Researching Pain: Iranian Students Exploring Medical English

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Introduction

As part of a research-based English for Specific Purposes (ESP) course at Tehran University of Medical Sciences, a third-term medical student researched his mother's sciatica and discovered that actually a skeletal dysfunction caused this pain which the family had lived with for years. Hadi explained, “We have been living with this pain for nearly ten years... I hope that I can do something useful for my mother to decrease her pain...”

Through his research, Hadi tried to understand the pain anew. He talked to his family and specifically to his mother, who helped him by “talking, bringing out the medical history, checking her drugs and...” He also talked with his mother's doctors, consulted many medical texts, and struggled with readings and medical terminology in English in order to tackle a problem which had been left almost untreated by doctors for years. He wrote about, and discussed sciatica as well as lumbar disc herniation, degenerative disc disease, spondylolisthesis, and piriformis syndrome among many other conditions. He went through all these challenges only to find out later that he had been misled by one word: sciatica. After reading a brief note in a textbook, he understood that the problem was probably not sciatica, but was related to the weight bearing joint called the sacroiliac joint. The risk factors that could cause a sacroiliac joint dysfunction were all present in Hadi's mother’s symptoms which were almost the same as for sciatica. He named the dysfunction sacrosciatica and suggested a few simple exercises that appeared to decrease his mother's pain.

This chapter, against a backdrop of several years of critical practices in medical English education, presents a language discovery approach (Ghahremani-Ghajar, Mirhosseini, &
Fattahi, 2007). It explores possibilities beyond mainstream conceptions of teaching ESP by suggesting how students may become involved in searching, interacting, discovering, and owning language in real contexts.

**Context**

We started our challenge to transform “the institutionally ossified practices of English language education at Tehran University of Medical Sciences” (Mirhosseini, 2007, p. 108) in September 2002. With *critical language education* (Norton & Toohey, 2004; Pennycook, 1999) and *teaching for understanding* (Wiske, 1998) as our broad theoretical standpoints, we departed from the current practices of teaching medical ESP in Iran. These practices are based on mainstream ESP approaches that focus on register analysis (Strevens, 1977); student-centered approaches and needs analysis (Hutchinson & Waters, 1987); and more recently on genre-based and content-based views (Bhatia, 2004; Brinton & Master, 1997; Lyster, 2007). Common underlying assumptions among these various approaches include an instrumentalist vision of language as merely a neutral means of communication; a view of language as a set of skills to be taught as separated components; and a fragmentary perspective on language and content that treats content as ancillary to language.

During the initial years, our courses included critical reading of medical and general texts; hospital observations and class dialogues about them; writing student-research papers; and open-house-type presentations, panel discussions, and workshops at the end of the term. These practices culminated in a full year, research-based course, ESP II, for more than 120 nineteen-year old students who had already passed the prerequisite courses of General English and ESP I in their previous terms.
Curriculum, Tasks, Materials

Initially, we pursued a research-based approach in ESP II based on current content-based approaches. However, such approaches tend to suffer from a pre-determined view of content solely as a means ‘through’ which language can be processed (Lyster, 2007). Instead, we envisaged medical content beyond a review of texts and decided to approach research by bringing students closer to real people in real life contexts through the curriculum.

A real search originates from a truly felt thirst and pain. In the words of Mowlana Rumi, the great thirteenth century Persian poet, for the water of wisdom to spring all around, you need to look for thirst, and to be a real human being you need to experience real pain. Therefore, we started the term with students’ own medical concerns (‘Pain’ in table 1). As beginning medical practitioners, our students did not know much about pain as a medical issue, but by researching physical or psychological pain (such as stress and anxiety) of family members or friends, they became deeply involved in the course. Two weeks after the introductory session, students were writing about their research and discussing it in class dialogues.

As shown in the Table 1, the students’ learning journey began with class discussion of a film called Lorenzo's Oil which was based on a true story (Miller, 1992). Every second week, students watched part of the movie (in English) which depicted the true story of a little boy with a rare fatal disease. They took notes, raised questions, and discussed the story. Without any prior academic knowledge of medicine, Lorenzo's parents began researching the disease which led them to develop a kind of oil which almost stopped the progress of the disease. This impressive story was an example of the type of real search that the students could undertake.
Throughout the term, the teacher reviewed students' weekly emails about their research and made notes about the research process as well as different aspects of the language of their writings. The class discussions usually started with the teacher's comments about students' research progress and about the language issues in their writing. The teacher’s comments included suggestions about critical reading, dealing with medical terminology, structural aspects of writing, general organization of writing, and the writer’s position. Class sessions were mainly spent on student discussions about these general issues or in dealing with individual student’s research points.

Table 1
A Language Discovery Curriculum in Medical English

<table>
<thead>
<tr>
<th>WEEKS 1 – 3</th>
<th>Research Issue</th>
<th>Pain</th>
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<tbody>
<tr>
<td>Searching Practices</td>
<td>• Thinking about self, family, and society</td>
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<tr>
<td></td>
<td>• Looking for one's most meaningful medical concerns</td>
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<td></td>
<td>• Writing and emailing weekly accounts of the pain</td>
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<tr>
<td>Classroom Practices</td>
<td>• Reading brief texts about medical research</td>
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<td></td>
<td>• Whole class discussions about the research of pain</td>
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<td></td>
<td>• Whole class or small group dialogues about an individual pain</td>
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<td></td>
<td>• Watching and discussing Lorenzo's Oil</td>
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<tr>
<td>Language Focus</td>
<td>• Discussions about what language learning involves</td>
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<tr>
<td></td>
<td>• Reviewing previous experiences of learning English</td>
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<td></td>
<td>• Writing emails in English</td>
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<tr>
<td></td>
<td>• Looking for English terminology related to a specific pain</td>
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<tr>
<td></td>
<td>• Discussing mechanics of writing in students' emails</td>
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<tr>
<th>WEEKS 4 – 6</th>
<th>Research Issue</th>
<th>People</th>
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<tbody>
<tr>
<td>Searching Practices</td>
<td>• Observing hospitals</td>
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<td></td>
<td>• Talking to patients, patients' family, specialists, etc</td>
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<td></td>
<td>• Reviewing the new information to find a focal pain spot (specific research problem)</td>
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<td></td>
<td>• Emailing weekly accounts of observations and dialogues</td>
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<tr>
<td>Classroom Practices</td>
<td>• Reading about and discussing the act of reading</td>
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<td></td>
<td>• Brief student reports about observations and dialogues</td>
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<td></td>
<td>• Class or group discussions about individual interactions</td>
<td></td>
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<tr>
<td></td>
<td>• Watching and discussing Lorenzo's Oil</td>
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<tr>
<td>Language Focus</td>
<td>• Discussing the mechanics of writing in students' emails</td>
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<tr>
<td></td>
<td>• Discussing the language of students' observation reports</td>
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<td></td>
<td>• Holding challenging class discussions in English</td>
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<tr>
<td>Research Issue</td>
<td>Words</td>
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| **Searching Practices** | • Searching libraries and the Internet  
                          • Reading books and articles about the medical problem  
                          • Relating new information to interaction and the pain spot  
                          • Writing and emailing weekly accounts of readings |
| **Classroom Practices** | • Student brief reports about their search and reading  
                          • Whole class sharing of texts found by individual students  
                          • Class or group discussions about individual readings  
                          • Watching and discussing *Lorenzo's Oil* |
| **Language Focus** | • Teacher and peer commenting on students' emails  
                          • Discussing aspects the reading of medical texts  
                          • Raising the issue of reading between the lines  
                          • Reporting students’ types of language discoveries  
                          • Holding challenging class discussions in English |

**WEEKS 7 – 11**

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<th>Research Issue</th>
<th>Integration</th>
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| **Searching Practices** | • Reviewing and integrating the information  
                          • Creating a meaningful picture of the particular pain spot  
                          • Providing suggestions or questions for further exploration  
                          • Writing and emailing progress reports |
| **Classroom Practices** | • Integrating the information in class or group discussions  
                          • Commenting on individual students' whole research |
| **Language Focus** | • Discussing individual students' whole research in English  
                          • Writing longer integrated research reports  
                          • Applying language discoveries in students' writing  
                          • Challenging the language of students' own writing |

**WEEKS 12 – 14**

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<th>Research Issue</th>
<th>Presentation</th>
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| **Searching Practices** | • Reviewing possible forms of presenting research  
                          • Deciding about a suitable presentation format  
                          • Presenting research process and learnings  
                          • Asking for teacher's comments through emails |
| **Classroom Practices** | • Discussing suitable forms of presenting pain and research for individual students  
                          • Discussing presentation forms (workshop, panel, etc.) |
| **Language Focus** | • Writing a final reflective report of the whole research process  
                          • Orally presenting the research to a large audience |

**WEEKS 15 – 16**

Academic research usually needs to go a long way before it can improve the lives of patients in the real context of their daily lives. In class discussions, referred to in Table 1 under ‘People,’ we debated how medical research could become more relevant to real people. To embody these debates in their search, students focused on people who could, in one way
or another, contribute to their understanding of the pain. As our students broke from the
confinements of lectures and textbooks, they found an abundance of sources. Student writing
during weeks four through six of the term showed that these contributors could be a patient, a
patient’s relative, a doctor, a classmate, or a university professor, among many others.

‘Words,’ as shown in the Table 1, were the focus of the next five weeks of the course as
students consulted a wide variety of medical textual resources including reference books and
journal articles as well as their university textbooks, and also searched the internet. They
summarized and annotated the sources and tried to integrate the information they found with
the information gathered from their interactions with people to make meaningful inferences
about the pain that they were researching.

The diverse and contextual nature of the students’ reading would not have been possible
in another approach to teaching this course. Learning medical English became part of a
broader context of meaningful learning. Students acquired language as means of learning
how to help the people who were important to them.

Towards the end of the term, students reviewed and integrated different aspects of their
research to gain a more holistic and meaningful picture of the particular pain being
researched (weeks twelve to fourteen on Table 1). They continued to write and email
progress reports and to discuss their challenges in whole class or in group discussions. They
also developed more comprehensive research reports.

During the last two weeks of the term, students explored possible forms of presentation
to determine the format that they believed could best present their research process and
discoveries. To wrap up the term, they wrote a learning journey report that reflected on their
chosen pain, as well as their discoveries, learning, and challenges over the term. Finally, as
the close of the term, in a special conference style event, they presented their research to a
large audience of students and teachers.


**Language Discoveries**

Through writing email notes; discussing pain; finding, observing, and talking to people; reading and writing about words; watching and discussing *Lorenzo’s Oil*; and sharing in class discussions, students focused on various formal aspects of the language of their search. Their language discoveries included such insights into academic and non-academic language, spoken and written discourse, and making critical inferences. Students’ language discoveries also included words and expressions and grammatical structures. One such instance of critical inferences appeared while discussing an early scene of the movie in which Lorenzo is restless at school. Here, the students focused on the word ‘hyperactive’ which the school principal used to describe Lorenzo. Students discussed the lexical components of the word as well as the negative labeling force that irritated Lorenzo’s mother.

These language learning experiences are characterized by three major features that distinguish them from mainstream language learning. First, the linguistic micro-elements are learned in a natural context of medical English through personally meaningful struggles with content rather than in dealing with de-contextualized static language samples. Secondly, the language points that are learned are multilayered and may help students become involved with language in its full capacity rather than at mere semantic or pragmatic word and structure level. Finally, language and its components are discovered in an authentic context by learners rather than spoon-fed to them through lectures.

**Reflections**

The research practices illustrated in this chapter have been based on a view of language as a practice that creates people’s understanding; on a view of learning as a restless struggle and a commitment to gaining internal and eternal strength; and on a view of research as
honest “searching for truth or seeking answers to burning questions and passions” (Fasheh, 2003, p. 3). This lived experience creates transformative possibilities, inspiration, and hope for our medical context and possibly for other language education contexts. It also may provide possibilities for questioning current assumptions regarding language education and for pursuing learning opportunities on the basis of a transformed view of English language education in content areas.

‘Researching pain’ resonates with each of us. For Ghahremani-Ghajar, the students taking ESP courses in the 1980s were encountering pain that was too obvious to ignore. Their lives were so deeply rooted in their community that there was little need for reminding them of their pains. Therefore, they readily viewed foreign language learning as part of their responsibility to do something about the pain that the whole community shared. However, in recent years the lives of students seem to be detached from their surroundings because they have been taken in by the prestige of academia and modern life. Nonetheless, the research that these young students pursued in our course gives us hope for more meaningfully situating academic practices in community life.

Through his learning journey with his students, Mirhosseini realized that research could become more personally relevant and contextualized for students when they did not rely totally on textual knowledge. Perhaps only a few students’ research would qualify as ‘methodical academic research,’ but the pain, people, words, and texts were very meaningful to them. As a medical doctor, Fattahi reflected that he felt safer and stronger with a community of medical students working sincerely on the pain of real people.

However, in transforming practice by using the language discovery approach to teaching medical English, there will be a number of major challenges. First, student expectations and preconceptions about language learning as a neatly delineated process of absorbing the knowledge of vocabulary, grammar, and communication often make them
resistant to participation in demanding, and apparently disorganized research. Secondly, after years of schooling with teacher-initiated activities, students often lack self initiative and recoil from uncertainty. Finally, students worry that a radically different approach to language learning may not prepare them for the English subsection of the National Comprehensive Examination of Basic Sciences for medical students, largely consisting of multiple choice test items on terminology and grammar.

Despite these challenges, facilitating language discovery rather than merely teaching a foreign language, coupled with the process of researching a particular pain rather than researching a general academic interest, can create a meaningful language learning practice. The specific practical procedures presented here will need to be modified for other contexts, but such a research-based discovery approach could be introduced into many ESP and EAP courses in content areas like engineering, social sciences, professional training, nursing, as well as into general content based learning for intermediate and advanced language learners. Throughout these practices learners may authentically explore and experience language while integrating information and presenting their work. The fundamental requirement of the realization of a language discovery approach is an understanding of language as a complex socio-contextual practice and learning as a challenging process of discovery.

We would like to thank our community of friends and colleagues who have been with us throughout the past five years of exploring medical English at Tehran University of Medical Sciences: Hossein Mohammadi Doostdar, Azin Rahimi, Ali Sedighi Gilani, Abolghasem Jazayeri, Mehdi Mollaei, Soudeh Oladi, Fahimeh Gholamhossein, Arezou Kashani, Farinoush Ebrahim, Marjam Chinianpour, Shiva Bakhtiari, Hossein Sattari, Ehsan Sattarian, Masoumeh Ghomi, Samaneh Oladi, Parvaneh Hosseini, Mahnaz Feiz, Golriz Mirshahvelayati, Saeideh Karimi, Mahsa Sheikhan, and Mahtab Janfada. We are also grateful to all our students whose brilliant ideas and meaningful challenges created invaluable learning experiences during our learning-journeys with them.

References


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Seyyed-Abdolhamid Mirhosseini is re-learning his academic studies (MA, TEFL, University of Tehran) with his primary, secondary and postsecondary students in Iran. His papers have appeared in venues including *Applied Linguistics* and *Language, Culture and Curriculum* and his book reviews in such journals as *Language in Society* and *Discourse & Society*.

Hossein Fattahi began his career as a medical doctor (Shaheed Beheshti University of Medical Sciences, Tehran, Iran). Questioning mainstream academic approaches to health and illness led to his explorations of medical discourse. His current challenges include understanding the language-context of medical education and medicine.

Language discovery approach

Medical English

ESP and EAP