patient history and to write articles for medical journals. Narrative essays were emphasized and taught in the first semester of the Premedical Program. Students were given narrative essay assignments and were asked to pick a medically-oriented topic to write about. Examples of essay topics included dealing with a particular disease in a family member, a visit to the hospital. It could be fictional or real-life experience. The essay was not to exceed 1500 - 2000 word count. The essay would be graded at the end of the semester and the marks added to the final grade given for the English course.

In the second semester, a research essay assignment was given to the students. Students were asked to research on prevalent medical disorders or conditions and were asked to submit the research essays on a particular date. The strategies and mechanics of writing a research essay were taught and internal marks were allotted to the student. The marks for this essay were given based on the evidence provided, the statistics stated and the authorities furnished.

This assignment generated a lot of interest as it was in keeping with their future profession and for the medical knowledge that was gained at the end of research. Some of the topics that the students have ventured into researching are “The effects of multiple sclerosis and its treatment”, “Alzheimer’s disease”, “HIPAA” (Health Insurance Probability and Accountability Act), and Euthanasia.

3. **Debates on medical issues:** Controversial issues like Euthanasia (Mercy Killing), Abortion, Stem cell research, etc were selected for debates that were organized (two or three in a semester). A batch of students was divided into smaller teams of four to five. Each team was pitched against another team in a particular debate. In this way, all students had a chance to participate. Marks were assigned for participation, points put forward and effectiveness of the presentation.

**Benefits of the New Curriculum**

Language in India [www.languageinindia.com](http://www.languageinindia.com) 225
10 : 3 March 2010
Blessy George, M.A.
Developing an English Curriculum for a Premedical Curriculum
1. The new curriculum was enthusiastically received by the students and the management. Students finally felt that they were learning something relevant and useful and understood that this curriculum would give them a good standing in future semesters.

2. Students attained good marks in the sessional examinations since the Medical Terminology section, although detailed, was not difficult to learn.

3. Students who are now in the MBBS semesters have commented on the sound foundation they found themselves with because of the new curriculum followed in premedical English course.

4. Some students questioned the value of learning certain complicated clinical terms before receiving a complete basic science education. However, the purpose of the medical terminology curriculum was not to provide complete information on the clinical topic, but to give a taste of the kind of terminology that such students will eventually have to get used to.

Blessy George, M.A
English Faculty
Department of Humanities
Manipal Institute of Technology
Manipal - 576104
Karnataka, India
blessy.sam@gmail.com