Background: English for Specific Purposes (ESP) courses should empower students to satisfy their language needs. However, at many Iranian universities, these courses are mostly taught based on the Grammar Translation Method focusing on teaching grammatical rules and reading comprehension. The present study aims at proposing an innovative approach for teaching English to medical students that can improve students’ proficiency in different language skills.

Methods: The design of this qualitative study was action research. The participants were 53 freshmen medical students studying at the Birjand University of Medical Sciences during the spring semester of 2015. A new syllabus including authentic medical materials (both visual and written) with a focus on all four language skills was designed and implemented to help the students learn English language as a whole and to become capable of producing the language on their own. During the term, learners were given the appropriate instruction on how to read, write, and also watch English programs.

Results: The results indicated that by implementing this new approach, the students’ proficiency in all language skills was improved. It was also revealed that they preferred this alternative approach since it was more in line with their language needs.

Conclusions: Taking into consideration the benefits of this approach, it seems necessary for English language instructors to take a more innovative approach for teaching English to medical students that can make English language more effective language instruction, more multimedia devices and materials available for language learning.

Keywords: ESP, Medical students, Innovative approach, Iranian Medical Universities

Original Article

English for Specific Purposes: Proposing an Innovative Approach to Teaching English to Medical Students

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INTRODUCTION
The increasing use of English as the international language for scientific, economic, legal, etc. purposes opened doors to the emergence of English for specific purposes (1). ESP courses should be based on the learners’ needs and therefore they require careful planning and “pedagogical materials” for a special group of people (1).
General and ESP courses are the only English language units that students pass at Iranian universities which are supposed to satisfy their English language needs. However, the problem is that the books are terminology and translation based and the syllabus is rooted mostly in “grammar-translation” method while this method cannot satisfy the students’ communicative needs in today’s world. Hayati (2) gives an image of Iranian university ESP classes as teacher centered, and passive students who just translate the texts or copy teacher’s translations. The text books impose the students specialized reading texts which the students have to memorize the vocabularies (3). The English language Medical text books were criticized by some other authors as well. For example, Nagy (4) maintains that Medical English is not what is covered in English medical text books and narrowly reflect the true language needed for medical students.

The other problem is the wrong idea of language as a fragmented phenomenon in these kinds of ESP courses and not a true contextualized one (2), while learning a language is a living thing which deals with experimenting and experiencing in the real life (5). For coming into that experience in life, Antic (6) mentions that students can take the responsibility of helping the teacher finding the material and gaining autonomy which is very important in ESP courses as the students need to satisfy their needs with the English language alone after passing these courses.

General and ESP courses in many of Iranian Universities are considered as inconsequential and ineffective. Students also do not consider these courses as a learning platform while these courses should be a podium of endless opportunities for language learning. Therefore, it is the time to rethink our approach to teaching ESP to students. What adds to the significance of addressing this issue is the beliefs of many researchers that university students need more English language proficiency in order to satisfy all their academic needs (7, 8, 9).

Regarding what has been mentioned, the present study tried to propose an innovative approach to teaching English to Medical students which aims at improving all 4 language skills and empowering them to be autonomous learners. So, instead of focusing on teaching one language skill, the present study tries to adopt a “Whole Language” approach which “calls for language to be regarded holistically rather than pieces” (10).

METHODS
Participants:
The participants were 53 freshmen (boys and girls) medical students studying at the Birjand University of Medical Sciences during the spring semester of 2015. Some of them had benefited from institutional language classes before coming to the medical school and some others never took part in any courses and only gained their knowledge of English from their school classes, so the participants did not have similar proficiencies in English which made the teaching process difficult. Totally, the class was held for 28 sessions two sessions each week on Mondays and Tuesdays for about 2 hours each.

Design:
This qualitative study favored an action research approach, since the course instructors acted as the teachers, researchers, and observers of the process of students’ ongoing learning in its authentic context of university class at the Birjand University of Medical Sciences, Birjand, Iran. Action research “refers to a disciplined inquiry done by a teacher with the intent that the research will inform and change his or her practices in the future” (11). This type of research is done in the researcher’s teaching context with his/her students (11). As the present study aimed at informing the researchers’ practice by focusing on the process of the learner’s learning the English language this qualitative approach seemed more appropriate.

Instructional materials:
Based on the researchers’ decision, a new syllabus was designed for the course which was in fact swimming against the mainstream orthodox methods of teaching ESP (which were reading and grammar based). It was enriched by different mediums such as medical texts, films, audio files, and brochures, and covered all four language skills namely, reading, writing, listening, and speaking. It was the researchers’ responsibility to prepare the teaching materials (written and visual) and bring them to the class. So they prepared a pamphlet including selected medical pieces written by doctors, patients, and medical practitioners and also some texts about the language itself, for example, paragraph transitions, how to learn unknown words, how to approach a new text, how to watch an English movie, how to own a personal dictionary of difficult words, how to learn correct pronunciation of new medical terms, etc.

Data collection procedures:
At the very first session, the students were given a written interview with different items encompassing students’ expectations about the course. This way, we could find the opportunity to learn about their needs and their proficiency level. It should be noted here that for some of the students it was not an easy step to take a departure from the previous approaches they passed in other English courses either at public schools or at university contexts. Again it is worth mentioning that teaching ESP courses in Iranian Universities are mostly based on grammar translation method, and strongly rely on text books designed by the “Organization for Researching and Compiling University Text books” which emphasize on memorizing bilingual list of vocabularies and translating technical texts for each major, and rarely pay attention to other language skills such as writing, speaking, and listening. During the course the in-class discussions of the students were taken into considerations and notes were taken by the instructors to check the students’ progress. At the end of the course again the students were asked to...
answer a written interview and comment on their learning process during the course. Also, in the final exam one of the questions was pertaining to the students' understanding of the course and what they had learned in this class.

For getting the students closer to the alternative approach, the first three weeks passed talking about the language itself and how to own a self-voice while using another language through simple paragraph writings and mostly writing reflections. The challenging and distinct atmosphere of the class was a battle between those who wanted the innovative approach and those who disagreed. Meanwhile, students went through different activities linked to learning the language. Reading, watching English programs and writing were the gates for getting the input they needed for learning, each is presented in more details here.

The procedure of teaching reading:
Each reading was introduced to students by some questions related to the subject of the text so that the learners became ready for that. This act reduced their fear of the text, got them ready, and helped them to focus more. While reading, new medical terms were explained in English and the students were invited to share their ideas about those terms or about the whole texts. Because the texts were all medical and were written by doctors or patients, students as future physicians could put themselves in the writers' shoes and felt as either doctors or a probable sick person.

Being aware of what they were reading gave them the power to tackle the unknown sentences. But there was still the fear from difficult words in the text. To handle the problem, students were asked to find at least three main words in the sentences and try to guess the whole idea of the sentence based on them. In this way they did not need to know all the words and they could flow more easily through the text. Accordingly, they were required to look at the words first, find the key words, guess their meanings if they did not know them, give the definition or some synonyms, and based on these phases get the meaning of the whole sentence.

The procedure of working on films:
One of the most prosperous parts of this class for students was the show time of the authentic medical movies. Moving pictures have great potentials for learners especially language learners because they carry meaning in the form of pictures which help the students recall the content better. In fact films and writing have similar mechanisms, they both are carrier of the language. While in writing words carry the idea, in movies, pictures have this responsibility. Both of them have a kind of reading hidden in them: a writer read as he writes and there is a reader waiting to read the written text, in films the viewers in fact read the pictures. This reality about the films is explained in the theory of 'visual literacy' which can highlight the way for language teachers to use pictures and movies more efficiently in their classes.

Knowing this theory and the similarities between films and writing, we used movies to boost students' understanding of the language and help them get the most out of this course which in essence was turned into a multi-disciplinary rout to learning English.

Films were chosen cautiously based on the learners' level of language proficiency and ranged from speeches (TED talks), documentaries (Extraordinary people series, Bubble boy), feature films (Patch Adams), and News (KOAT News) which were all medical. Students were eager to watch as they wanted to see and learn about a medical condition and at the same time check their understanding. Some of them who had better proficiency in English understood the spoken language better and some had more difficulty. So before watching the films, new words were explained and the students were asked to guess the subject of the film and guess the meaning of unknown words based on the root, prefixes and suffixes, and homonyms and homophones. Again they had the chance to learn about the ideas challenged in the films before watching them. The movies were paused here and there for checking students' comprehension, so that no one left behind not knowing what had happened. They were wanted to listen carefully and see if they could get the correct pronunciation of the words. We should mention here that Iranian medical students, in general, do not pronounce the English medical terms correctly because some of the terms are simplified according to Farsi pronunciation and some of them are based on French pronunciation, so at the time of watching the films with native English pronunciation, some students had difficulty getting the words. Therefore, focusing on pronunciation was another goal of this class. Again after watching, there was a discussion session about the film shown during which learners shared their ideas. This part of the course was welcomed by the students as they had not seen real medical cases yet (as they were freshmen), so they were eager to watch medical movies and talk about them.

The procedure of teaching writing:
Most sessions, students were assigned written homework based on the texts they had read in the class or they were supposed to read at home. Some of them were in the form of reflections because they were able to write on their own and this gave us the chance to dig into their writing to know more about them and to learn about their needs so we were able to adjust the syllabus. As the main idea of this course was an understanding of language in a medical context and helping the students to learn about medical issues via the medium of language, the course was not based on a single predefined book with outdated technical texts. The texts chosen were in the form of daily language of doctors and patients or their description of a medical event (a disease or a treatment) for common people with both technical and general terms.

Drawing students' attention to form and connecting words in sentences and paragraphs were of a great importance. For example, they were given a list of seemingly unrelated words and were asked to find a connection between them and write one or two paragraphs. Here the students were working on both English language and their medical understanding without knowing that they were writing in another language. Writing gave them lots of chance to learn as they could focus on what they were writing and use more words and vocabularies. Also, they had more time to think about the structures they used and to revise and rewrite their texts.

Based on students' interviews and comments, it became clear that writing was the most difficult and therefore the least
favorite language skill for students to learn about although, in actuality, they needed it more than other practices in their journey of studying as they would be required to write various articles in English in future. Accordingly, we started to give them several writing activities such as reflections, sentence and paragraph writing, cloze texts based on some listening recordings, and also the most important one, writing based on a template. Writing based on a template was one of the last resorts for students to write in a correct framework. Following reading a text, students were asked to concentrate on the sentences and words so that they could get where the main key words (nouns, adjectives, and verbs) were. Then they deleted those adjectives and nouns and replaced their own vocabularies with the main structure of the sentence. For instance, if the tense was in past they kept the time and verbs (optional) and rewrote the sentence with their own story and new words. This way they had a framework, so little by little they learned the correct English pattern of writing.

Apart from correcting students' papers and homework, we enriched the class with a weblog and uploaded some information, assignments, or review of some of the sessions so that the students could analyze what had happened in the class. We also linked them to some websites which were full of medical information written in English language, and also some medical dictionaries to help them get the meaning and correct pronunciation of the terms.

**RESULTS**

The semester commenced with a call for students to think about themselves as future doctors and how they want to be one. Through different writing activities, they were asked to explore their major and why they chose it. Weaving English to medical issues and building knowledge out of them was the main goal of this course. As Norton and Toohey (12) said "language is not simply a means of expression or communication it is a practice that constructs, and is constructed by the way language learners understand themselves, their social surroundings, their histories, and their possibilities for the future" (p.1).

The samples excerpts below from the students' reflections show how they discovered themselves, their major and their language in this class. It is worth noting that in order to meet the ethics of doing a qualitative research the names of the students kept unknown.

The excerpts may include students' errors and mistakes.

**Sample excerpt 1:**

It was a bad night. They took my grandfather to a room there was something written on the wall. I didn't know English but it was ICU! A man with a white dress came out of the room. My uncle, Mahmood, and my mother and my aunt ran after him, they were speaking. I was listening. He said: "we are trying to keep him alive but it is very hard." …… I don't know why but I decided to become a doctor. In that night, I changed my opinion because before that I liked to be a detective like Sherlock Holmes. …… I want to be a doctor, I don't know what will happen in the future but I will do my best to get my specialization in heart. I hope at least I can keep a grandfather alive and make a family happy.

**Sample excerpt 2:**

Where am I? Can you tell me please? I mean it wasn't exactly what I wanted… I am far from sick people and I can't help them. I am in a cage with lots of books that I have never seen before. There aren't any entertainment in these book. I expected my classes began in hospital, but it is just a wrong imagination, that I had in the past. I hope in the future it gets better.

**Sample excerpt 3:**

… When I was younger, I thought if I become a doctor I can be useful and help others to feel better. But now I can't realize why I chose to become a doctor. In other words I have no goal for choosing this. Maybe I chose this for my family's happiness and glory. But still I have no goal. I'm not sure with this thought and without any interest I can keep on this way or not.

**Sample excerpt 4:**

At first my major was math but my father forced me to change my major so I decided to change it, just for money. But know I like this major and I want to help people not for money. At first, the students began thinking about themselves and their future in English so they shared their goals with the instructors. They dived into thinking about their major while they were beginner students. As the term went on and the students became more familiar with the procedure, students were helped to start producing the language in an organized way. For example, as part of the class procedure, we asked the students to write questions before the reading activities and based on those questions compose their text. For instance, after watching a documentary on a rare disease, one of the girls in the class wrote in this way:

**Sample excerpt 5:**

- What was his purpose in his life?
- How did he connect with his parents?
- How did he pass his time during the day?
- Did he have any hope about the future?

Then she wrote her text:

A boy with a special condition was born in 1970…. doctors found a solution for his disease that he had to live in a bubble…. After a while in 1983 doctors decided that they should infuse bone marrow…. finally he died because of bacteria in the bone marrow.……

Watching authentic medical movies and reading related texts resulted in learning about different aspects of being a doctor and changed students' views about their field.

**Sample excerpt 6:**

… We learned a doctor cares about his patients and sometimes sacrifice himself for saving people's lives like the floating doctors……

**Sample excerpt 7:**

In this term … we learned how to be a good doctor and have a goal aim. If we want to be a good doctor we should pay attention to patients and learn more about sickness. It was shown in their comments that they got the difference between this course and the previous ones. They also noted some problems that they faced like the stress that they had in the class because of the large number of students and the difference among their English proficiency levels.
Furthermore some of them preferred to have a course book. Although we assigned them a booklet of different texts that we worked, they felt more secure if they could have a "textbook" for the course.

**Sample excerpt 8:**
This class was very useful for me I learned many things about English language and medicine... I was a little stressed in ...aha... apart from all the good points I think if we had a refer

**Sample excerpt 9:**
...aha... apart from all the good points I think if we had a reference book for the exams it was better....

English courses at universities make the students book bound so it seems some of them preferred to have a textbook for this course. Although having a book may reduce the chaos and disorder in the class and help both the teachers and the students to be more organized, authentic texts and media can also act as rich references in spite of the fact that some people may dictate the fallacy that without prescribed books learning is meaningless and impossible.

**Sample excerpt 10:**
This method of learning was very good because I learned many things about various illnesses and the texts were authentic......The recordings such as "VOA health report" and the movies that you gave us were really helpful and we can practice English in our free time.

The learning journey that students had with English in this course showed how language can come closer to life of learners and help them to reach out of the fears they have while learning a language. The contextualized language that they experienced in the prepared syllabus or in their own writings displayed the importance of authenticity in language learning, something that the other courses that the students passed, lacked, spoon feed approaches to learning which give the students the "readymade fish" rather than teaching them "how to fish".

**Sample excerpt 11:**
This English Course passed very well because it was really educational and I learned many new things though it was really really difficult for me... because I was not familiar with this method ... in contrast to the previous English courses which focused on memorization in this class we learned how to tackle learning a language...

The result of this study showed that students preferred this active style of teaching which was not tough and fixed and flew between different kinds of texts (written, visual, and audio) and made the class a learning corner which intertwined the medical issues and English language together. The students mentioned that it did not seem like a rigid university course and they felt more like learning with more ease. It was also shown that, there was an emergent need for new, rich, and alive books, references, and teaching materials that benefit students with the knowledge of language and not a thing which makes them more passive and inactive.

**DISCUSSION**
The results of this qualitative study showed a new face of an English course in a medical university as a way of observing, reflecting, and acting on a subject matter (here medicine) and a tool in hands of students to embody their worlds in words, as Pennycook (13) noted language is a social act not a sole linguistic feature to be learned and taught. Participants in this study came across a language they uncovered in medical texts and discovered the world of people who used it and also reflected on their own life as beginner medical students (via the English language) through writing, and consequently they became familiar with lots of diseases and treatments as novice medical students. Our class was indeed challenging the mainstream methods of teaching English at Iranian universities which undermine the role of students in learning and focus mostly on reading and grammar rules. This study indicated that a language course with its live nature can establish a thriving space for learning both the language and the subject matter. Although the large number of students in one class limited the possibility of working with each and every learner and the fact that these innovative and ground-breaking methods are very burdensome for the instructors, with a careful and thoughtful design and syllabus, the difficulties of teaching can be faded away. The present study tried to make a platform for further studies by teachers who want to teach English to students of medicine, as this major stays alive with people, it should benefit from living approaches of teaching and learning. The sparks of this study can turn into flames for those who want to make a change in the teaching approaches of ESP or any other majors that deal with teaching and learning a language.

It should be noted that for making any meaningful changes in the status quo of ESP teaching in Iranian universities (which is perceived to be not very effective by the stakeholders), and applying alternative teaching methods some requirements should be met. Firstly, the number of the students in each class should be reduced so the teachers can apply audio-visual and communicative activities. In the class that we taught, the number of students was 53 which is too high for a language class aiming at improving students' proficiency in 4 language skills. Secondly, students should be placed in different classes based on their English proficiency level. This can be determined either by asking them to take a placement test or by putting them in different classes based on their English language scores in the university entrance exam. It is clear that teaching heterogeneous classes can be problematic for the teachers and also demotivating for the students because the materials presented may be so difficult for some students and so easy for the others. Although applying these changes may be costly for the universities, considering the important role of English in the today's world as the language of science, it is a valuable investment.

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**Conflict of interest:** Non-declared
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