When and Why EFL Teachers Use L1?

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Abstract. The study examined how, in what situations and why teachers used students’ L1 in EFL classes. EFL students and teachers from two universities in Mainland China were involved in this study as the participants. The study employed a mixed methods research design, both qualitative and quantitative data were collected. The data provide evidence that EFL teachers believed in the importance of incorporating L1 in EFL teaching because of the insufficient class time for EFL teaching and learning in university classes. The EFL teachers believed that their low competence in mastering the English language hindered their EFL teaching abilities, and the university students had limited English language experiences because of the textbook-driven teaching content of EFL classes. The data provide important results related to the implementation of change practices for the teaching of EFL.

Keywords: L1 use, University and EFL, attitudes towards L1 use, Chinese EFL learners

Introduction
The demand for the teaching and learning of English as a Foreign Language (EFL) or English as a Second Language (ESL) has risen dramatically in the Asian regions of the world in the last 50 years. The EFL and ESL goal has become to increase communication capabilities involving both oral fluency and grammatical competence. The development of communicative competence in English has become the overall aim (Strobelberger, 2012) and the advancement of communicative proficiency in English has been encouraged in the Asian regions (Damnet & Borland, 2007; Lawn & Lawn, 2015). Knowledge related to the pedagogy of how, when and to whom to teach English has become a new driver in education.

EFL is defined as English that is taught in a country where English is not the first language (L1), whereas English as a Second Language (ESL) encompasses English that is taught in countries where English is L1 of the culture but not L1 of the students. The teaching objective of EFL courses in the context of this study was: “to develop students’ ability to use English in a well-rounded way, especially in listening and speaking, so that in their future studies and careers as well as social interactions they will be able to communicate effectively.”
In this study, theories about EFL and English as a Second Language teaching, were examined to explore how, when and why EFL teachers resort to using students’ L1. The importance of understanding L1 usage in EFL teaching leads to important curriculum innovations.

Background literature

Exclusive use of the target language, i.e. a language being learned as second or foreign language (Cohen, 1998), as a pedagogic principle dominated foreign language or second language classrooms for about a century. More recently, whether or not teachers should use the students’ L1 in foreign language classrooms has become a controversial issue. Turnbull (2000) advocates the total elimination of students’ L1 in the foreign language teaching processes. However, total exclusion of L1 is rarely achieved in daily classroom teaching practices. Code-switching refers to the act of alternating between two languages in either spoken or written expressions (Auer, 1999).

Macaro (2001) suggested some reasons why the first language was used by teachers in foreign or second language classrooms. These reasons are listed as follows:

- The L1 was used mostly for procedural instructions for complex activities, relationship building, control and management, teaching grammar explicitly, and providing brief L1 equivalents or vice versa;
- Learner ability (or level of competence) was a major factor in how much L1 was used;
- Time pressures (e.g., exams) were a major factor in how much L1 was used. (p. 535).

Some researchers believe that EFL students’ English proficiency levels are related to the amount of L1 used by teachers in classrooms (Cheng, 2013; Liu, 2010; Tang, 2002): students’ low English proficiency levels were given as one major reason why teachers used L1 in EFL classrooms (Cheng, 2013; Liu, 2010; Song, 2009).

Polio and Duff (1994) suggest that teachers should minimize L1 usage and use the target language as much as possible. Other researchers (Cook, 2001; Macaro, 2001) believe that using the students’ L1 has some positive values in foreign language classrooms. L1 usage was found to be positive for EFL teaching and learning when teachers were explaining grammar, translating new vocabulary, teaching abstruse concepts and building rapport with students (Cheng, 2013; Liu, 2010; Tang, 2002).

However, knowledge about the amount of L1 usage by teachers has varied greatly between studies. Duff and Polio (1990) found that the amount of L1 usage was high and they suggested that teachers should try to maximize the target language input. In contrast, De La Campa and Nassaji (2009), Macaro (2001), and Rolin-lanziti and Brownlie (2002) all found that only a small amount
of L1 usage occurred in classrooms, and they believed that a limited amount of L1 input would not impede target language learning.


**The study**

The data presented in this paper were a part of a larger study of EFL teachers’ code-switching from English to students’ L1. The study was conducted in two universities in Mainland China with the participation of 22 EFL teachers (10 from University A and 12 from University B) and 417 students (184 from University A and 233 from University B). Both quantitative and qualitative data were obtained through the following data collection techniques: non-participant observations, questionnaires, and semi-structured interviews. This paper focuses on the data collected from eight class audio-recording sessions and four teachers’ interviews to address the following research questions:

1. What is the L1 amount used by EFL teachers?
2. When do teachers use L1 in EFL classrooms?
3. Why do teachers resort to using L1 in EFL classes?

**Participants**

The study was conducted at two multi-disciplinary universities in Mainland China (called University A and University B in this study). Mandarin, the official language in Mainland China, was L1; and English was the foreign language for all of the student and teacher participants. Non-English major EFL courses are designed for Year One and Year Two non-English major students. These courses are intended to develop students’ English skills in reading, writing, speaking, listening and translating.

There were 147 EFL teachers at University A and 50 EFL teachers at University B at the time of this study. 22 teachers involved in this study and four of them were prepared to be observed and audio-recorded teaching their EFL classes. The intensive nature of audio-recording and transcribing EFL classes limited the amount of data that could be collected in a short time.

**Data collection of Class audio-recording sessions and teacher interviews**

The four teachers participated in class audio-recording sessions. The class sizes ranged from 18 to 42 students. Eight classes of about 40 minutes each, delivered by these four teachers, were audio-recorded using a high quality digital recorder. The principal researcher was a non-participant observer in these sessions and therefore was not involved in any teaching activities so as not to interfere with any class interactions, or put any undue pressure on the teachers or students. Before each audio-recording the teachers and students were informed about the purpose of the class audio-recording sessions.
The four teachers also agreed to be interviewed. A qualitative case study approach (Stake, 1995; Yin, 2003) was used to collect text data through individual semi-structured interviews (Galletta, 2013; Minichiello, Aroni, Timewell, & Alexander, 1995) with the four EFL teachers. All interviews were recorded using the same high digital recorder that had been used for the class audio-recording sessions. All four of the interviews were transcribed verbatim, transforming teacher participants’ words into a written text for referral throughout the study (Seidman, 1991).

Data analysis
Class audio-recording sessions for quantitative analysis
Class audio-recording sessions were first transcribed and analysed quantitatively to calculate the actual amount of EFL teachers’ L1 usage by applying the 15-second sampling technique from Duff and Polio’s (1990) study. Based upon the previous research (Duff & Polio, 1990), five categories of teachers’ utterances were created and are shown in Table 1.

<table>
<thead>
<tr>
<th>Utterance category</th>
<th>Explanation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Completely in the target language (English).</td>
<td>I think it’s time for us to begin our class.</td>
</tr>
<tr>
<td>Em</td>
<td>In the target language (English) with one word or a phrase in L1 (Mandarin).</td>
<td>We can also use an infinitive structure after “enough”, &lt;bu ding shi&gt;.</td>
</tr>
<tr>
<td>E-M</td>
<td>Approximately, an equal mixture of the target language (English) and L1 (Mandarin).</td>
<td>&lt;ta wen zhe ge&gt; Edward &lt;yao bang zhu de shi shen me&gt;? Ask for a job.</td>
</tr>
<tr>
<td>M</td>
<td>Completely in L1 (Mandarin).</td>
<td>&lt;ni jiu shuo, dai wo lai shuo, wo xi huan zhu zai xiang xia&gt;.</td>
</tr>
<tr>
<td>Me</td>
<td>In L1 (Mandarin) with one word or phrase in the target language (English).</td>
<td>Two &lt;li mian de, bus hi wo men zhe yi ce de&gt;.</td>
</tr>
</tbody>
</table>

Class audio-recording sessions for qualitative analysis
In the second phase of the study, the eight audio-recordings of classes were analysed qualitatively to investigate when the EFL teachers used L1. Based on the coding schemes of Rolin-Ianziti and Brownlie (2002) and De La Campa and Nassaji (2009), a coding scheme was created for this study with 12 contexts in which EFL teachers used L1. These contexts were coded as:

- Translation – EFL teachers switched from English to L1 to give the translated version of their English articulation
- Grammar – EFL teachers used L1 to explain English grammar to students
- Culture – EFL teachers used L1 to introduce the culture of English-speaking countries
- Objective – EFL teachers provided students with objectives of teaching activities
• Instruction – EFL teachers used L1 to give instructions
• Encouragement – EFL teachers used L1 to encourage students to respond in English
• Evaluation – EFL teachers used L1 to evaluate students’ answers or practice in English
• Responses to students’ questions – EFL teachers used L1 to respond to students’ questions raised in L1
• Comprehension checks – EFL teachers used L1 to check if students understood the teaching content
• Good rapport – EFL teachers used L1 to build up a good rapport with students
• Administration – EFL teachers announced administrative items in L1, such as exam plans
• Other – Other usage contexts

Teachers’ interviews for qualitative analysis
Data from the four teachers’ semi-structured interviews were analysed to identify why EFL teachers resorted to using L1 in non-English major EFL classes. The “Data Analysis in Qualitative Research procedure” (Creswell, 2009, p. 185) was applied. Data gathered from the four teachers’ interviews were first organised for qualitative analysis. After gaining a general sense of the information, the coding process was applied to create categories or themes for analysis. By using “the most popular approach”, “a narrative passage, to convey the findings of the analysis” (Creswell, 2009, p. 189), the researchers found the connections between categories or themes which were the main result of this study. Finally the researchers interpreted the data and compared the findings in this study with the findings from previous studies.

Results
What is L1 amount used by EFL teachers?
The data obtained from the eight class audio-recordings demonstrated that the four EFL teachers’ L1 usage varied widely from 0.8 per cent to 74.8 per cent of utterances. The mean amount of L1 usage by the four EFL teachers was 40.7 per cent. In four of the eight class audio-recordings, the EFL teacher used L1 for more than 50 per cent of utterances. Only one teacher (Teacher D) used a small amount of L1 in her teaching: 11 per cent and 0.8 per cent for the two class audio-recording sessions. A higher amount of students’ L1 usage by EFL teachers was found in this study compared to some previous studies (De La Campa & Nassaji, 2009; Macaro, 2001; Rolin-Ianziti & Brownlie, 2002; Song, 2009). Table 2 shows the results of the percent of English and L1 utterances by the four EFL teachers by class.

Table 2 Percent of utterance categories of the four EFL teachers by class

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class</th>
<th>E</th>
<th>Em</th>
<th>E-M</th>
<th>M</th>
<th>Me</th>
<th>L1</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher A</td>
<td>A1</td>
<td>13.6</td>
<td>18.8</td>
<td>20.5</td>
<td>44.9</td>
<td>2.3</td>
<td>57.4</td>
<td>42.6</td>
</tr>
<tr>
<td>Teacher A</td>
<td>A2</td>
<td>2.8</td>
<td>11.7</td>
<td>21.4</td>
<td>8.3</td>
<td>55.9</td>
<td>74.8</td>
<td>25.2</td>
</tr>
</tbody>
</table>

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Teacher B  
B1  6.0  13.5  22.6  2.3  55.6  69.2  30.8  
B2  24.3  14.0  21.3  3.7  36.8  51.1  48.9  
Teacher C  
C1  50.3  17.5  14.1  0.7  17.5  25.2  74.8  
C2  34.3  22.1  14.3  5.7  23.6  36.4  63.6  
Teacher D  
D1  79.1  6.7  6.7  1.9  5.7  11.0  89.0  
D2  96.9  2.3  0.0  0.0  0.8  0.8  99.2  
Mean  
40.7  59.3  

Categories E and Em were both considered as English utterances; Categories M and Me were both considered as L1 utterances; Category E-M was considered half English and half L1.

For example, L1 amount of Teacher A in Class A1 is:
\[ M(44.9\%) + Me(2.3\%) + 1/2E-M(1/2*20.5\%) = 57.4\% . \]

The great divergence in L1 usage in non-English major EFL classes is consistent with some previous studies. Kim and Elder's (2005) research showed five out seven teachers used L1 more than 30% of the time and two of them used L1 more than 60% of the time. Duff and Polio (1990) also reported a wide difference of teachers' L1 usage amount ranging from 0% to 90%.

However, this wide range of L1 usage amount in foreign language classes was not found in other studies. In Macaro’s (2001) study, an average of 4.8% of L1 usage amount was found; and the range was from 0 to 15.2%. Rolin-Ianziti and Brownlie (2002) reported that teachers’ L1 usage amount were 0%, 4.32%, 12.75% and 18.15%. De La Campa and Nassaji (2009) found the overall usage of L1 (English) by the two German teachers was 11.3% (9.3% for the experienced teacher and 13.2% for the novice teacher). In Song's (2009) study conducted in the context of tertiary education in Mainland China, four EFL teachers’ L1 usage amount were 10.5%, 20.3%, 21.5% and 32.2%. The significance of all these results is that EFL teachers use L1 more frequently with non-English major students, indicating that there is a perceived need for this supportive teaching practice.

**When do teachers use L1 in EFL classrooms?**

From the qualitative analysis of the audio-recordings, the four EFL teachers used L1 most frequently in the context of translation, which represented 53.6 per cent of all usage. Instruction was the second most common L1 usage context (20.5 per cent) followed by other L1 usage contexts (11.6 per cent) and encouraging students (6.1 per cent). The four EFL teachers did not use L1 in some identified usage contexts. Table 3 shows the details of frequencies of all L1 usage contexts.
Table 3 Raw data of frequencies of all L1 usage contexts

<table>
<thead>
<tr>
<th>L1 usage Contexts</th>
<th>Percentage (%)</th>
<th>All</th>
<th>Teacher A</th>
<th>Teacher B</th>
<th>Teacher C</th>
<th>Teacher D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translation</td>
<td>53.6</td>
<td>30.9</td>
<td>69.8</td>
<td>64.2</td>
<td>37.5</td>
<td></td>
</tr>
<tr>
<td>Grammar</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>1.5</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>0.5</td>
<td>1.3</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td>1.9</td>
<td>1.7</td>
<td>3.9</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>20.5</td>
<td>41.6</td>
<td>19.4</td>
<td>3.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Encouragement</td>
<td>6.1</td>
<td>7.7</td>
<td>6.2</td>
<td>4.5</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Comprehension checks</td>
<td>2.9</td>
<td>7.3</td>
<td>0.4</td>
<td>1.5</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Good Rapport</td>
<td>0.7</td>
<td>1.3</td>
<td>0.0</td>
<td>1.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>1.2</td>
<td>0.0</td>
<td>0.0</td>
<td>4.5</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>11.6</td>
<td>8.2</td>
<td>0.4</td>
<td>15.9</td>
<td>56.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Similar to the findings from the studies of Rolin-Ianziti and Brownlie (2002) and De La Campa and Nassaji (2009), translation was found to be the most frequent L1 usage context in this study. Among the sub-categories of translation, the four EFL teachers translated different content (words, phrases and sentences). The instruction usage context was divided into five sub-categories: procedural instruction, word instruction, phrase instruction, sentence instruction and text instruction. Procedural instruction means that the EFL teachers used L1 to give instructions, and is similar to L1 usage context of explaining tasks and activities to students in Cook’s (2001) study. Word instruction, phrase instruction and sentence instruction are the usage contexts in which EFL teachers used L1 to provide extended or related information to facilitate students’ understanding. These three L1 usage contexts are similar to L1 usage context of facilitating students’ understanding by quoting others’ words found in the study of Liu (2010). Other L1 usage contexts included using L1 to call students’ names, to ask for help from students, to tell some conjunctive words and to give personal comment about the teaching contents.

Metalinguistic uses were the second most frequent L1 usage context in Rolin-Ianziti and Brownlie’s (2002) study. De La Campa and Nassaji (2009) suggested a similar L1 usage context in which L1 utterances are used to contrast second language forms or cultural concepts with L1 forms or cultural concepts. In this study, L1 is Mandarin, which belongs to the Sino-Tibetan language family, while the target language is English, which is a Germanic language. Due to the linguistic distance between L1 and English, the metalinguistic uses of L1 usage context did not occur.

In this study, encouraging students to speak English was a very common L1 usage context. However, this context has not been reported in previous studies (De La Campa & Nassaji, 2009; Liu, 2010; Polio & Duff, 1994; Rolin-Ianziti & Brownlie, 2002; Tang, 2002). EFL teachers’ frequent L1 usage for encouraging students to speak English can be explained by the learning and studying style in
East Asian countries: students are used to more listening and less speaking in classrooms (Liu & Littlewood, 1997). Chen and Goh (2011) suggested that students’ lack of participation in classrooms is one of the main reasons for the difficulties that EFL teachers encounter in teaching oral English in the context of higher education. The results indicate that there is a need to make a cultural shift in the teaching and learning practices in EFL classes. Increasing the use of engaging participation strategies will help facilitate a decrease in the need for L1 usage.

Why do teachers resort to using L1 in EFL classes?
From the teachers’ interviews, it was found that limited EFL classroom time, students’ English proficiency levels, EFL teachers’ own English competence and non-engaging content contributed to EFL teachers’ L1 usage in classrooms. EFL teachers were faced with a dilemma: they had a strong belief that they should use as much English as possible to ensure sufficient English input to their students, but in reality, they felt that they had no choice but to resort to using L1 in their teaching to maximize their effective use of the limited EFL classroom time.

Macaro (2001) has suggested that time pressure is one of the major determinants of how much teachers use L1 in classrooms. Tang (2002) has also suggested that using L1 is less time-consuming than using English exclusively in EFL classrooms. In this study, the four EFL teachers who were interviewed repeatedly mentioned the very limited EFL classroom time they had which thus affected the practice time available. They thought that incorporating L1 in EFL classrooms was essential because it was more efficient and time saving. For example, three of the four EFL teachers interviewed agreed that using L1 to announce administrative items could save valuable class time. However, what is required is a more effective process of dealing with administrative matters rather than using EFL class time.

Students’ English proficiency levels were an important influence on EFL teachers resorting to using L1 in their classrooms. Teacher D stated that the ratio of English and L1 use could be changed because students’ English proficiency levels determined the amount of L1 used by EFL teachers. EFL teachers used different proportions of L1 in different proficiency level in EFL classrooms. This accounts for the wide range in the proportion of EFL teachers’ L1 usage in the EFL class audio-recordings. This finding is consistent with results of previous studies in which student’ language proficiency levels have been shown to be a major factor in teachers’ language choices (Cheng, 2013; De La Campa & Nassaji, 2009; Liu, 2010; Macaro, 2001; Song, 2009; Tang, 2002).

The EFL teachers’ English proficiency was related to EFL teachers’ language choice in university classrooms. This result is consistent with findings in previous studies: Cheng (2013) and Liu (2010) both found teachers’ English proficiency to be the second most important determinant of EFL teachers’ language choice. In addition, as Chen and Goh (2011) have argued, many EFL teachers are not confident because they are not native English speakers. All the
EFL teachers interviewed in this study were not confident enough to accomplish all of their teaching tasks exclusively in English. When these teachers were not familiar with some of the content, they could not find the exact words or expressions in English and they often resorted to using L1. The data indicates that EFL teachers’ proficiency in English needs to be made a priority by the teaching institutions in order to increase the students’ levels of EFL proficiency.

In this study, the teaching content was also related to EFL teachers’ L1 usage in classrooms. The teaching content in non-English major EFL classes in this study includes explaining the text and completing exercises in the textbook. As Pan and Block (2011) have pointed out, the current EFL teaching and learning in tertiary education in Mainland China is exam-centred. The accumulation of English knowledge, especially the command of English grammar, is still the focus of the exams, while authentic English language practice is not given due attention. It appeared that the EFL teachers were not satisfied with the current EFL course design, which is still exam-centred and teacher-centred. In addition, the limited EFL classroom time for EFL does not allow students to have much oral practice in classrooms. Developing English fluency is one of the key objectives in 21st century EFL and ESL classes. This requires constant oral interaction and engagement. The results of this study highlight the need for the exploration of multimodal teaching content especially in non-English major EFL classes.

**Conclusion**

Analysis of the class audio-recordings data showed a great divergence of EFL teachers’ L1 usage amount. In comparison with previous studies, a higher amount of students’ L1 usage by EFL teachers was found in this study. The EFL teachers used L1 most frequently for translation and instruction.

The four EFL teachers agreed that EFL teachers’ usage of L1 in classrooms was helpful for teaching and learning processes. EFL teachers held the pedagogical belief that they should limit their L1 usage to ensure sufficient English input, but they resorted to using L1 in their EFL teaching to cover the curriculum content efficiently within the university time constraints.

The situation was further complicated by the students’ English proficiency levels. These were important in determining the amount of L1 used in EFL classrooms. The less competent the students were in English, the more L1 the EFL teachers used.

The teachers’ own English competence was another important determinant of EFL teachers’ L1 usage amount in non-English major EFL classes. Some teachers were not confident with their own English capabilities and resorted to using L1 to make sure that the students understood the tasks.

There are a number of recommendations that can be drawn from this study related to improving EFL teaching and learning practices.

1. Using L1 in EFL classrooms in a university context involving adult
learners is necessary and beneficial in some circumstances. However, finding the most effective balance of teaching strategies involves not only commitment by EFL teachers, but also, by university administrators to provide institute infrastructure and resources to enhance new EFL teaching practices.

2. Over-use of L1 in EFL classroom teaching is not beneficial for long-term improvement of university students’ EFL speaking, listening, reading, writing, knowledge and usage. Exploring a range of alternate teaching and learning strategies that maximize efficient multimodal delivery strategies still needs further research.

3. The balance required between the use of L1 that facilitates EFL university students’ acquisition of EFL skills and the overuse of L1 that inhibits learning needs to be recognized. Factors that contribute to university students’ EFL success are shown to be the initial English proficiency levels of both students and teachers. Therefore, university teaching staff need to maximize opportunities to increase the students’ access to additional high quality English programmes. In addition, university staff also need access to high quality professional development programmes that will increase their own English language proficiency levels.

4. Universities can make innovative attempts to switch EFL classes from teacher-centred learning to student-centred learning by providing EFL students with more interactive conversational time in the classroom. Such innovations can be accomplished by providing high tech facilities within teaching classroom that maximize student participation and minimize instruction involving teachers’ mono-dialogues.

5. Universities can create more opportunities for EFL students to practice English outside class, especially learning and practising English in authentic language environments. Providing access to English social clubs and overseas English short courses through internet participation are invaluable experiences for students.

6. The data from this and other studies clearly points to the need for universities to develop internal EFL professional development courses as part of the work requirement of EFL teachers. Increasing the English proficiency of EFL teachers is imperative to improving the quality of EFL courses delivered. Increasing staff English proficiency will have multiple benefits. It will increase staff confidence which will in turn increase the quality of the courses delivered which will in turn facilitate the reduction of L1 usage in EFL classes.
References


