Table of Contents

1. **M. Naci Kayaoğlu** .................................................................4-31
   *Case Study into the Classroom Questions by a Native Speaker and a Non-Native Speaker Teacher in EFL Classes*

2. **Chili Li & Zhoulin Ruan** ....................................................32-50
   *Language Difficulties of EAP Learners at English-medium Contexts: A Case Study of Chinese Tertiary Students at XJTU in Mainland China*
Case Study into the Classroom Questions by a Native Speaker and a Non-Native Speaker Teacher in EFL Classes

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Bio Data

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Abstract

There has been a continuing debate about the dichotomy between native speaker (NS) English teachers and non-native speaker (NNS) teachers. While a good many differences are observed between the two groups in error evaluation, classroom management, classroom instruction and language use, teacher questions seem to have received solely sporadic attention. Therefore, this case study with two teachers seeks to find out how and to what extent native and non-native language teachers differ from each other in terms of type of questions they employed in their classroom instruction. Classroom audio recording was used as a major data collection instrument. In addition to the classroom observation, a questionnaire was also conducted in order to obtain background information and general classroom behavior of the two teachers, one native and one non-native speaker teacher. A semi-structured interview was held with each participant with a view to exploring pedagogical purposes, if any, pursued by each informant. Overall analysis indicates that the native and non-native speaker of English teachers used different question types in their instruction to foster divergent thinking and develop higher cognitive processing. While the native-speaker teacher appeared to use more procedural and convergent questions, the non-native speaker teacher used remarkably more divergent questions. Another discrepancy between the two cases was reported in the use of personal and general solicits. One remarkable result that emerged from the findings was that it would be misleading to focus solely on types of question without analyzing the pedagogical purposes of the language classroom interaction.

Key words: Teacher questions, native, non-native teachers, teacher talk, classroom interaction

Introduction

There have long been arguments regarding the dichotomy between native speaker (NS) English teachers and non-native speaker teachers (NNS). This division has stirred heated debate amongst linguists, sociolinguists and educators alike. It is evident that native speaker
teachers differ from non-native speakers in many respects. While a large number of discrepancies are observed between the two groups in error evaluation, classroom management, and language use, teacher talk and, more specifically, teacher questions (classroom questioning techniques) seem solely to have received sporadic attention. Teacher talk is, however, stated to constitute the major proportion of a class hour (Cook, 2000). It is not only one of the major ways that teachers convey information to learners and the primary means of controlling learner behavior (Allwright & Bailey, 1991), but it also shapes the nature of classroom interaction to the extent that “classroom interactional competence (CIC) was defined in relation to a teacher’s ability to make use of appropriate teacher talk” (Walsh, 2006, p. 150).

In this respect questioning occupies a large part of the teacher talk and is one of the most common teaching techniques, and a strategy employed by teachers. Question-and-answer exchanges sometimes occupy more than half of the class time (Gall, 1984; Kerry, 2002). The question-and-answer sequence is not only about the transmission of facts or managing classes but is rather the interactions between the teacher and students in the classroom where the teacher co-constructs learning with students, building on what learners already know and extending that by asking high-level questions.

Theoretical background

Native and non-native teachers of English and classroom interaction

As this paper deals with questioning techniques employed by native and non-native teachers of English in an EFL classroom interaction, it is important to review the continuing debate about native and non-native teachers and, secondly, classroom interaction within which the issue of asking questions can be understood. Referring to the interaction between the native speaker and the non-native speakers and the role of teachers’ question in classroom discourse, Tsui (2001) states that “an important dimension of classroom interaction is teacher questions” (p. 122).

It is indeed the case that the notion of native speaker refers to people who have natural control over a language and are a reliable source of data for the truth about the language (Ferguson, 1983). Davies (1991) adds, “there is the further sense of ascription, that a person does not choose to be, can’t help being a native speaker” (p. x). It is interesting to note that native speech is some kind of acceptance by other people that created the distinction between native and non-native speakers. Davies (1991) has a similar comment on the issue:
“the native speaker boundary is one as much created by non-native speakers as by native
speakers themselves” (p. 9). Phillipson (1996) regards non-native speaker teachers of
English as ‘ideal’ language teachers since they acquire English as an additional language;
they have first-hand experience in learning and using language as a second language, thus
this experience sensitizes them to the linguistic and cultural needs of their students.
Widdowson (1992) also supports the same idea and claims that non-native speakers have
more advantages when the role of the instructor is important because they have experience
as second language learners of English and this experience makes them aware of the target
language. Therefore, the feature of having experience in the language learning process
contributes to the teaching skills of non-native speaker teachers a great deal. Furthermore,
on-native speaker teachers can be better in specific areas since they have a chance to
benefit from sharing the learners’ mother tongue in monolingual classes. Backing up this
idea, Gill and Rebrova (2001) state that non-native speaker teachers’ chance to use mother
tongue is an invaluable option for both the effective explanations of abstract notions and
classroom management.

The studies in this area to date indicate clear differences by native speaker teachers and
non-native speakers in the topics ranging from the use of target language to judging lexical
suggest more comprehensive differences between NS and NNs in Table 1.

Table 1: Differences between Native Speaker Teachers (NSs) and Non-native Speaker
Teachers (NNSs)

<table>
<thead>
<tr>
<th>NSs</th>
<th>NNSs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of target language</td>
<td></td>
</tr>
<tr>
<td>Speak better English</td>
<td>Speak poorer English</td>
</tr>
<tr>
<td>Use real language</td>
<td>Use ‘bookish’ language</td>
</tr>
<tr>
<td>Use English more confidently</td>
<td>Use English less confidently</td>
</tr>
<tr>
<td>General attitude</td>
<td></td>
</tr>
<tr>
<td>Adopt a more flexible approach</td>
<td>Adopt a more guided approach</td>
</tr>
<tr>
<td>Are more innovative</td>
<td>Are more cautious</td>
</tr>
<tr>
<td>Are less empathetic</td>
<td>Are more empathetic</td>
</tr>
<tr>
<td>Attend to perceived needs</td>
<td>Attend to real needs</td>
</tr>
<tr>
<td>Have far-fetched expectations</td>
<td>Have realistic expectations</td>
</tr>
<tr>
<td>Are more casual</td>
<td>Are more strict</td>
</tr>
<tr>
<td>Are less committed</td>
<td>Are more committed</td>
</tr>
<tr>
<td>Attitude to teaching the language</td>
<td></td>
</tr>
<tr>
<td>Are less insightful</td>
<td>Are more insightful</td>
</tr>
<tr>
<td>Focus on</td>
<td>Focus on</td>
</tr>
<tr>
<td>fluency</td>
<td>Accuracy</td>
</tr>
<tr>
<td>meaning</td>
<td>Form</td>
</tr>
<tr>
<td>language in use</td>
<td>grammar rules</td>
</tr>
<tr>
<td>oral skills</td>
<td>printed word</td>
</tr>
</tbody>
</table>
colloquial registers | formal registers
---|---
Teach items in context | Teach items in isolation
Prefer free activities | Prefer controlled activities
Favour group work/pairwork | Favour frontal work
Flexible to use a variety of materials | Use a single textbook
Tolerate errors more | Correct errors more
Set fewer tests | Set more tests
Use no/less L1 | Use more L1
Resort to no/less translation | Resort to more translation
Assign less homework | Assign more homework
Supply more cultural information | Supply less cultural information

According to the research-based findings presented in Table 1 above, a substantial number of differences were observed to exist between NS and NNS; it is, however, interesting to note that there is no reference to the issue of teacher questions which apparently shape the nature of interactions between the teacher and students in the classroom.

Tsui (2001) states “classroom interaction focused on the language used by the teacher especially teacher questions” (p. 120) plays a crucial role in initiating interactions in the classroom. Similarly, Walsh (2011) states “questioning occupies much of a language teacher’s time” (p. 52) and “typically, classroom discourse is dominated by question and answer routines, with teachers asking most of the questions as one of the principal ways in which they control the discourse” (Walsh, 2006, p. 8). Referring to Long and Sato’s work (1983), Walsh (2006) points out the role of the teacher questions that “a teacher’s use of questions is the single most-used discourse modification to aid and maintain participation among learners” (p. 8). With their questions, reactions, and actions, teachers are always the model for learners. Supporting this idea, Chaudron (1993) adds that conversation and instructional exchanges between teachers and students provide the best opportunities for the learners to exercise target language skills, to test out their hypotheses concerning the target language, and to get useful feedback. Richards and Lockhart (1995) state that when teachers use teacher talk, they try to make themselves as easy to understand as possible. Effective teacher talk including questions may provide essential support to facilitate both language comprehension and learner production.

Although questions are considered to contribute to the ongoing interaction, there has been some serious criticism directed towards the nature of ELT classroom interaction because of the fact that the interaction produced by teachers, through the use of questions, is suggested to be typical examples of the IRF (teacher initiation-learner response-teacher follow-up) cycle rather than genuine or natural interaction (Kumaravadivelu, 1993; Nunan,
The traditional teacher-run EFL classroom interaction is claimed to restrict the equal and free participation and even turn-taking rights in conversation. In a typical ELT classroom turn-taking is not self-regulated and students are not naturally allowed to negotiate the topic and have equal responsibility for managing and maintaining the conversation monopolized by the teacher. According to Seedhouse (1996):

"[T]he only way...in which an ELT lesson could become identical to conversation would be for the learners to regard the teacher as a fellow-conversationalist of identical status rather than as a teacher, for the teacher not to direct the discourse in any way at all, and for the setting to be non-institutional (p. 18)."

Having adopted a sociolinguistic stance, Seedhouse (1996) asserts that as long as there is an idea of ‘let’s have a conversation in English’ in mind and a pedagogically designed learning context geared toward the institutionalized goal regardless of question types, it is almost impossible for a genuine communication and conversation to take place in the sociolinguistic sense. Similarly, according to Walsh (2006), the second language classroom discourse is characterized by the teacher’s monopoly over the topic of conversation and turn-taking owing to the unequal status and role relationship between teachers and students. It is the teacher who coordinates the patterns of communication, deciding when and to what extent students are to be restricted and allowed to initiate or respond to the moves. At the outset, institutional purposes shape the discourse, which can be summarized for the vast majority of ELT settings as teaching English to the learners. Seedhouse (1996), however, regards the ELT classroom interaction as an institutional variety of discourse, which is very much geared toward the program goals.

So, the language and patterns of interaction, which the students generate, are to be inexorably related to the pedagogical purposes even though the teacher voluntarily relinquishes all his/her power to direct the classroom. Walsh (2006) supports Seedhouse (1996), stating “communication is unique because the linguistic forms used are often simultaneously the aim of a lesson and the means of achieving those aims” (p. 3). Seedhouse’s argument is not to diminish the pedagogic value of creating opportunities for interaction to take place through the use of questions. Rather, it is to express that replicating genuine or natural communication in the classroom setting, as communicative orthodoxy advocates, is too utopian to realize in practice and also devoid of theoretical bases.

Yet, it is not appropriate to equate communicative language teaching to only sociocultural perspectives. This approach seems to be biased as it is largely based on the ideal
conversation or English native-speaker interaction. The strong emphasis on this sociocultural aspect of communication is not compatible with non-English speaking environment where learners are provided with opportunities to use their English for various communicative and non-communicative activities in a wide program of language teaching. Language planning cannot be made without reference to its social, pedagogic and educational contexts. When analyzing the principles of CLT (Communicative Language Teaching), Berns (1990) states:

[I]t is essential that learners be engaged in doing things with language, that is, they use language for a variety of purposes in all phases of learning. Learner expectations and attitudes have increasingly come to be recognized for their role in advancing or impeding circular change (p. 104).

Littlewood (1981) takes a very flexible position in the discussion of communicative activities, suggesting that even drill and controlled practice can serve to prepare the learners for more communicative work. So in this context, classroom questions are not necessarily expected to initiate or stimulate a genuine communication. Rather, questions create opportunities for students to engage in meaningful interactions in the classroom, which will facilitate language learning and L2 acquisition to some extent. Tsui (1995) provides research-based evidence for the crucial role of teachers’ questioning strategies and suggests that teachers video-tape their own lessons and examine questions to raise their awareness of the importance of questions.

When it comes to analyzing classroom interaction, Flanders’ interaction analysis category (known as FIAC) (1970) appears to have been used a great deal. The FIAC system consists of two major categories (pupil talk and teacher talk including asking questions). The FIAC system is, however, seriously criticized by Walsh (2006) for being biased towards teacher talk and having subjective and very broad categories, which fail to account for “the complex interactional organization of the contemporary classroom” (p. 42). Instead, Walsh (2006) proposes a more refined framework called SETT (Self Evaluation of Teacher Talk) and a multi-layered approach to investigating and analyzing interaction within the classroom. Using classroom recordings and reflective feedback interviews, Walsh (2006) regards the classroom context crucial to understand the features of interaction in a real sense, stating “single L2 classroom context does not exist; contexts are locally constructed by participants through and in their interaction in the light of overall institutional goals and immediate pedagogic objectives” (p. 62). It is suggested that the nature of classroom interaction cannot be identified without reference to pedagogic goals aligned with language use.

Drawing on insights from the studies by Walsh (2006) and Tsui (2001), this study, in
addition to lesson recordings and transcripts, utilized reflective feedback and interview, recognizing the unobservable aspects of teachers’ questions such as teacher beliefs, cultural norms and the teacher’s pedagogic beliefs. This will be discussed in the methodology section.

**Teacher Talk and Questions**

A considerable amount of classroom research has focused on different aspects of teacher talk to which foreign language learners are mainly and frequently exposed in the classroom. This focus is mostly on rate of speech, amount of talk, effects of teacher questioning on student performance, modifications in discourse, pauses, types of oral feedback, modification in syntax and vocabulary (Haydon & Hunter, 2011; Kaoa et al., 2011; Kawalkar & Vijapurkar, 2011; Liu & Zhang, 2007; Moser et al., 2012). The main conclusions of the studies undertaken on features of teacher talk (Almeida, 2011; Dashwood, 2005; Hamayan & Tucker, 1980; Pica & Long, 1986; Shen, 2012) suggest the following general picture though with some variation:

- Teacher talk occupies the major proportion of a class hour.
- Teachers use shorter utterances with less proficient learners.
- Teachers do more repetition with foreign language learners.
- Teachers use fewer marked structure.
- Teachers use longer pauses with learners.
- Teachers speak more loudly and make their talk more distinct.
- Teachers slow down their rate of speech.

Given the number of studies on teacher talk and classroom interaction, the issue of questioning has become a prominent topic of academic interest. Questions have been considered a valuable pedagogic device for teachers whether to test students’ knowledge or to stimulate their thinking. The knowledge and skills used in asking different types of questions in a classroom is a critical aspect of the teaching and learning process to the extent that questions can facilitate language acquisition, production and result in meaningful interaction. So learners’ achievement and degree of engagement are linked to the types of questions generated and used by teachers in a classroom. In support of this view, Chaudron (1993) states “teachers’ questions constitute a primary means of engaging learners’ attention, promoting verbal responses, and evaluating learners’ progress” (p. 126). Students are
encouraged to participate in the ongoing interaction through questions, and in return teachers use student responses to adjust the whole process from the content to the form of language inputs. An increase in the amount of classroom interaction through questions is likely to activate learners’ competence and help them improve language learning. First, questions serve as a means of obliging students to make some kind of contribution to the ongoing interaction, and their responses provide the teacher with feedback which he/she can use to adjust the content and form of his talk. Second, questions are also used to control the progress of classroom interaction and put it back on track in case there are some major deviations from what the teacher has planned occur. Also having a function of facilitating language production and resulting in correct and meaningful responses are crucial in teacher questioning (Pawlak, 2004).

Therefore, the teacher questions may serve to:

- shape the socio-cognitive development of learners as they explore and make meaning in collaborative contexts
- foster divergent thinking
- support students’ higher levels of thinking
- influence students’ achievement and level of engagement in a classroom
- develop higher cognitive processing skills.

An equally important issue in relation to teacher questions is to categorize questions into functional classes. There have been several attempts to classify questions. Barnes (1969) seems to propose one of the earliest taxonomies of questions and suggests four types of questions on the basis of his secondary school classroom observations: factual, reasoning, open and closed. Barnes further subdivided reasoning into closed (only a predictable response) and open (a number of different responses)

Perhaps one of the most referred taxonomy of questions came from Long and Sato (1983), who worked on Kearsley (1976)’s classification based on conversational data. Long and Sato’s taxonomy is based on the distinction between echoic and epistemic categories. The former one is to elicit repetition of an utterance or confirmation, initiating discourse repair (confirmation checks, clarification requests and comprehension checks). The latter type serves to elicit information and includes two subcategories such as referential and display questions. Referential questions refer to genuinely information-seeking questions for which
the teacher does not know the answer, such as *what do you think about globalization?* Such questions require interpretations and judgment on the part of the learners. Display questions are those that do not seek information unknown to the teacher, such as *what is the past form of the verb ‘read’?*. Display questions are usually asked for comprehension checks.

Hargie’s (2006) classification appears very similar to that of Long and Sato (1983) in that questions fall into three main categories: procedural, recall-process and closed-open questions. Seedhouse (2004) reports that display questions have characteristics of IRF. Referential questions, on the other hand, are claimed to initiate classroom interaction (Brock, 1986; Kramsch 1985). Nunan (1987) emphasizes the value of referential questions, stating that “increasing the use of referential questions… over display questions is likely to stimulate a greater quantity of genuine classroom communication” (p. 142). Procedural questions focus on teacher language in giving instructions in classroom. Recall questions are used to retrieve knowledge and check whether students grasped the previous lessons. By contrast, process questions encourage students to use higher cognitive processes. Closed questions require short answers, possible yes/no or identification, whereas open questions call for higher interaction and more language output.

Richards and Lockhart (1995) classify the questions into three: procedural, convergent, and divergent. Procedural questions refer to classroom procedures and routines and classroom management as opposed to the content of learning, such as *did everybody finish the task?* Convergent questions basically encourage students to give single short (correct) statements or ‘no’ ‘yes’, answers such as *what are some capital cities in the world?*, focusing on the recall of some information. Convergent ones do not usually require higher-level thinking. Rather they encourage similar student responses or responses which focus on a central theme. Divergent questions refer to, as opposed to convergent questions, different responses, which require students to engage in higher level thinking, such as *what would happen if all of the world’s computers suddenly stopped for a month?* They encourage students to provide their own information rather than recall previously presented information.

Research on teachers’ questions in foreign or second language classroom appears to have centered on the frequency of the different types of questions (Ellis, 1995; White & Lightbown, 1984). In an early study with school teachers, Barnes (1969) found that teachers preferred remarkably closed reasoning-type questions rather than open reasoning-type questions. In Long and Sato’s study (1983) the ESL teachers were observed to ask far more display than referential questions, compared to non-native speakers in conversation with non-native speakers. In support of Long and Sato (1983), Pica and Long (1986) indicate that
language teachers asked more display than referential questions. In a study by Yang (2010) on NNS pre-service English teachers’ questions, closed and display questions were found frequently asked by the teachers, while open and referential questions were rarely or even never asked. Walsh (2006) reports in his analysis of interactional strategies in classes that display questions are used more frequently with lower level students and referential questions appeal to students of a higher level for discussion purposes. Contrary to these finding, Bialystok et al. (1978) found that teachers were observed to use more referential questions. On the other hand, Thornbury (1996) finds display questions appropriate not to language classes but other classes such as geography and math.

In view of the significant role of questions used by teachers in classroom, this paper aims to document one native and one non-native teacher’s talk, more specifically their asking questions in classroom interaction. What matters in a language classroom is the teacher’s verbal (and non-verbal) reactions, asking questions, and giving feedback. It is evident that language teachers differ from other classroom teachers in the way they address language learners. Language teachers tend to make adjustments to both language forms and language functions so as to facilitate communication. The quality of the teacher’s input directed at the learner can be central for L2 (second or foreign language) acquisition because it is the teacher talk that has potential effect on learners’ comprehension, which is hypothesized to be important for L2 acquisition (Ellis, 1995).

Methodology
This is a case study seeking answers as to how, and to what extent native and non-native language teachers differ from each other in terms of the types of questions they employed in their classroom instruction. A considerable effort was also made to identify possible reasons behind the teacher’s choice of questions through the use of interviews. The primary and the most important reason for favoring case study in this particular research is the effort to answer ‘how’ and ‘why’ questions, relying mostly on data collection techniques such as direct observation and interviewing as indicated by Yin (1994): “case studies are the preferred strategy when ‘how’ and ‘why’ questions are being posed, when the investigator has little control over the events and when the focus is on a contemporary phenomenon within some real-life context” (p. 1). Characterized as focusing on the importance of context, perspectives on observation, and in-depth nature of analysis, a case study approach was, therefore, chosen as the most appropriate approach for this present study which was on actual behavioral events of native and non-native teachers in an authentic classroom context.
This study enjoyed the combination of qualitative and quantitative traditions, in the sense that, while the classroom observation and interviews provided data concerning the teachers’ questions in classroom context, the questionnaire of 20 items provided background information and general classroom applications of the two teacher participants, with a view to understanding the context and the boundary of the phenomena under investigation to the fullest extent. The questionnaire items in a checklist format were designed to identify the two teacher participants’ teaching experience, preferred teaching styles and activities including correcting errors, language modification and asking questions (as will be presented in Table 3). This also served not only to complement and supplement the data, but also to enrich the findings.

Setting and Sample
The study was undertaken in the Department of English language and Literature at Karadeniz Technical University, Trabzon, Turkey, at which the researcher was based as an instructor. This proved to be a convenient location providing quick access to the data in the department, with the medium of instruction being English. The educational duration is 1+4 years, i.e. the beginners take a one-year preparatory language course in the department, followed by a four-year undergraduate education. The program involves local and native-English teachers sponsored by the Fulbright Commission, the US Embassy and Georgetown English Language Fellow Program.

A total of 320 students in five classes were asked, in an order of importance, to list the most interactive lessons among the 23 lessons offered to English-majoring students in the first semester of 2011, resulting in two classes, one run by a native and one by a non-native speaker teacher. Each class accommodated 32 and 36 sophomore students respectively. This sampling was purposive allowing the researcher to choose samples that “meet some specific predetermined criteria” (Dörnyei, 2007, p. 128) and also excluding what was not relevant to the issue under investigation. Krippendorff (2004) also views this type of sampling strategy as “so natural that is rarely discussed as a category of its own” (p. 120).

Data Collection, Management and Analysis
Classroom Audio Recordings
The next step was to collect data regarding classroom interaction. To this end, audio recordings were employed to capture and analyze classroom interaction with a focus on questions used by the native and non-native teacher respectively. In both classes, the
extended topic was about two different short stories. Meetings were arranged with each teacher to consider the proposed lessons, and a mutual decision was made to collect observational data mainly on the teachers’ questions through audio recording. Since the primary focus was on question types, there was a non-threatening atmosphere, and a climate of trust between the researcher and teachers was established. A multidirectional microphone was placed in the middle of the class, tested and observed to be sufficient enough to record the classroom interaction. The classes were observed and recorded via audio recorder for a total of 360 minutes, making four block sessions, each lasting 90 minutes during the second semester of the year 2011. The first recording session was not included in the data analysis to avoid a Hawthorne effect, which refers to a psychological phenomenon that produces a change in participants’ behavior during the course of the study due to the use of audio recordings in the classroom. The participants might have been alerted to the treatment as a result of attention they received. Nonetheless, it was observed that the participants were engaged in routine classroom practice.

Audio files were transcribed into text using Express Scribe Transcription Software, professional audio player software for PC, designed to assist the transcription of audio recordings. The transcribing process resulted in a total of 21,660 words.

In order to ensure high reliability of coding, the researcher employed two extra coders who were quite familiar with the topic under investigation, and who were also provided with a clear definition of each question type with examples, as illustrated in Table 2. Questions were extracted, with their contexts, from the transcribed document in advance by the researcher. The task did not require elaborative complex processing by the coders whose task was to match the questions with the question types identified according to the taxonomies by Long and Sato (1983) and Richards and Lockhart (1995) as given in Table 2 below. To avoid ambiguity, the transcribed document was provided for each coder to refer to, allowing the coding table to serve as a reliability data matrix.
Table 2: Coding table for coders

<table>
<thead>
<tr>
<th>Question Types</th>
<th>Definition (example)</th>
<th>Coders</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Procedural Questions</td>
<td>refer to classroom procedures and routines and classroom management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(did everybody finish the task?)</em></td>
<td></td>
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<tr>
<td>2 Convergent Questions</td>
<td>require single, short (correct) statements or ‘no’ ‘yes’, answers</td>
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<td></td>
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<td></td>
<td><em>(what is the capital city of Egypt?)</em></td>
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<td></td>
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<tr>
<td>3 Divergent Questions</td>
<td>refer to, different responses, which require students to engage in</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>higher level thinking, <em>(what would happen if all of the world’s computers suddenly stopped for a month?)</em></td>
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<td></td>
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<tr>
<td>4 Referential Questions</td>
<td>refer to genuinely information-seeking questions for which the teacher</td>
<td></td>
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<tr>
<td></td>
<td>does not know the answer, <em>(what do you think about globalization?)</em></td>
<td></td>
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<tr>
<td>5 Display Questions</td>
<td>are those that do not seek information unknown to the teacher, <em>(what is the past form of the verb ‘read’?)</em></td>
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<tr>
<td>6 Clarification Requests</td>
<td>requesting various types of information</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td><em>(I’m sorry, what did you say?)</em></td>
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<tr>
<td>7 Confirmation Checks</td>
<td>expression to elicit information of whether the utterance is correctly</td>
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<tr>
<td></td>
<td>heard or understood, characterized by repetition and intonation</td>
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<tr>
<td>8 Comprehension Checks</td>
<td>refer to when the teacher ascertains whether or not the students</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>understood the utterances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Personal Solicits</td>
<td>asking questions to specific students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 General Solicits</td>
<td>asking questions to the whole class</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Open Observation Method and Interview

In addition to the audio recording, the open observation method (Hopkins, 2006) was employed in class to note down key points about teachers’ reactions and behavior through the use of a personal form of shorthand for making verbatim and non-verbatim recordings of the classroom transactions. The main aim was to record factual and descriptive information (including the use of the blackboard, wait-time, providing feedback, classroom management speech rate, and cognitive strategies such as repetition and using synonyms).

It was not possible to observe how the subjects organized their questions and the intentions they assigned to the questions. For this purpose the semi-structured interview was chosen because this type of interview is “the one which tends to be most favored by educational researchers since it allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewee’s responses” (Hitchcock &
Hughes, 1994). Interview questions provided natural patterns for data analysis.

Therefore, the final step was to use a semi-structured interview with the informants so as to obtain greater insight; especially what pedagogical purposes were pursued by each participant, and they were asked to elaborate, in detail, on the following major questions: (1) For what purposes do you use questions in the classroom? (2) What are factors that affect your questions in class? (3) Do you prefer (in general) asking questions to the entire class or to an individual student? (4) What is your common practice when volunteer students want to answer your questions? (5) What do you do when you feel your question is not understood or is not responded to in class? The aim of the interview was to allow the subjects to narrate their own ‘stories’ and to account for their use of questions in their own words so that we would have a clearer understanding as we cannot directly observe feelings and intentions (Patton, 1990).

Limitations

In the light of the information emanating from the interviews, it would be wise to re-consider epistemological perspectives pertaining to the choice of research strategy in analyzing teachers’ questions in the classroom. Only focusing on frequencies and occurrences of question types within quantitative approach may not lead to being able to depict the full picture because questions in the classroom may serve different and specific functions.

It would be more illuminating if question types preferred by teachers had been analyzed in relation to tasks and the classroom interaction. There are mainly two limitations that prevented this: (1) the current research design tends to focus on quantitative data because of its scope and the research questions and (2) as Seedhouse and Almutairi (2009) indicate, the interaction interrelated with tasks are very difficult to analyze because of its very "indexical nature” (p. 311). This also requires a more sophisticated tool to capture accurate tracking of not only verbal but also non-verbal interaction in the classroom. To solve this problem, Seedhose and Almutairi (2009) used task-tracking hardware and adapted a digital tabletop of face-to-face interaction, in a rare study.

Results and Discussion

A combination of quantitative and qualitative data collection instruments was used in this research. Initial analysis of questionnaire data concerning teachers’ background and classroom behavior was summarized in Table 3 below.
Analysis of Questionnaire

Table 3: Background information and classroom behavior about teacher participants

<table>
<thead>
<tr>
<th></th>
<th>Native Speaker Teacher</th>
<th>Non-native Speaker Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching experience</td>
<td>7 years</td>
<td>18 years</td>
</tr>
<tr>
<td>In service training in TEFL</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Preferred teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>small group discussions</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>interactive activities</td>
<td>Yes/very often</td>
<td>Yes/sometimes</td>
</tr>
<tr>
<td>lecture</td>
<td>Yes/sometimes</td>
<td>Yes/sometimes</td>
</tr>
<tr>
<td>asking questions</td>
<td>Yes/all the time</td>
<td>Yes/all the time</td>
</tr>
<tr>
<td>following a certain method</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>language modification</td>
<td>Yes/slower rate</td>
<td>No</td>
</tr>
<tr>
<td>use of students’ mother tongue in case of lack of comprehension on the part of learners:</td>
<td>No</td>
<td>Yes/rarely</td>
</tr>
<tr>
<td>Repeating</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>simpler vocabulary</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>giving examples</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Rephrase</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>use of mother tongue</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>let other students use mother tongue</td>
<td>Yes (rarely)</td>
<td>No</td>
</tr>
<tr>
<td>correcting errors</td>
<td>Rare</td>
<td>Often</td>
</tr>
</tbody>
</table>

In spite of some variation, both the native and the non-native speaker teacher appear to have similar teaching behavior, to a large extent as displayed in Table 3 above.

Analysis of Audio Recordings

The second data obtained from audio recordings was first, as stated before, transcribed and analyzed according to taxonomies by Long and Sato (1983) and Richards and Lockhart (1995).

Table 4: Question types (taken from Richards & Lockhart, 1995)

<table>
<thead>
<tr>
<th></th>
<th>Procedural Questions</th>
<th>Convergent Questions</th>
<th>Divergent Questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Native Speaker</td>
<td>6</td>
<td>30.0</td>
<td>4</td>
<td>20.0</td>
</tr>
<tr>
<td>Non-native Speaker</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Table 4 shows that most of the questions used by both teachers were divergent questions. These kinds of questions are used to encourage diverse student responses, which require students’ engagement in higher level thinking as compared to the convergent questions, which require often short statements and are often used to make students focus on the
presented information. It is, however, interesting to note that the non-native speaker teacher used more divergent questions than the native speaker (66.6% and 50% respectively) and used no procedural question.

Table 5: Question types (Long & Sato, 1983, cited in Richards & Lockhart, 1995)

<table>
<thead>
<tr>
<th>Referential Questions</th>
<th>Display Questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Native Speaker</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>44.4</td>
<td>55.5</td>
</tr>
<tr>
<td>Non-native Speaker</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>72.2</td>
<td>27.2</td>
</tr>
</tbody>
</table>

Despite the dominance of the display question type over referential type in teacher questioning research (Barnes, 1969; Long & Sato, 1983; Barnes, Pica and Long, 1986). Table 5 indicates that the non-native speaker teacher used referential type of questioning much more often than the native teacher (72.2 % and 44.4 %, respectively). The native speaker teacher preferred to use more display questions, which are designed to elicit particular answers the teacher himself knows.

Table 6: Clarification requests, confirmation checks, and comprehension checks (Long & Sato, 1983, cited in Pawlak, 2004)

<table>
<thead>
<tr>
<th>Clarification Requests</th>
<th>Confirmation Checks</th>
<th>Comprehension Checks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Native Speaker</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>20.0</td>
<td>20.0</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Non-native Speaker</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>20.0</td>
<td>60.0</td>
<td>20.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 is also related to the questions used by teachers and indicates that the non-native teacher was more likely to employ clarification requests and confirmation checks as a way of encouraging the students to rephrase erroneous utterances. As can be seen from Table 6, confirmation checks were used by the non-native speaker teacher much more than by the native speaker teacher, by more than 50 percent of all question types. However, comprehension checks were used more frequently by the native speaker teacher than by the non-native speaker teacher; three times as often as the one by the non-native speaker teacher.
Table 7: Personal and general solicits (Pawlak, 2004)

<table>
<thead>
<tr>
<th></th>
<th>Personal Solicits</th>
<th>General Solicits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Native Speaker</td>
<td>8</td>
<td>40.0</td>
<td>12</td>
</tr>
<tr>
<td>Non-native Speaker</td>
<td>6</td>
<td>27.2</td>
<td>16</td>
</tr>
</tbody>
</table>

In terms of turn taking, teachers generally want a particular student to give an answer to the question or they talk to the whole class. It was inferred from the data shown in Table 7 that both the native and the non-native speaker teacher used general solicits. In either class, it was more than 50 percent of all, but the difference is that the native speaker teacher used personal solicits more often than the non-native speaker teacher.

Open Observation: How did Teachers Modify their Language?

Both native speaker and non-native speaker teachers often use explanations to make the situations clearer for the students. Especially, the non-native speaker teacher preferred to talk in detail to explain the themes and subject matters whereas the native speaker teacher directed students into group discussions. The non-native speaker teacher addressed the whole class, therefore giving a lecture rather than doing small discussion groups. The non-native speaker teacher tended to pause more often and spoke much more slowly compared to the native speaker teacher.

It was also observed that the native speaker teacher made use of blackboard and drawings to make his/her talking clearer while the non-native speaker teacher tried to modify his language by repetitions, using synonymous words. Another finding is that the native speaker teacher used many more imperative forms such as ‘prepare questions, look at the story, get together, I want you guys to figure out some reasons...’ to guide the students in the classroom; however, the non-native speaker teacher tried to monitor the discourse by asking questions of the students such as ‘What else?, But why?, What about racism?’ . The non-native speaker teacher waited much more often than the native speaker teacher since he/she wants students to find the answer to the questions or the subject matter. For instance, the non-native speaker teacher waited 61 seconds because he/she wanted students to complete his sentence ‘one more issue in the story, it is ...it is...’. Both teachers were careful in providing feedback; with both classrooms it was understood that feedback was used mostly to increase motivation and build a supportive climate. Furthermore, rather than on form, feedback on
content was observed. Especially the non-native speaker teacher often used this method to repeat the students’ answers, summarize, or expand students’ answers. By using the expressions such as ‘ok, right, yes, good, hmm, well of course’, both the native and non-native speaker teacher acknowledged a correct answer and complimented students on their answers.

Analysis of Interviews
Semi-structured interviews were held with these two teachers in an effort to gain more insight into the issues being discussed in the study such as (a) the purposes for asking questions in class (b) factors that affect their questions and c) their preferred strategy to use questioning techniques in class, (d) common practices in case of voluntary answer, and (e) strategy in case of ambiguity in question-answer sequence.

(a) Purposes in asking questions
I suppose questions, for me, are a means to get a sense of class participation with the reading and other out of class assignments, but beyond that questions are an excellent way to challenge students to move their thoughts beyond the obvious. For example, when reading Native Son by Richard Wright, I tried to move my students away from an obvious reading of racial violence in 1940s America and encouraged them to look at how oppression affects people in all cases or how an individual deals with living, with themselves after committing a terrible act. The goal was to get students to connect something very foreign to themselves. In literature discussions, there is a tendency for students to look for the ‘right’ answer when in fact there are many answers and analyses for any given piece of text. (NS)

Teacher questions test students’ knowledge and stimulate their thinking. If teachers’ questions are compatible with teaching objectives, they are hoped to serve well for teachers. If they are asked at the end of the class session, they test students’ knowledge. I usually do it. I ask them to talk about some matters where they are supposed to use what they have gleaned during the class. At the beginning of the class session, they might stimulate their thinking. I start with procedural questions during warm-up, and go on with convergent questions and then divergent questions. (NNS)

From the subjects’ reports above, it appears both teachers have developed a sense of questioning and employed questions for their own purposes by establishing their own rules of pedagogic behavior and personal understanding in the class. While the NS English teacher appeared to emphasize communication over accuracy and took the role of the facilitator in the sense that he/she tried to encourage students to formulate their own responses in a more
liberal atmosphere, the non-native speaker English teacher was found to have been guided by methodological considerations. In other words, while the NS was interacting with students, the NNS was interacting with the curriculum. This was surprising since it was the NS who used more display and fewer referential questions. This unexpected result can possibly be accounted for by teachers’ identities. As indicated by James (2001), teachers’ personal worldview and professional knowledge take the form of personal theories, which eventually lead to their developing ways of thinking regarding their roles in the classroom.

It is interesting to see that the NNS teacher used professional jargon in expressing his/her ideas in relation to the questioning, indicating that the teacher evaluates him/herself by following the prescribed teaching principles. So, how teachers decide which question types are to be employed seems to be shaped either by practical action in the real world or by a wealth of tacit knowledge related to teaching and learning. This is also where we are seriously challenged to pursue contextual clues within which the functions of one question can be understood. So, it may not be clear to understand precisely what the function of a question is performed by a teacher at any point in a lesson. It is also similarly important to distinguish what a teacher intends to achieve with a question and what happens on the part of the learners. This is what Discourse Analysis (DA) approaches, as well as this study, suffer from. Walsh (2006) criticizes the traditional DA model for its failure to consider the multi-functionality of an utterance in a classroom environment where interaction patterns may be very complex, and subsequently finds the model problematic because “matching utterances to categories may be problematic owing to the issues of multi-functionality and the absence of a direct relationship between form and function” (p. 48).

(b) Factors affecting questioning

I ask questions that come spontaneously from the discussion itself (those are often the best and my favorite ones). Other factors that affect how I formulate a question are my own awareness of the particular sensitivities of students. For example, I will avoid asking a highly political question when it is obvious that it will create an immediate division within the class. Instead, I try to form questions that are provocative and encourage the students to think within themselves how it applies to specific concerns in their lives. There are questions I tailor to a particular group of students based on their interests or backgrounds. (NS)

Three factors affect my questions: stage of the lesson, level of my students, and the syllabus. First, at the very beginning of the lesson, I ask questions to warm up. If the content is not familiar with the students, I ask text-related questions to create a sense of success. For more advanced students I tend to
ask more complex questions that require giving opinion. I encourage them to find a way to formulate their ideas in English and figure out on their own how they will formulate their responses. Also, the interest level of the class determines what questions I ask. Some classes are always enthusiastic and will talk about anything, whereas others need to be stimulated with topics that appeal to their interests. (NNS)

In relation to the factors affecting questions in the classroom, the NS teacher appeared to have established questioning techniques through common sense and intuition. Instead of using predetermined questions, he/she chose to adjust the questions based on his/her assessment of the classroom atmosphere, students and topic and most probably prior knowledge of what happened and would happen in similar situations. Because of his/her delicate position as an ‘outsider’ in a relatively conservative setting, the NS teacher was on very high alert to minimize the potential damage that some questions might cause. This high sensitiveness can account for why the NS teachers greatly preferred general solicitation to personal. On the other hand, there is a marked difference in the non-native speaker teacher’s report in that the driving force for the NNS teacher was to realize what was to be done pedagogically. The pedagogical purposes became clearer in the response by the NNS to the question of “do you prepare any questions to ask prior to the class?” As follows:

In every step of teaching there should be a plan prior to application. I always prepare several questions related to the topic that I will ask before class, Thus, preparing some questions before the class related to the topics would provide me a better control of what I am doing, and does not let me stray from my teaching goals. Thus, it provides more control when needed. (NNS)

On the other hand, the NS teacher was found to be more flexible and freer from the idea of controlling the flow of the lesson with predetermined questions:

It is Ok to prepare some questions in advance. I draw a map in my mind of how one question will lead to another. I will then guide the students through a particular discussion and I also feel free to ask whatever might come to mind during a lesson in-progress once they are more comfortable, open the discussion up to a more free-flowing conversation (NNS)

It appears that the NS teacher does not strictly adhere to the questions prepared in mind before class; rather they serve as a general guide for the lesson. The class is allowed to flow in a direction determined by the students’ engagement and receptiveness rather than by the teacher. When it comes to common practices in relation to reformulation (rephrasing a
learner’s contribution, extension (extending a learner’s contribution) and modeling (correcting a learner’s contribution), there seems to be not much difference between the NS and NNS’ self-report:

I do this (reformulation), especially if the student has said something very interesting. Sometimes I will ask the student to repeat what they have said again and even ask them to turn to the rest of their class to repeat it. I usually do extension to lead into the next question or to connect their response to a previous response put forth by a different student. I do modeling very rarely. In my English Conversation, I was mostly concerned with the students’ comfort and ease with speaking to me in a conversational and authentic fashion. To correct students too much, I feared, would cause students who might have a tendency toward shyness to completely shut down. (NS)

I mostly employ reformulation and extension in all of my classes. This naturally provides my students with a correct model without hurting their feelings or discouraging them from voicing their views. (NNS)

(c) Preference for Personal Solicits and General Solicits

I ask general basic questions to the whole class so as to get the discussion started. This allows me to group the students and then let the group work together to elaborate on their common answer. This gives them a chance to formulate their ideas in a more comfortable setting, so that they may trust themselves more to speak in front of the class. Sometimes, I call on particular students who I’m not hearing from enough. Also, I sometimes call on a particular student as a way to reward them for their continued participation and to let them know I’m genuinely interested in their thoughts. In most cases, I break the class into smaller groups and direct my questions to the group. (NS)

I prefer to ask a question to an entire class to start discussion. I usually start off asking questions to the class as a whole and then if necessary move in on individual students because otherwise some students would never participate. Sometimes students are hesitant to answer. (NNS)

In both cases teachers reported to have preferred asking questions to the entire class in an effort to reduce potential degrees of anxiety since interacting in English in front of audience can create some amount of tension. It is interesting to observe that the NS teacher chose to put students into smaller groups due to psychological significance. Students might be expected to engage in more conversational modifications with their level of participation. The teacher in this case gives the task, probably using display or procedural questions rather than successive referential questions.
(d) Common practice when volunteer students want to answer

If only one student or only a few students are volunteering to answer every question. I sometimes tell them that I want to hear from others or I put my hand up gently and smile at them to let them know that I have seen them but want to give others a chance. (NS)

It is a good way of reinforcing the students who are deeply interested in the subject and answering the question to let them answer the question. However, try to reach every single student in the classroom even if they are not volunteer ones. (NNS)

It is true to say that question-answer sequences serve as an information-seeking device in the classroom and are used as strategies by teachers to maintain interactive teaching and learning. However, students’ responses and receptiveness also have an effect on how these sequences are arranged and managed. According to the interview reports above, the non-native speaker teacher regards volunteer students as enthusiastic students who deserve extra credit for their ‘deep’ interest. This may naturally lead the NNS to use more referential questions. On the other hand, the NS teacher does not appear to give priority to volunteer students, and therefore may use more display questions to reach other students.

(e) Strategy in case of ambiguity in question-answer sequence

In this case I rephrase the question or I will ask them to rephrase the question to me to gauge their comprehension. One thing I have learned though is that sometimes students need more time to answer a question, especially one that is complicated or abstract. If it is an important question, I try to slow down and explain it in simpler terms. By using body language, pictures, board and etc., I am usually able to get the idea across. As a last resort, I may ask one of the students who understood to explain it in their native language (NS)

The first thing is to repeat it. Taking the linguistic and intellectual background of the students into account I try to transmit my message to them using the (appropriate) communication strategies such as circumlocution, approximation, using non-linguistic signals. Then I go over related topics to help students brush up their memories. I sometimes turn the question into several statements and move step by step if it still remains obscure, this means I will be the one who will answer that question. But this rarely happens to me (NNS)

There are common points as well as discrepancies’ between the NS and NNS in their strategies when they faced difficulties experienced by learners in understanding the questions. Both teachers reported using some simplifications and reduction in their speed of language use. While the NS preferred rephrasing the question, the NNS chose to use repeating strategy.
One interesting finding worth mentioning here is that the NS teacher resorted to the mother tongue of students whereas the NNS appears to have avoided referring to the use of L1.

**Conclusion**

This case study primarily investigated the questions asked by one native and one non-native teacher of English, on the premise that classroom questioning constitutes an integral part of classroom interaction and remains an effective strategy not only to manage classroom routines but also to identify students’ existing knowledge, to reinforce students’ learning, and to improve students’ high level thinking skills. Classifying questions, though with some difficulty, into a set of pre-determined categories accurately to a large extent, as employed in this study, was quite helpful to the degree that we were informed of the type of questioning and classroom discourse patterns in general.

All in all, the findings reveal that the questions by the non-native and the native teacher differ in some aspects. Both teachers prefer different question types in similar situations. While the native-speaker teacher appeared to use more procedural and convergent questions, the non-native speaker teacher used remarkably more divergent questions. A very similar pattern was observed with referential and display questions. The native speaker used display questions more frequently which elicited brief responses. Contrary to the previous studies, such as Burns and Myhill (2004) and Harrop and Swinson (2003), the non-native speaker teacher used more referential questions to generate further interpretations from students. This might be related to the pedagogical purposes that the teachers had in their minds of the course objectives.

There is, however, a paradoxical situation in this study, in which the NS teacher used more display questions but aimed to create more liberal and self-expressing atmosphere free from centralized curriculum boundaries, as compared to the NNS teacher. This strongly indicates that we need a better classroom analysis methodology that considers all potential variations in teachers’ questions and pedagogic purposes. Teachers are social beings with specific linguistics and pedagogic goals and not totally determined beings (Freire, 2000) so what they do in classroom is “social practice rather than a de-contextualized cognitive skill” (Gieve, 1998, p. 123). Therefore, our knowledge of teachers’ questioning strategies could be limited without exploring the link between teachers’ choice of question types and pedagogic purposes and the context with all its ingredients.

The questions, regardless of type and quantity, can assume a very different function from the teachers’ own perspectives. The teacher can vary the type of questions according to
settings, students, course objectives and the pedagogical purposes in mind. This is to underlie
the link between the questions and pedagogical purposes, which is ultimately related to
language learning as Seedhouse (1994) indicated that “the interaction of pedagogical
purposes and linguistic forms/patterns of interaction in some way bring about language
learning in the language classroom” (p. 303). Without considering what the teacher is really
trying to achieve with a particular question type and the pedagogical purposes of the language
classroom, it does not make much sense to code questions accurately because what matters
may not be the frequency or the type of questions asked by teachers, but rather the impact
that we create on students with questions to promote meaningful interaction in classroom.
Walsh (2006) strongly indicates “according to a teacher’s pedagogic goal, different question
types are more or less appropriate: the extent to which a question produces a communicative
response is less important than the extent to which a question serves its purpose at a particular
point in a lesson” (p. 8). Therefore, it may be misleading to judge the value of classroom
interaction by solely focusing on the quantity of questions.

Equally important is the lack of empirical data on the extent and the functions of
questions to which students are stimulated since a substantial number of studies on teachers’
questions were done from the perspective of the teachers and observer, rather than that of the
learners. From the students’ perspective, however, questions might have taken on a very
different function and meaning.

As to educational implications, it is often difficult to measure the effects of questions
on the language learning process, yet there is evidence, though in an embryonic stage, that
questions have the potential to shape the classroom interaction. There is an immediate need to
increase teachers’ awareness of possible effects of questions on students’ learning.

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Language Difficulties of EAP Learners at English-medium Contexts: A Case Study of Chinese Tertiary Students at XJTLU in Mainland China

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Abstract
The last two decades have witnessed a proliferation in research on language difficulties encountered by EAP (English for academic purposes) learners studying at English-medium contexts. However, there has been inadequate attention to EAP learners’ language difficulties in English-medium-instruction (EMI) settings in non-English-speaking countries. This paper reports on the findings of an investigation into the sources of language difficulties among a cohort of EAP learners studying at an English-medium university in Mainland China. Data were collected by means of a self-designed questionnaire and were then subjected to an exploratory factor analysis. The results show that these EAP learners’ difficulties center on: 1) communicating with others in academic studies; 2) reading and writing for both general and academic purposes, such as inadequacy in academic vocabulary and syntactic knowledge, writing effective paragraphs, choosing appropriate language for academic writing, and lack of knowledge about academic norms; and 3) understanding lectures delivered by teachers with various accents. The findings suggest that these difficulties are attributable to the Chinese learners’ previous English learning experiences, their English proficiency and the distinctive characteristics of the EAP learning context. This study has implications for EAP teaching in both China and other similar English-medium contexts.

Keywords: Language difficulties; English-medium context; Chinese EAP learners

Introduction
In recent years, the internationalization of higher education has generated a substantial outflow of students from Mainland China to pursue English-medium-instruction (EMI) higher education at English-speaking countries and regions. While these students make valuable contributions to the overseas academic communities, they are often found to
encounter difficulties in adapting to the new English-medium contexts (Gao, 2008; Skyrme, 2007). Language difficulties encountered by Chinese EAP learners have been widely addressed in English-speaking countries and the postcolonial Anglophone regions, such as the UK (e.g., Wang, 2010; Zhou & Todman, 2009), the United States (e.g., Liu, 2000), Australia (e.g., Zhang & Mi, 2010), New Zealand (e.g., Campbell & Li, 2008) and Hong Kong (e.g., Evans & Green, 2007; Hyland, 1997; Littlewood & Liu, 1996; Trent, 2009).

However, a search for the relevant literature in this field reveals a dearth of research on the sources of language difficulties encountered by Chinese EFL learners learning EAP at a broader EFL context, particularly Chinese students in Mainland China, which has the largest EFL population in the world. This is of particular significance considering the growing prevalence of EMI education in Mainland China. EMI education, as observed by Hu (2009), has been the most overwhelming vocabulary in Mainland China. EMI education has been advocated at a multitude of educational levels, at higher education in particular (Huang, 2003; Mok & Xu, 2008). Therefore, this study endeavors to investigate Chinese EAP learners’ difficulties in learning English in Mainland China through an exploratory research approach.

**Literature Review**

**EMI in Internationalization of Higher Education**

Due to the ever-increasing effect of globalization worldwide, the past two decades have witnessed a spurt of internationalization of higher education. Many governments are making initiatives to internationalize their higher education (Altbach & Knight, 2007). One of such initiatives is to provide EMI programmes in the major English-speaking countries like the UK, USA, Australian, Canada and New Zealand, and in some non-English-speaking countries such as Germany, France, the Netherlands and the Scandinavian nations (Andrade, 2006). In Mainland China, since the launch of the reform policy in 1978, the Chinese government has been sending its academic staff and students abroad and making efforts to create Sino-foreign exchange and degree programmes. It also encourages tertiary institutions to open EMI programmes and invites overseas universities to establish branch campuses where English is adopted as the medium of instruction and communication (Huang, 2003; Mok & Xu, 2008).

EMI plays an important role in the internationalization of higher education. SLA research has claimed that it is more effective for one to learn a language through using it to learn
content subjects (Kim & Sohn, 2009; Krashen, 1985). With language learning increasingly considered as being context-mediated (Wenger, 2000), studying in an EMI context is increasingly believed to be beneficial for EAP learners to better their command of the language. An EMI setting could serve as a community of practice for English learning, which provides affluent opportunities for learners to use English in their academic studies (Gao, 2010; Wenger, 1998, 2000). Such access to English could facilitate learners to improve their skills and to meet the language requirements for studying the subject contents in English (Storch, 2009; Storch & Hill, 2008). For instance, EMI could equip students with language skills and knowledge of academic norms pertinent to the subjects that students specialize in.

However, the above claim that an EMI context is facilitative to English learning has come under criticism for being over simplistic and for ignoring the possible constraints of contextual realities. For example, an EMI context may discourage students’ participation in classroom due to their limited English proficiency (Kim & Sohn, 2009). It may cause difficulties in their attempts to adapt to the EMI contexts. These potential problems thus to some degree legitimatize further examinations over the difficulties these students might encounter in the EMI contexts.

**Difficulties in Learning EAP in EMI Context**

Studies on EAP learners’ difficulties in EMI contexts have presented a holistic picture about the major sources of the difficulties among EAP learners. It has been revealed that Asian students, particularly Chinese students, are often found to face tremendous problems when studying in English-medium environments. The commonly identified challenges mainly include lack of study skills and language proficiency (Evans & Green, 2007; Zhang & Mi, 2010), and insufficient knowledge of academic norms and conventions (Campbell & Li, 2008; Storch & Hill, 2008; Wang, 2010).

It has been argued that the primary source of difficulties in learning EAP at the EMI contexts relates to language problems. For instance, in their investigation of the language difficulties encountered by first-year Chinese students at four universities in Hong Kong, Littlewood and Liu (1996) found that the main sources of difficulties were academic writing skills, grammar and vocabulary. These findings partly confirm Hyland’s (1997) survey research findings on 1619 Chinese students from five Hong Kong universities. The research found that their language problems mainly centered on the productive skills of writing, speaking and the acquisition of specialist vocabulary. More recently, Evans and Green (2007)
surveyed 4932 undergraduates about their difficulties when studying EAP at Hong Kong universities. Their findings lend further support to the previous two studies in that the participants experienced difficulties in academic writing, speaking and vocabulary. Academic listening appeared to be much less of a problem to these students. These findings, however, seem to be divergent from studies conducted in other EMI settings. For example, in a study of 40 Chinese students’ language difficulties in Australia, Zhang and Mi (2010) found that academic listening was also a major concern among their participants.

Research so far has shown that a second principal source of difficulties lies in the EAP learners’ lack of knowledge of academic norms. The Socratic dialogical practices are the norm of the Western culture of learning, which is featured in questioning, criticizing, refuting, arguing, debating and persuading repertoire (Major, 2005). However, students from Asian countries, Mainland China in particular, are discovered to be equipped with little knowledge of these academic conventions when studying in the English-medium universities. They are not accustomed to the Western-styled classroom cultures like teacher-student interaction, academic requirements and expectations (Ward et al., 2001). In their study on the challenges among Asian students in New Zealand, Campbell and Li (2008) found that Asian students had an inadequate knowledge of academic skills, patterns of classroom interactions, and academic conventions. This inadequacy seems to cause obstacles in the development of their academic literacy. For instance, their difficulties in writing academic assignments were considered to be caused by a lack of insufficient knowledge of academic conventions that are not explicitly taught in class, such as writing literature reviews, critical reviews and essays, reports, research proposals, and making references (Campbell & Li, 2008).

Another major issue is their inability to participate in classroom activities such as group discussion. Previous studies have reported ambivalent results with regard to Chinese EFL learners’ participation in classroom activities in both EMI and EFL contexts. On the one hand, several studies indicate that Chinese EFL learners were often reticent in class in both the EMI and the EFL environments. For example, both Liu’s (2000) and Chen’s (2003) studies found that Chinese students in the United States were often silent in classroom communications. This phenomenon was also reported in research conducted in Hong Kong (Jackson, 2003; Trent, 2009) and Mainland China (Liu & Jackson, 2008, 2009). However, these claims were challenged by other studies (e.g., Cheng, 2000; Li & Jia, 2006), in which Chinese students are found to be willing to participate in supportive contexts (e.g., Cheng, 2000; Li & Jia, 2006).
These contrasting views on Chinese EFL learners’ reticence in class might be accounted for by a range of social and contextual factors, as indicated in the literature. The aforementioned divergence suggests that reticence might be context-specific, which means that contextual factors might be responsible for students’ reticence in class. Therefore, good knowledge about the basic requirements for academic study in a particular context might raise students’ confidence in actively involving themselves in classroom activities, and vice versa. For instance, in a case study of an in-class silent postgraduate Chinese student in London, a lack of basic understanding of the UK educational system was discovered to have caused the student’s reticence in class (Wang, 2010). Besides, cultural factors such as the collectivist culture in Chinese society, the traditional roles assigned to teachers and students are considered to underpin the alleged reticence of Chinese students (Cortazzi & Jin, 1996). Another factor relates to language proficiency. Evans and Green (2007) contend that reticence is probably caused by inadequate language competence. Limited language proficiency results in a lack of confidence in communicating ideas fluently in class. In their exploration on reticence in Chinese EFL students at varied proficiency levels in Mainland China, Liu and Jackson (2009) also found that the more proficient the learners were, the less reticent they were in classroom activities. In a nutshell, Chinese students’ reticence is a complicated phenomenon in the EMI contexts, which has to do with a multiplicity of social, cultural, psychological and pedagogical factors (Cortazzi & Jin, 1996; Evans & Green, 2007; Jackson, 2002, 2003; Wang, 2010).

To sum up, previous research does reveal that Chinese EAP learners encounter a variety of problems when learning EAP at the EMI contexts. However, the above review shows that several issues remain to be further explored. Firstly, existing research mainly focuses on Chinese EAP learners either in English-speaking countries such as the UK or the United States, or postcolonial Anglophone regions like Hong Kong. To date little research of such kind has been conducted on Chinese EAP learners in EMI settings in Mainland China. Secondly, previous research has also indicated that the difficulties in EAP learning at EMI contexts are context-specific, related to an array of cognitive, socio-cultural, and pedagogical factors. Therefore, the generalizability of the findings reported in previous studies needs to be amply verified in other contexts, especially at the EMI settings within a broader EFL context.

In order to bridge the gap identified above, the present study attempts to examine the difficulties of a cohort of Chinese EAP learners learning at an English-medium university in Mainland China by adopting an exploratory research approach. It seeks to answer the
following questions:

1) What are the major sources of Chinese students’ language difficulties when studying EAP at an English-medium university in Mainland China?

2) How do these learners perceive their difficulties in EAP learning with regard to the four language skills including listening, speaking, reading and writing?

The Present Study

Xi’an Jiaotong-Liverpool University (XJTLU ) as Research Context

The present research was conducted at Xi’an Jiaotong-Liverpool University (XJTLU), an EMI university in Mainland China. Being a Sino-Foreign joint higher institution, the University follows its UK parent university’s system. It adopts English as the medium of instruction and communication on campus. Classes at the first year are taught in English, except a few modules such as the Chinese Culture and the Physics Education which are required to be taught in Chinese by the Ministry of Education of China. For these classes, textbooks and other teaching materials, coursework and experiments, and assessment are also in English.

A great majority of the English teaching staff at this EMI University are native speakers of English. The international teaching staff hold appropriate qualifications in the area of applied linguistics or English language teaching. At the same time, a small proportion of the English teaching staff are returning Chinese who received higher education in applied linguistics and English language teaching from overseas universities in the English-speaking countries. Most of these tutors have extensive experience in teaching EAP, especially in teaching EAP to Chinese students.

In order to help the students acquire a better command of English and to facilitate their application of English in academic studies, the EMI University requires the students to attend compulsory EAP courses in the first two academic years. The EAP course spans 14 teaching weeks each semester, featured with small-sized class of no more than 20 students. Each week, an EAP class normally meets 6 times around 12 teaching hours, including two EAP sessions for reading and writing, two for academic listening and speaking skills, one lecture and one face-to-face tutorial. These EAP courses cover a variety of topics such as history, psychology, education, society, economy, science and technology. A variety of assessment methods, encompassing group projects, essays, and presentations, mid-term and final exams are adopted to evaluate the students’ performance in EAP learning.
Participants

In order to strengthen the representativeness of the research sample, the participants were selected from 8 intact classes of two streams, Finance and Business (4 classes) and Engineering (4 classes), the two programmes with the most registered students at the EMI University. The participants for the current research included 122 Chinese first-year students coming from across the country. As presented in Table 1, 109 out of the 122 participants were from urban areas and 112 graduated from key high schools in these regions. They were at their university ages, ranging from 17 to 21. By the time of the study, they had been learning English for about 9 years on average. The average English score in the National College Entrance Examination (Gaokao) is 121.68 out of 150, over 80% of the total score.

Table 1: Demographic information of the participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>59</td>
<td>63</td>
<td>122</td>
</tr>
<tr>
<td>Family background</td>
<td>rural</td>
<td>urban</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>Finance and business</td>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Type of high school</td>
<td>Provincial Key school</td>
<td>City key school</td>
<td>County key school</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>Minimum Age</td>
<td>17</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Maximum Age</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Age</td>
<td></td>
<td></td>
<td>18.50</td>
</tr>
<tr>
<td>Minimum Years of learning English</td>
<td>5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Maximum Years of learning English</td>
<td></td>
<td></td>
<td>8.95</td>
</tr>
<tr>
<td>Mean Years of learning English</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum English scores in Gaokao</td>
<td>91</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Maximum English scores in Gaokao</td>
<td></td>
<td></td>
<td>121.68</td>
</tr>
</tbody>
</table>

Instrument

A self-reported questionnaire was designed by drawing on sources from previous research (e.g., Hyland, 1997; Taguchi & Naganuma, 2006; Zhang & Mi, 2010; Zhou & Todman, 2009). These studies have documented that EAP learners in EMI contexts encountered difficulties in academic norms and conventions as well as language problems (e.g., Zhou & Todman, 2009). The language problems cover the four skills of listening, speaking, reading and writing (e.g., Zhang & Mi, 2010). Specifically, these language problems include listening to lectures, speaking in tutorials, reading textbooks and assignment instructions, writing essays, and specialist words (e.g., Hyland, 1997; Taguchi & Naganuma, 2006).
The questionnaire of the current research, informed by these relevant studies and based on initial classroom observations in the research context, was designed to include the four language skills and academic norms. A 28-item questionnaire was developed, including the aforementioned four language skills and academic norms.

Before administering the questionnaire, a piloting procedure was undertaken by inviting four second-year students to fill in the questionnaire with a follow-up discussion. The purpose of this step was to guarantee that the questionnaire was able to cover the common difficulties the participants might encounter in their study at the EMI university. A second purpose of this pilot step was to check the wording of the statements in case of any ambiguity or leading expressions. A general consensus of the four students was that the 28 items could appropriately reflect the difficulties they encountered in their EAP study. Alterations were correspondingly made in relation to wording problems according to their feedback.

The final questionnaire was composed of two parts. The first part was about the demographic information of the participants, relating to their family background, age, gender, years of learning English, English scores in Gaokao, and the type of the high school they graduated from. The second part included the 28 items examining the participants’ difficulties in learning English at the EMI University. It involved academic skills in listening (Items 1-5), speaking (Items 6-8, 20 and 22), reading (Items 9-15 and 21), and writing (Items 16-19 and 23-28). Responses were requested on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The reliability of the research questionnaire was determined by Cronbach alpha. The Cronbach alpha test showed that the reliability coefficient of the questionnaire was 0.9098, suggesting that the questionnaire has high reliability.

**Data Collection and Analysis**

The questionnaire was administered to eight intact classes in the third week of the fall semester of the academic year 2011 at the EMI University. These eight classes were taught by three EAP tutors, two of them from the UK and the other one from Mainland China. Under their assistance, the author went into the class and expounded the research purposes of the investigation before the students responded to the questionnaire. At last, 122 valid questionnaires were collected. The collected data were computed through SPSS 16.0 and processed by means of factor analysis, descriptive statistics and frequencies of responses. An alpha level of 0.05 was set for all of the statistical procedures.

The participants’ responses to the questionnaire were first subjected to an exploratory
factor analysis. The KMO value .844 (close to 1.0) and Bartlett’s Test of Sphericity .000 (< 0.05) showed that there were significant correlations among the variables in the questionnaire (Table 2). Therefore, there existed common factors and it was suitable for factor analysis.

Table 2: KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>.844</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>1275.222</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>378</td>
</tr>
<tr>
<td>Df</td>
<td>.000</td>
</tr>
</tbody>
</table>

When performing factor analysis, those items with factor loadings and communalities lower than .400 were deleted. The factor analysis with varimax rotation produced 8 factors with eigenvalues greater than 1.0 (Table 3). As revealed in Table 3, the eigenvalues for all the eight factors were above 1.700, much greater than the accepted index 1.0. The cumulative variance of these eight factors was 63.856%, which can interpret very well all the variances in Table 3, suggesting a high construct validity of the questionnaire.

Table 3: The eight factors generated by the exploratory factor analysis

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Eigen Value</th>
<th>Variance %</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7, 22, 6, 20, 8</td>
<td>3.013</td>
<td>10.760</td>
<td>10.760</td>
</tr>
<tr>
<td>2</td>
<td>16, 17, 19, 18</td>
<td>2.639</td>
<td>9.426</td>
<td>20.186</td>
</tr>
<tr>
<td>3</td>
<td>21, 28, 27, 5, 15</td>
<td>2.303</td>
<td>8.224</td>
<td>28.410</td>
</tr>
<tr>
<td>4</td>
<td>25, 26</td>
<td>2.211</td>
<td>7.896</td>
<td>36.306</td>
</tr>
<tr>
<td>5</td>
<td>11, 10, 4</td>
<td>2.119</td>
<td>7.569</td>
<td>43.874</td>
</tr>
<tr>
<td>6</td>
<td>13, 14</td>
<td>2.021</td>
<td>7.218</td>
<td>51.093</td>
</tr>
<tr>
<td>7</td>
<td>23, 12, 24</td>
<td>1.797</td>
<td>6.420</td>
<td>57.513</td>
</tr>
<tr>
<td>8</td>
<td>3, 2, 1</td>
<td>1.776</td>
<td>6.343</td>
<td>63.856</td>
</tr>
</tbody>
</table>

Results

The first research question explores the sources of difficulties in learning EAP among Chinese EFL learners at the EMI University in Mainland China. Table 4 displays the labels assigned to the eight extracted factors, the actual items each factor subsumed, the corresponding loadings and the response frequency of each item under the extracted factors. As shown in Table 4, these eight factors are related to the participants’ difficulties in the four skills in language learning: speaking (Factor 1), listening (Factor 8), reading (Factor 3,
5 and Factor 6) and writing (Factor 2, Factor 4 and Factor 7).

A principal source of the participants’ difficulty in EAP learning stems from writing, which is pertinent to Factors 2, 4 and 7. These factors reveal that the participants, when learning EAP at the EMI university, encountered difficulties in writing for both general and academic purposes. Specifically, as indicated in Factor 2 which was labeled as *Difficulty in writing effective paragraphs*, 30% of the participants (Item 18) agreed that they felt it difficult to formulate a thesis statement; 31% of them (Item 16) admitted that they did have problems in writing an effective paragraph. At the same time, the participants reported that they experienced *difficulty in writing for academic purposes* in Factor 4 which has two items. 46% of the participants agreed that they had difficulty in selecting appropriate language for academic writing (Item 25), whereas 35% of them did not know how to prepare a research paper (Item 26). These results indicate that academic writing poses considerable challenges to these students. Furthermore, as revealed in Factor 7 which embraced three items, the participants showed a *lack of knowledge of academic norms for writing*. Though about half (49%) of the participants were cognizant of the importance of using reference in academic writing (Item 23), 30% of them did not know how to use references appropriately (Item 24). There was also almost one third (31%) of them, who considered it difficult to summarize the gist of a reading paper (Item 12). These findings reveal that knowledge about academic norms is a major source for the participants’ difficulties in EAP learning at the EMI University.

Another source relates to English reading in both EGP (English for General Purposes) and EAP, which is associated with Factors 3, 5 and 6. First of all, as demonstrated in Factor 3 which was labeled as *Difficulty in extensive reading*, most of the participants, though experienced less difficulty in extensive reading, did have problems in differentiating academic English from non-academic English, when they read English texts. For example, over half (54%) of the participants did not think that they had difficulty in reading the extended materials recommended by their teachers (Item 21). By contrast, 44% of them considered that they had difficulty in taking effective notes while doing fast reading (Item 5). Approximately, one third (29%) of them confessed it challenging for them to tell the differences between academic English and non-academic English in reading (Item 28). Besides, the participants seemed to encounter difficulties in terms of vocabulary and syntactic knowledge. This finding is reflected in Factor 5 which was labeled as *Difficulty in reading for general purposes*. One third of the participants acknowledged that they had difficulties in the
new words and sentences in reading (Item 10). This lack of knowledge of vocabulary and syntax appears to have also caused difficulties in the participants’ academic reading, as indicated in Factor 6 which was labeled as *Difficulty in reading for academic purposes*. 24% of the participants agreed that they encountered difficulties in identifying contextual clues to understand the meaning of specialist words (Item 14). And 37% of them did experience difficulties in understanding language and complex sentences in reading for academic purposes (Item 13). These results suggest that academic literacy in terms of vocabulary and syntactic competence, such as knowledge about technical vocabulary and complex sentences, is a major factor that contributes to the participants’ difficulty in reading for academic purposes.

Thirdly, the participants seemed to have shown a strong confidence in communicating with others. This finding is related to Factor 1, *Confidence in communicating with others in academic studies*, which included five items. 65% of the participants did not agree that they had difficulty in exchanging ideas with classmates in English (Item 20). About half of them (Items 7 and 22) disagreed that they encountered difficulties in communicating with others on campus and responding to others in English immediately in class respectively. To the contrary, 32% of them acknowledged that they felt it challenging to express themselves in English on a particular topic in class (Item 6). These results tend to indicate that most of the participants were generally confident in communicating with others in English at the EMI University.

The participants’ confidence in EAP learning is also reflected in their perceptions about listening to teachers who speak English with various accents. This point is manifested in Factor 8 which was labeled as *Confidence in understanding lectures delivered by teachers with various accents*. In responding to the items of this factor, the majority of the participants did not think that the English they heard in class was too difficult to understand (Item 1) and half of them did not have difficulty in understanding their foreign teachers with different accents (Item 3). This result could be interpreted as an echo to the participants’ confidence in communicating with others at the EMI University.

In summary, the participants’ difficulties in EAP learning are related to the four skills in language learning: listening (Factor 8), speaking (Factor 1), reading (Factors 3, 5 and 6) and writing (Factors 2, 4 and 7). These difficulties cover both EGP (Factors 2, 3 and 5) and EAP (Factors 4, 6 and 7). To be specific, they were confident in communicating with others and experienced less difficulty in understanding teachers with a variety of accents. They had
difficulty in reading for both general and academic purposes due to their inadequate vocabulary and syntactic knowledge. Furthermore, they seemed to encounter most difficulties in writing effective paragraphs, choosing appropriate language for academic writing and understanding academic norms for writing.

Table 4: Rotated factor loadings and participant responses to factor items

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Loadings</th>
<th>Disagree (%)</th>
<th>Neutral (%)</th>
<th>Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>It is difficult for me to communicate with others in English.</td>
<td>0.78</td>
<td>49</td>
<td>30</td>
<td>21</td>
</tr>
<tr>
<td>22</td>
<td>I find it difficult to respond to others in English immediately in class.</td>
<td>0.70</td>
<td>47</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>I feel it difficult to express my ideas in English on a topic in class.</td>
<td>0.63</td>
<td>31</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>20</td>
<td>It is difficult for me to exchange ideas with classmates in English.</td>
<td>0.62</td>
<td>65</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>I have difficulty in participating in group discussions in class.</td>
<td>0.45</td>
<td>54</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td><strong>Factor 2 Difficulty in writing effective paragraphs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I do not know how to write an effective paragraph.</td>
<td>0.78</td>
<td>35</td>
<td>34</td>
<td>31</td>
</tr>
<tr>
<td>17</td>
<td>It is difficult for me to formulate a thesis statement.</td>
<td>0.67</td>
<td>38</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>19</td>
<td>I have problems in making my writings cohesive and coherent.</td>
<td>0.65</td>
<td>27</td>
<td>47</td>
<td>26</td>
</tr>
<tr>
<td>18</td>
<td>I feel it challenging to organize paragraphs logically.</td>
<td>0.62</td>
<td>37</td>
<td>34</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td><strong>Factor 3 Difficulty in extensive reading</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I feel it a burden to read the extended materials recommended by teachers.</td>
<td>0.73</td>
<td>54</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>28</td>
<td>I cannot clearly tell the differences between academic English and non-academic English while reading texts.</td>
<td>0.57</td>
<td>43</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>27</td>
<td>I have difficulties in synthesizing information from different sources.</td>
<td>0.52</td>
<td>43</td>
<td>41</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>I have difficulty in taking effective notes while doing fast reading.</td>
<td>0.49</td>
<td>33</td>
<td>23</td>
<td>44</td>
</tr>
<tr>
<td>15</td>
<td>It is a challenge for me to quickly get the overall structure of a text in reading.</td>
<td>0.47</td>
<td>38</td>
<td>37</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td><strong>Factor 4 Difficulty in writing for academic purposes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I feel it difficult to choose appropriate English for academic writing.</td>
<td>0.80</td>
<td>24</td>
<td>30</td>
<td>46</td>
</tr>
<tr>
<td>26</td>
<td>I do not know how to prepare a research project paper.</td>
<td>0.69</td>
<td>31</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td><strong>Factor 5 Difficulty in reading for general purposes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I spend hours understanding the questions for each reading task.</td>
<td>0.73</td>
<td>51</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>I spend hours looking up new words and sentences in the reading tasks.</td>
<td>0.71</td>
<td>36</td>
<td>34</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>I feel it difficult to think in English while reading.</td>
<td>0.48</td>
<td>52</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td><strong>Factor 6 Difficulty in reading for academic purposes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I find it difficult to understand long and complex sentences in reading.</td>
<td>0.75</td>
<td>34</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>14</td>
<td>I have difficulties in looking for contextual clues to understand the meaning of technical words.</td>
<td>0.60</td>
<td>40</td>
<td>36</td>
<td>24</td>
</tr>
</tbody>
</table>
Factor 7 Lack of knowledge and skills in academic norms for writing

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Item</th>
<th>Neutral (%)</th>
<th>Agree (%)</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>I do not fully realize the importance of using reference in writing.</td>
<td>0.73</td>
<td>49</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>12</td>
<td>I am not good at getting summarizing the gist of a text.</td>
<td>0.55</td>
<td>26</td>
<td>43</td>
<td>31</td>
</tr>
<tr>
<td>24</td>
<td>I do not know how to use references appropriately when writing essays.</td>
<td>0.55</td>
<td>30</td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>

Factor 8 Confidence in understanding lectures delivered by teachers with various accents

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Item</th>
<th>Neutral (%)</th>
<th>Agree (%)</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>It is difficult to understand some of my foreign teachers who speak English with different accents.</td>
<td>0.81</td>
<td>50</td>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>The English I hear at my university is too difficult to understand.</td>
<td>0.71</td>
<td>58</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>1</td>
<td>It is a challenge for me to understand teachers’ lectures.</td>
<td>0.45</td>
<td>55</td>
<td>24</td>
<td>21</td>
</tr>
</tbody>
</table>

The results in relation to the first research question seem to indicate that the sources of the participants’ difficulties in learning EAP at the EMI University cover the four aspects of English learning. However, this question does not explicitly address the participants’ perceptions about the degree of difficulties in these four skills, which relates to the second research question of this study. In order to answer this question, the research further analyzed the questionnaire data by calculating the response frequency of all the items which belong to the four language skills and the descriptive means of each skill under the extracted factors (Table 5).

Overall, the percentages of disagreement on difficulties outnumbered the ones of agreement. Specifically, 45% of the participants disagreed that they had difficulties in learning EAP, while about one quarter of them indeed agreed that they encountered problems. Further, the percentages which signal the participants’ denial of having difficulties in the four language skills (36% in writing, 41% in reading, 49% in speaking and 54% in listening) surpassed those that indicate the participants’ acknowledgement of having problems. This result appears to suggest that the participants are generally confident in their EAP learning at the EMI University. At the same time, the ascending order of the means for the four skills also shows that writing is the major source of the participants’ difficulty in EAP learning at this EMI University. The results also suggest that listening poses fewest problems to the students at the EMI University.

Table 5: Overall level of the participants’ difficulties in learning EAP

<table>
<thead>
<tr>
<th>Type</th>
<th>Disagree (%)</th>
<th>Neutral (%)</th>
<th>Agree (%)</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>54</td>
<td>27</td>
<td>19</td>
<td>2.5465</td>
<td>.98384</td>
</tr>
<tr>
<td>Speaking</td>
<td>49</td>
<td>28</td>
<td>23</td>
<td>2.6787</td>
<td>.98540</td>
</tr>
<tr>
<td>Reading</td>
<td>41</td>
<td>32</td>
<td>27</td>
<td>2.8634</td>
<td>.95890</td>
</tr>
<tr>
<td>Writing</td>
<td>36</td>
<td>35</td>
<td>29</td>
<td>2.9287</td>
<td>.93385</td>
</tr>
<tr>
<td>Overall</td>
<td>45</td>
<td>31</td>
<td>24</td>
<td>2.7543</td>
<td>.96550</td>
</tr>
</tbody>
</table>
Discussion

The principal purpose of the research is to address the sources of language difficulties encountered by Chinese EAP learners at an EMI University in Mainland China by adopting an exploratory factor analysis approach. Eight factors, which were extracted by performing a factor analysis on the questionnaire data, were further grouped into four broader aspects. The sources of these EAP learners’ difficulties were then found to center on the following four areas: communicating with others, listening to teachers with various English accents, reading and writing in both EGP and EAP respectively, and knowledge of and skills in following academic norms.

The research found that most of the participants denied that they had difficulties in learning EAP and in communicating with others. It seemed that speaking was not a big challenge to these students. In another word, they demonstrated sufficient confidence in learning EAP and using English to communicate with others at the EMI University. This result indicates a willingness to communicate with others and to participate in classroom activities among the participants (Cheng, 2000; Li & Jia, 2006). On the other hand, this finding seems to contradict previous studies (e.g., Evans & Green, 2007; Hyland, 1997; Littlewood & Liu, 1996) that speaking is among the top list of EAP learners’ difficulties in learning English at EMI contexts.

Similar to their self-efficacy in communicating with others, the participants also displayed strong confidence in listening to people with various English accents. This finding echoes the above result that these EAP learners are in general confident in learning English at the EMI University. This result corroborates Evans and Green’s (2007) study findings in that listening is not a big problem for EAP learners at Hong Kong, but differed from Zhang and Mi’s (2010) research, which reported that listening is also a major sources of Chinese EAP learners’ difficulties in learning at Australia. This divergence seems to indicate that language difficulties of EAP learners are context-specific, given that the context for the current research (in Mainland China) and Evans and Green’s (2007) study (in Hong Kong) were both related to EFL/ESL settings while Zhang and Mi’s (2010) (in Australia) was related to a native English-speaking environment. The contextual realities among these different contexts might be responsible for the divergence in this regard reported in different studies.

These participants’ confidence in learning EAP, in communicating with others and listening to people with various accents might also have been enhanced by their
demographical background. As Table 1 shows, this cohort of students demonstrated a high level of English proficiency in the National College Entrance Examination. This high language proficiency may have contributed to their self-efficacy and motivation for learning English (Li, 2011). Their confidence may also have been enhanced by their family background, the high school they graduated from and their previous English learning experiences (Zhang, 2001). A large proportion (see Table 1) of the students in research were from urban areas or metropolitan cities, and graduated from key high schools, suggesting that they may have better conditions to learn English and more opportunities to speak English. Their language proficiency, previous English learning experiences, and family background, might have strengthened their confidence in learning English, in communicating with others in particular. The findings tend to shed further light on the positive connection between EAP learning and language proficiency and contextual realities as indicated in previous literature (e.g., Evans & Green, 2007; Liu & Jackson, 2009).

This study has also identified that writing is of primary difficulty experienced by these EAP learners. They tended to encounter problems in developing effective paragraphs, preparing for research report, using appropriate references, selecting academic language for academic essays. They were also discovered to have difficulties in vocabulary and syntactic levels such as words and long and complex sentences. This result confirms previous studies either in native English-speaking or EFL environments that writing is a major concern for EAP learners (e.g. Evans & Green, 2007; Hyland, 1996; Taguchi & Naganuma, 2006, etc). Further, these difficulties exist not only in academic studies (EAP), but also in general English (EGP). This is to suggest that they had difficulties in reading for both general and academic purposes. This result may be related to the educational context at the EMI University which applies the British educational system. All its students start to learn EAP upon their arrival at the university. This might make these Chinese students, who just graduated from high schools in China, miss a preparatory phase of learning English for general purposes. This preparatory phase, known as College English in Chinese universities, is generally considered to be able to prepare students for the study of English for academic purposes. Therefore, a lack of this transitional component might pose challenges to these students in language learning.

**Conclusion**

This study has ascertained the sources of language difficulties encountered by Chinese learners learning EAP at an EMI University in Mainland China. It was found that, in general,
these EAP learners were confident in EAP learning, in communicating with others and in listening to teachers who speak English with various accents at the EMI University. They also considered writing to be the top difficulty. Besides, their difficulties in writing and reading relate to both EGP and EAP, such as inadequacy in vocabulary (including specialist words) and syntactic knowledge, writing effective paragraphs, choosing appropriate language for academic writing, and lack of knowledge about academic norms. These findings may be attributable to the learners’ demographic background, their English proficiency, their previous language learning experiences, their teachers’ pedagogical practice, and the EAP learning at the EMI University. These findings further echo previous literature that language problems in EAP learning at EMI contexts is associated with an array of social, cultural, linguistics, psychological and pedagogical factors (Cortazzi & Jin, 1996; Evans & Green, 2007; Jackson, 2002, 2003; Wang, 2010).

The above results have several profound implications for pedagogical practices and research. For instance, the participants revealed difficulties both in EGP and EAP. This indicates that a transitional period is of critical importance at the beginning of these students’ coming into the EMI University. Curriculum designers and EAP teachers are advised to pay more attention to this critical stage. Secondly, due attention should be paid to the EAP learners’ concerns about academic writing and specialist vocabulary since these two aspects are among their top sources of difficulties. Lastly, the consistent results between the present study and previous research points to the validity of using an exploratory method to investigate language problems of EAP learners in EMI contexts.

However, when generalizing the findings of this research into other contexts due caution must be exercised. First, the current research has surveyed only a relatively small group of students in one EMI context. In order to get a deeper understanding of the difficulties the students may experience when studying in EMI contexts, the sample needs to be enlarged in future research. Secondly, it mainly addressed the language difficulties in EAP learning from learners’ perspective. In order to obtain an in-depth understanding of EAP learners’ language difficulties, future research is also called for from teachers’ perspective.
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