

# From Needs Analysis to Lessons Learned: Designing an ESP Course for Chinese Medical Staff

ハリカ・ビリジ ジョシュワ・ジョーダン

Harika Bilici and Joshua Jodoin

This paper describes the process of putting together a 12-week English for Specific Purposes (ESP) course for Chinese medical staff from start to finish as employees of the University of Nottingham Ningbo China (UNNC). The project began with many initial requests from the hospital including two strands: a lower-level strand focussing on speaking and a higher-level strand, which focused on both speaking and writing for international conferences. In order to meet these requests, the authors completed a needs analysis, created a syllabus, taught the class, and, lastly, had student complete a feedback survey. This paper will not only outline some of the pitfalls encountered during the creation, management, and culmination of the project, but also consider the successes and lessons learned from the experience.

**Key Words :** English for Specific Purposes (ESP), Chinese Medical Staff, Course Design

## Introduction

China's massive presence on the world stage is in little doubt and there is a huge push in all sectors of modern Chinese society, like universities and medical centers, to further this presence. The University of Nottingham Ningbo China (UNNC) was set up in collaboration with the Chinese Ministry of Education and Zhejiang Wanli Education Group and was established as the first English-medium university in China opening its doors in September 2004. Since then, the UNNC has grown in both size and influence and has pursued several side-projects within China including the English course at Ningbo #1 hospital. We were chosen as language teachers in the Center of English Language Education (CELE) to lead this project under the direction of one of our managers at UNNC.

The hospital was looking to further develop an international wing that had been newly opened to cater to the growing international staff working in Ningbo, China as well as offer their doctors training for attending international events and conferences. Initially, the hospital requested two separate courses: one that was for beginners focused on communicative English and a second

that was at a higher level, which included a writing for conferences component. UNNC, as a well-respected local institution, was a good match for what the hospital was looking for. However, UNNC does not currently have a Medical or Nursing School and, thus, CELE was chosen as the program to implement the program. Our manager sent out an email outlining the basics the project looking for interested CELE teachers who would run this course with the possibility of developing future courses in the same vein. We responded and agreed to the project even though we did not have any direct experience teaching English for medical purposes. What became abundantly clear after we agreed to do the project was that it was going to be much more complicated and fraught with challenge than we were led to believe.

In this paper, following a brief overview of ESP courses in China, we will describe the process of doing an initial needs analysis that included visiting the hospital and doing a basic speaking interview with each student, creating a syllabus, teaching the course, and offering written feedback to each student at the end. We will discuss the pitfalls, the successes, and the lessons learned from being involved in the process from start to finish.

## **ESP Courses in China / English for Medical Purposes**

According to Hutchinson and Waters (2006, p. 7), ESP emerged for three main reasons: to meet the demands of a brave new world, as a revolution in linguistics, and as a shift to focus on the learner. Firstly, the world is changing at an enormous pace with many countries, like China, pushing strongly into the globalized era. Secondly, traditional linguistics set out to describe the features of the language whereas modern linguistics are more interested in how language is used in communicative ways, which is especially important in doctor-patient situations. Lastly, rather than focus on *how* the language is being delivered to the student, attention has shifted to how a learner acquires language meaning a more learner-centered approach in English Language Teaching (ELT).

In creating ESP courses in China, the English language stands as doorway into international conferences as well as an opportunity to represent one's views on the international stage. Furthermore, students expect to be able to communicate with others on this international stage where English sits as the lingua franca. How a course promotes and integrates communicative techniques as well as a learner-centered approach is very important for students to be successful in international situations.

### **Needs Analysis and Results**

Needs Analysis (NA), results give curriculum writers "a realistic list of language, ideas or skill items, as a result of considering the present proficiency, future needs and wants of the learners" (Nation & Macalister, 2010, p. 1). This initial process is extremely important to the entire curriculum development and can often offer insights into what the students understand about their needs and offers the curriculum developer a much clearer picture of where the learner is before entering the classroom.

The needs analysis we used had two parts: a basic speaking exam and a brief interview. The entire needs analysis took about 15 minutes per student. The basic speaking exam that was used for this project is similar to a simplified Cambridge IELTS speaking exam and was comprised of three sections: a 'warm-up' section that dealt with general questions from everyday topics, an 'individual turn' section that focused on specific topics, and a discussion section that build on the topic specific questions moving from simple to more abstract. Students were offered a score based on how they performed on a

four-category rubric modified for UNNC students based on the IELTS speaking exam rubric. The rubric used the following categories: fluency and coherence, lexical resource, grammatical range and accuracy, and pronunciation. No norming sessions were necessary as the exam used was commonly used in speaking courses in the CELE program, which all teachers were familiar with. This first part aimed to understand students' objective needs and target use of language. The second part of the needs analysis consisted of a set of three questions that made up a brief interview (see Appendix 1). These questions were asked after the speaking exam and were simplified if the student's proficiency was low. The purpose of this part of the needs analysis was to get the student speaking and gain insight into what the student wanted to gain from the course personally and professionally, which was meant to help us determine students' subjective and perceived needs.

Based on the initial requests from the hospital, we assumed that there would be a relatively clear division in the group of medical staff between the strong and weak students, but the needs analysis proved this inaccurate. What we discovered was that we had a group of students that had a variety of strengths and weaknesses and there was not a clear split between the two groups even though they thought of themselves as a higher proficiency group and a lower proficiency group. In other words, we had to seriously reconsider offering a 'writing for conferences' component for the higher group and, based on the results of the needs analysis, both groups were roughly the same proficiency.

This created a slightly difficult situation for us early on as we needed to communicate to the hospital that the writing component should be saved for a subsequent course when learners proficiency had improved. We decided that instead of putting everyone in a single class based on the needs-analysis results, we would simply proceed with two separate courses as per the initial requests of the hospital. One course was called a 'higher level' course and the other was called a 'lower level' course even though the curriculum would be roughly the same. There were several factors that contributed to this decision, however, it was mostly dependent on contractual obligations between UNNC and the hospital that we had little control over.

Overall, the results of the needs analysis resulted in two main skill areas of focus for the curriculum design: speaking and listening. The NA showed that the students were able to understand general English topics like travel, shopping and education, but struggled with extending their ideas and were often

confused by follow up questions in these topic areas. Furthermore, the interview questions that we used almost always needed to be simplified and hedged for learners. Overall, most learners had trouble speaking at length on topics as well as having enough vocabulary to support their ideas often reverting to Chinese. Moreover, students made a variety of basic grammatical mistakes as well as common pronunciation errors typical for Chinese students like substituting /s/ or /z/ for the English /ð/ or using intonation that mimics the tones found in the Chinese language leading to several misunderstandings between the teacher and student during the needs analysis (Zhang & Yin, 2009).

### Curriculum Design

Following the NA, we began developing our syllabus by identifying clear goals and objectives as well as potential problems. While writing the syllabus, we chose a learner-centered approach in-line with typical ESP courses. In a learner-centered syllabus, as maintained by Flowerdew and Peacock (2001), the teacher is expected to adapt activities and materials to student's needs, familiarize themselves with specific relevant disciplines, work with mixed ability classes, design materials, and adjust them to student's needs. Unlike an EAP syllabus, working with content teachers was not possible and ensuring students are autonomous learners was not one of our main goals. As Tudor (1996, cited by Flowerdew and Peacock, 2001:179) suggested, owing to its complexity, NA requires refining and re-applying during the course. Hence, our course was adapted according to changing needs of our learners. This meant that although our syllabus had clear goals, objectives, methodology and materials outlined, it went through a constant revision based on the *live* curriculum that was taking place in the classroom. Our course was informed by the steps of designing a course mentioned by Richards and Renandya (2002) and Graves (1996), and were based on the results of the NA.

We built the course around a mixed-proficiency group that would be divided into two separate classes using the same curriculum. The teachers developed the materials together in advance and adjusted the materials according to the need of their class.

#### *Syllabus and Sequencing*

"A syllabus describes the major elements that will be used in planning a language course and provides the basis for instructional focus and content" (Richards, 2001, p. 152). Although this

course was listening and speaking focused, grammar and vocabulary were fed into the activities as they were useful in using the skills. Therefore, our skills-based syllabus also has some characteristics of an *integrated syllabus* (Richards, 2001). For example, vocabulary for parts and functions of the body were assigned for homework in lesson 9 to be used in simple sentences that were taught in lesson 10. Furthermore, the parts and functions of the body as well as the simple sentences were then used in short dialogues and patient/doctor conversation activities as practice. The vocabulary and grammar were used to support the focus on speaking and listening in the course.

Both principles of sequencing, *building* and *recycling* were taken into consideration while writing the syllabus (Graves, 1996). A *spiral sequencing* approach, meaning the ordering of materials from simple to complex were used (Richards, 2001), and the tasks were chosen accordingly. *Building*, which means building on what students learnt previously, is used while revisiting the skills (listening and speaking) to help learners proceduralize the language taught. *Recycling*, revising what was taught, took place at the beginning of each lesson to ensure that learners have opportunities to internalize the learnt skills and language (ibid).

#### *Methodology and Approach*

The course included simple reading texts considering learners' interests and dialogues with commonly used language, which also served as input for grammar and vocabulary. A process over a product approach was adopted as the course was intended to facilitate student involvement, build confidence and encourage students to continue learning English in the future. Necessary scaffolding to produce the language was provided to help learners focus on practicing the skills. The teacher was available for questions and support in and out of the classroom.

Even though our NA did not collect information about students' preferred work styles, we designed activities around pair-work and small groups to promote encouragement from the teacher, help students develop confidence, and have students learn from their partner's independence (Harmer, 1998). Also, including different types of interaction patterns contributed to our learner-centered approach by creating student involvement and an element of variety.

### Materials

Although this course was not a pure EAP course, choosing the right materials, due to time constraints, was essential. Therefore, we based our material choice on the effectiveness and appropriateness of the materials (Graves, 2000) and our NA. This meant for some of the lessons, we needed to write our own materials to meet student needs, while for other lessons, different activities from some of the internationally accepted course books worked well as they had relevant topics and tasks, a clear layout, and colorful pictures. Texts and activities in those books also lent themselves to revision of the EAP sub-skills and level grammar objectives, which made them appropriate for meeting the aims.

### Feedback Surveys at the End of the Course

As is typically the case at the end of most courses, we gave a basic group-administered questionnaire to gain insight into how the course was perceived by students and how we could improve the course for future iterations. In creating surveys for language programs, Brown (2005) outlines six main steps that should be taken including planning, designing the instrument, gathering and compiling data, analyzing data statistically, analyzing the results qualitatively, and reporting the results. Like the needs analysis, we borrowed heavily from the survey instrument that already existed at UNNC in terms of what was offered to CELE students at the end of their courses. This allowed us to save time in the planning and designing of the instrument.

The group-administered questionnaire was done on the last day of classes after the teachers had left to ensure confidentiality. The questionnaires were returned to the teachers by the hospital administrative staff the following week. There were three sections on the questionnaire: questions about the course, questions about the teacher, and an open-response section (see Appendix 2). The first two sections were a set of statements and students needed to choose whether they strongly agreed, agreed, disagreed, or strongly disagreed. The questionnaire responses were analyzed following the completion of the course, but it is important to keep in mind that these results are not scalable as the class sizes were relatively small. Two main findings came out of the questionnaire data: Students were satisfied with the course, but were dissatisfied with the frequency.

**Figure 1**

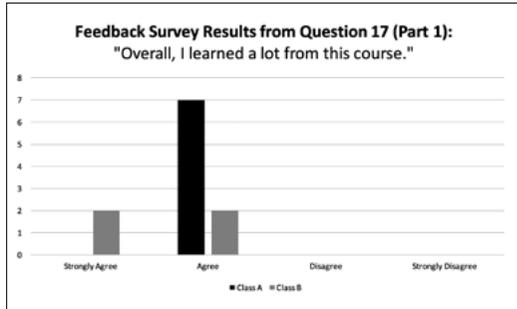


Figure 1: This shows the results of question 17 in Part 1 (see appendix 2 for full list of questions) from Class A and Class B.

**Figure 2**

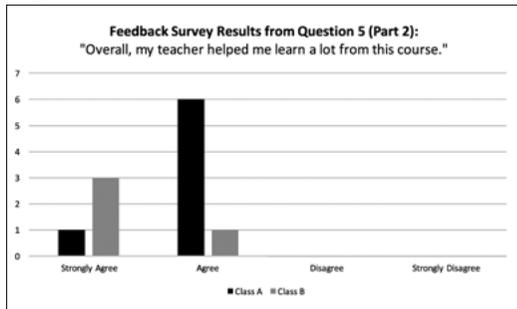


Figure 2: This shows the results of question 5 from Part 2 (see appendix 2 for full list of questions) from Class A and Class B.

Figure 1 shows that students enjoyed the course overall with favorable ratings (i.e. "Strongly Agree" or "Agree") for the first 17 questions of *part 1*. In terms of ratings for teachers, students rated the teachers highly as the scores on the questionnaires were in the 'strongly agreed' and 'agreed' sections *part 2*. The results are further backed up by comments offered by students such as "Its (the course is) interesting and useful." One of the major deficits of the course that was reflected in student comments on the feedback survey from *part 3* was that students were unhappy with the low frequency of the classes or there was not enough time to practice speaking in class.

## Pitfalls of the Course

### *Doctors are Busy People*

One issue that we could not anticipate from the needs analysis was that doctors were not showing up for class. Many of the doctors were surgeons that were constantly on-call and would sometimes be called out in the middle of class to perform a surgery. Having a class every two weeks was a challenge in of itself, but if a student missed one class, it would be a month before the student showed up to class. As the curriculum was built in a way that developed on previous learning, these students were often lost or disadvantaged in the next class. Although we became good at improvising or pairing students up with more knowledgeable students, it was a struggle throughout the course.

### *Student Levels Varied*

This issue was something we were aware of from the needs analysis, however, this became more of a problem when we used productive tasks in the classroom where students would, for instance, use something they listened to for a discussion. In our experience, there were several situations where one part of a pair group had strong listening skills where the other did not. Instead of an activity moving seamlessly onto a discussion, for instance, activities would often become stymied because one part of the group missed the first part of the activity all together. Classes were small so there were several ways to overcome such issues, especially as we began to learn about our students needs as the course progressed, but this caused significant difficulties early on.

### *Chinese Hospital System and the University System*

One issue that became evident early in the course was that there was professional hierarchy between students at the hospital. We had assumed that the students were all roughly at the same level at the hospital in terms of the hospital professional and social hierarchy, however, this was not the case. In a place like China, where hierarchy is very important in the work place and in society generally, navigating the relationships between students and their position in the hospital became a real challenge over the course.

In addition to navigating student relationships at the hospital, we realized there was a gap between the amount of support we expected from the university and the amount of support we received. Much of this perceived lack of support had to do with the amount of resources the UNNC exhausted on the ongoing contractual negotiations with the hospital, which was

fraught with difficulties from the start. This created a situation where it was difficult to find support both from the hospital as well as from the UNNC.

## Successes of the Course

### *Improved Fluency and Accuracy*

Although some students had better knowledge of English and a higher level of receptive skills such as listening, most students came with a low level of accuracy and fluency in speaking. As both aspects of language are important, the priority while designing this course was to enable students to start and maintain a basic conversation in English with a level of accuracy that allows them to be understood. Similar to most Chinese students, our students came from a traditional education system where learning English meant focusing on receptive skills such as reading and listening, practising grammar and vocabulary in mostly controlled ways rather than focusing on the communicative aspect of language learning. Therefore, our syllabus design needed to consider how to build confidence by providing gradual scaffolding and recycling language so that learners can practice the language in a relatively freer way and maintain basic conversations in English more fluently.

Even though the amount of time spent learning was limited, through our regular revisions at the beginning of each class, we observed that students started to have less difficulty communicating more fluently towards the end of the course. Even though accuracy was still an area to be worked on at the end of the course, the student feedback survey also confirmed a perceived improvement in fluency and accuracy around basic conversational skills.

### *Improved Ability to Communicate with Patients*

Despite the cultural and linguistic difficulties faced in the lessons, learners demonstrated an improved ability in role plays of patient-doctor communication. As Anat et al (2010, p. 38) advocate, "effective doctor-patient communication is a central clinical function in building a therapeutic doctor-patient relationship, which is at the heart and art of medicine." Therefore, a large part of the course focused on improving student conversational skills using typical English patient-doctor dialogue models. Furthermore, adapting and acting out the dialogues further contributed to student improvement by allowing students to understand and prepare for the natural and unexpected nature of doctor-patient conversation.

### *Increased Confidence and Motivation to Continue Learning English*

Having experience teaching lower level students in our previous workplace, we were aware that it is important for lower-level learners to build confidence and have the motivation to continue learning the language. Therefore, our syllabus design included both the element of fun and an amount of support to keep students engaged and motivated. Although the student feedback survey confirmed that students were motivated to keep learning, we do not have any data about the students after the course ended.

### **Lessons Learned**

#### *Negotiate Time and Support Needed to Design a Course*

As any teacher who attempted to design a customized course to meet the specific needs of learners would know, this process requires a substantial amount of time, especially if the teacher does not have extensive experience in curriculum writing. Therefore, to create a working syllabus, it is critical for teachers to ensure that they have adequate amount of time and support to guide them in the process as well as access to feedback by an experienced curriculum writer.

#### *Less is More: Have Realistic Expectations and Keep the Syllabus Simple and Flexible*

One of the biggest challenges in this course was the limited time inside and outside the classroom dedicated to practice and learn the targeted skills. The fact that students neither had the time nor motivation to study independently outside the class also contributed to our challenges. Therefore, we soon realized that it would have been better to have fewer goals and objectives, which would make room for more quality time in the classroom. Especially in ESP contexts where there is limited time and information available about the needs of the students, it would be useful to keep goals and objectives simple, flexible and realistic since they are likely to change and evolve as the course unfolds.

#### *Create an Enjoyable Curriculum*

Although learner motivation is a key component in all learning situations, it plays a bigger role in contexts where learners are required to attend classes after a long work day. Thus, providing adequate amount of support for learners as well as using visuals and enjoyable activities will improve the effectiveness of the syllabus by further enhancing motivation.

### **Conclusion**

Designing and implementing any course is fraught with challenges and successes, regardless of the amount of experience a teacher has in curriculum design. Overall, taking the time to really understand the needs of learners at the start as well as carefully consider the context carefully is a very important part to any course development. Although there are many factors influencing the initial course development, it is most important to remember that *live* curriculum, which takes place in a specific classroom context, is heavily shaped by the changing needs of the students, requires regular revisions, and the teacher must be open and flexible throughout the entire process.

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## Appendix 1: Marking Sheet used for Needs Analysis

Hospital Interview Score Sheet

Assessor's Name:

Date:

Candidate name/ID	Fluency & Coherence	Lexical Resource	Grammatical Range and Accuracy	Pronunciation	Overall Results	Comments
Sample Candidate	7	7	6	6	6.5	<i>Although some pronunciation was unclear, this was partly down to fast speech. Speech was maintained and he was able to expand and give examples for each question asked; meaning very full answers were given. All questions were answered with no apparent comprehension problems. Vocabulary was wide and flexible with some good items, e.g. 'scenic' 'tender' (in the business sense). He seemed confident with speaking skills. Upper-intermediate level course.</i>
What do you personally want to gain from taking this course?						
How will this course benefit you in your professional life?						
Is English important to you in your day to day work? How?						

## Appendix 2: Questions used in Feedback survey

### Part 1: Questions about the Course

- In this course, I have improved my confidence in speaking English.
- In this course, I have improved my knowledge English vocabulary.
- Through this course I have greater awareness of English pronunciation, intonation, rhythmic variations.
- I have developed my ability to cope with a variety of English accents and different speeds of speech.
- The course has improved my ability to understand English in many situations (i.e. airports, restaurants, etc.)
- Through the course I developed the ability to communicate ideas effectively in class discussions.
- The topics used in the course were generally interesting for me.
- The organization of the lessons was effective for learning.
- The organization of the lessons was easy to follow.
- The PPT (PowerPoints) slides of the lesson were easy to follow.
- The recordings and recording transcripts were useful in learning English.
- The hand-outs (photocopies) were effective for learning.
- I would like to continue learning English from a course like this.
- The course complimented others I have studied.
- The presentation at the end of the course was a good way for me to practice English.
- The homework helped me practice the material from class.
- Overall, I have learned a lot from this course.

***Part 2: Questions about the Teachers***

1. My teacher made the course interesting.
2. My teacher was well prepared for class.
3. My teacher had an effective teaching style.
4. My teacher started the lesson on time.
5. Overall, my teacher helped me learn a lot from this course.

***Part 3: Open-response Questions***

1. What did you like about the course?
2. What did you dislike about the course?
3. What should your teacher do to improve their teaching?
4. What did your teacher do that was effective for learning in the classroom?