Natural recycling of grammar while teaching medical English

ABSTRACT

In the last few years Varna Medical University has introduced several new specialties, thus challenging lecturers to design new courses of English for health care management, dental medicine, pharmacy, obstetrics, etc. Each discipline has its own range of essential topics, terms and grammar to acquire. The structure of the language taught in these subjects, although very similar, still needs appropriate contexts to naturally recycle grammar items. Students’ groups are traditionally mixed level in terms of language proficiency, and multicultural with diverse educational backgrounds. The materials designers and textbook authors have to focus on natural contexts from each narrow specialty in medicine. The aim of this article is to explore and demonstrate how one and the same grammar item is practised and revised in different contexts typical for the specific discourse of the medical specialty.

Key words: mixed-level groups; recycling of grammar; natural context; English for Medicine, Dental Medicine, Obstetrics and Pharmacy; practice for accuracy; using language for fluency

Introduction

Students who study English for Medicine, Dental Medicine, Obstetrics, Pharmacy and other Health Care subjects at Varna Medical University in Bulgaria are usually in mixed level groups. The syllabus traditionally includes topics that allow students to build, expand and enrich their vocabulary in their area of specialization. Together
with this primary focus on specific terminology we try to revise and recycle the grammar they learned at high school in a meaningful and appropriate context. Since they are at different levels of language proficiency, students are at a different stage of language acquisition and understandably they have different needs. Because it is difficult to find adequate books on the market that meet the special requirements of this specific context of teaching and learning English for medical purposes, there emerges a dire necessity for designing and writing our own materials. This situation is challenging both for lecturers and students of English for specific purposes.

When writing a new textbook, some of the key issues to address are what topics to include; what conceptual sequence to offer (our students are 1st and 2nd year at University); which grammar items to recycle and reinforce; how to select a natural context for consolidation of grammar; in what way to provide access to different types of discourse, etc.

The aim of this article is to share ideas about the process of choosing grammar points to teach and recycle, and of designing activities for awareness raising, practicing and providing contexts for natural use of the target grammar structures. The grammar thus analysed has been included in the textbooks written by teachers at the university and implemented in the course of nearly 10 years.

**Grammar and Methods**

The history of language teaching and learning methodology in essence refers to the changing concepts of teaching grammatical structures.

One of the traditional methods for learning languages in the past was the *Grammar-Translation* method, originally used for teaching and learning Latin and Greek and later transferred to teaching and learning other foreign languages. Language learning was thought to consist of “little more than memorising rules and facts in order to understand and manipulate the morphology and syntax of the foreign language”. The Grammar-Translation method unfortunately did not prepare learners to use the target language.

So following the swing of the pendulum in methodology the so called *Direct Method* emerged. No translation was allowed anymore and teachers taught structures using realia, pictures or pantomime. The Berlitz school today still uses this inductive way of teaching grammar in which students are presented with examples and encouraged to figure out the rule. When applying this method “An explicit grammar rule may never be given”.

With the *Audio-Lingual Method* “The major objective of language teaching should be for students to acquire the structural pattern through listening and repeating patterns and modelling the teacher” ⁷. Most linguists, methodologists and teachers of English believed that the learning of a foreign language should be the same as the acquisition of the native language. Since students do not need to memorise rules in order to use their own language, they do not need such rules to use the target language. But using the foreign language, students will begin to figure out the rules that govern it. The idea of the existence of a *natural order* of learning structures in a language led to listening and repeating long lists of drills such as substitution and transformation drills.

In *Suggestopedia* developed by the Bulgarian psychologist Lozanov¹², the teacher should present and explain the grammar and vocabulary, but not dwell on them. One way that meaning is made clear is through mother tongue translation.

Penny Ur, an author of methodology books such as *Grammar Practice Activities*¹⁴ and teacher trainer, also admits that there is no doubt that a knowledge of grammatical rules, whether implicitly or explicitly taught, is essential for the mastery of a language.

Later on the *Communicative approach* was developed. Its adherents acknowledge that structures and vocabulary are important. The theory of language has changed and language was no longer viewed as a *system or code to be mastered* but as a *vehicle for communication*. However, the feeling was that “grammar and vocabulary only will not prepare students for communication. Students may know rules for language usage, but will be unable to use the language” ⁷. The author Larsen-Freeman claims that an important part of communicative competence is to learn to use language forms *appropriately*, the grammar and vocabulary that the students learn “follow from the function, situational context and the roles of the interlocutors”. ⁷

David Nunan in his book *Designing Tasks for the Communicative Classroom*¹⁰ provides an overview of approaches and methods that clearly delineates the most important methods and approaches concerning the *theory of learning* and *theory of language*. Thus one can follow the way *teaching grammar* has changed according to the development of concepts and understanding about these theories.

*The Lexical approach* proposes a greatly diminished role for what is usually understood by ‘grammar teaching’. Equally, there is an enhanced role for grammar work which is radically different. The new style of grammar is primarily receptive, and because it is based on raising student’s awareness, is powerfully student- rather than teacher- centred”. ⁸ Michael Lewis suggests replacement of the presentation-practice-produce paradigm with observe-hypothesize-experiment (O-H-E) that allows stu-
dents to explore and observe how the language works, then hypothesise about the possible rules. Thus they “write their own rules” and then experiment while using the language.

One of the more recent and in-depth discussions of grammar is provided by Scott Thornbury in his book *How to Teach Grammar*. In his view “In the last century the architects of language teaching methods have been preoccupied with two basic design decisions concerning grammar:

Should the method adhere to a grammar syllabus?

Should the rules of grammar be explicit?”

The author recognises that “In fact, no other issue has so preoccupied theorists and practitioners as the grammar debate, and the history of language teaching is essentially the history of the claims and counterclaims for and against the teaching of grammar.”

At the beginning of the 21st century, *The Common European Framework of Reference for Languages - Learning, Teaching, Assessment* was designed by a number of European linguists and methodologists to facilitate mutual recognition of qualifications, and communication concerning objectives and achievement standards’. Frank Heyworth discusses this document in his article *Why the CEF is important* and answers the question “What do we mean by learning a language”. He claims that “The emphasis throughout the CEF is on how languages are used and what learners/users can do with the language – on language being action-based, not knowledge-based”.

Today we have all the range from grammar obsessed teachers at one end of the continuum to grammar phobics who claim: “I never teach grammar”. Hence in this post-method era of language teaching, teachers of English have to be eclectic and teach grammar according to their educational context.

**What to Teach When Teaching Grammar**

One of the best and most concise answers to this question was given by Jeremy Harmer. He said that “Whatever the level of the students and however language study is organised, there are four things that students need to do with new language: be exposed to it, understand its meaning, understand its form (how it is structured) and practice it.” By practice we understand use the language appropriately, both accurately and fluently.
How to Teach Grammar

Which approach to teaching grammar structures should be implemented in an ESP educational environment depends on a number of factors such as age of students, previous language learning experiences, personal learning style, type of grammar item to be taught, time available for its internalisation, etc.

*A deductive approach* to grammar teaching usually starts with the presentation of a rule, then giving some examples that demonstrate how this rule is applied. *An inductive approach* to grammar teaching would start with some examples from which students infer the rule. Some methodologists prefer the term *discovery learning*.

Research suggests that the more explicit or overt teaching of grammar is appropriate for adult learners who are able to make a conscious effort to internalize whole chunks of language, while young learners should be taught implicitly, in a covert way so that they may acquire language in context without focusing on rules or metalanguage they would not understand.

For the purpose of revising and consolidating grammar in our context of teaching English for medical specialties we have adopted a more “fluency-to-accuracy” sequence. “...the learning cycle begins with the meanings that the learners want to convey. They try to express these meanings using their available resources... through successive stages of trial, error and feedback, the learner’s output is fine-tuned for accuracy.” Sometimes marrying a task-based approach with the traditional grammar syllabus seems to be the best solution.

Implementing the Theory

Having outlined the major approaches to teaching grammar and how we decided on incorporating it in the course books for medical English we would share one of the most difficult tasks for us as textbook writers, that of identifying natural contexts in which the grammar items we aim to reinforce are typically used. To demonstrate the selection of natural contexts for consolidation of grammar, we shall give some examples, following the way one and the same grammar structure is recycled in different medical specialties such as medicine, dental medicine, pharmacy, etc. For more adequate exemplification we have decided to choose a grammar item that has been included in all the course books analysed. Thus we will be able to discuss the choice of natural contexts to reinforce the same grammar structure in situations pertinent to the different areas of health care: *Comparative and Superlative Degree of Adjectives*. Having considered in detail the type of activities suggested in the various course books we have designed, we came to the conclusion that basically three kinds
of activities are observed in them: awareness raising of grammar that follows a fluency-oriented activity; grammar practice for accuracy, and grammar use for fluency.

**Awareness Raising of Grammar**

Students of medicine are traditionally high achievers and have a good level of English. What most of them need is to extend their vocabulary bank of medical terminology but occasionally there are students who need more focused practice of grammar as well. From the very first unit, which focuses on comparing men and women in terms of who make better doctors, students are allowed to practice comparative and superlative degrees of adjectives. They either listen to or read a text which allows awareness raising of grammar in a natural context. Students are offered texts for listening or reading that provide the so called ‘roughly-tuned input’. Usually the reading comprehension tasks focus first on fluency and then on accuracy, especially when we notice that some students have problems with a given grammar point. Students first react to the text on a conceptual level and then we focus their attention on the way language works and the way it is used in a specific area. So they observe the text in detail and draw conclusions on how adjectives are used. Since groups are mixed level, for some it is just recycling of grammar while using it naturally, but for others there is a greater need for more practice.

Students of dental medicine experience a similar awareness raising of comparative and superlative degrees of adjectives in a context describing dental structures: they read about enamel, dentine, pulp and compare and contrast these materials in terms of which is softer, harder, the most durable, etc.

In obstetrics the same grammar item is included in a text about some world records on the smallest and the heaviest baby born alive. In other cases, after examining several separate sentences or a whole text that is saturated with lots of examples of how a given grammar point is used, students come to a conclusion how the grammar item works. They highlight the grammatical forms in context and the respective rules are elicited, usually from more advanced students.

Here is a sample of an awareness raising activity from the *English for Medicine* book, Unit 1:

**Task** Read the above text again and underline the forms expressing degrees of comparison. How are they formed?

Another example of an awareness raising activity may be found in the *English for Pharmacy* book, Unit 4.
**Task**  Read the sentences describing pain and drugs that go with it and say which is the typical grammar item revised.

1. This is the strongest painkiller available without prescription.
2. Women giving birth usually find that the epidural is the most effective pain relief.
3. Yesterday the pain was more severe than it is now.
4. These laxatives are milder than those.
5. He looks much worse today. The medicines he is taking don’t seem to work.

**Grammar Practice for Accuracy**

Once the teacher has raised students’ awareness of grammar in some less advanced groups, it may be necessary to devote some time for students to get used to the grammar forms with a focus on accuracy. In our case this sometimes holds true for students studying obstetrics. For that reason activities based on the form have been integrated in the appendix at the end of each course book analyzed. When teachers realize that students need more practice on accuracy and better understanding of how the form works, they resort to such controlled accuracy-focused practice of form on a word level. Basically these are supplementary activities for less advanced students.

*English for Obstetrics*, Appendix, *Unit 4*

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Comparative</th>
<th>Superlative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>the biggest</td>
</tr>
<tr>
<td>Small</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>more / less painful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>heavier</td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td></td>
<td>the best</td>
</tr>
<tr>
<td></td>
<td>more</td>
<td></td>
</tr>
<tr>
<td>Little</td>
<td></td>
<td></td>
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</tbody>
</table>

Along with these very controlled activities, a more common type is presented by tasks that practice grammar on a sentence level. At this stage the activities are similar in the different textbooks, e.g. **Open the brackets and provide/supply the proper comparative and/or superlative degrees.**
**English for Medicine**, Unit 1

**Task**  Complete the sentences to make logical statements using the appropriate degree of comparison of the words in brackets.

1. Women are 2-3 times (likely) _______________ men to suffer from depression in part because women's brains make (little) _______________ of the hormone serotonin.

2. (Far) _______________ studies are necessary to investigate the neurophysiological mechanisms of the disease.

3. Women smokers are (likely) _______________ to develop lung cancer than men smokers, at the same level of exposure. Women are (susceptible) _______________ to the carcinogens in cigarettes.

4. Of all the factors that may cause the disease, the social environment has (little) _______________ importance.

**English for Dental Medicine**, Unit 11

**Task**  Fill in the appropriate forms of comparative and superlative degree of the adjectives given in brackets.

1. Enamel is (a) _______________ (thin) at its border and (b) _______________ (thick) at the cusp.

2. Dentin is _______________ (soft) than enamel.

3. Enamel is _______________ (hard) substance in the body.

4. Cellular cementum is _______________ (permeable) than cementum.

5. Enamel is _______________ (sensitive) as dentine and pulp.

**English for Obstetrics**, Unit 4

**Task**  Complete the sentences with the correct form of the adjectives given in brackets.

1. The _______________ mother is known to be from Brazil. (young)

2. The _______________ woman in Bulgaria to give birth after IVF comes from Rousse. (old)

3. The baby in the crib seems to be _______________ and _______________ than the one in the incubator. (strong, healthy)
4. Baby girls are usually ______________ than baby boys but people say they are ______________ to raise. (small, difficult)

Using Grammar for Fluency

A third and perhaps most useful type of activities are those focused on students using English to express themselves. Thus spoken production on a sentence level or longer narratives and descriptions are produced. When it comes to the rubrics For Your Portfolio, students write reports and essays on given topics where they can use the language grammar and vocabulary for expressing their thoughts and ideas in a cohesive and coherent way.

Here is an activity from English for Pharmacy², Unit 4, that allows pharmacy students to describe drugs by comparing how expensive, effective and reliable they are.

**Task** Compare the medications given in the table by using the proper comparative and superlative degrees. Then write your own true sentences about drugs you know and their effect.

<table>
<thead>
<tr>
<th>Type of drug</th>
<th>Effective</th>
<th>Side effects</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin</td>
<td>***</td>
<td>**</td>
<td>*</td>
</tr>
<tr>
<td>Diclofenac</td>
<td>****</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Ibuprofen</td>
<td>***</td>
<td>*</td>
<td>***</td>
</tr>
</tbody>
</table>

Diclofenac is _______________________________ (effective).
Aspirin has _______________________________ (side effects) than Ibuprofen.
Diclofenac is _______________________________ (cheap) than Ibuprofen.
Ibuprofen is much _________________________ (expensive) than Aspirin.

The difficulty for non-native teachers of English as materials developers arises from the need to provide a natural context, usually with some support, both verbal and non-verbal. Here are some activities from different medical English course books that exemplify such contexts.
A. English for Medicine

**Task** Look at the table from the WHO Statistics estimates for 2002 about men’s and women’s life expectancy for Bulgaria and other countries and in pairs write sentences comparing life expectancy between the different countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Healthy life expectancy at birth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>males</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>35.3</td>
</tr>
<tr>
<td>Australia</td>
<td>72.6</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>64.6</td>
</tr>
<tr>
<td>Nigeria</td>
<td>41.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>70.6</td>
</tr>
<tr>
<td>United States</td>
<td>69.3</td>
</tr>
</tbody>
</table>

B. In *English for Dental Medicine*, Unit 20, there is a text describing types of fillings. Students have to compare restorative dental materials in relation to their durability, cost, and texture. They generate longer descriptions practicing contextualised comparative and superlative degrees with focus on the semantics, not the form, thus enhancing their fluency in English.

C. In *English for Obstetrics*, Unit 3, there is an activity which helps to trigger students’ expressing personal opinion. Then they write their own composition about the hospital job they like best. It is common practice to first consolidate the language by speaking before proceeding with a more creative writing task.

**Task** Think about these questions. What is your opinion? Answer giving complete sentences paying attention to the adjectives and their degrees of comparison.

Which hospital job...
- is the most difficult physically?
- seems to be the easiest and most pleasant?
- is mentally the hardest?
- is most rewarding?
- needs the greatest responsibility?
- would you least like to do?
- should be better paid?
- is most highly respected?
While comparing prescription forms used in different English speaking countries, students are encouraged to take an attitude of enquiry and analyze what the trends are, and they come up with observations on cultural issues while using comparative and superlative forms of adjectives. For instance, by comparing the two prescription forms below, they may draw the conclusion that in English speaking countries the patient details precede those belonging to the doctor. This may be explained historically but it also may be due to psychological reasons. There is yet another more recent prescription form used in Bulgaria which is more detailed and closer to the sample from the English speaking country.

<table>
<thead>
<tr>
<th>PRIMARY CARE ASSOCIATES</th>
<th>Министерство на здравеопазването</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1138 Wellness Rd, Colorado (413) 999-1817</strong></td>
<td></td>
</tr>
<tr>
<td>Name: Jane Darnley</td>
<td>Лекар ................................</td>
</tr>
<tr>
<td>Date 8/11/2011</td>
<td>(наименование на лечебного заведение)</td>
</tr>
<tr>
<td>Address: 11, Salisbury Lane. Age/Wt ____</td>
<td>гр.(с) ....................... год.</td>
</tr>
<tr>
<td><strong>RX Doxycycline 100 mg</strong></td>
<td>Rp.</td>
</tr>
<tr>
<td><strong>Disp #15</strong></td>
<td>Лекар: ..........................</td>
</tr>
<tr>
<td><strong>Sig: Take 1 capsule bid x 7 days</strong></td>
<td>за ..........................</td>
</tr>
<tr>
<td></td>
<td>Мими Райан, ARNP</td>
</tr>
<tr>
<td></td>
<td>Dispense as Written Substitution</td>
</tr>
<tr>
<td></td>
<td>Permissible</td>
</tr>
<tr>
<td>Refills <strong>0</strong></td>
<td>Per protocol: Dr. Everett</td>
</tr>
</tbody>
</table>

Similarly students of pharmacy perform an activity in which they are trying to read and discuss different job advertisements thus comparing and contrasting the different positions available. They may also be involved in reading and interpreting graphs/charts as the one below. Usually questions are added to provide both guidance and support. They help students to generate their own language when compar-
ing and contrasting differences in average hourly wages for pharmaceutical specialists. Besides the natural use of English, such activities develop students’ observation skills, their abilities to concentrate precisely, to reason and summarize. The questions below provide a scaffolding that supports the students’ interpretation of the graph.

**Task. Look at the diagram and answer the questions.**

Which professions are compared?
Who has the highest wage?
How much does a chemist earn for an 8-hour workday?
Who earns almost 50% more than chemical technicians?
Why do in your opinion biochemists earn more than medical scientists?
Which of the professions listed appeals to you most?

At the end of the English course students of different health care subjects traditionally prepare an oral presentation on PowerPoint which they deliver before their peers. This gives them yet one more chance to use the grammar in context, display and compare their more creative products, e.g. pictures, posters, collages, folders with portfolio topics, etc.

**Conclusion**

The specific context provided for natural grammar-focused work in English depends on the medical subject taught. Typically the exploited texts supply natural environment and allow students to experience the language in a highly contextualized manner. Sometimes tips are used from existing books on general English and tasks are
transferred to a text for medical purposes, and they are adapted to match the context and culture of teaching.

As Michael Swan pointed out at a seminar in Sofia in April 2012, ‘Grammar doesn’t have to be grey!’ On the whole, students at university level like doing grammar, they are used to such activities in high school and grammar-focused work is part of their expectations for enhancing their English skills and enriching their medical English vocabulary. In rare cases some students even prompt the lecturer to provide more activities for practicing contextualized grammar. On one occasion one of the excellent students observed, ‘We don’t have enough grammar’ and continued, ‘It was high time we did a grammar-focused activity to brush up our English …”. Thus students give ideas and help in the process of further developing the English for medical purposes course books.

REFERENCES: