# A Critical Examination of Lists of Formulaic Items

Lewis Murray
Dale Brown
*Kanazawa University*

With the importance of formulaic language now widely recognised, several lists of formulaic sequences for L2 pedagogical purposes have been developed. This paper reports on a critical appraisal of ten such lists with the aim of assisting language educators in understanding their characteristics, their strengths and weaknesses, and any issues common across the lists. Factors related to the processes undertaken in producing each list and features of the final products themselves were examined. The lists were found to fall into two categories: resource-oriented lists, seemingly intended mostly as a resource for teachers, materials writers and curriculum designers, in which the process of item identification was central; and learner-oriented lists, which displayed a focus on providing a user-friendly product. Notably, no list combined a rigorous selection process with user-friendly features. Moreover, each was focused on formulae of a single type and thus none captured the broad scope of formulaic language.

定型表現の重要性が広く認識されるようになったため、L2 教育目的の定型表現含有のリストがいくつか開発されている。本論では、英語教育者がリストの特徴、長所と短所、およびリストに共通する問題を理解するのに役立つように、10 個の定型表現リストの批判的評価について述べる。各リストの作成過程に関連する要因とそれらの最終的な成果物である定型表現リストの特徴も調査された。リストは 2 つのカテゴリに分類されることがわかった。1 つはリソース指向のリストで、これは主に教師、教材作成者、カリキュラム設計者のためのリソースとして意図されており、項目の識別プロセスが中心となっている。もう 1 つは学習者指向のリストで、学習者が使いやすい成果物を提供することに重点を置いている。注目すべきは、どのリストも厳格な選択過程と使いやすい機能を兼ね備えていないことである。さらに、それぞれが単一タイプの表現に焦点を当てているため、どのリストも定型表現の幅広い範囲を捉えていなかった。

**Keywords:** formulaic language, phraseology, phrases, word lists 定型表現、定型的な言い回し、フレーズ、単語リスト

**https://doi.org/10.37546/JALTTLT49.2-1**

In recent decades, strong theoretical arguments have been put forward regarding the importance of formulaic language (Pawley & Syder, 1983; Sinclair, 1991; Wray, 2002). This importance stems from its ubiquity (Hoey, 2005) and the variety of roles formulaic sequences play. It is suggested that these sequences are important in language use, offering processing advantages which enable fluent comprehension and production, and important to language learning by serving as raw material for the acquisition of linguistic features. These suggestions are increasingly backed by empirical evidence. For example, Kyle and Crossley (2015) found positive correlations between formulaic sequence use by L2 learners during oral tasks and measures of oral proficiency; Bestgen (2017) found strong positive correlations between use in L2 learners' writing and ratings of text quality; and Tavakoli and Uchihara (2019) found significant positive associations between use and objective temporal measures of oral fluency among L2 learners.

Concurrently, there have been calls for an emphasis on formulaic language in the classroom (e.g., Boers & Lindstromberg, 2012). For teachers and curriculum developers, this raises the question of how to identify which items merit pedagogical attention, given the variety of types of sequence and vast number of sequences. Helpfully, several lists of formulaic phrases for pedagogic purposes have been developed in recent years, yet this raises the further issue of judging which list might be optimal for a given pedagogic context (a question discussed previously regarding word lists; e.g., Thompson & Alzeer, 2019).

Hence, this paper reports on an examination of a sample of ten formulaic language lists (see Table 1) to determine their characteristics, strengths, and weaknesses, and reveal whether any particular type of list is lacking. This was done with a view to assisting teachers in understanding the usefulness of these lists and how other such lists can be evaluated, as well as in the hope that lessons may be learnt to guide the development of future lists. Accordingly, a set of factors for investigating each list was produced, drawing on elements discussed in the literature on word- and phrasal-list development (as cited below). The factors analysed relate to both the process of producing the list of formulaic phrases and the product itself. Concerning the list production process, the factors considered were: (a) clarity of purpose in developing the list; (b) reasoned selection of an item type (or types); (c) methods of item identification; and (d) list validation. Regarding the lists themselves, the factors explored were: (a) reasoned justification for the number of items; (b) logical specification of modality; (c) reasoned or-

ganization of the list; and (d) provision of additional information on items. The sections below present our findings.

**Table 1**

*Lists Selected for Examination*

| Author(s) | Year of Publication | Formulaic Phrasal List |
|---|---|---|
| Ackermann and Chen | 2013 | Academic Collocations List |
| Durrant | 2009 | Top 1000 key academic collocations |
| Garnier and Schmitt | 2015 | Phrasal Verb Pedagogical List |
| Hammond | 2018 | Assignment-specific Academic Phrasebank |
| Hsu | 2014 | The most frequent opaque formulaic sequences in English-medium college textbooks |
| Liu | 2012 | The most frequently-used multi-word constructions in academic written English |
| Martinez and Schmitt | 2012 | Phrasal Expressions List |
| Morley | 2023 | Academic Phrasebank |
| Shin and Nation | 2008 | The most frequent collocations in spoken English |
| Simpson-Vlach and Ellis | 2010 | Academic Formulas List |

## Examination of Processes

Nation (2016) observes that a key initial step in list development is a clear, concrete statement of purpose. In the case of the ten studies under examination, the underlying motivation (see Table 2) was pedagogical, though in some cases the list was intended for learners, in some cases for instructors and in some cases for materials writers. However, phrasal language is register sensitive (e.g., Biber et al. [2004] show that use in classroom teaching differs considerably from use in conversation) and, within academia, is sensitive to discipline (e.g., Hyland [2008a] found formulaic items used in biology to be quite different from those used in applied linguistics). Therefore, the statement of purpose might also be expected to clarify the context for which the list is intended. While all ten studies did this in some form, in some cases the context was stated only in broad terms as ESL/EFL. Moreover, the most common context among the lists examined was EAP, yet the discipline-sensitive nature of phrasal language suggests that this also may be too broad. Green and Lambert's (2019) observation that word lists are shifting towards discipline specificity is perhaps reflected only by Hammond (2018), who in fact went beyond this by describing the list's purpose as an assignment-specific resource for students.

**Table 2**

*The Purpose of Creating Each List*

| Author(s) | Stated Purpose |
|---|---|
| Ackermann and Chen (2013) | To create "a further tool for EAP teachers to construct appropriate teaching materials and help students focus on frequent lexical items beyond individual words" (p. 246). |
| Durrant (2009) | Since "existing pedagogical listings of academic collocations are insufficient," to attempt "to take some steps towards a more adequate listing" (p. 165). |
| Garnier and Schmitt (2015) | To be "of general usefulness for people using English for a variety of reasons" (p. 655) and "to provide teachers and learners with only the most essential information that should be targeted for explicit teaching/learning" (p. 652). |
| Hammond (2018) | To create "an assignment-specific (contextualised, authentic activity) phrasebank" (p. 98-99) which provides "a sufficient set [of phrases] for students to complete the assessments" (p. 100). |

| Author(s) | Stated Purpose |
|---|---|
| Hsu (2014) | To "establish a pedagogically useful list . . . for non-English majors in an EFL context, who need to read the textbooks of their fields in English" (p. 146). |
| Liu (2012) | To "examine MWCs [multi-word constructions] in academic writing in general" (p. 26) to "assist students in more effectively grasping these constructions in their writing" (p. 33). |
| Martinez and Schmitt (2012) | To "provide a basis for the systematic integration of multiword lexical items into teaching materials, vocabulary tests, and learning syllabuses" (p. 299). |
| Morley (2023) | To provide "examples of some of the phraseological 'nuts and bolts' of writing organised according to the main sections of a research paper or dissertation." |
| Shin and Nation (2008) | To create "a list of the most useful spoken collocations for elementary learners of English" (p. 339). |
| Simpson-Vlach and Ellis (2010) | To "create a pedagogically useful list of formulaic sequences for academic speech and writing" (p. 490). |

The second factor examined was the type of formulaic item focused on (see Table 3), and why this particular type was selected. Wray (2002) highlights the profusion of terms used in studies of formulaic language and the importance of clarity in specifying what a term is being used to refer to. In the majority of the studies, this was achieved, but Hammond (2018) and Morley (2023) provided less detail: Hammond talked of 'open-slot formulaic frames' (e.g., 'One way of looking at X is through Y', 'Understanding X is useful for Y') and Morley listed 'phrases' (e.g., 'It is thought that', 'There is evidence to suggest that'), without further specification.

Also notable across the studies was the variety of terms used and that, where the same term was used, the item type was defined such that the phrases identified were different in nature. For example, the *formulaic sequences* identified by Simpson-Vlach and Ellis (2010) are contiguous three- to five-word sequences occurring in academic spoken and written corpora with a frequency of more than 10 per million words, rated for formulaic and teaching value (e.g., 'in terms of', 'at the same time'); whereas *formulaic sequences* listed by Hsu (2014) are grammatically complete semantically non-transparent sequences of between two and five words occurring with a frequency of more than 5 per million in a college textbook corpus (e.g., '(be) accustomed to', '[come/get] to grips with'). That is, while both see length and frequency as defining characteristics of *formulaic sequences*, for Hsu, semantic opacity is also essential.

Despite the diversity in item types (see Table 3), the justification for focusing on a given item type was the same across studies: the authors argued that the item type of interest to them was a common feature of a given genre/register and therefore identifying and listing the most useful items of that particular type was of value in prioritizing items for pedagogy. This foregrounds the pedagogical motivation behind each of the studies. Yet the fact that all the studies shared a desire to identify useful items and at the same time focused on different types of items highlights the lack of clarity regarding what usefulness to learners with respect to formulaic language might actually mean. That is, generally, an item type seems to have been selected first, and then a method devised for identifying useful items of that type. Of greater value would be, first, developing a method for determining usefulness for learners, something none of the studies truly addresses, before then embarking on the selection of item types and identification of items.

Regarding item identification (see Table 3), various methods were used, and multiple metrics often employed within studies, with all but Hammond (2018) and Morley (2023) drawing their initial raw data from some form of corpus investigation. When developing a corpus-based list, Nation (2016) highlights selection of an appropriate corpus as a crucial step in development, as the corpus selected must be appropriate to the stated purpose, a task made easier the better defined the purpose is. Thus, Hsu's (2014) utilization of a purpose-built corpus of college textbooks was well-matched with the purpose of compiling a pedagogically useful list for EFL learners who need to read textbooks in English in their fields of study. Conversely, Martinez and Schmitt's (2012) selection of the British National Corpus, which is largely focussed on written, formal, informative discourse (Nation, 2016), seems somewhat at odds with the goal of developing a list for general EFL/ESL purposes (an issue, in fairness, these authors recognized) for which a corpus with a better balance of written/spoken discourse and informal as well as formal discourse might have been more appropriate.

The studies which drew on corpora typically began with a frequency-based search, identifying,

**Table 3**

*Features of the List Production Process*

| | Ackermann and Chen (2013) | Durrant (2009) | Garnier and Schmitt (2015) | Hammond (2018) | Hsu (2014) | Liu (2012) | Martinez and Schmitt (2012) | Morley (2023) | Shin and Nation (2008) | Simpson-Vlach and Ellis (2010) |
|---|---|---|---|---|---|---|---|---|---|---|
| Type of phrasal item included (as stated in each study) | | | | | | | | | | |
| 'Formulaic sequences' | | | | | ✓ | | | | | ✓ |
| 'Collocations' | ✓ | ✓ | | | | | | | ✓ | |
| 'Formulaic frames' | | | | ✓ | | | | | | |
| 'Phrasal verbs' | | | ✓ | | | | | | | |
| 'Multi-word constructions' | | | | | | ✓ | | | | |
| 'Multi-word expressions' | | | | | | | ✓ | | | |
| 'Phrases' | | | | | | | | ✓ | | |
| Metrics used for identifying items | | | | | | | | | | |
| Raw corpus frequency | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Statistical measures of corpus frequency | | ✓ | | | ✓ | | | | | ✓ |
| Human judgement | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Occurrence in dictionaries and previous studies | ✓ | | ✓ | | ✓ | ✓ | ✓ | | ✓ | |
| Validation of list conducted | | | | | | | | | | |
| Yes | ✓ | | | | ✓ | | | | ✓ | ✓ |
| No | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | |

in the case of those on formulaic sequences for example, word strings of a pre-determined length and frequency (e.g., Simpson-Vlach & Ellis, 2010; Martinez & Schmitt, 2012; Hsu, 2014). The output of this initial stage was then typically refined using additional metrics, including human judgement, statistical scores, and reference to dictionaries and existing single- and multi-word vocabulary lists. However, it is surprising that only three studies used frequency metrics beyond raw frequency, despite several decades of discussion in corpus linguistics on issues with raw frequency as a metric (e.g., Evert, 2008).

The use of human judgement also varied considerably across the studies, from the application of formal criteria to the use of researchers' intuitive evaluations. For example, Simpson-Vlach and Ellis (2010) had 20 experienced EAP instructors rate a corpus-based list of candidate phrases; and Ackermann and Chen (2013) themselves assessed a list for specific qualities before then having six 'experts' rate the items. In contrast, personal intuition, based on experience teaching the course for which the list was intended, was the sole factor in Hammond (2018) for determining which items to include, and Morley (2023) based selection purely on personal judgement guided by a series of questions.

Finally, validation of a word list (i.e., checking its quality) is an important step in development (Nation, 2016). In practical terms, this means confirming that the items are in fact useful and checking that useful items are not missing from the list. It is

therefore surprising, particularly given the rigorous process of item identification carried out in most of the studies, that several did not report any type of validation (Table 3). Among those that did, the methods adopted varied greatly. Ackermann and Chen (2013) looked at the proportion of discourse covered by their list (i.e., text coverage) in both the source corpus and a more general corpus. Hsu (2014) looked at coverage within the source corpus and in the academic section of the Corpus of Contemporary American English, and additionally reported how many of the identified phrases also featured in Martinez and Schmitt's (2012) PHRASE List. On the other hand, Simpson-Vlach and Ellis (2010) considered the use of human raters a form of validation, and Shin and Nation (2008) mention checking their results against previous studies but give no details.

In sum, regarding the list production process, there is considerable variation with regard to almost every factor. Even in cases where the same type of formulaic item appears to be the focus of multiple studies, it is often in name only, with the way it is defined and the identification criteria often varying considerably. Interestingly, being pedagogically motivated was the only factor about which all the studies were in agreement.

**Table 4**

*Features of the Lists*

| | Ackermann and Chen (2013) | Durrant (2009) | Garnier and Schmitt (2015) | Hammond (2018) | Hsu (2014) | Liu (2012) | Martinez and Schmitt (2012) | Morley (2023) | Shin and Nation (2008) | Simpson-Vlach and Ellis (2010) |
|---|---|---|---|---|---|---|---|---|---|---|
| Number of items | | | | | | | | | | |
| Number | 2,468 | 1,000 | 150 | 102 | 475 | 228 | 505 | 2,030[a] | 4,698 | 438 |
| Justification given | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | ✓ |
| Modality | | | | | | | | | | |
| Receptive | ✓ | | | ✓ | ✓ | | ✓ | | ✓ | |
| Productive | ✓ | ✓ | | ✓ | | ✓ | | ✓ | ✓ | |
| Ordering of items | | | | | | | | | | |
| Alphabetical | ✓ | | ✓ | | ✓ | | | | | |
| Frequency | | | ✓ | | | ✓ | ✓ | | ✓ | |
| Function | | | | | | ✓ | | | | ✓ |
| Spoken/Written | | | | | | | | | | ✓ |
| Moves/steps of paper | | | | ✓ | | | | ✓ | | |
| Length (of phrase) | | | | | ✓ | | | | | |
| Unspecified | | ✓ | | | | | | | | |
| Additional information provided | | | | | | | | | | |
| Meaning/function | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | |
| Examples | | | ✓ | ✓ | | | ✓ | ✓ | | |
| Genre/register information | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Form variability | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |

[a] The approximate number of phrases at the time of counting

## Examination of Products

The first element examined with respect to the lists themselves (i.e. the products that were produced by the processes examined above) was the number of items included on each list and whether justification was provided for this quantity. As Table 4 shows, this number varied considerably between lists, yet, when a justification was given, the authors were united in reporting a desire to keep to a practicable number that teachers would find useful and learners manageable. Clearly, there are quite different views as to what constitutes a practicable number of items. On the one hand, there are two lists that have similar goals, but differ greatly in size. Ackermann and Chen's (2013) list and Hsu's (2014) list are both intended to support EAP learners, but the former is five times the size of the latter. On the other hand, there are two lists that are similar in size, but differ greatly in the scope of their goals. Hammond (2018) and Garnier and Schmitt (2015) are both rather short (indeed, they are the two shortest lists examined), yet while Hammond was produced to support students completing a specific assignment, Garnier and Schmitt had the very broad goal of being 'of general usefulness for people using English for a variety of reasons' (p. 655). These disparities may again stem from under-specification of the lists' intended uses: that is, estimating the number of items that may be usefully included on a list is clearly easier if factors such as proficiency level, study purpose and learner age are specified.

The second factor examined was whether the items in the list were determined to be of value receptively or productively and whether this was coherent with the methods used. In some cases, the intended modality of the list was not even stated; where this was stated, studies were split fairly evenly between the two, or indeed specified both modalities (Table 4). However, the logic of the stated modality was not always apparent. On the one hand, for example, Hsu's (2014) list of opaque formulaic sequences found in a purpose-built corpus of college textbooks is explicitly for receptive use, which is logical and appropriate. On the other hand, Liu's (2012) list of written academic 'constructions' was intended for productive use by EAP learners, but drew on corpora of journal articles and book chapters; that is, expert-level academic discourse. While such language may be helpful at a receptive level, phrasal language is sensitive to academic register (Hyland, 2008b), suggesting that a corpus of writing closer to what the targeted users would be likely to produce may have been more fitting.

The next feature examined was how researchers chose to organize their list (Table 4), a feature which again varied considerably between studies. Corpus frequency was used most often, while other methods included listing phrases by functional categorization, with both Liu (2012) and Simpson-Vlach and Ellis (2010) following the model provided by Biber et al. (2004), or by the sections in an academic paper (Hammond, 2018; Morley, 2023). In some cases, lists were presented in two different formats, such as Garnier and Schmitt's (2015) which presented phrases both in frequency order and alphabetically. In many cases, perceived accessibility seems to have been the primary motivating factor determining the choice of method, but explicit reasoning for a given organizing principle was often lacking. For example, it might be reasoned that in a list intended for receptive purposes, alphabetical listing would be useful, allowing learners to look up a particular phrase, whereas in a list intended for productive use, listing items by frequency or function might be of more value. However, explanations such as these were absent. Rather, the approach adopted seems to have been based on researcher intuition and input from potential users was not generally sought. Once more, the suspicion arises that in some cases this may have been because there was not always a clear vision of an intended end user, context of use, and uses.

The final factor examined was what information was provided alongside phrases in each list (Table 4). The one piece of information provided by all the studies was the context for which the phrases were intended, although, as noted previously, how explicit this was made varied significantly. In Hsu (2014), for example, this was implied only by the list title, while others indicated the level of appropriacy of each phrase within different contexts (Martinez & Schmitt, 2012) or listed the items under different headings to indicate this (Simpson-Vlach & Ellis, 2010). Perhaps the best-defined context was given by Hammond (2018), whose phrasebank was intended for students writing a particular assignment, making it very clear which phrases are suitable for a specific context.

Alongside contextual use, information relating to variability in phrasal form, the meaning or function which phrases serve, and examples of phrases given in context were also provided to varying degrees. However, with the exception of Hammond (2018), who demonstrates the value of user feedback in list development, it is notable that the provision of information alongside the items was not informed by input from users of the lists.

## Discussion

This study examined ten lists of formulaic phrases with respect to both the processes used to produce the lists and the lists themselves. Looking across the findings, the lists can be seen as falling into two categories: resource-oriented or learner-oriented. In the former, comprising the majority of the lists, the focus is on a rigorous identification process for a narrowly defined item type, with the resultant list intended to serve principally as a resource which teachers, materials writers and curriculum designers may be able to draw on. In the latter category, represented only by Hammond (2018) and Morley (2023), the emphasis is on the creation of a user-friendly product. It is striking, however, that there is very little crossover between the two categories; that is, we would argue that it is desirable for a list to be both rigorously compiled and presented in a user-friendly format, but none of the lists examined had both of these features. For example, neither Hammond nor Morley selected phrases based on much more than intuition. However, the context for which each list was intended was made very clear, and more additional information was provided than in many of the other lists. Indeed, Hammond gathered feedback from students who had used an initial version of the list to determine how its user-friendliness might be improved upon. The resource-oriented lists, in contrast, provide far less support to users, in many cases being little more than a list of items for a broadly defined context.

Indeed, a general issue with the resource-oriented lists appears to stem from under-specification of their ultimate purpose, which led to choices in the compilation process and in the presentation of items that are sometimes hard to fathom. The above findings have highlighted a number of aspects of these lists which might have been enhanced with greater clarity regarding who the list would be used by, how, and for what purpose. At the process stage, clarity on these matters enables selection of suitable corpora to be used when identifying items and appropriately qualified people to act as raters of potential items, as well as providing a clearer idea of the number of items which may be suitable. In terms of the product, this clarity helps to determine how a list is organized and how the individual items are presented, potentially allowing for design input from users (as in Hammond, 2018), and enables the provision of context-specific examples of phrases in use.

The above examination also highlights various other features that may be of value to consider. Firstly, as previous studies have argued (e.g., Simpson-Vlach & Ellis, 2010), there are limitations in relying solely either on corpus interrogation or intuition, the two main metrics highlighted above, as a means of identifying items. As several of the list-development studies reveal, the use of multiple metrics helps to eliminate items that a single selection method may pick out, thus ensuring that items in the final list are of maximal value. Also clear is that nearly all the lists focus on a single type of formulaic item (e.g., collocations, phrasal verbs, formulaic sequences). Yet it is interesting to note that many of these lists are aimed broadly at academic written English and that the list developers each make a case for the particular type of formulaic item of interest to them being important in this type of discourse. This suggests, therefore, that rather than creating a list of the most useful items of a single specific type, it may be of value to identify items of a variety of types; that is, to identify all items that are important in a given type of discourse regardless of which item type.

## Conclusion

Formulaic language should be a key part of language pedagogy, but the sheer number of phrases in a language poses challenges for identifying a focus for instruction. Formulaic phrase lists can therefore be invaluable in assisting all those involved in language learning to prioritize the most useful phrases. The considerable efforts put into list development are therefore certainly positive. This study has sought to critically examine a sample of lists with a view to furthering understanding of such lists and the list development and design process. It should be noted that the study examined only a sample of formulaic language lists and was by no means exhaustive. Furthermore, the scope of the examination was limited to the development process of each list and the lists themselves. A more complete evaluation should factor in the practical usage of lists as well. Nevertheless, this study has found that, among the ten lists examined, no one list was both rigorous in the processes used to identify items and committed to organizing and presenting the resultant list of formulaic phrases in a manner that is maximally informative and accessible to users. It also found that almost no attempt was made to include a range of item types within a single list. In future, we would like to see lists that combine rigour with user-friendliness and in which formulaic items of various types appear alongside each other so as to reflect the broad scope of formulaic language.

## References


Ackermann, K., & Chen, Y. (2013). Developing the Academic Collocation List (ACL) – A corpus-driven and expert-judged approach. *Journal of English for Academic Purposes*, *12*(4), 235–247. https://doi.org/10.1016/j.jeap.2013.08.002

Bestgen, Y. (2017). Beyond single-word measures: L2 writing assessment, lexical richness and formulaic competence. *System*, *69*, 65–78. https://doi.org/10.1016/j.system.2017.08.004

Biber, D., Conrad, S., & Cortes, V. (2004). If you look at…: Lexical bundles in university teaching and textbooks. *Applied Linguistics*, *25*(3), 371–405. https://doi.org/10.1093/applin/25.3.371

Boers, F., & Lindstromberg, S. (2012). Experimental and intervention studies on formulaic sequences in a second language. *Annual Review of Applied Linguistics*, *32*, 83–110. https://doi.org/10.1017/S0267190512000050

Durrant, P. (2009). Investigating the viability of a collocation list for students of English for academic purposes. *English for Specific Purposes*, *28*(3), 157–169. https://doi.org/10.1016/j.esp.2009.02.002

Evert, S. (2008). Corpora and collocations. In A. Lüdeling & M. Kytö (Eds.), *Corpus linguistics: An international handbook* (pp. 1212-1248). Mouton de Gruyter.

Garnier, M., & Schmitt, N. (2015). The PHaVE List: A pedagogical list of phrasal verbs and their most frequent meaning senses. *Language Teaching Research*, *19*(6), 645–666. https://doi.org/10.1177/1362168814559798

Green, C., & Lambert, J. (2019). Position vectors, homologous chromosomes and gamma rays: Promoting disciplinary literacy through Secondary Phrase Lists. *English for Specific Purposes*, *53*, 1–12. https://doi.org/10.1016/j.esp.2018.08.004

Hammond, K. (2018). "I need it now!" Developing a formulaic frame phrasebank for a specific writing assessment: Student perceptions and recommendations. *Journal of English for Academic Purposes*, *31*, 98–105. https://doi.org/10.1016/j.jeap.2017.11.006

Hoey, M. (2005). *Lexical priming: A new theory of words and language*. Routledge.

Hsu, W. (2014). The most frequent opaque formulaic sequences in English-medium college textbooks. *System*, *47*, 146–161. https://doi.org/10.1016/j.system.2014.10.001

Hyland, K. (2008a). As can be seen: Lexical bundles and disciplinary variation. *English for Specific Purposes*, *27*(1), 4–21. https://doi.org/10.1016/j.esp.2007.06.001

Hyland, K. (2008b). Academic clusters: Text patterning in published and postgraduate writing. *International Journal of Applied Linguistics*, *18*(1), 41–62. https://doi.org/10.1111/j.1473-4192.2008.00178.x

Kyle, K., & Crossley, S. A. (2015). Automatically assessing lexical sophistication: Indices, tools, findings, and application. *TESOL Quarterly*, *49*(4), 757–786. https://doi.org/10.1002/tesq.194

Liu, D. (2012). The most frequently-used multi-word constructions in academic written English: A multi-corpus study. *English for Specific Purposes*, *31*(1), 25–35. https://doi.org/10.1016/j.esp.2011.07.002

Martinez, R., & Schmitt, N. (2012). A phrasal expressions list. *Applied Linguistics*, *33*(3), 299–320. https://doi.org/10.1093/applin/ams010

Morley, J. (2023). *Academic phrasebank*. University of Manchester. https://www.phrasebank.manchester.ac.uk

Nation, I. S. P. (2016). *Making and using word lists for language learning and testing*. John Benjamins.

Pawley, A., & Syder, F. (1983). Two puzzles for linguistic theory: Nativelike selection and nativelike fluency. In J. C. Richards & R. W. Schmidt (Eds.), *Language and communication* (pp. 191–226). Longman.

Shin, D., & Nation, P. (2008). Beyond single words: The most frequent collocations in spoken English. *ELT Journal*, *62*(4), 339–48. https://doi.org/10.1093/elt/ccm091

Simpson-Vlach, R., & Ellis, N. C. (2010). An academic formulas list: New methods in phraseology research. *Applied Linguistics*, *31*(4), 487–512. https://doi.org/10.1093/applin/amp058

Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford University Press.

Tavakoli, P., & Uchihara, T. (2019). To what extent are multiword sequences associated with oral fluency? *Language Learning*, *70*(2), 506–547. https://doi.org/10.1111/lang.12384

Thompson, P., & Alzeer, S. N. (2019). A survey of issues, practices and views related to corpus-based word lists for English language teaching and learning. *International Journal of Applied Linguistics and English Literature*, *8*(6), 43–53.

Wray, A. (2002). *Formulaic language and the lexicon*. Cambridge University Press. https://doi.org /10.1017/CBO9780511519772



**Lewis Murray** (MSc, University of Edinburgh), currently unattached, has extensive language teaching experience in Vietnam, China, Japan and the UK. His research focuses on L2 learners' acquisition and use of formulaic language and has been published in *TESL Canada Journal*, the *Journal of English for Academic Purposes*, and *JALT Journal*.

**Dale Brown** (Ph.D., Cardiff University) is an associate professor at Kanazawa University where he directs the academic English programme. His interests are in the analysis of language teaching materials and in all aspects of second language vocabulary, with

particular interests in L2 learning of collocations and derivational affixes.

## Appendix

### Examples of formulaic items from ten lists of formulaic phrases

Below are the first five items from each of the ten lists of formulaic phrases appraised.

Ackermann & Chen (2013): 'collocations'
- abstract concept
- academic achievement
- academic career
- academic circles
- academic community

Durrant (2009): 'collocations'
- this study
- associated with
- this paper
- based on
- and respectively

Garnier & Schmitt (2015): 'phrasal verbs'
- go on
- pick up
- come back
- come up
- go back

Hammond (2018): 'formulaic frames'
- understanding X is useful for Y.
- one way of looking at X is through Y.
- observing the development of X can be done by Y.
- analysing X through the perspective(s) of Y is valuable for ...
- X is important for (health practitioners) to be aware of because...

Hsu (2014): 'formulaic sequences'
- [auxiliary verb] + hardly
- [provided/providing] that
- [suppose/supposing] that
- a bit
- a few

Liu (2012): 'multi-word constructions'
- according to (det + N)
- (be) based on (det + N)
- in terms of (det + N)
- (by) the fact that
- (in) the case of (det + N)

Martinez & Schmitt (2012): 'multi-word expressions'
- have to
- there is/are
- such as
- going to (future)
- of course

Morley (2023): 'phrases'
- It is thought that...
- It is believed that...
- It has been reported that...
- It is a widely held view that...
- It has commonly been assumed that...

Shin & Nation (2008): 'collocations'
- you know
- I think (that)
- a bit
- (always [155], never [87]) used to {INF}
- as well

Simpson-Vlach & Ellis (2010): 'formulaic sequences'
- in terms of
- at the same time
- from the point of view
- in order to
- as well as