The acquisition of lexical phrases in academic writing: A longitudinal case study
Jie Li*, Norbert Schmitt
School of English Studies, University of Nottingham, Nottingham NG7 2RD, UK

Abstract

Lexical phrases are both numerous and functionally important in written texts. Despite this, L2 learners often find their use problematic, typically overusing a limited number of well-known phrases, while at the same time lacking a diverse enough phrasal repertoire to employ lexical phrases in a native-like manner. While a number of studies have described learners’ usage of lexical phrases, very few have explored how these phrases are acquired. In this paper we report on a longitudinal case study which followed a Chinese MA student over the course of an academic year. All of her written assignments (8 essays and a dissertation) were analyzed for lexical phrase use, and she was interviewed after each assignment was submitted. It was found that she learned 166 new lexical phrases during her studies, and that she improved in her degree of appropriate usage. She also gained confidence in using the phrases. She successfully drew upon both explicit and implicit sources for this improvement, particularly benefiting from her academic reading. However, she also tended to rely too heavily on a limited range of phrases, sometimes to the point where judges considered the usage non-nativelike. We discuss the relevance of these findings for our current knowledge of L2 writing.

# Background

Knowledge of vocabulary is obviously a prerequisite for writing. For example, from the perspective of L2 writing instruction, Hyland (2007) proposes a genre approach to help L2 learners understand the vital roles of vocabulary choices and cohesion patterns in achieving literacy in a second language. Moreover, research is increasingly showing that this vocabulary is often made up of formulaic multi-word sequences (Biber, Johansson, Leech, Conrad, & Finegan, 1999; Cortes, 2004; Moon, 1997; Nattinger & DeCarrico, 1992; Sinclair, 1991; Wray, 2002). These formulaic sequences are of great importance for L2 writers for at least three reasons:

(a) the [formulaic sequences] are often repeated and become a part of the structural material used by advanced writers, making the students’ task easier because they work with ready-made sets of words rather than having to create each sentence word by word; (b) as a result of their frequent use, such [sequences] become defining markers of fluent writing and are important for the development of writing that fits the expectations of readers in academia; (c) these [sequences] often lie at the boundary between grammar and vocabulary; they are the lexicogrammatical underpinnings of a language so often revealed in corpus studies but much harder to see through analysis of individual texts or from a linguistic point of view that does not study language-in-use. (Coxhead & Byrd, 2007, pp. 134–135)
Appropriate use of formulaic sequences facilitates communication within a speech community in a manner that is both expected and accepted, partly because members of the community know and routinely use those sequences (e.g., Coulmas, 1981; Nesselhauf, 2004). In one study, various types of formulaic sequences were found to constitute 52.3% of the written discourse investigated (Erman & Warren, 2000). One reason for this widespread use is that formulaic sequences are pragmatically efficient. For example, many formulaic sequences have clearly defined roles as effective guideposts in signaling the discourse structure. This is illustrated by formulaic discourse devices (e.g., in spite of, for example, as far as I know) whose function is to signal the direction of and organization of the informational content of the discourse, that is, whether the information to follow is in contrast to, is in addition to, or is an example of information that has preceded (Nattinger & DeCarrio, 1992).

As for academic discourse, it has been generally agreed that formulaic sequences like as a result and it should be noted that are central to the creation of academic texts (Coxhead & Byrd, 2007; Hyland, 2008). As important building blocks of the characteristic features of academic texts, the absence of such formulaic sequences may indicate the lack of mastery of a novice writer in a specific disciplinary community (Haswell, 1991; Hyland, 2008), given that to be a successful academic writer, an L2 learner is required to be competent at using these conventional sequences which characterize the learner’s discipline.

Thus learning to write well also entails learning to use formulaic sequences appropriately. However, a number of studies show that L2 learners’ employment of formulaic sequences is often problematic. Although learners can produce a considerable number of native-like sequences (Nesselhauf, 2005), there is evidence that learners’ restricted formulaic repertoires lead them to overuse those sequences they know well (Granger, 1998). Still, overall, nonnative use of formulaic sequences is less pervasive and less diverse than native norms (De Cock, Granger, Leech, & McNerly, 1998; Foster, 2001). For instance, Howarth (1998) calculated that native speakers employed about 50% more restricted collocations and idioms than learners did in the corpora he studied. It is not surprising, therefore, that L2 learners’ failure to use native-like formulaic sequences is one factor in making their writing feel nonnative.

Chinese learners of English are not immune to this difficulty in mastering formulaic language, and a number of studies have shown that Cantonese-speaking intermediate to advanced level students need to develop improved competence in formulaic language use in their academic writing. Hyland and Milton (1997) looked at the expressions of doubt and certainty in Hong Kong and native speaker high school students’ argumentative academic writing. The results show that Hong Kong L2 writers favor a more authoritative tone by using more formulaic sequences like it is far beyond doubt, in fact, and of course than native speaker norms. Milton (1999) compared the frequencies of formulaic sequences (or what he called formulaic phrases) between two 500,000-word corpora consisting of essays produced by students graduating from A Level in Hong Kong and their UK counterparts. He found that the Chinese L2 students used more formulaic sequences like first of all, on the other hand, and in my opinion than the UK students, whereas sequences frequently used by the native speakers, such as in this case and it can be seen that, were not used at all. He also found that Hong Kong L2 learners’ use of discourse markers “often works against the coherence that the writers attempt” (p. 230). Flowerdew (1998) investigated discrepancies in the use of cause/effect markers (e.g., result from, arise from, account for, due to) between native professional writers and Cantonese advanced L2 learners by comparing a native speaker academic corpus and a Hong Kong learners’ writing corpus. The results revealed that Hong Kong students tend to rely on a small group of causative conjunctions, whereas they severely underuse causative verbs, prepositions, and adjective sequences (e.g., responsible for, as a result of, result in, lead to) compared to the native speakers in the academic corpus.

The difficulty that Chinese learners have in employing formulaic sequences has frequently been attributed to the sparse input and inadequate academic writing instruction they typically receive. For example, Milton (1998) claims that list-based instruction of formulaic sequences (or what he called idiomatic expressions, such as all in all and in a nutshell) and rote learning for exam preparation in Hong Kong high schools leads to a substantial overuse of such phrases by Chinese L2 writers in academic writing. The short-term instruction and rote learning of uncontextualized formulaic sequences limit Chinese learners’ exposure to written discourse and give learners no opportunity to understand the precise meanings, pragmatic functions, and structural qualities of such sequences within any particular discourse community. The inevitable result is oversimplified and inappropriate use of formulaic sequences.

In sum, studies show both the important role of formulaic sequences in language use, and the problems L2 learners have with these sequences. Yet research into the acquisition of formulaic language is still in its infancy. This is problematic because an increasing number of international students are traveling to English-medium universities to study, where proficient writing (including the appropriate use of formulaic language) is required. For example, in an effort to increase their English language proficiency and build up their academic background, large numbers of
Chinese attend language and academic programs abroad in English-speaking countries every year. According to the British Council, there were 51,000 Chinese students attending tertiary-level education programs in the UK in 2007. Expected benefits of studying abroad are the massive exposure to the target language community and the specific disciplinary culture. However, there has been a dearth of longitudinal studies investigating the extent to which this input-rich language learning environment can improve learners’ use of formulaic sequences in their academic writing.

The lack of research into the acquisition of formulaic language has also led to uncertainty regarding the roles of explicit learning versus incidental acquisition in mastering this dimension of language use. Some researchers suggest that mere exposure to formulaic sequences does not usually lead to their acquisition. For instance, Bahns and Sibilis (1992, cited in Nesselhauf, 2005) claim that reading only slightly improves learners’ knowledge of formulaic expressions, since there are many other determinants of acquisition, such as semantic basicness, salience, communicative intent, and relevance (Slobin, 1997). On the other hand, L1 children (e.g., Nelson, 1973) and L2 children (e.g., Wong-Fillmore, 1976) clearly learn formulaic sequences from exposure, which suggests that older L2 learners should be able to do this as well, at least to some extent. However, there is simply not enough research to know how incidental formulaic sequence acquisition occurs. This is also the case for explicit approaches to acquisition. Jones and Haywood (2004) highlighted formulaic sequences during a 10-week EAP pre-university course. The students greatly improved their awareness of formulaic sequences, but showed only a slight improvement in production of sequences in controlled situations (C-test), and no noticeable improvement in their composition writing. Thus, as with incidental acquisition, it is not yet clear what effect explicit learning has on formulaic sequence acquisition.

In an attempt to better understand the longitudinal development of formulaic language in L2 academic writing, we followed a Chinese MA student over the course of an academic year, analyzing all of her university writing assignments. Using a case-study methodology, we hope to provide a more nuanced description of this development over time than would be possible with short-term designs with single point-in-time sampling of students’ abilities. Leki (2000), for example, points out the importance of longitudinal studies for writing research as a way of understanding students’ writing development and how social and situational settings influence the learning process. Wray (2002), from a psycholinguistic perspective, also claims that the data-based individual case study has been largely overlooked in the research of formulaic language. Our longitudinal case study will focus on the following research questions:

1. How does the Chinese MA student’s use of lexical phrases develop over an academic year?
2. If the Chinese MA student begins using new lexical phrases, what is the source of acquisition for these new phrases?
3. How does the Chinese MA student’s use of lexical phrases develop over the academic year in terms of appropriateness of usage?
4. Will the Chinese MA student become more confident in her use of formulaic sequences over the academic year?

Methodology

This article reports a longitudinal case study with multiple inputs. Data collected from the participant consisted of a number of written MA assignments and interviews focusing on those assignments.

Participant

The Chinese participant (pseudonym “Amy”) was enrolled in an MA in English Language Teaching program at the University of Nottingham. She was 29 years old and had studied English for over 10 years. Before beginning the program, she taught middle school students aged between 12 and 15 for 4 years. Upon graduation, Amy hoped to return to China and teach in a college or university. She took the IELTS test before beginning the program and scored 6.5 (Listening 6.0, Reading 6.5, Speaking 7.0, Writing 6.0), which means that Amy was a relatively proficient nonnative English speaker. She voluntarily participated in the study, partially because she hoped the experience would help improve her academic writing.

Written assignments

The one-year MA in ELT course consisted of two extended core modules (Applied Linguistics and Syllabus Design & Methodology), four elective modules, and a dissertation requirement. Table 1 describes the nine writing assignments
Interviews

In order to obtain more detailed information about the written assignments, particularly the process of writing them, the first author carried out nine one-on-one interviews with Amy. The interviews were all undertaken within one week of the assignments’ being completed. The interviews were conducted in Chinese, Amy’s L1, in order to give her the best chance to explain her thought processes and feelings about her academic writing. The recorded interview data were then transcribed and translated into English (see Appendix A for a sample of interview questions and answers). They lasted between 20 and 40 minutes.

As an evidence source in case studies, Rubin and Rubin (1995) indicate that interviews should be guided conversations rather than structured queries. In other words, the target questions need to be fluid and asked in an unbiased manner throughout the interview process, since participants’ views and reporting are often critical to the success of a case study, particularly if it is based on a single participant. However, if little control is exercised by the interviewer, the direction of unstructured interviews is relatively unpredictable. In addition, it takes interviewers longer to collect systematic information due to the lack of patterns in the data gathered. To balance these concerns, a semi-structured interview format was used in the present study.

The interview always began with topics or issues regarding Amy’s feelings about the assignment (e.g., Did you find it difficult to write up this essay? Was there any difference from the previous one? Did you find this topic interesting? Did you really benefit from writing this essay?) rather than a list of predetermined questions, which gave her some degree of control over the interaction. This was followed by a set of interview questions regarding the highlighted lexical phrases in terms of their acquisition sources and Amy’s level of confidence when using them. Referring to the assignment, which was always in view of both interviewer and interviewee throughout the interview, Amy was also encouraged to bring up any ideas regarding to her lexical phrase use. She seemed comfortable with this type of semi-controlled conversation, at times even relating stories of how she acquired certain phrases.

Procedures

Building a corpus of Amy’s academic writing

As Amy submitted her essays, she would also forward an electronic version via email to the first author. Once they were received, the cover page and reference section were deleted. In addition, direct quotations were also deleted. The word count was then noted, as well as basic information regarding the assignment, such as essay title, submission date, and write up time.

Identifying the lexical phrases in Amy’s academic writing

There have been four main approaches to defining and identifying the formulaic elements in language (Durrant & Schmitt, in press). The first bases identification on the frequency of occurrence of items within the corpus being
studied, often using statistical “association measures” such as t-score and mutual information (e.g., Lorenz, 1999). A second involves the study of all word combinations of a particular grammatical form, for instance “-ly amplifier-adjective” combinations, such as perfectly natural, regardless of whether they are “formulaic” in any defined sense (e.g., Granger, 1998). A third approach focuses specifically on “collocations” as they are defined in the so-called Russian school of phraseology (e.g., Cowie, 1998). In this tradition, collocations are typically identified as those combinations in which either word takes on meanings which it does not have in other environments (e.g., curry.favour) or there are arbitrary restrictions on what words can be substituted into a particular phrase (e.g., the phrase commit+[something wrong or illegal] is a collocation because commit a lie/deceit/delinquency are arbitrarily blocked). A fourth approach relies on proficient speakers’ intuitions about whether a piece of language is formulaic or not (e.g., Foster, 2001; Yorio, 1989).

All of these approaches have strengths and limitations. We opted to use proficient speaker intuitions in this study mainly because we followed only a single participant, and this inevitably entails that only a limited number and range of formulaic sequences would be available for analysis. This makes the first three approaches less viable than intuition because judges can identify all of the formulaic sequences in a text without having to discard items due to frequency, semantic, or grammatical constraints. While not infallible, it is assumed that native judges can make a reasonable identification of the formulaic elements in Amy’s texts because those elements have the property of “sounding right” and are “regularly considered by a language community as being a unit” (Moon, 1997, p. 44). Moreover, as pointed out by Bahns, Burmeister, and Vogel (1986), formulaic language with semantic-pragmatic functions can only be identified by the intuitive approach.

Because we were interested in the type of formulaic sequence which realizes pragmatic functions, we decided to use a definition of formulaicity which emphasized these functions: “multi-word lexical phenomena which are conventionalized form/function composites that occur more frequently and have more idiomatically determined meaning than the language that is put together each time” (Nattinger & DeCarrico, 1992, p. 1). Following Nattinger and DeCarrico’s terminology, we will hereafter refer to these “form/function composites” as lexical phrases.

In order to ensure that as many as possible of the lexical phrases in Amy’s writing could be identified, a panel of three judges from different backgrounds was set up. The first was a native speaker with 2 years experience in teaching ESL/EFL, who had recently obtained an MA degree in Applied Linguistics. The second was an experienced Chinese ESL teacher from Beijing Normal University, who was studying for her PhD at a British university. She was included for her familiarity with Chinese EFL learners and their output and to overcome a problem highlighted by Foster (2001), namely that native speakers cannot always identify nonnatives’ formulaic language. This is because nonnatives sometimes develop L2 formulaic sequences influenced by their L1 equivalents, but which are atypical in the L2. The third judge was a native English-speaking non-linguist, who had recently received his Masters degree in politics at a British university. He was included to give a non-specialist perspective to the identification process.

The panel was given a brief description of the study and its aims. Also, a short explanation was given to the panel to ensure a common understanding of the study’s interpretation of the notion lexical phrase. The panel was then instructed to read the writing assignment (the assignments were rated one-by-one as they were collected through the year) and identify any lexical phrases which occurred by highlighting them without consulting anyone else. Lexical phrases identified by one or more of the judges were added to a lexical phrase list. This relatively lenient methodology should insure that the greatest percentage of lexical phrases was identified and extracted.

Similar to the comments from Foster’s (2001) judges, our panel reported missing obvious examples of lexical phrases due to tiredness or lack of concentration and difficulty in marking lexical phrase boundaries. However, each reported feeling fairly confident with their identification after a certain amount of self-imposed revision (e.g., reviewing the identification process, taking breaks during longer identification sessions). When there was a discrepancy among the judges as to the length of a lexical phrase (e.g., a summary can be drawn vs. a summary can be drawn from), we recorded the longest one for the appropriateness judgment. When analyzing the source of acquisition, the acquisition source of each lexical phrase was recorded for only the first time it was used.

---

1 Originally mutual information comes from work in information theory. It calculates the probability of the two words co-occurring by comparing their individual relative frequencies in a particular corpus with the observed frequency of their co-occurrence.
Determining the appropriateness of the lexical phrases

As we were interested not only in the acquisition of new lexical phrases but also in improving mastery of already-met partially known phrases, we wished to obtain an appropriacy rating for all of the phrases in Amy’s writing. A separate panel was assembled for this purpose. It consisted of five native speakers (all different from the identification panel) who came from an ELT or Applied Linguistics background and had at least 3 years of experience in teaching L2 learners, either in language training courses or teacher training programs. As a whole, the judges came from a discipline community very similar to Amy’s and were familiar with second language academic output.

Amy’s assignments were adapted and sent to the appropriateness judges. The adaptations included highlighting all of the identified lexical phrases and placing a bracket after each one for the judge’s rating. Also, the sentences around target lexical phrases were sometimes modified slightly in that spelling mistakes, obvious semantic mistakes occurring outside the lexical phrase, and grammatical mistakes were corrected. In addition, the sentences in which the lexical phrases occurred were sometimes reformulated slightly to make the intended meaning clearer. For example, the sentence containing two lexical phrases (it seems that, there is no consensus) “it seems that there is no consensus of informal or native-speaker spoken grammar between teachers and students, and no certain definition of this kind of grammar” was revised to “it seems that there is no consensus about what is informal or native-speaker spoken grammar between teachers and students…” to ensure a clearer meaning. A brief framework of appropriateness was attached on the front page of each essay to ensure that a uniform criterion was adopted by the five judges. The informants were asked to judge the highlighted lexical phrases on a five-point scale as follows:

1. Very Appropriate. (You strongly agree with the employment of the highlighted lexical phrase; i.e., you think the phrase is perfect in the specific context.)
2. Appropriate. (You agree with the use of the target item; i.e., you find it is fine to use the highlighted phrase in the context.)
3. OK. (You neither agree nor disagree with the use of the lexical item, but you can accept its use in this context from an L2 learner.)
4. Less Appropriate. (You disagree with the employment of the target item; i.e., you would not use the phrase in this context.)
5. Not Appropriate. (You strongly disagree with the usage of the target item; i.e., you would definitely not employ the highlighted phrase in the context.)

Unless the lexical phrase was judged as “Very Appropriate,” the judges were also asked to provide an appropriate or better option to express the intended meaning. Finally, the judges were asked to give suggestions on lexical phrase use in general for each essay. All this corrective feedback was filed in a document and shown to Amy once the judgment process was completed (see below).

The scores given by all five judges were averaged and categorized according to three degrees of appropriateness: an appropriate lexical phrase group with an average score below 2.0, a less appropriate group with an average score between 2.0 and 4.0 inclusive, and an inappropriate group with average score above 4.0.

Interviews with Amy

As soon as the lexical phrase identification process was finished for each assignment, an interview was arranged with Amy. The interviews were conducted mainly in Amy’s L1, Chinese, to ensure she was able to fully express her ideas and opinions. Working off of the original assignment with the lexical phrases highlighted, Amy was asked, one-by-one, about how she thought she learned those phrases (if an item occurred in the previous essays, it was not checked again), and her confidence level (high confidence, confidence, or low confidence) when employing them in her essay. These questions were designed to help determine the acquisition source of Amy’s lexical phrase knowledge and to observe her changes in confidence level over the one-year MA program. All the interviews were undertaken within one week of the completion of the assignments, which facilitated the interviewee’s recall of the lexical phrases. It seemed that Amy’s awareness of the acquisition sources of these phrases was rather clear, although she did report combined acquisition sources (e.g., previously learned in China and academic reading, peers in UK and dictionary) when she was not completely sure which single source she used to learn the target item. Interestingly, she did not report “I don’t remember” regarding the identified lexical phrases checked in the interviews. Based on Amy’s self-report data, all of the lexical phrases were classified into one of two groups: “Newly learned” and “Already known.”
Results and discussion

The developing use of lexical phrases

To answer the first research question concerning the development of lexical phrases over time, we explored Amy’s use of lexical phrases in her assignments. In Table 2, we see that Amy does use lexical phrases in her academic writing, a total of 780 tokens consisting of 319 types\(^2\) in the nine assignments (29,318 total words). Since the word count requirement for each assignment is different (see Table 2), we normalized the raw frequency counts from the nine assignments of different lengths so that they could be compared directly. The individual lexical phrase frequency counts for each 700-word segment were averaged for each of the nine writing tasks (see Table 3). Amy used an average of 11.5 lexical phrase types among 700 running words in her first academic writing, which indicates she already knew a variety of academic-specific lexical phrases before she started her MA program at a British university. The average lexical phrase types per 700 words was higher in most of the subsequent assignments, finishing at 15.8 in the final dissertation written 10 months later, which was 37.4% more than in the initial academic essay. However, there was considerable variation among the assignments and it is difficult to discern any clear pattern of improvement in the diversity of lexical phrase use over the year. If the first essay is excluded, along with the extremely high-scoring second essay and the low-scoring seventh essay, then the types per 700 words varied in range between 13.3 and 18.7.

Similarly, given the same exclusions, the tokens ranged from 14.3 to 20.3 per 700 running words. This works out to one lexical phrase token per 34.5-48.9 words, or about 2-3% of the total running words. As with phrasal diversity, it is

\(^2\) Each different lexical phrase is considered a different type, and each occurrence of a lexical phrase a different token.
difficult to see a pattern regarding the frequency of lexical phrase use (Fig. 1). If we do the calculation in terms of types (using the same exclusions), then a new type occurs every 37.4-52.6 words on average. Even in Essay 2, where Amy used the most lexical phrases, the figures show only a new lexical phrase token every 22.2 words (4.5%) and a new type every 26.4 words (3.8%). These figures are very low compared to the percentage of formulaic sequences among native language users. For example, Erman and Warren (2000) calculated that formulaic sequences of various types constituted 58.6% of the spoken English discourse they analyzed and 52.3% of the written discourse. Foster’s (2001) raters judged that 32.3% of the unplanned native speech they analyzed was made up of formulaic language. The variations in these figures are unsurprising as the studies used different criteria and procedures, and formulaic sequences are difficult to identify precisely in any case. Still, the studies point to the conclusion that a very substantial percentage of native language is formulaic in nature. However, it is probably more realistic and appropriate to compare Amy’s output to that of other nonnative speakers. Here the percentage appears much lower. Howarth (1998) studied the essays of ten MA in Linguistics and English Language Teaching students studying in the UK (thus being very similar to Amy) and found that about 5% of the running text consisted of a variety of formulaic sequences. So, although it is difficult to compare directly, it seems that Amy used a roughly similar number of formulaic sequences compared to Howarth’s students.

In addition, Amy managed to learn 166 new lexical phrases over the 10-month MA program, adding to the 153 phrases she knew (or partially knew) and used in her writing before coming to Nottingham (based on her self-report). The newly acquired lexical phrases account for over 50% (166/319) of the occurring lexical phrase types in the nine writing tasks. Her learning is not surprising as she was exposed to a very rich acquisition environment: She studied at an English-medium university, was required to operate in English on a daily basis, and received explicit feedback on writing and use of lexical phrases.

Source of acquisition of new lexical phrases

Research Question 2 queries the source of the new lexical phrases Amy produced in her writing. Amy was interviewed about where she thought she learned these new phrases. Although it is impossible to verify Amy’s self-report impressions, at a minimum, they should be indicative of the sources of her learning. Table 4 shows that by far the largest percentage (almost 40%) were solely acquired in her previous studies in China. However, this means that about 60% of the lexical phrases she produced were either learned after she moved to the UK, or at least enhanced through an additional acquisition source (see below). Of these newly learned/enhanced lexical phrases, over 40% of the types (70/166) were reported as being acquired from exposure to the large amount of academic material she was required to read. Another major source was the explicit instruction she received from the Centre for English Language Education (CELE) EAP support unit at the University of Nottingham (31%, 51/166). Beyond these two major sources, Amy picked up smaller numbers of lexical phrases from a variety of sources, including interaction with peers (11%, 18/166) and the feedback from the native judges (9%, 15/166). Although individually these minor sources did not contribute large numbers of new lexical phrases, taken together they combined for around 23% of the new phrases. This suggests that having a range of sources can usefully increase the cumulative number of lexical phrases learned.
It is not surprising that academic reading materials play such an important role in lexical phrase acquisition and use, since international postgraduates are required to understand their subject topics and build up their knowledge through large amounts of reading. Interestingly, Amy is aware of the benefits of relying on reading materials in addition to explicit learning sources (e.g., CELE, Feedback from Native Judges) to decide on the use of a specific lexical phrase. She specifically commented that, in contrast to explicit instruction on an isolated lexical phrase, course books and journal articles can provide more knowledge of such a phrase within a rich context.

Another point to come out of the interviews was that Amy believed that some lexical phrases (around 10%) were learned from multiple input sources (i.e., previous learning in China and CELE, previous learning in China and feedback from native judges, previous learning in China and academic reading, CELE and feedback, academic reading and CELE, peers and dictionary, previous learning in China and dictionary, previous learning in China and peers, academic reading and feedback). As the source for this data was self-report, it is impossible to verify the actual point of learning or the precise source. However, as vocabulary learning is an incremental process (Schmitt, 2000), it is reasonable to expect that some lexical phrases would be the beneficiaries of multiple input sources during their early stages of acquisition, and this seems to be the case in a not-insubstantial percentage of cases.

The newly learned lexical phrases which could relatively unambiguously be placed into either an “explicit learning” category or an “implicit learning” category were so classified (Table 5). From this categorization, we find

Table 4
Summary of lexical phrase (LP) acquisition sources.

<table>
<thead>
<tr>
<th>Acquisition sources</th>
<th>LP types</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous learning in China</td>
<td>125</td>
<td>39.2%</td>
</tr>
<tr>
<td>Academic reading</td>
<td>70</td>
<td>21.9%</td>
</tr>
<tr>
<td>CELE</td>
<td>51</td>
<td>16.0%</td>
</tr>
<tr>
<td>Feedback from native judges</td>
<td>15</td>
<td>5.6%</td>
</tr>
<tr>
<td>Peers</td>
<td>18</td>
<td>5.6%</td>
</tr>
<tr>
<td>Previous learning in China &amp; CELE</td>
<td>9</td>
<td>2.8%</td>
</tr>
<tr>
<td>Previous learning in China &amp; feedback</td>
<td>9</td>
<td>2.8%</td>
</tr>
<tr>
<td>Previous learning in China &amp; academic</td>
<td>8</td>
<td>2.5%</td>
</tr>
<tr>
<td>CELE &amp; feedback</td>
<td>3</td>
<td>0.9%</td>
</tr>
<tr>
<td>Dictionary</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Spoken language</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Academic reading &amp; CELE</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Peers &amp; dictionary</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Previous learning in China &amp; dictionary</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Previous learning in China &amp; peers</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Academic reading &amp; feedback</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note. CELE = Centre for English Language Education.

Table 5
Explicit vs. implicit learning sources.

<table>
<thead>
<tr>
<th>Learning source</th>
<th>Lexical phrase types</th>
<th>Percentage a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CELE</td>
<td>51</td>
<td>16.0%</td>
</tr>
<tr>
<td>Feedback from native judges</td>
<td>15</td>
<td>4.7%</td>
</tr>
<tr>
<td>CELE &amp; feedback from native judges</td>
<td>3</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Dictionary</td>
<td>2</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>22.3%</td>
</tr>
<tr>
<td>Implicit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic reading</td>
<td>70</td>
<td>21.9%</td>
</tr>
<tr>
<td>Peers</td>
<td>18</td>
<td>5.6%</td>
</tr>
<tr>
<td>Spoken language</td>
<td>2</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>28.2%</td>
</tr>
</tbody>
</table>

a Percentage of total lexical phrase types produced (319).
that the results are rather similar, with a slight advantage for incidental learning (i.e., Academic Reading, Spoken Language, Peers) over explicit learning (i.e., CELE, CELE & Feedback from Native Judges, Dictionary, Feedback from Native Judges). Although this is not a strictly controlled comparison, the figures seem to suggest that both approaches are useful and that neither is substantially better than the other. Also, in a few cases, Amy believed that both explicit and implicit approaches combined to help her learn lexical phrases, for example academic reading and CELE, and academic reading and feedback.

It is interesting to note that the CELE program benefited Amy much more in the learning of lexical phrases than the Feedback from Native Judges did, which is somewhat surprising given that the feedback was specifically focused on her particular lexical phrase use in academic writing. According to Amy, the CELE academic training courses provided a relatively detailed context of how a specific phrase functions in a particular disciplinary community, whereas the feedback from native speakers was always out of context in a list-like manner. This appears to show the benefits of a sustained and well-organized EAP program in facilitating the acquisition of lexical phrases and to indicate the drawbacks of overly narrow explicit corrective feedback. In addition, Amy’s self-report supports Montgomery and Bakera’s (2007) argument that students have strong preference for both the amount and type of feedback given by their teachers (see the discussion below).

**Improvement in the appropriate use of lexical phrases**

While Amy learned 166 new lexical phrases over her 10-month study period, acquiring lexis is about more than just acquiring new forms. It is also about gaining better mastery over forms which have been only partially learned. This improving mastery entails a number of elements, including knowing more about the lexical item, more about where and when to use the item appropriately in particular contexts, and about being able to use it with more automaticity (e.g., Nation, 2001; Nattinger & DeCarrico, 1992; Siyanova & Schmitt, 2008). Research Question 3 focuses on Amy’s increasing mastery of lexical phrases by focusing on her appropriacy of use, as appropriate usage requires a relatively good understanding of a lexical phrase and its suitable contexts of employment.

From Table 6, we can see a clear improvement in the appropriate use of lexical phrases from Amy’s earlier assignments to her final dissertation submission. In her initial writing task, less than 40% of the lexical phrase tokens used were considered as appropriate, whereas this rate increased to nearly 90% at the end of the academic year (examples of appropriate and inappropriate lexical phrases judged by native speaker judge panel are shown in Appendix B).

On the other hand, the less appropriate rate went down gradually from 51.7% to 10.8% over the course of three terms. As for the inappropriate use of lexical phrases, there was an overall decreasing tendency, although the percentages were quite low overall, with no essay having more than 7% inappropriate usage after the first one. The most noticeable reduction happened in Essay 2, where only 1.5% inappropriate use was identified, compared to 10.3% in Essay 1. This dramatic fall in the second essay is likely affected by the intrusion of the case study itself, where Amy received a great deal of explicit feedback on her lexical phrase usage. In Amy’s dissertation, this inappropriateness rate

<table>
<thead>
<tr>
<th>Essay</th>
<th>Lexical phrase tokens</th>
<th>Inappropriate</th>
<th>Less appropriate</th>
<th>Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3 (10.3%)</td>
<td>15 (51.7%)</td>
<td>11 (37.9%)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1 (1.5%)</td>
<td>33 (48.5%)</td>
<td>34 (50.0%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4 (6.6%)</td>
<td>26 (42.6%)</td>
<td>31 (50.8%)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5 (3.9%)</td>
<td>29 (22.7%)</td>
<td>94 (73.4%)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4 (5.7%)</td>
<td>11 (15.7%)</td>
<td>55 (78.6%)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2 (3.0%)</td>
<td>21 (31.8%)</td>
<td>43 (65.2%)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1 (2.2%)</td>
<td>5 (11.1%)</td>
<td>39 (86.7%)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2 (3.1%)</td>
<td>12 (18.8%)</td>
<td>50 (78.1%)</td>
<td></td>
</tr>
<tr>
<td>Diss.</td>
<td>2 (0.8%)</td>
<td>27 (10.8%)</td>
<td>220 (88.4%)</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Diss. = dissertation.*
reduced to less than 1%, which means nearly no lexical phrase tokens were used inappropriately. It was also noticeable that many lexical phrases which were used less appropriately in earlier writing tasks came to be used appropriately over time.

Fig. 2 provides a visual illustration of how Amy’s appropriate/less appropriate/inappropriate lexical phrase use changed over time. The inappropriate rate is generally quite low after Essay 1. The real changes are in the lexical phrases judged appropriate and less appropriate. The appropriateness rate shows a steady increase over the nine writing tasks, while the less appropriate rate decreased gradually at a similar rate. This suggests that Amy’s improving mastery of lexical phrases was not a case of jumping from inappropriate usage directly to appropriate use. Rather, in line with an incremental perspective of lexical acquisition, the process was one of gradually improving understanding, with phrases previously used somewhat appropriately later becoming used with native-like appropriateness.

These findings suggest a steadily improving mastery of lexical phrases, but it is important to note that Amy tended to use a small group of lexical phrases repetitively as what Dechert (1984) calls “islands of reliability.” Therefore, Amy’s rather conservative employment of only well-known lexical phrases to some extent contributes to the apparent improvement of appropriate lexical phrase use. An example of this recycling can be found in Essay 4, where 37 lexical phrase types were used which had appeared in the three earlier essays, and another 4 types were provided as feedback from native speaker informants. These 41 types made up nearly 50% of the total number of types (84) that occurred in Essay 4. In fact, while the individual usages of the lexical phrases was increasingly judged as appropriate by the judgment panel, the repeated use of individual phrases often was not, as the following judges’ remarks illustrate:

Too much use of discourse markers too close together. They are useful to set out organization of argument, but overuse feels very unnatural. (Essay 1)
My only comment would be that particular phrases seem to appear with very high frequency here. I think a native-like essay would probably try to use a wider range of forms. (Essay 5)
The only things I notice overall are some (to me) slightly unnatural tense/aspect choices and a tendency to repeat certain phrases a little too often (e.g., “such as”). (Essay 8)

The bottom line seems to be that while Amy did learn to use lexical phrases more appropriately over her 10-month program (and with more confidence; see below), she tended to overuse them to the point where they became problematic. This is congruent with a number of findings that nonnatives tend to overuse the formulaic sequences of language they know and do not use a wide enough range of sequences. For example, Granger (1998) found a tendency for learners to stick with familiar and “safe” sequences which they feel confident in using, although De Cock (2000) found that some formulaic sequences were overused, some underused, and others simply misused by nonnatives when compared to native norms. Durrant and Schmitt (in press) discovered some systematicity in this variation, finding that their nonnative writers tended to rely heavily on high-frequency collocations, but that they also tended to
underuse less frequent, strongly associated collocations, the type of item which is likely to be highly salient for native speakers.

**Amy’s confidence in using lexical phrases**

Learning and using vocabulary is only partly about knowledge of lexical items; it is also about having the confidence to use those items. Research Question 4 explores Amy’s developing confidence in using lexical phrases in her academic writing. As part of the semi-structured interviews, Amy was asked about her degree of confidence in using each of the identified lexical phrase types. The results are given in Table 7 and graphically illustrated in Fig. 3.

Only 16.7% of the lexical phrase types were claimed to be used with a high level of confidence in Amy’s first writing task, which is understandable since she had recently entered the academic writing community with little practice using common lexical phrases (although she did already know quite a number, as illustrated in Table 4). But it did not take her long to begin gaining confidence. After the initial feedback on lexical phrases in Essay 1, she was very confident about over 40% of the lexical phrases she used in Essay 2. Although this moderated somewhat in Essays 3 and 4, by the latter part of the academic year (Essays 7 and 8, and the dissertation), the percentage of lexical phrases in which she was very confident had stabilized at about 70%. The number of phrases for which she was merely “confident” moved in a converse manner; that is, as the number of “very confident” phrases increased by the end of the year, the number of merely “confident” phrases decreased in tandem, stabilizing at about 30%. In a manner similar to the appropriateness judgments in Fig. 2, we find a gradual increase in confidence of use, rather than a large jump directly from “less confident” to “very confident.” This demonstrates the developing pattern of Amy’s growing

---

**Table 7**

Amy’s level of confidence in lexical phrase (LP) use.

<table>
<thead>
<tr>
<th>Essay</th>
<th>Less confident</th>
<th>Confident</th>
<th>Very confident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LP types</td>
<td>Percentage</td>
<td>LP types</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>33.3%</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>13.5%</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>8.5%</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>7.1%</td>
<td>49</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2.1%</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>2.2%</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0%</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0%</td>
<td>13</td>
</tr>
<tr>
<td>Diss.</td>
<td>1</td>
<td>0.9%</td>
<td>36</td>
</tr>
</tbody>
</table>

*Note. Diss. = dissertation.*

---

**Fig. 3. Changes in confidence of lexical phrase use.**
confidence in lexical phrase use; that is, phrase types with a medium level of confidence had been upgraded to the
category of high confidence over the course of three terms. Concurrently, we also find a steady decline in the number of
phrases which Amy was less confident in using, until, by the dissertation, it was down to a single lexical phrase type \( (so\ that) \), that is, less than 1% of the total.

Transcriptions of the interviews also provide evidence supporting Amy’s increase in confidence. For instance, when
Amy was asked about how confident she felt in employing \textit{according to}, which first occurred in Essay 1 and was
repeatedly used in the following writing assignments, she said:

I first noticed this phrase in my friend’s writing note, I thought it should be quite useful for my own essay, so I just
picked it up… but, after I saw the feedback, I realized that I did not use it correctly… Because I used “according
to somebody’s study,” where it should be used as “according to somebody.” So I feel more confident to use this
phrase in my future assignments in a more accurate way.

\textbf{General discussion}

Most previous research into the use of formulaic language in L2 writing has looked at corpora composed of single
compositions produced by groups of L2 students (e.g. De Cock \textit{et al.}, 1998; Granger, 1998; Howarth, 1998). While
valuable, this ‘point-in-time’ approach has difficulty in illustrating the longitudinal development of formulaic
language. In contrast, our case-study approach has provided a rich picture of the developing mastery of lexical phrases
over the course of an academic year, highlighting a number of interesting points.

Perhaps the most noticeable finding of the study is that formulaic language is learned incrementally. This is a well-
known feature of individual words (Schmitt, 2008), and this study shows that the developing use of lexical phrases is
no different. Amy increased her mastery of her lexical phrases over the year in terms of both appropriacy and
confidence. Moreover, the increase in mastery was mainly of partially known phrases becoming more appropriately
used over time. This suggests that much learning was not the acquisition of \textit{new} phrases, but the \textit{increasing mastery}
of phrases which where already known to some degree.

Nevertheless, Amy did learn and use a considerable number of new lexical phrases over the course of the academic
year. In fact, over 50\% of the phrases she used were learned during her time in Nottingham, according to her report.
This is encouraging in that it clearly demonstrates that L2 writers can develop a greater range of lexical phrases.
However, the most interesting question is pedagogical: How can writing instructors facilitate this learning? Our in-
depth interviews with Amy shed some light on this issue. Overall, Amy’s impressions were that both explicit and
incidental approaches were helpful. She reported academic reading as a particularly fruitful source of lexical phrases,
with about one-fifth of her phrases coming from this single source. This highlights the usefulness of integrating
academic reading and academic writing in the curriculum.

Explicit instruction and feedback (mainly CELE and Feedback from Native Judges) combined to contribute about
another one-fifth of the phrases. However, our interviews about each individual lexical phrase made clear that Amy’s
acquisition of lexical phrases and her reaction to explicit feedback from native judges were inconsistent. In some cases,
explicitly corrective feedback from native judges led to substantial improvement in lexical phrase use, but there were
also cases where little progress was observed despite the repetitively offered corrective feedback on the same issue.

To illustrate this, let us first consider some positive evidence which shows an encouraging acquisition process. \textit{Reckon that} first occurred in Essay 1 (see Appendix B for an example), and Amy reported that she acquired it from
lecturers’ speech at the University of Nottingham: “This phrase is very frequently used by lecturers when they teach.
So when I write up essays, I naturally used it without conscious awareness actually…” However, after feedback from
the native speaker judges pointed out the formality problem, she learned not to employ it again in any of her following
essays. \textit{For this reason} was recommended by a native speaker judge when giving feedback on the first assignment. This
item later became one of Amy’s favorite phrases when she needed to express causal relation, in every case being
judged as appropriate. Amy explained her high use of and confidence in the phrase as a product of its being
recommended by a native speaker. \textit{In other words} occurred in Amy’s first writing assignment and was reported as
being learned before she began her course. In spite of Amy’s high level of confidence in using this item, it was judged as
“less appropriate” with a suggestion to replace it with \textit{therefore} in that particular type of context. With guidance
from the feedback and knowledge from previous learning, Amy kept on employing \textit{in other words} in the subsequent
writing assignments, but with more accuracy.
The above cases show the positive effect of explicit feedback from native judges on lexical phrase improvement, since Amy avoided some inappropriate lexical phrases, acquired a number of new ones, and employed phrases in a more accurate way. However, there is also some discouraging evidence regarding Amy’s absence of response to the explicitly provided corrective feedback from native speakers. That is was first used in Essay 1, after encountering it repeatedly in Paul Nation’s (1990) book on vocabulary. When she introduced Nation’s vocabulary approach in her own writing, Amy was rather confident about borrowing the item. Since Amy received encouraging feedback on this phrase from the judgment panel, she felt even more confident about using it in most of her following essays. However, a number of appropriateness problems appeared, such as using it in sentence-initial, rather than medial positioning. It was also used in non-reformulation situations, where phrases like such as or namely that would be more appropriate. Despite repeated feedback on these issues, Amy had trouble using this phrase appropriately even after a period of 10 months. She also continued to have problems with on the other hand, using it in situations where in addition or furthermore would have been more appropriate, even though she received specific feedback from the judges on this point. This shows that although Amy was sometimes able to act upon explicit feedback, there were also many cases where she was not able to do this.

Although Ferris and Roberts (2001) and Komura (1999) argue that explicit corrective feedback is beneficial to L2 writers, our findings suggest that it is not necessarily effective when it comes to lexical phrases. Amy reported a preference for explicit feedback on each individual lexical phrase, but the corrective feedback only helped her improve her writing in some cases. To some extent, our findings reflect the lack of consensus in the area of L2 writing feedback research. Some researchers (e.g., Sheppard, 1992; Truscott, 1996) argue that providing feedback on local issues (e.g., grammar, spelling, etc.) does not lead to fewer local mistakes in short term, since improvement for such features is a rather long process. On the other hand, authors such as Ashwell (2000) and Ferris (1997, 2002) claim that corrective feedback focusing on accuracy in L2 learners’ writing does help them recognize and fix their local errors. Jones and Haywood (2004) provided specific input on formulaic sequences during a 10-week course, and found that their EAP students became more aware of formulaic language, but that this did not translate into more usage in their compositions. Our study documented explicit feedback over the course of a full academic year, yet the uptake from this feedback was still inconsistent. It seems that improving learners’ use of lexical phrases may take more than just explicit feedback in many cases.

It is also useful to note that although Amy improved in her mastery of lexical phrases over the year, the absolute number of phrases was still rather low (around 2.5%), which is in line with other advanced learners which have been studied (Howarth, 1998). This compares to much higher estimates of the formulaic content of native writing (roughly between 33% and 50%). If writing instruction is to help learners produce a higher percentage of formulaic language in their writing, then more attention will clearly have to be given to this aspect.

Finally, although it was not one of the research questions, it is interesting to compare the judgments of the formulaic component of Amy’s essays with the course tutors’ assessments of the overall quality of her assignments. The module assessment feedback form for each writing task included prose comments on a list of “formal” characteristics (presentation conventions, referencing style, clarity of expression) and a set of criteria focusing on content, organization, and writers’ knowledge and understanding of the topic. There was also a numerical mark, with 50 being a minimum pass score, and 70 or above given a Distinction. All of Amy’s scores varied between the upper and lower boundaries of the pass range. Due to the confidentiality agreement between the participant and authors, we are not able to present the numerical marks for the nine writing tasks. As can be seen in Fig. 4, there is no obvious relationship between the essay marks and her improving formulaic appropriacy ratings (Fig. 2), although there appears to be a slight correspondence with token frequency (Fig. 1).3 We would have expected formulaic language to have more effect, but considering the multiple assessment criteria, perhaps it is not so surprising that a single factor (and one not explicitly included in the marking criteria) had no noticeable influence on the final scores. Moreover, although Amy’s appropriacy of usage improved, her frequency and diversity of use did not consistently increase. It may be that an improvement in lexical phrase usage large enough to be discerned by markers needs to include increases in all of these areas.

However, it is too simple to conclude that L2 writers’ use of lexical phrases is unconnected to the overall quality of writing, as a few of the markers’ comments suggest that the appropriate and diverse use of lexical phrases does have an

3 The small number of data points precludes a statistical correlation analysis.
effect on the evaluation of the academic writing. For example, a suggestion was given to make more use of discourse devices in order to make the writing more coherent: “The overall structure of this assignment is satisfactory, but there is little linking and coherence between sections.”

Another comment from a module tutor concerned the misuse of a specific lexical phrase given of: “Your language is satisfactory on the whole, but there are points when it becomes hard to work out your meaning—in particular, section 2.2.1 where ‘given of’ should be ‘given that’.”

Obviously, the inappropriate use of given of was noticeable enough to be commented on, and presumably had some influence on the evaluation of this writing. However, most of the feedback was rather general and vague in nature, and very little directly involving formulaic language.

**Conclusion**

The 10-month investigation into Amy’s nine academic compositions showed that although she did not consistently increase the frequency of use or the diversity of lexical phrases, those she did use were produced in a more appropriate manner. In addition, Amy became increasingly more confident in their usage. Thus, a major part of Amy’s improvement consisted of enhanced mastery over already (partially) known phrases. Nevertheless, Amy’s employment of lexical phrases was rather conservative, with a small group of well-known items repetitively used throughout the nine writing assignments. This sometimes led to certain phrases being overused to the point of being problematic.

The other main improvement appeared to be her substantial progress in learning new lexical phrases from both explicit and implicit acquisition sources, 166 items according to her self-report. This showed her ability to make use of various learning resources offered by the one-year Masters program, both as single sources and in combination. Among all the available learning resources, academic reading materials were the most influential.

However, Amy’s lexical phrase acquisition process was not consistent. A number of previously known items continued to cause problems throughout the course, despite access to a variety of learning resources, including direct feedback. Amy was sometimes able to take explicit feedback from native speakers and use it to improve her lexical phrase usage and to learn new items. However, there were also cases where explicit feedback was ineffective. Surprisingly, the explicit corrective feedback seemed to have a rather small effect on Amy’s improvement of lexical phrases, compared with other sources such as academic reading and the CELE program. This outcome can be partially explained by Amy’s reported preference of focusing on the context of the target phrases, which was better provided by the reading materials and CELE courses. However, it still raises questions about the efficacy of feedback and how it can be made more effective. Research has shown that virtually any type of activity which increases a student’s engagement with a lexical item facilitates its learning (Schmitt, 2008), and so further research might usefully explore which type of follow-up engagement activities (e.g., exercises, concordance lines) best enhances the effectiveness of feedback.

Overall, these results demonstrate that an advanced Chinese learner could acquire lexical phrases and improve her mastery of already partially known phrases through both implicit and explicit sources. Her confidence in using the phrases rose concurrently with this advancement. This study also reinforces previous findings that learners tend to rely too heavily on a limited repertoire of phrases, which indicates that pedagogies need to be developed which can help
learners to build up more diverse phrasal lexicons. However, these findings require larger-scale longitudinal studies to verify whether these outcomes apply to other Chinese learners and other learners with different L1 backgrounds.

**Appendix A. Excerpts from interview transcriptions**

**First interview**

**Interviewer:** Had you attended any academic writing courses before your entry into the one-year MA program in the University of Nottingham?

**Interviewee:** Yes, I did attend a short-term academic writing course provided by a Chinese IELTS test training company. You know, the New Oriental School in Beijing.

**Interviewer:** Yes, it is a very popular private school specialised in English language test training. Do you find the academic writing course very helpful to your assignment writing now?

**Interviewee:** Not really, to be honest. It is more focused on the IELTS writing exam preparation really. The tutors teach us how to deal with the test, for example, sentence structures, organization, and things like that. But I don’t think these skills are very helpful to my current assignment writing.

**Interviewer:** Have you found any difficulties when writing up this first essay?

**Interviewee:** Yes, I did find quite a lot of problems when I wrote up this first assignment. For example, I feel it is hard to handle the structures within the 1,500 word count requirement. And the writing style is different as well; I feel like it is more academic style. Maybe I need to write up the assignment in the same way as journal writers do.

**Interviewer:** Are you attending any academic support courses now in the University of Nottingham? And how do you feel about it?

**Interviewee:** Yes, I am attending the academic writing course provided by CELE now. I found it is quite helpful really. It gives us a list of frequently used phrases in academic writing, like *the purpose of this report is... The data shows that...* etc. And it also provides us some commonly used structures for setting out an argument, and ways to write up the beginning paragraph. These are all very useful for my essay writing.

**Second interview**

**Interviewer:** You use *on condition that* in the first paragraph on page 6 of this essay. How confident are you when using this phrase? Do you still remember where you learned it from?

**Interviewee:** I first met this phrase in a friend’s essay when we were discussing academic writing techniques, but I had never used this expression before. So after looking it up in a dictionary, I thought it could be a good choice for my essays as well. I am not very confident with this usage though, because I am not sure whether it is formal and commonly used in academic writing.

**Fifth interview**

**Interviewer:** Did you find it difficult to write up this essay? Was there any difference from the previous one?

**Interviewee:** Not really, I think maybe I have already adjusted to the academic writing style, so I did not find it particularly difficult. I find I am more confident with my assignment compared with previous ones.

**Appendix B. Samples of appropriate and inappropriate lexical phrases judged by native raters**

Examples of appropriate lexical phrases (the underlined italic word combinations are identified lexical phrases):

1. *According to* Timmis (2002), these questionnaires are supported by a small population of English teachers and students (600 in total); though relatively small in number the responses do cover a geographical area, namely 45 different countries. (Essay 2)

2. When a teacher designs a program or just a specific activity what he/she needs to bear in mind is that the purpose and the process of the task must be clear for the learners. *In addition*, the teacher should provide some guidance about the self-assessing for the learners. . . . (Essay 5)
Examples of inappropriate lexical phrases:

1. **There is no reason to say** which method is better than the other, the selection of a method should depend on personal preferences and learner levels. (Essay 1)
2. Many teachers and writers **reckon that** word cards learning is undesirable because it is not being used for a communicative purpose. (Essay 1)

References


**Jie Li** is a PhD student studying at the University of Nottingham. Her academic interests include vocabulary learning and teaching, corpus linguistics, formulaic language, and foreign/second language acquisition. Her thesis focuses on Chinese learners’ employment of formulaic language in academic writing.

**Norbert Schmitt** is Professor of Applied Linguistics at the University of Nottingham. He has published extensively on issues concerning second language vocabulary acquisition and use, including a number of studies and a book (*Formulaic Sequences*, John Benjamins) on formulaic language. He is currently writing a vocabulary research manual for Palgrave Press.