



On Creating an English for Specific Purposes Course for Pharmacy

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Introduction

In fall 2016, the School of Pharmacy reached out to the Applied English Center to create an English class for pharmacy students who speak English as an additional language (EAL). The English for specific purposes (ESP) pilot course would target English for the community pharmacy setting. The idea behind the course was to help EAL students who have succeeded in the classroom but need to adjust their pronunciation and oral grammar to be more comprehensible to local Kansas patients. The EAL students were identified by the School of Pharmacy, which takes into account preceptor³ feedback and observations of simulations.⁴

With the opportunity to teach ESP in the School of Pharmacy, I needed to (a) revisit ESP and investigate “community pharmacy English,” (b) do a needs analysis and write student learning outcomes, (c) develop an overall approach to the course, (d) find materials and create activities, and (e) create grading rubrics, found in the appendices. The rest of the article reports on these activities.

English for Specific Purposes and Community Pharmacy English

In Basturkmen’s (2010, pp. 7-8) review of ESP literature, two particular points appeared immediately relevant to the course I was developing. The first point, attributed to Cook’s (2002) is that the teaching goals for an ESP course are “external” in the sense that the language is intended to be used in society to do things like buy food or provide medical services. This is in opposition to “internal” classroom English, which includes explicit language instruction for the sake of acquiring grammar structures, vocabulary, and the four language skills. The second point is attributed to Tudor (1997) who maintained that ESP is concerned with knowledge domains that are not necessarily commonplace.

³ Preceptors are supervising pharmacists who oversee pharmacy student interns at a particular site.

⁴ Simulations are mock interactions between a student pharmacist and a patient who is played by an actor. Pharmacy students participate in simulations as part of their preparation for becoming professional pharmacists.

These two points formed the core of the ESP course I was tasked with developing. The course taught an “external” use of English (community pharmacy settings) and focused on a highly specialized knowledge domain (medications).

Pharmacists in a community setting might typically discuss medications by focusing on:

- how to administer a medication,
- what to do if a dose is missed or if there is an overdose, or an allergic reaction,
- how other medications can interact with a new medication, and
- how to store medications.

Technical knowledge of medications is acquired through academic jargon in pharmacy classes, but jargon is not often accessible to the average patient in a community pharmacy. Therefore, one linguistic task for the community pharmacist is to “translate” the technical language into “plain English.” Other linguistic tasks involve the ability to use English to build rapport and show empathy and care for patients while using a friendly and professional tone.

Clearly, a special set of communication skills is needed to counsel patients in community pharmacies. Some internationals working in Kansas pharmacies may, however, face additional communication challenges. EAL student (and professional) pharmacists may have foreign accents and may use communication styles that are unfamiliar to local patients, potentially affecting successful communication. Linguistic and communicative differences are not only relevant to the pharmacist-patient relationship, but they also matter to preceptors, who provide feedback and evaluate the performance of the pharmacy student. If preceptors observe persistent communication obstacles or if they themselves experience difficulties communicating with students on rotation, the preceptor may give a low score to the student. Low scores result in failing out of school.

A compounding factor that can affect successful communication is stress experienced by the patient or student pharmacist. If a patient is in pain, irritated, embarrassed, or experiencing significant anxiety, it may seem particularly burdensome or unnecessary to make an extra effort to understand accents or differences in communication style. The EAL student pharmacist needs to consider potential reactions from a patient under

stress. The student pharmacist can also experience stress from even the normal activity of impatient customers, incoming and outgoing phone calls, and random questions about products sold over the counter. When supplemented with unfamiliar idiomatic expressions, cultural references, or colloquial or regional uses of English, stress can increase. Stress can also feel magnified simply because of the presence of a preceptor. Anxiety from these and other sources can affect the EAL speaker's ability to monitor pronunciation, oral grammar, and/or vocabulary recall resulting in a "thicker accent" and more potential for a breakdown in communication.

Needs Analysis and Student Learning Outcomes

Doing a needs analysis is crucial to creating an ESP course, but it can be difficult to ascertain what a student needs. Brown (2016, pp. 13-14) offered four perspectives to consider: (a) the democratic view; (b) the discrepancy view; (c) the analytic view; and the (d) diagnostic view. The democratic view emphasizes the wants and expectations of stakeholders while the discrepancy perspective focuses on what the learners should be able to do but currently cannot do. The analytic view takes into account a particular theory of language learning and identifies the next step or stage which the learner needs to experience. The last view, the diagnostic view, targets aspects of the language that are missing and will cause harm if not learned.

I operationalized Brown's (2016) definitions of *needs* in the context of the School of Pharmacy by listening to what stakeholders had to say and by evaluating previously recorded speech of the student. The stakeholders were administrators in the School and the one student in the pilot course. I was able to gather what the administrators and the student wanted from the course (democratic view). I also heard about what the student was having difficulty with, viewed video clips of the student in pharmacist-patient simulations recorded at the School of Pharmacy, and then I identified aspects of English that affected comprehensibility. Brown (2016) might consider this direct observation as the discrepancy perspective on what is needed, but since I am influenced by SLA concepts such as fossilization, I might consider this a discrepancy-analytical hybrid perspective. The strongest need was articulated from the diagnostic perspective. Life and death are potentially at

stake if there is a miscommunication between the pharmacist and the patient. Pronunciation seemed to be the main cause of miscommunication, so I focused on pronunciation.

While doing a needs analysis, I reviewed literature on ESP and pharmacy to get an idea of what was happening at other universities. I have not yet found a “treasure trove” of publications on English for EAL pharmacy students, but I did find reports on pharmacy courses (Graham & Beardsley, 1986; Kokkinn & Stupans, 2011) a report on language assessment (Jay, 2007), a textbook for international students (Díaz-Gilbert, 2009), and a study on discipline-specific vocabulary (Grabowski, 2015).

Taking the needs assessment and previous literature into account, I identified key issues in pronunciation and grammar that would be the content of the course. Then I wrote up student learning outcomes.

Student Learning Outcomes

The following were the student learning outcomes for the course. After four weeks, the student will be able to (a) group words into thought groups to facilitate comprehensibility; (b) use word, phrase, and sentence stress and be able to reduce vowel quality on unstressed vowels to increase comprehensibility and familiarity; (c) use a variety of intonation patterns to communicate meaning and increase comprehensibility and familiarity; (d) pronounce and be aware of vowels and diphthongs to increase comprehensibility and familiarity; (e) make adjustments to grammar, collocations, and word choice; and (f) change volume of speech and rate of speech.

The Course and My Approach

The title I gave the course was *English for International Students in Pharmacy*. The task was to create a one-month pilot course with the possibility of developing that course into a full summer semester geared toward the language needs of EAL students in the School of Pharmacy. The course met two hours a day on Tuesday and Thursday for one month. There was one student and a single goal (and six student learning outcomes). The goal was for the student to be able to adjust her spoken English to be more comprehensible to local Kansans in a community pharmacy setting.

I approached the course from the perspective of *change*. The idea was that the student needed to change the way she used English to sound more familiar to local Kansas patients by pronouncing words and using

phrases in local ways. By becoming more familiar sounding, the student would be able to maximize comprehensibility to patients. I did not approach the course by encouraging the student to lose all influences of her native language when speaking English. The emphasis was not on something “to get rid of” (an accent) but rather on the ability to adjust pronunciation and grammar to be more compatible with the linguistic expectations of local Kansans.

To achieve change, I focused on *awareness* of the language issues and on practice. The course included concepts such as thought groups, phrasal stress, word stress, intonation, and vowels. I stressed that these aspects of pronunciation help make one’s speech sound familiar, which affects ease of comprehension and it affects the way one can be perceived by others. In addition to awareness raising, of course, we practiced in the class and the student recorded her speech for homework.

One question I wrestled with from the start was, “how would teaching English for EAL pharmacy students differ from teaching communication skills, which are already taught in the School of Pharmacy?” A sample of chapter titles from Berger’s (2009) pharmacy communication skills textbook reveals that pharmacy students already learn how to develop rapport with patients, respond with empathy, work with angry patients, be assertive, manage conflict, and help patients with change.

Although my approach continues to evolve, at this point I can recommend that an ESP course for EAL speakers in the School of Pharmacy contributes to the curriculum through an emphasis on:

- Pronunciation
 - Prosody (intonation, stress, rhythm, loudness, pausing, blending/linking, etc.)
 - Segmentals (vowels and consonants)
- Vocabulary, Grammar, Metaphors
 - Collocations and word choice
 - Idiomatic expressions
 - Common medical terms for body parts and medical conditions
 - Oral grammar

- Metaphors typically used in conversation⁵
- Listening Comprehension
- Cross-cultural Communication and Perceptions
 - Communication within a cross-cultural framework
 - Perceptions of EAL speech and reactions

If I had had more time in the course, I would have introduced one aspect of culture that is particularly relevant. Many patients, especially elderly patients in rural areas may not have interacted with international professionals. *Differentness*, such as a foreign accent and a different ethnicity, cannot only affect comprehensibility but can also evoke perceptions about the abilities or professionalism of the international. This serious issue could affect trust. Cultural perceptions of an accent and/or different ethnicities should be discussed in an ESP course for pharmacy and relevant communicative strategies to manage cross-cultural challenges should become part of the international professional's communicative repertoire.

Materials and Activities

The materials and activities I primarily used for the course included the pronunciation of the names of prescription medications and discussions about the medications.

Medication Names and Pronunciation Activity

A brief look at the generic and brand names for commonly prescribed drugs in the US reveals words unfamiliar to speakers of English as a first language as well as EAL speakers. (I used an online pronunciation dictionary to help with my pronunciation of many of the drug names.⁶) According to the website *WebMD*, the ten medications, shown in Table 1, were among the most prescribed and sold medications in 2015.

⁵ See Lakoff, G. and Johnson, M. (2003). *Metaphors we live by*, 2nd edition. Chicago: University of Chicago Press.

⁶ Online Pronunciation Dictionary: <http://clinical.com/pronouncetop200drugs/>

Table 1. Most Prescribed Medications⁷

Generic Names	Brand Names
Levothyroxine	Synthroid
Rosuvastatin	Crestor
Albuterol	Ventolin
Esomeprazole	Nexium
Fluticasone	Advair Diskus
Insulin glargine	Lantus Solostar
Lisdexamfetamine	Vyvanse
Pregabalin	Lyrica
Tiotropium	Spiriva
Sitagliptin	Januvia

One simple activity I assigned was to have the student pronounce each of these medications twice. This activity was done after we had worked on word stress and vowels, including reduced vowels. The student recorded the assignment for homework. See Appendix 1 for an assessment rubric for this activity.

Patient Counseling Materials and Activity

As part of patient counseling, pharmacy students learn to discuss medications with patients. A common prescription refill request handed out by pharmacists when a patient picks up medication shows key information about a drug that a pharmacist may communicate to a patient.

The information includes:

- the generic and brand name of the drug,
- the medication's purpose and how to administer the medication,
- the side-effects, precautions, and drug interactions,
- information about accidental overdose and missed dose, and
- information about the proper storage of the medication.

Based on the kinds of communication typical in a community pharmacy, activities were assigned for in-class practice and homework. Homework assignments were recorded. Refer to Appendix 2 for an assessment rubric for homework and in-class activities. Types of activities included:

⁷ Source: <http://www.webmd.com/drug-medication/news/20150508/most-prescribed-top-selling-drugs>

- Greet a patient and engage in small talk, then transition to the reason for the visit.
- Explain and discuss what a medication is used for and how to use it and how to store it.
- Explain and discuss side-effects, precautions, and drug interactions.
- Explain and discuss what to do if there is an accidental overdose or a missed dose.
- Explain and discuss other tasks that may include medical conditions and products for blood pressure, diabetes (e.g., socks), diet, and other relevant topics.
- Check patient comprehension.

By the end of the course, the student was able to monitor her speech and make adjustments to her pronunciation and grammar when performing the speech acts listed above.

Conclusion

The Applied English Center and the School of Pharmacy began a partnership in fall 2016 with the goal of creating a course to help EAL pharmacy students communicate more effectively and efficiently in a community pharmacy setting. Students and professionals who speak English as an additional language may have accents and ways of using English that can affect successful communication, which is vital in a pharmacy setting since a misunderstanding about a medication can potentially be a matter of life and death. The AEC can contribute to the success of EAL students in pharmacy by helping students in a number of linguistic areas such as pronunciation, grammar, word choice, and cross-cultural communication. The pilot course described in this paper begins to specify how an ESP course for pharmacy can be developed and can contribute to the pharmacy curriculum.

Appendix 1: Rubric for Pronunciation of Names of Medications

STUDENT NAME

DATE

Word Stress & Vowels

The X marks areas to continue working on.

Tongue Position	Symbol	Example	To Work On
High Front Tense	[i ^y]	beat	
High Front Lax	[ɪ]	bit	
Mid Front Tense	[e ^y]	bait	
Mid Front Lax	[ɛ]	bet	
Low Front	[æ]	bat	
High Back Tense	[U ^w]	boot	
High Back Lax	[ɔ]	book	
Mid Back Tense	[o ^w]	boat	
Mid Back Lax	[ɔ̃]	bought/call	
Low Back	[a]	stop	
Central Schwa	[ə]	about/but	
Retroflex	[ɤ̃]	bird	
Reduced Vowel	[ə]	about	
Word Stress			

Notes: Please refer to my comments on the audio recording.

Appendix 2: Rubric for Patient Counseling

STUDENT NAME
 DATE
 Counseling Feedback

The X marks areas to continue working on.

Categories		
Pausing/Thought Groups		
Blending/Linking		
Phrasal Stress		
Intonation		
Word Stress		
Vowels and Diphthongs	[i ^y] <u>beat</u>	[U ^w] <u>boot</u>
	[ɪ] <u>bit</u>	[ʊ] <u>book</u>
	[e ^y] <u>bait</u>	[o ^w] <u>boat</u>
	[ɛ] <u>bet</u>	[ɔ] <u>bought/call</u>
	[æ] <u>bat</u>	[a] <u>stop</u>
	[oy] <u>boy</u>	[ə] <u>about/but</u>
	[aw] <u>mouth</u>	[ə] <u>bird</u>
	[ay] <u>price</u>	
Consonants	[p] <u>pie</u>	
	[b] <u>buy</u>	
	[t] <u>time</u>	
	[d] <u>dime</u>	
	[k] <u>key</u>	
	[g] <u>go</u>	
	[f] <u>fan</u>	
	[v] <u>van</u>	
	[θ] <u>think</u>	
	[ð] <u>them</u>	
	[s] <u>so</u>	
	[z] <u>zoo</u>	
	[ʃ] <u>shoe</u>	
	[ʒ] <u>usual</u>	
	[tʃ] <u>choose</u>	
	[dʒ] <u>juice</u>	
	[m] <u>my</u>	
	[n] <u>no</u>	
	[ŋ] <u>ring</u>	
	[l] <u>led</u>	
[r] <u>red</u>		
[w] <u>we</u>		
[y] <u>you</u>		
[h] <u>how</u>		
Oral Grammar		
Word Choice/Collocation		

Notes: Please refer to my comments on the audio recording.

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