Review

Evaluation of an EAP (English for Academic Purposes) Textbook: English for the Students of Dentistry

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Abstract

This paper evaluated the ESD textbook (English for the Students of Dentistry) using McDonough and Shaw's (2003) internal and external evaluation model and the ACTEFL Evaluation Checklist to examine its appropriacy for the target situation. The researcher has reviewed and presented sixteen evaluation models produced by various applied linguists. The external and internal evaluation of the textbook showed that it cannot be used as the core materials for the ESD course in its present format and state. Also, based on standards of the ACTEFL Evaluation Checklist, the textbook scored 33 out of 100 points indicating that it does not observe the features of an acceptable material for the target situation. Some useful recommendations are presented for adapting and improving this textbook to meet the required criteria. The weak and strong points of the textbook are discussed in details.

Keywords: Textbook, Materials: EAP, ESD, Internal Evaluation, External Evaluation, The ACTEFL Evaluation Checklist, Dentistry, Iran.

INTRODUCTION

During my fifteen-year experience of teaching the ESD textbook (English for the Students of Dentistry), I’ve been suffering from the betrayal of dissatisfaction oozing out of my dental students at every pore, culminating in my own displeasure as the only instructor of this course at the School of Dentistry at Yazd Shahid Sadoughi University of Medical Sciences and Health Services. This textbook is imposed by the authorities in the Ministry of Health, Treatment, and Medical Education as the only teaching material for this course as if we are practicing pedagogy under the realm of the old philosophical school of classical humanism of Clark (1987) in the 21st century, and that is a pity. Most passages in this textbook are about 41 years old. The book seemed to me to lack many fundamental characteristics of a good textbook, so I decided to investigate its validity scientifically based on some well-established materials evaluation criteria found in most proposals and checklists and base my claims on empirical evidence.

I pursue two objectives in this research: First, I will describe and demonstrate a useful procedure for textbook evaluation combining features from a number of well-documented checklists and proposals. Second, I will evaluate the ESD textbook used for the courses “English for the Students of Dentistry I” and “English for the Students of Dentistry II” written by M. H. Tahririan in 1993 and published by the official Iranian SAMT Publications, at the School of Dentistry at Yazd Shahid Sadoughi University of Medical Sciences. For the purposes of this project, I will try to understand whether ESD would be an appropriate core textbook for the intended course at the said university.

According to Peterson (1998), there are several reasons to evaluate a textbook. First, we may want decide if a textbook can be used or if in-house materials will have to be generated. Second, we may want to choose one textbook out of several possible candidates. And third, after choosing a textbook, we might want to examine it in detail to determine what areas will need to be supplemented. The evaluation which I will do could
help us achieve any of these purposes. The evaluation method which I will follow is based on ideas presented in Hutchinson and Waters (1987) and in Chambers (1997). I will use two checklists based on my criticisms of existing checklists and merging some extra features of other existing ones as there is no omnipotent checklist presently available. As mentioned before, this textbook is imposed by the authorities in the Ministry of Health, Treatment, and Medical Education as the only teaching material for this course as if we are practicing pedagogy under the realm of the old philosophical school of classical humanism of Clark (1987) in the 21st century, and that is a pity. Most passages in this textbook are about 40 years old. The book seemed to me to lack many materials for this course as if we are practicing pedagogy. Treatment, and Medical Education as the only teaching imposed by the authorities in the Ministry of Health, and Talebinejad (2012) Dudley-Evans and St. John (1998) posit “ESP is an approach to language teaching in which all decisions as to content and method are based on the learner’s reason for learning.” Hence, we can define ESP as English instruction based on actual and immediate needs of learners who have to successfully perform real-life tasks unrelated to merely passing an English course or exam (Smoak, 1996). So, it focuses on learners’ needs primarily. Another point according to Hutchinson and Waters (1987) is that curriculum design specialists believe that the breaking down of curriculum into components and sub-processes is of vital importance since it simplifies and organizes such a complex process as the curriculum design is. The first component in such a procedure is the needs assessment that is, obtaining of data followed by a needs analysis.

In the Iranian context, English is the language of a lot of academic textbooks, especially in medicine and engineering. Of course, the learners learn it just to gain the ability to read and understand EAP/ESP textbooks. They may never use this English for communicative purposes. Yet, this has led universities to include ESP work in their curriculum as a necessary course, though these courses are still limited to learning specific lexicon, grammar points, and translating texts. This approach, as Ghalandari et al. asserted, basically ignores learners’ personal interests and needs and often creates low motivation in students’ English studies. This, in turn, leads to poor performance later when they use English in their profession. According to Swales (1980), since the early 1960’s when ESP became one of the most prestigious areas of EFL teaching, we have witnessed the publication of a large number of ESP textbooks, but a few books are obviously the product of careful research and a clearly defined theoretical position. Also, evaluation of teaching materials is an important part of a teacher’s career. Evaluation is basically a matching process, which concerns matching learners’ needs to available solutions (Hutchinson and Waters, 1987).

The history of ESP is divided into four phases by Hutchinson and Waters (1987). The first phase covers the 1960s and the early 1970s when ESP researchers and teachers emphasized the lexical and grammatical characteristics of academic/professional registers at the sentence level. The second phase extended from late 1970s to early 1980s when the focus was more on rhetorical issues and researchers and practitioners began to examine the organization and function of discourse at a number of levels of abstraction. The third phase synthesized the discoveries of Phase 1 and Phase 2 when researchers concentrated on systematic analyses of the target situations in which learners’ communicative purposes were more attended to. Recently, in the last phase, researchers have shifted their emphasis on learners’ strategies for their effective thinking and learning. Thus a much more promising approach to a theory of ESP comes from the analysis and evaluation of ESP textbooks. All ESP activities have to be linked to a view of text. According to Hutchinson and Waters (1987, as cited in Ghalandari et al), ESP has, in its brief history, adopted various approaches to text analysis, from the early register analysis associated with the identification of
key grammatical elements of scientific communication through rhetorical analysis and finally to functional/notional. In today’s classrooms, textbooks are a key component in most language program. After teachers, textbooks are considered to be the next important factor in second/foreign language classrooms (Riazi, 2003). Also, according to Dudley-Evans and St. John (1998), in some situations where English is a foreign not a second language the ESP classroom may be the only source of English. Materials then play a crucial role in exposing learners to the language, and the full range that learners require. In the educational setting of Iran, textbooks serve as the basis for much of the language input learners receive and the language practice that takes place in the classroom. For most teachers, textbooks provide the foundation for the content of lessons, the balance of the skills taught. They also provide kinds of language practice the students engage in during class activities. On the other hand, a countless number of English textbooks are available on the market today. For an inexperienced teacher, it can be particularly difficult to know what to look for in an English textbook. As Wright (1992) believes, rather than criticizing instructors who are handcuffed to a certain text, relevant evaluation criteria should instruct teachers how to best select course books that fit their specific needs. Consequently, the selection of a textbook is one of the most important decisions a teacher will make. Equally worthy of mention is that, according to Ansari and Babayi (2002), as teachers, many of us have had the responsibility of evaluating textbooks, so the evaluation of teaching materials is an important part of a teacher’s work. According to Tomlinson (2005), the process of materials evaluation can be seen as a way of developing our understanding of the ways in which they work and, in doing so, of contributing to both acquisition theory and pedagogic practice.

ESP is a rather old approach which has been widely used over the past three decades. However, as Anthony (1997) notes, there has been considerable recent debate about what it means. The first Japan Conference on English for Specific Purposes in 1997, demonstrated clear differences in how people interpreted the meaning of ESP (Kimball, 1998). To some, ESP is simply the teaching of English for any purpose that could be specified. To others, however, it is the teaching of English used in academic studies, or the teaching of English for vocational or professional purposes. The main speaker at the conference, Gatehouse (2001) was very much aware of the confusion and set out in his one hour speech to clarify the meaning of ESP.

Materials evaluation seems to be the old hat to the professionals in applied linguistics. As instructors of EAP/ESP courses in the world of academia, we grossly evaluate our course book as a daily routine. Yet, this is not satisfactory as the selection of any textbook appropriate for a given target situation demands a deeper contemplation on its appropriacy. This implies the need for conducting a systematic evaluations (Brown 1995, Ellis 1997, Richards 2001, cited in Al Fraidan 2012). In my situation, I have just one textbook for the ESD course (English for the Students of Dentistry) imposed on me by the authorities in the ministry of Health, Treatment, and Medical Education. My teaching experience and students’ reaction to this course book reveals the point that its content and sequencing, and also format and presentation do not match the needs of the dental students. Evaluation is a ‘matching process; matching needs to available solutions’ (Hutchinson and Waters 1987 cited in Sheldon 1988: 237). This statement is true in my situation, as I am striving to satisfy the needs of my learners through proving that this textbook must be adapted or replaced by a suitable one. I am attempting to find the book that contains solutions to all or most of my learners’ deficiencies. Learners must not be obliged to study the book they have little or no interest in. As this course is related to the careers of individuals, the materials must be selected carefully (Hutchinson et al. 1987, 1994). As Sheldon (1988) states, the selection of a particular core volume signals an executive educational decision in which there is considerable professional, financial and even political investment… the definition and application of systematic criteria for assessing course books are ‘vital. The evaluation process should be carefully conducted to assure optimal results (Allwright 1981; McGrath 2002).

Cunningsworth (1995) and Ellis (1997, as cited in Litz, 2003) have suggested that there are three different types of material evaluation. According to them, the most common form is probably the ‘predictive’ or ‘pre-use’ evaluation that is designed to examine the future or potential performance of a textbook. The other types of textbook evaluation are the ‘in-use’ evaluation designed to examine material that is currently being used and the ‘retrospective’ or ‘post-use’ (reflective) evaluation of a textbook that has been used in any respective institution. As Peterson (1998) states, there are several reasons to evaluate a textbook. First, we may want decide if a textbook can be used or if in-house materials will have to be generated. Second, we may want to choose one textbook out of several possible candidates. And third, after choosing a textbook, we might want to examine it in detail to determine what areas will need to be supplemented. The evaluation done in this research could serve any of these objectives.

According to Lowe (2009), it is far easier to discuss materials selection when objective criteria are established and agreed as the following:

**Materials evaluation**

1. Discuss what attracts you to a book? It is likely to be a mixture of reasons. e.g.
2. How do you evaluate? (Hutchinson and Waters 1987 chapter 9)
a. Evaluation is basically a matching process: matching needs to available solutions. Ultimately the decision is subjective.
b. It helps to know what you are looking for, and your priorities.
c. It helps to have a checklist.
1) list the features.
2) give priority ratings to the features.
d. It helps if two or more people do the work.
e. Actively compare how two or more books deal with a language point/skill/topic.
f. Distinguish between:
1) global appraisal, overall approach and content
2) detailed evaluation of one unit of a book
3. Characteristics of good materials:
a. Provide a stimulus to learning: interesting, enjoyable, content at the right level.
b. Provide a path through the learning maze. Clear, coherent structure with variety.
c. Consciously reflect a view of learning and language.
d. Stretch teachers to use different techniques.
e. Provide models of correct and appropriate language use. But, models in perspective. Language is a means to an end for ESP/EAP learners.

Problems with evaluation checklists

In working with evaluation checklists, we actually face some unexpected problems. It is better to refer to these problems as deficiencies as they render the evaluation process as tiresome or probably impossible. For instance, Peterson (1998) evaluated InfoTech, and initially used Sheldon’s (1988) evaluation checklist (see appendix 1). While doing the evaluation, they encountered numerous problems with the checklist. As they assert, answers to many of the questions Sheldon asks could not be found. “Why was the course book written? Are you given information about the needs analysis?” (p 243). However, answers to these questions say nothing about the quality of the materials. They are more for evaluation convenience. Other questions are trivial. “Is the spine labeled?” (p 244). A rating of “excellent” or “poor” on this question would not affect the decision in the least. Two books would have to be perfectly balanced for “spine labeling” to tip the scale. Further, it would be very difficult to justify your decision to the stakeholders based on the “spine labeling” criteria. Further, several silly questions are asked. “Is the book too large? Too heavy?” (p 244). The list of possible problems with a textbook is endless. There needs to be a “catch all” category for things that stand out as strange. Likewise, there needs to be a catch all categories for things which are unusually good. Most importantly, they add, Sheldon relies too much on finding out the author’s rationale for writing the book. Most of her questions can be answered by just examining the rationale printed at the beginning of the book or looking at the table of contents. At the end of the evaluation, you feel like you have evaluated something because the checklist is full, but much of the information obtained is from the author’s perspective, and thus not objective.

Peterson (1998) further presents Chambers’ (1997) useful framework for evaluating textbooks in which the decision makers decide on necessary criteria and desirable criteria (see appendix 2). According to him, only textbooks with all of the necessary criteria are considered. The desirable criteria are then weighted and
then given a score. The advantage of this checklist is that it is specific to the group that is making the decision. However, one of the problems I found when making the checklist was that the list of desirable criteria was endless. Not much reliance can be placed in the total score if the list is incomplete, and the list will always be incomplete. Further, many criteria that are put on the list may be open to interpretation. In the sample Chambers provides, one of the criteria is “communicative approach” (p. 32). Communicative approach means different things to different people. If we disagree about the score we assign to this category, it is not known why we disagree. Is our idea about the communicative approach different, or is our interpretation of the materials in the text different?

Characteristics of Good Checklist Items

Based on the problems faced by many researchers including Peterson (1998), the following features are offered for good checklist items:

-items on the checklist should deal with the quality of materials, not evaluation convenience.
-no items should be on the checklist that could not, in them, sway the decision.
-there needs to be a catch all categories for textbook characteristics that are “unusual”.
-items on the checklist should require the evaluator to look at the materials, not just the author’s description of the materials.
-checklists based on scores are of limited value because, by their very nature, checklists are always incomplete.
-general terms such as “communicative approach” must be defined.

In this regard, we can draw a number of conclusions: First, the materials must match the needs of the students; not only the language needs which are required to function in the target situation, but also the learning needs, the ways which the students like to learn. Second, evaluation cannot be done by examining the author’s rationale alone; a sample number of units have to be looked at in detail. Third, criteria for evaluation should be based on your personal theory of language learning. As Hutchinson and Waters (1987) argue, “Materials should ... truly reflect what you [the teacher] think and feel about the learning process” (p. 107). Fourth, this theory of language learning should be divided into theories of reading, writing, speaking, listening, vocabulary, etc. Then, the reading exercises can be evaluated against your theory of reading, the writing exercises can be evaluated against your theory of writing, etc. Fifth, looking at individual units is not enough. There must be some “whole book” criteria, based on your theory of recycling language, grammar progression and motivation. Thus, a checklist must be made based on your “whole book” theory of language learning.

Evaluation models


Research literature

Many interested researchers have focused on determining the validity of EAP and ESP textbooks. They have endeavored to explain the deficiencies and disadvantages of them and provide some guidelines to improve or replace the materials. Peterson (1998) conducted a research with a twofold purpose. First, to describe and demonstrate a useful procedure for textbook analysis, and second, to evaluate the computer English course book InfoTech, written by Santiago Esteras and published by Cambridge University Press (1996), using this procedure. The author tried to determine if InfoTech would be an appropriate textbook for a pre-sessional English for Computer Users (ECU) course at the University of Reading.

In another study by Cañado and Almagro Esteban (2005), it is claimed that Although authentic materials are a very rich source for the selection of teaching materials in the field of ESP in general and of Business English in particular, the ultimate purpose should be authentic communication between the text (oral or written) and its recipient as a result of the interpretation brought to the text by the latter. To speak of authenticity implies therefore a dual focus: that of “authentic material” and that of “authenticity.

According to Swales (1980), although ESP textbooks have been purchased in considerable quantities, they have been surprisingly little used. Thus, the ESP textbook problem is seen as being essentially one of educational failure. The major cause of this failure could lie either in the product (the textbook) or in the primary user (the ESP practitioner). The problem as posed thus
raises at least two inter-related issues: what should be the purpose and role of ESP textbooks, and what is properly involved in being an ESP professional? However, our approach to these issues is obscured by some of the facts of ESP history, such as market forces in publishing, the status of the ESP practitioner, textbook analysis and trends in research and development, all of which have contributed to the abuse and disuse of textbooks. The researcher further adds that a reconsideration of the role and structure of ESP textbooks would allow them a restricted but legitimate place in ESP work. Williams’ (1983) article shows how criteria can be developed for evaluating English language textbooks. It presents a scheme for evaluation which can be used to draw up a checklist of items relevant to second (or foreign) language teaching. Instructions for using the checklist are given as a way of suggesting how teachers can evolve their own criteria for different situations. Miekley’s (2005) checklist provides educators with a valuable tool for evaluating reading textbooks for use in ESL/EFL classrooms. Classroom teachers spend much time using textbooks in class, so choosing an appropriate one is important. Each question in this checklist is based on either recent research or previously developed checklists. This article explains how to use the checklist. Using this will make the textbook selection process more efficient and more reliable. Riazi (2003) asserts that textbooks are the dominant source of learning in English for Specific Purposes classes. Within the Iranian context, ESP textbooks are mainly written or compiled by the Iranian experts either in ELT field or the content area. In order to evaluate the appropriateness of such textbooks for Iranian ESP courses, a survey was conducted by the researcher via questionnaires and informal interviews. The textbook opted for evaluation was ‘English for the Students of Private Law’ compiled and edited by Moshefghz and Sharifiyan (1998). The questionnaires were submitted to one hundred students and twenty teachers studying and teaching Private Law in Allameh Tabataba’i University and Tehran University, respectively. The result of this survey showed that this textbook did not match up with the students’ needs and teachers’ expertise in teaching ESP courses. Hence, students’ and teachers’ opinions elicited through the questionnaires can provide ESP textbook writers with insightful ideas in improving ESP textbooks. Baleghizadeh (2011) attempts to describe the process that was undertaken to evaluate the textbook English for the Students of Sociology: Social Science Texts taught at the University of Tehran. The purpose of this research project was to determine the overall pedagogical value and suitability of the book toward this specific language program. To achieve this goal, a questionnaire consisting of 20 items and examining 6 factors (practical concerns, materials in relation to course objective, subject matter, linguistic issues, skills and strategies, variety of tasks and activities, and the layout of materials) was used. The findings indicated that the book, despite having merits, was not very suitable for the course. Suggestions regarding the kinds of activities, strategies, layout and other important issues are discussed. Al Fraidan (2012) evaluates two ESP textbooks and briefly discusses the external evaluation and then concludes with the results of a detailed evaluation of one chapter from each textbook for a course that they were teaching. The course was for business major students who wished to apply for jobs at The Saudi Telecommunication Company (STC), which required a strong command of English. The evaluation indicated that both books would be appropriate if we merge them together and add some additional materials, as a textbook that can accommodate the needs of all learners does not exist. Scott Boston’s (1998) paper looks at the course books Passport and Passport Plus. While this paper is an evaluation of two particular course books in the context of a specific teaching situation, it could be taken as an example of how course books can be evaluated, and if need be, modified to better meet the needs of students. However, there is an inverse relationship between the utility of a course book and the amount of adaptation required by teachers to make it suitable for their situation. The Passport course books are inadequate for their learner’s needs and to render them so requires more than mere modification. Rather, the course books need to be extensively reworked and supplemented, making the Passport course books unsuitable for the current classes in which they are used. According to Lowe (2009), it is common enough in ESP that teachers will have to choose their own textbook. All teachers can benefit - even the more experienced ones - by taking explicit steps to compare and evaluate the textbooks objectively, so that the textbook and the use of the textbook is the best match to the needs of the students. Subjective feelings should only be a guide - by establishing a list of criteria these feelings can be confirmed or shown to be wrong. In addition, I am assuming that normally the decision to use a textbook will involve discussion with other colleagues. It is far easier to discuss materials selection when objective criteria are established and agreed. Ghalandari and Talebinejad (2012) believe that teachers, course designers, and materials writers must be aware that for successful ESP learning, the incorporation of learners’ needs is considered to be a vital part of the syllabus. Furthermore, analyzing the specific needs of a particular learner group serves as the prelude to an ESP textbook evaluation. Their article is about an analysis of medical ESP textbooks taught in Shiraz Medical College. Then, based on Hutchinson and Waters’ (1987) framework, ESP textbooks of medical students in Shiraz Medical School were evaluated.
Finally, the compatibility of the content of these textbooks with the students’ needs has been discussed. Considering the result of evaluation on ESP textbooks, they found that ESP textbooks in medicine are appropriate books for the purpose of medical English for Iranian physicians and compatible to student's needs and achievement.

In Litz' (2005) opinion, ELT materials play a very important role in many language classrooms, but in recent years there has been a lot of debate throughout the ELT profession on the actual role of materials in teaching English as a Second/Foreign Language (TESL/TEFL). The paper discusses and describes the intricate and complex evaluation process that was undertaken at Sung Kyun Kwan University in Suwon, South Korea in 2000-2001 for a textbook (English Firsthand 2) that was being used in this particular learning environment. The purpose of this research project was to determine the overall pedagogical value and suitability of the book towards this specific language program.

There is also “Textbook Evaluation Instrument Based on the ACTFL Standards” available. The Standards for Foreign Language Learning afford us the opportunity to review every aspect of our delivery of instruction. One such element to be considered is textbook selection. Based on the Standards, textbook evaluation has become expanded to include the 5 C's as well as the seven curricular elements.

**METHODOLOGY**

Below will be given a brief exploration of issues concerning subjects for whom the textbook was originally written and instruments used in the materials evaluation process.

**Instruments**

I used two evaluation models to carry out this research. First, I applied McDonough and Shaw’s (2003) model which divides the process into external and internal evaluation phases. Then, I performed the internal evaluation phase using the ACTEFL Textbook Evaluation Model for details (See above). The McDonough and Shaw (2003) evaluation model, according to Al Fraidan (2012) saves us a significant amount of time and effort. In the external evaluation stage, a teacher can scan a book, obtain a general idea regarding the materials and then decide whether the materials conform to his expectations. If the text satisfies his requirements, then he can progress to the next stage, which consists of an in-depth analysis of the materials. I have chosen this model because it is the most appropriate, time-saving, economical and applicable method of evaluation for my situation. In simple terms, this model can be called a ‘universal model’ that can be useful in nearly any context.

According to Sheldon (1987), some Egyptian teachers used questionnaires, interviews and seminars as means of evaluation. These methods can be effective if they are well managed, but the authors also cited some drawbacks of these techniques, such as embarrassing situations for teachers in interviews and some types of speech disorders in seminars.

**Method**

As I mentioned before, I did an external evaluation (McDonough and Shaw (2003) of the ESD textbook, first and then the internal evaluation using the ACTEFL Textbook Evaluation Checklist as the following:

**External Evaluation**

The book is entitled “English for the Students of Dentistry, written by M. H. Tahririan in 1993 and published by the official Iranian SAMT Publications in Tehran, I. R. of Iran. It consists of 560 pages, too much for an EAP textbook. It seems to be too heavy an EAP book to be taken to the class in the students’ briefcase everyday as it weighs about less than 1 kg. The cover is simply designed and colored and not interesting to the students. The paper quality is low and of a dark appearance for both the front and back covers as well as for the inner sheets. The sheets are thick and heavy. The binding is very poor as the sheets are separated readily after a few days of use. The book is not strong and long-lasting. The price (70000 Rials) is too much for such a low quality book, so that most students prefer to xerox it rather than buy it. Also, it is out of print and not easily available in the market. New supplies are not available at short notice. The page layout and design is not attractive. You can see some texts typed and printed with old software. The black and white printing decreases its attractiveness. The font type and font size are not selected skillfully. The use of bold-face letters do not seem to be properly done, though the italicized letters are properly used. There are no illustrations except 10 simple caricatures drawn in stick lines in black and white. These caricatures appear at the end of some lessons and are not related to the content, i.e., they are not used to demonstrate any pedagogical points. After having a quick scan of the book, I noted that it has no blurbs on the front and back covers or at the beginning of each unit. There is no “Introduction” to the book, except a Persian one given at the end of the book. The general objectives of the book are not given at all. Also, the specific objectives of each unit are missing, so that the learners are not aware of what they are going to learn in each unit.
Internal Evaluation

Target situation

This textbook is intended for a two credit-hour course for the students of dentistry to be covered in 16 sessions, each of 100 minute duration. Naturally, it should include just 16 units as it is the case with other SAMT publications; however, it includes 46 units which makes the book too thick and heavy.

General structure of unit

The general structure of each unit is very deficient and problematic. In fact, each unit begins with the reading comprehension passage which is very uncommon in EGP, EAP, and ESP textbooks. There is a “Vocabulary Help” put at the last page of each unit and this contrary to the principles of teaching reading comprehension. Every TEFL professional knows that the vocabulary should be presented and worked on before going to the passage. The “Vocabulary Help” is very deficient and limited as it gives just 4 words and their definitions in Unit 1 while the passages are very difficult and exhaustive. There are no parts devoted to “Definitions”, and “Exemplifications to provide some use and usage examples to the students. “Pronunciation Practice” is missing and there are no phonetic transcriptions for the new or difficult words. In fact, pronunciation is totally forgotten in this textbook. No part of the unit is devoted to grammar or grammatical explanations, yet there are some grammatical exercises which do not seem to be helpful. There are some compilation problems, e.g., there are some cloze passages with some words given for filling the blanks in the cloze passage, but surprisingly these words do not belong to this passage and are mistakenly put there.

One strong point of the textbook is the part on “Comprehension Check” which asks students a dozen of questions on the passage to be answered orally. This is good for practicing speaking in class and also for group discussion. Next, we have the matching items exercise under “Vocabulary Exercise”. This part does not seem to be helpful in expanding students’ vocabulary domain as it provides the new words decontextually, i.e., in isolation without any exemplifications. Next, there is a cloze passage on grammar, i.e., the students are required to use the correct form of the words given in parentheses. This is also inappropriate as it is not based on any sequencing, recycling, or grading of grammatical points. In fact, it is quite haphazard.

The next part is “Word Analysis Exercises” which is interesting as it helps the students how to disintegrate a word into its components and then re-synthesize it again. It is also helpful in enabling students to guess the meaning of the word by putting the meanings of its different parts together. Then, a part on “Translation Exercise” is given. This part is also suitable for the purpose of the course as it enables the students to acquire the ability to understand the EAP/ESP texts in English. The next part is “Farsi Equivalents” which seem to be proper as it is necessary for dentists to know the Persian equivalents of their jargon terms. In providing the students with further reading materials, the author has included “Further Reading” in which another passage with a content similar to the first passage is given followed by some oral answer questions. Finally, the “Vocabulary Help” appears which is, as I said before, is totally misplaced in the structure of each unit.

Authenticity

The source of each reading comprehension passage is given at the end of it as the following: (Adapted from: B. S. Krause et al, Dental Anatomy and Occlusion, The Williams and Williams Company, 1969). As the date (1969) shows, passages in this textbook are about 42 years old. This means that the content is scientifically out-of-date as we have daily, monthly, and yearly innovations in the field of dentistry. The language and style of writing is also difficult, non-fluent, and archaic as confessed by the students in my classes. This means that the textbook lacks greatly in authenticity.

Language skills

Regarding the language skills, each unit just focuses on reading and ignores the presentation of listening, speaking, and writing. No speaking is taught and the students answer the oral questions based on their repertoire of English.

Language components

Regarding language components, there is a limited amount of practice on vocabulary. No work is done on spelling, pronunciation, stress patterns, intonation, and other paralinguistic and extra linguistic features of prosody. Little work is done on grammar. The book is not illustrated and is printed in black and white.

Cultures

The textbook has totally ignored the teaching both the little “c” and Big “C” culture.

Technological Issues

There are no CDs, cassettes, or videos accompanying...
Table 1. Evaluating According to the 5 C’s

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<td>Other Features</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

the book. This is a great deficiency for this textbook.

My ACTEFL Evaluation of the Textbook

I evaluated the ESD textbook using the ACTEFL standards and gained the following results: (Table 1) The textbook evaluation score was 33 out of 100 points meaning that it cannot be used in its present format and state as the core teaching source for the ESD courses I and II at the School of Dentistry at Yazd Shahid Sadoughi University of Medical Sciences and Health Services.

Overall Evaluation

McDonough and Shaw (2003) provide a final step, whose importance is similar to that of the other steps. In this step, a teacher finalizes his or her analysis and then chooses the book that suits the course objectives and the needs of his or her students. However, my decision will be presented later in the manuscript. This step addresses the following questions:

Can the textbook be modified to suit your purposes?

Actually it can. If we effect the following modifications, we can use it as the main source of the ESD courses I and II: -Addition of new sections on: pronunciation practice, definitions, exemplifications, grammatical points, grammatical exercises, listening practice, speaking practice, and writing practice. -Correcting the content and sequencing of the material. -Improving the format and presentation of the material. -Limiting the number of units from 46 to 16 to gain a good size and volume. -Printing the book in multicolor with proper page layout and design. -Using interesting illustrations to add to the attraction of the book and help clarify the content. -Providing some supplementary multimedia as CDs, cassettes, etc. -Using light white high quality paper. -Using an attractive cover design. -Moderating the price of the book. -Making it easily available in the market. -Specifically, the units are not based on any type of grading or word frequencies. We should compensate for this shortcoming, too.

Can this textbook be used as core or supplementary?

This book cannot be used as core material in its present format. However, it can be adapted to my syllabus after doing some corrections and improvements.

Can the textbook be generalized? Will it be useful for all learners?

Since this is an EAP source, it is designed just for the students of dentistry for their ESD courses. Students of other majors can study it for themselves to add to their general knowledge.

Are the materials flexible in sequence and grading?

The units and the passages are not at all graded or sequenced. In fact, they are put one after another haphazardly.

Decision

Based on my internal, external, and ACTEFL evaluation of the ESD textbook and getting a score of 33 out of 100 points, I decided that this textbook could not be used...
CONCLUSION

I analyzed the ESD textbook in two main stages: external and internal evaluations. The external evaluation consisted of a brief scan to determine whether Persian introduction of the author and the content match the purposes of the course. In the internal evaluation, the book was judged by different criteria as language, authenticity, appropriateness, the language skills, components, culture, technological issues, appearance, price, quality, and other factors, such as usability generalizability, adaptability and flexibility.

In EAP, a teacher always aims to fulfill the needs of learners, and textbooks that accommodate all of these needs and objectives are rare. Therefore, a teacher may use supplementary materials to support your core textbook. One problem with evaluation is the subjective nature of checklist design and its subsequent effect on textbook selection; Littlejohn (1998), as cited in McGrath (2002), argues that designing checklists may result in limitations that are linked to what ‘desirable materials should look like’ (p. 46). Finally, I cannot claim that this work constitutes a conclusive evaluation, as an empirical evaluation in the form of a students’ needs analysis should follow this study. As Al Fraidan (2012) says, when making decisions, ‘two heads are better than one’ (McGrath 2002: 52). Future lines of research are open to interested parties based on the findings of this study.

Implications

The findings of this study relate to a situation in which a single textbook is imposed on teachers by some authorities. However, they could be applied to similar evaluation situations for other majors, EGP/ESP/ESL sources, levels, and other situations. The findings also are applicable to situations in which the teachers can choose one source among a number of available sources.

Suggestions for further research

Future research can focus on replicating this study with materials of other cultures, majors, levels, or with students in non-academic situations as language centers in Iran or round the world. They can also use a larger sample of checklists with a combination of items. Finally, they can combine evaluation proposals and students’ checklists to arrive at more comprehensive results.

Delimitations of the study

The present study focused on just ESP/EAP courses excluding EGP and other types of English. Also, it focused on “EAP for the Students of Dentistry excluding other majors. Further, it centered on the students at the professional doctoral level excluding other levels as Post-diploma, BA, MS, MA, or PhD levels. Finally, I used just two evaluation models.

Ethical issues

Due to the nature of this study, there were not much ethical problems to overcome. Throughout the research project no violation of ethical issues was exercised.

ACKNOWLEDGEMENTS

During the course of doing this research, I should greatly appreciate Dr. Hemmati, my course professor and project supervisor who provided me with much guidance regarding choosing the research topic and conducting the research.

REFERENCES


1. Man, like all mammals, has two sets of teeth. The first set, comprising 20 teeth in all, is called the primary, deciduous, or milk dentition. These teeth first begin to appear in the oral cavity at a mean age of 6 months and the last one erupts into the mouth at about 28 months. For approximately the next four years (from two to six years of age) the child must function with his twenty primary teeth. Then, commencing at 6 years, the first of the permanent or succedaneous teeth appears. From 6 until 12 years of age the primary teeth are replaced, in rather definite succession, by the permanent teeth. Additional teeth appear until by the age of 18 or even as late as 25 the full complement of 32 permanent teeth are present in the mouth. There are then three periods of dentition in the man: (1) the primary dentition (6 months to 6 years), (2) the mixed dentition (6 to 12 years), and (3) the permanent dentition (12 + years). If man is assigned an average life span of 70 years, it is obvious that he spends only 6% of this time chewing with his primary teeth but 91%, if he is fortunate, masticating with his permanent dentition.

2. The peculiar kinds and arrangement of the dentition lend themselves to a special kind of taxonomical system which may be new to dentistry but is old hat to other fields such as archeology, from which we have English for Dentistry borrowed the classification to be used in describing the permanent and primary dentitions.

Illustration

3. To begin with, there are two dental arches: the maxillary, which is part of the cranium and is immovable apart from it, and the mandibular, which is part of the lower jaw and is the movable part of the skull. In man the units of the primary and the permanent dentition are equally divided between the two arches. Thus, in the primary dentition there are 10 maxillary and 10 mandibular teeth, while in the permanent dentition there are sixteen maxillary and 16 permanent units. Looking at the arches face on, we can divide the total tooth-bearing apparatus into four quadrants: a right maxillary, a left maxillary, a right mandibular, and a left mandibular. In the permanent dentition there are 8 teeth in each quadrant. The vertical line dividing the arches into right and left halves denotes the midsagittal plane. A horizontal line between the arches separates the upper from the lower dentitions.

4. On the basis of form and function the human teeth falls into three or four classes. In the primary dentition there are three classes of teeth: incisors, canines, and molars. In the permanent dentition there are four classes: incisors, canines, premolars, (or bicuspids), and molars. Canines, for example, differ in form from the molars in that they possess a single rather pointed cusp, whereas molars have three to five somewhat flattened cusps. The form predicts the function in both cases, canines are primarily piercing teeth while molars are grinders. Class traits, then, are basically those characteristics which place teeth into function categories. The compressed crowns of incisors make them cutting teeth as opposed to the cone-shaped cusps of the canines which limit them to piercing functions.


3. English for Dentistry

1.1 COMPREHENSION CHECK

1.2 Answer the following questions based on what you have read in the passage.

1. What does a "mean age of 6 months" in paragraph 1 mean?
2. What do deciduous and succedaneous mean?
3. What are the periods of dentition in man?
4. What does "if he is fortunate" in paragraph 1 refer to?
5. How has dentistry been compared with archeology?
6. Which dental arch is movable?
7. What major differences between primary and permanent teeth have been mentioned?
8. What is the taxonomy of human teeth?
9. Why is the midsagittal plane mentioned in relation to dental arches?
10. How do the forms of human teeth relate to their function?
11. In what aspects are canines different from molars?

4 Unit 1

12. How is the function of incisors different from that of other teeth?

1.2 VOCABULARY EXERCISE
-Match the words in column “a” with appropriate definitions in column “b”.

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. commence</td>
<td>a. the act or process of following in order or sequence.</td>
</tr>
<tr>
<td>2. approximately</td>
<td>b. flattened</td>
</tr>
<tr>
<td>3. to comprise</td>
<td>c. to specify</td>
</tr>
<tr>
<td>4. to assign</td>
<td>d. at right angles to the horizon</td>
</tr>
<tr>
<td>5. succession</td>
<td>e. to chew</td>
</tr>
<tr>
<td>6. permanent</td>
<td>f. to contain</td>
</tr>
<tr>
<td>7. apparatus</td>
<td>g. nearly</td>
</tr>
<tr>
<td>8. to function</td>
<td>h. lasting; durable</td>
</tr>
<tr>
<td>9. vertical</td>
<td>i. to work</td>
</tr>
<tr>
<td>10. compressed</td>
<td>j. device; mechanism</td>
</tr>
<tr>
<td>11. to predict</td>
<td>k. to penetrate; to make way through</td>
</tr>
<tr>
<td>12. to pierce</td>
<td>l. to know in advance; to foresee.</td>
</tr>
<tr>
<td>13. to masticate</td>
<td>m. to determine</td>
</tr>
</tbody>
</table>

5 English for Dentistry

n. crusher
o. to begin

1.3 LANGUAGE PRACTICE
Read the following passage using the appropriate form of the words given between parentheses.

After the five aspects have been (describe) _______ _, the pulp will then be (discuss) _______, to be followed by a summary chart (show) ____________ in abbreviated from the (diagnose) ________ arch and type traits for that particular class and arch. A section (point) _________ out the types of normal variations in structure, both of crown and root, will end each (describe) _______ unit.

1.4 WORD ANALYSIS EXERCISE
Analyze the following words by separating the suffixes and/or prefixes, and determine how they have contributed to the meaning of each word.

maxillary _____________________________
mandibular ___________________________
succedaneous _________________________
taxonomical __________________________
archeology __________________________

6. Unit 1

1.5 TRANSLATION EXERCISE
Translate the following passage into Farsi.
Since each tooth can be described from five different views, the maxillary and mandibular teeth will be treated in the following order: labial (or buccal), lingual, mesial, distal, and incisal (or occlusal) aspect. Under each aspect the types of teeth in that class will be considered, always in the same order. Thus, for the maxillary incisors, the labial aspect of the central will be described first, then the labial aspect of the lateral, and so on. In addition, for each aspect, the tooth may best be divided into three areas for purposes of systematic description: crown profile, crown surface, and root.

1.6 Farsi Equivalents

determine the Farsi equivalents of the following terms as used in this unit.

dental arches __________________________________
maxillary incisors ______________________________
crown profile __________________________________
midsagittal plane _______________________________
set trait _______________________________________
labial ________________________________________
buccal ________________________________________
mandible _____________________________________
maxilla _______________________________________
mesial ________________________________________

7. English for Dentistry

primate _______________________________________
taxonomy ______________________________________

Further Reading

-Read the following passage on your own and determine the author's main ideas.

The number of teeth in each class constitutes the dental formula and is usually stated in terms of one quadrant, the upper left. For example, in the permanent dentition there are two incisors, one canine, two premolars, and three molars in each quadrant. They are written as follows: 2-1-2-3. in each quadrant the teeth closest to the middle are the incisors, followed distally by the canine, the two premolars, and finally the three molars. The entire dental formula would then be written

3-2-1-2  2-1-2-3
3-2-1-2  2-1-2-3

Since in man each quadrant contains the same number and classes of teeth, the formula need to be written for only one quadrant. In other mammals, however, there are differences between maxillary and mandibular arches, so that upper and lower left quadrants are designated.

8. Unit 1

Not only are there differences within each class between the upper and lower arches (these differences being called arch traits), but there are differences between the arch components of each class which render them easily identifiable. For example, in the incisor class there are two components in each quadrant. The most mesial of the two is the central incisor, so designated for its proximity to the midsagittal plane. Distal to it is the lateral incisor. Although both incisors possess distinctive class traits and arch traits, they also have individual characteristics which distinguish them from each other. The latter are termed type traits. In addition to these three kinds of traits, a fourth (trait) is the set trait which distinguishes the permanent tooth from its analogue in the primary dentition. In other words, those features which enable the dental anatomist to differentiate between a permanent maxillary central incisor and a primary maxillary central incisor are called set traits.

Several shorthand notation methods have been devised for designating the type of tooth and the quadrant in which it is found. The most common and perhaps most convenient notation is that which employs cursive lower case letters for the primary teeth and Arabic numerals for the permanent teeth. Thus, for the primary teeth the designation is as follows:

9. English for Dentistry
For the permanent dentition it is:

1. central incisor  
2. lateral incisor  
3. canine  
4. first premolar  
5. second premolar  
6. first molar  
7. second molar  
8. third molar (wisdom tooth)

To indicate a particular quadrant, the following symbols are used:

maxillary left  
maxillary right  
mandibular left  
mandibular right

In this way, it is a simple matter to designate any one of the 52 units of the dentition; 5, for example, denotes a maxillary permanent left second premolar, and 6 signifies a mandibular right primary first molar.

If, out of the totality of 52 teeth, a single tooth were to be selected at random, how would one proceed to identify it? Generally, one would follow this order: 1) Is it one of the primary or permanent teeth? 2) Is it an incisor, canine, premolar, or molar? 3) Is it a maxillary or mandibular tooth? 4) If it is an incisor, is it a central or lateral; if a premolar or molar, which specific one is it? Therefore, we might say that the usual order of classification is first to identify the set trait, next the class trait, then the arch trait, and finally the type trait. Since it is unsystematic to describe primary and permanent teeth simultaneously, we shall omit the set traits in this section but shall follow the remaining sequence. If we were to consider the various groups or populations of mankind, and even the other kinds of Primates, then we would be forced to use additional diagnostic categories such as racial traits and species traits.

(Adapted from B. S. Kraus et al. Dental Anatomy and Occlusion, The Williams and Williams Company, 1969)

10. Unit 1

1.7 COMPREHENSION CHECK
Answer the following questions based on what you have understood from the passage.

1. What does dental formula mean?  
2. How is the dental formula for the upper right quadrant designated?  
3. How are dental classes different from each other?  
4. How are type traits different from set traits?  
5. How is a mandibular permanent right second premolar designated?  
6. What traits are usually mentioned in each dental classification?

11. English for Dentistry

1.8 VOCABULARY HELP

analogue: a thing or part that is similar or comparable in certain respects.  
archaeology: the scientific study of the life and culture of ancient peoples.  
pierce: to perforate; to make a hole.  
trait: characteristic.