



*Hiroshima Lexical Research Forum*

# **H-LRF 2022**

*September 10th to 12th, 2022*

## **Book of Abstracts**

# H-LRF 2022

## How to Participate

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This year's H-LRF will be held from Saturday, September 10th to Monday, September 12th. All of the day's of the conference will be held using the same Zoom session. You will be able to join the Zoom session by clicking on the link below during the conference times.

### **Zoom Link:**

<https://tinyurl.com/hlrf2022>

### **Full Zoom link**

[https://us02web.zoom.us/j/88508772861?  
pwd=ODUvbVFhNXpkK1YxVXBXSTZMTzI3Zz09](https://us02web.zoom.us/j/88508772861?pwd=ODUvbVFhNXpkK1YxVXBXSTZMTzI3Zz09)

### **The conference schedule can be found here:**

<https://tinyurl.com/hlrf2022schedule>

### **Zoom Etiquette:**

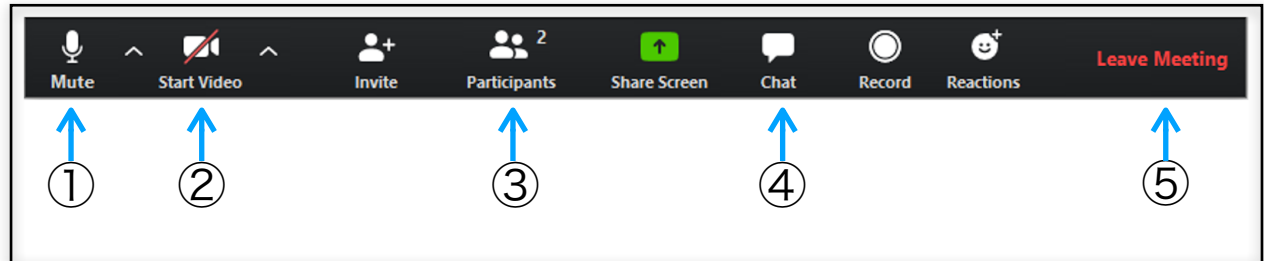
To ensure that everyone gets the most out of this year's conference, we have included a few requests regarding Zoom etiquette below.

- Please ensure that your microphone is muted when the presenter is talking
- We want the discussions to be as interactive as possible, so please feel free to use the Chat feature to ask and answer questions or make comments during the presentation.
- While the speaker will (probably) not be able to respond to your question during their presentation, we will have a question and answer session at the end of each talk.
- If you have a question, you would like to ask, please use the “raise your hand” feature of Zoom after the speaker has finished presenting.
- When asking your questions during the question and answer session, please ask your questions orally and ensure that both your microphone and camera are turned on.

## Using Zoom:

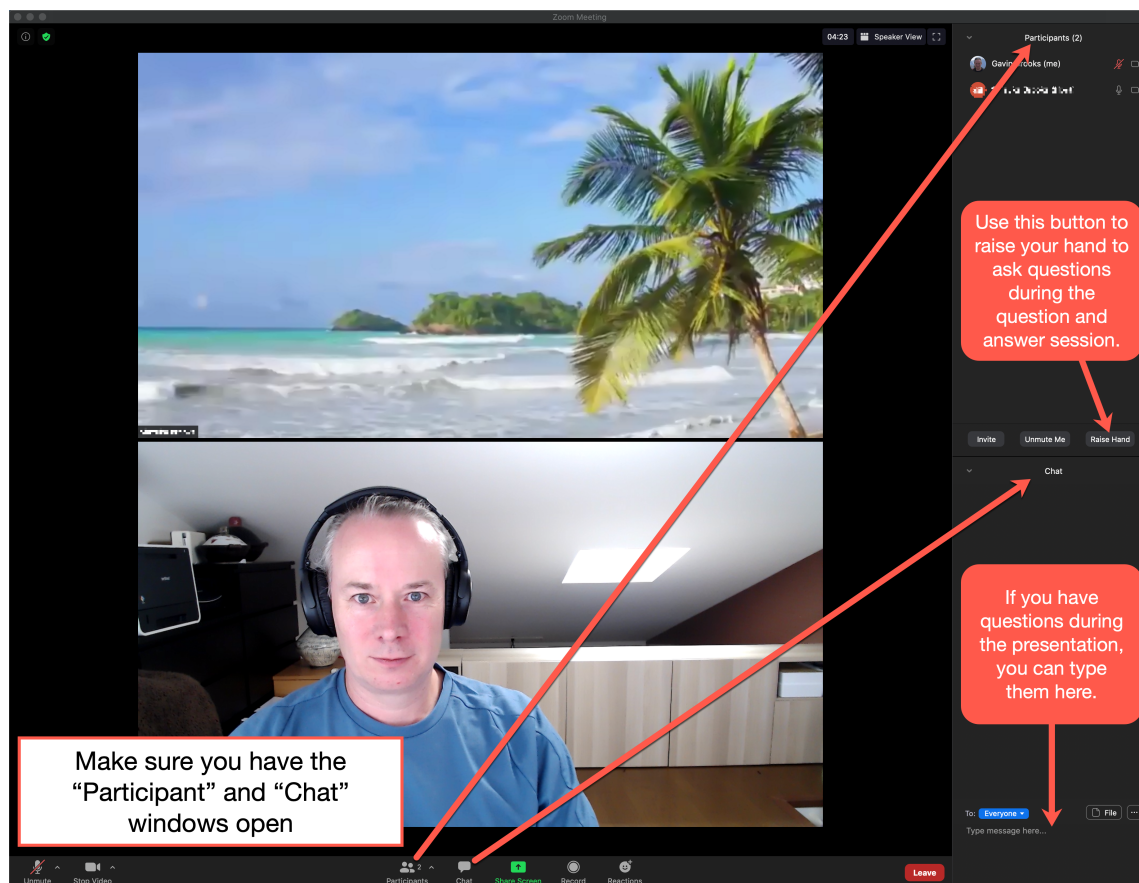
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This year's H-LRF will be delivered using Zoom. While I am sure that everyone is very familiar with Zoom at this point in time, we have included a few simple instructions and requests to ensure that the conference runs smoothly.



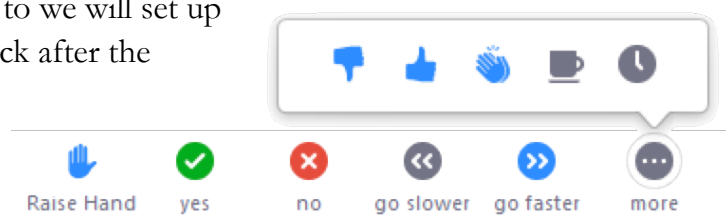
### When Joining:

- As soon as you login, make sure your video ② and microphone ① are turned on. To make things easier, we would also appreciate it if you could mute your microphone when the presenters are talking, as background noise from the microphones of audience members could cause Zoom to shift the focus away from the presenter.
- You should also open the participant ③ and chat windows ④ so that you can raise your hand if you have any questions or send a message to someone in the session.
- Make sure that your name is visible in the participant's window, as this is the name that the session chair will see when you are asking questions.
- If you need to leave the presentation, you can do so by clicking on Leave Meeting ⑤.



### Asking questions:

- Please ensure that your microphones are muted when the presenters are talking.
- You can ask questions during the presentation using the Chat feature of Zoom.
- We want these sessions to be as interactive as possible, so please feel free to respond to other audience members' comments or questions in the Chat box.
- After the presenter finishes, there will be time for questions and answers. These will be done orally. To ask a question:
- Raise your hand using the "Raise Hand" button in Zoom.
- The session chair will call on the audience members in the order in which they raised their hands.
- When your name is called, please turn on your microphone and ask your question to the presenter.
- Due to time constraints, we may not get to all of the questions. If you have a question that you wanted to ask but were not able to we will set up a question channel in the H-LRF Slack after the conference and continue the discussion there.





## Keynote 1

**Author:** Professor Paul Nation, *Victoria University of Wellington, New Zealand*

### What Really Matters in Vocabulary Learning?

A considerable amount of research on vocabulary learning shows that there are basically three things that matter – what aspect of vocabulary knowledge is focused on, the amount of attention and repetition, and the quality of the focus. These three requirements can be expressed as principles that both teachers and learners should know. These principles are easily applied and are very effective. This talk looks at these principles and their application.

There is also considerable research that shows that these principles apply much more widely than just to vocabulary learning. There is therefore value in making learners aware of these principles and how to use them.

## Keynote 2

**Authors:** Dr Irene Fioravanti, *Università per Stranieri di Perugia*; Professor Alessandro Lenci, *University of Pisa*; and Anna Siyanova-Chanturia, *Victoria University of Wellington & Ocean University of China*;

### Collocational Priming in L1 and L2 Speakers of Italian

Collocational priming can be described as a priming effect induced by collocationally related words (Hoey, 2005), and has been taken to support the cognitive reality of collocations. Studies into this phenomenon in English have shown that collocational priming exists for L1 speakers (L1, Durrant & Doherty, 2010; Ellis, Frey, & Jalkanen, 2009; Cangir, Büyükkantarcıoğlu, & Durrant, 2017). However, there is a lack of studies in other languages. Moreover, work on the representation of collocations in second languages is limited.

The present research investigates the nature of collocational priming in L1 and L2 speakers of Italian. To this aim, a lexical decision task was used in order to explore collocational priming in Italian Verb+Noun and Noun+Adjective collocations differing in frequency and collocational strength. A pattern mask was used to elicit automatic priming. Participants decided if a word was real or not in Italian as quickly and accurately as possible.

Mixed-effects modeling showed that L1 and L2 speakers responded faster to collocations than control pairs. Moreover, L1 speakers were sensitive to frequency bands and to the collocation predictability. Collocational priming was found between high frequency collocations; no priming effect was found in medium and low frequency conditions. Further, the effect of priming was stronger in more rather than less predictable collocations. Similarly,

L2 learners responded faster to high frequency collocations than to medium and low frequency items; they were also sensitive to the type of collocations (V+N vs. N+A). Exposure to L2 Italian was also found to play a role, with the effect of priming being stronger in learners with greater exposure to L2.

The present research suggests that collocational priming exists both for L1 and L2 speakers, supporting Hoey's (2005) claim that the mechanisms associated with collocation processing and representation in L1 and L2 may be comparable. In addition, our findings support usage-based models of language acquisition, processing, and use (Bybee, 1988; Langacker, 1987).

### **Keynote 3**

**Author:** Professor Averil Coxhead, *Victoria University of Wellington, New Zealand*

#### **Everyday Words in Language Learning for EAP/ESP: Not as Easy as Pie**

High frequency vocabulary is essential for all language learners. It appears in all kinds of written and spoken communication and makes up a large proportion of any text. Much research into this lexis focuses on general English (see Nation, 2013 for example) and on ways for learners and teachers to develop knowledge and use of this vocabulary. This talk focuses on the nature of high frequency vocabulary in EAP/ESP texts in three studies. The first investigates high frequency vocabulary with medical meanings. The second reports on a high frequency lexis in spoken English for Academic Purposes texts while the third provides somewhat of a contrast with rap music. There will be time for questions and discussion, particularly on implications and future research.

### **Keynote 4**

**Author:** Professor Jeanine Treffers-Daller, *University of Reading*

#### **Oral Vocabulary Skills and Reading Comprehension Among Low SES Children in India**

The aim of the study was to find out to what extent low socio-economic status (SES) children enrolled in government-run primary schools in Hyderabad are ready to receive instruction through the medium of English (English medium instruction [EMI]). To this end we investigated children's oral vocabulary skills, the lexical complexity of their textbooks, as well as the amount of English input they receive in class. A subsample of 90 children from primary school Grades 4 and 5 who opted to carry out a story retelling task in English rather than in Telugu took part in the study. Results reveal that the children's oral vocabulary levels

are far below the levels required to read the textbook materials. The lexical diversity of the children's stories was measured with Covington and McFall's (2010) Moving Average TTR as well as with the Index of Guiraud (Guiraud, 1954). Only Guiraud turned out to be a significant predictor of their reading comprehension scores. The latter was measured with a reading test from the Annual Status of Education Report, which is widely used in India. We conclude that children from low-SES enrolled in government schools are not ready for EMI, and call for further investigation into the levels of English vocabulary knowledge that are needed for EMI.

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## Keynote 5

**Author:** Professor Nivja de Jong, *Leiden University*

### The Concept of Fluency in Four Different Disciplines

This presentation critically evaluates the current conceptualization of fluency in the field of applied linguistics. Most of the research on fluency that is usually cited and used as an empirical basis, naturally, comes from that research field. This presentation, however, seeks evidence from four different research disciplines: applied linguistics, psycholinguistics, discourse analysis, and sociolinguistics. Incorporating evidence from these four disciplines, I will question the current conceptualization of fluency as a concept that should be sought in the ear of the beholder, and in which disfluency is usually seen as a deficit. In the end, research should focus on finding ways to ensure that the measures for fluency used in assessment and research reflect the ability to translate thoughts to speech easily and efficiently, rather than measures that reflect current raters' impressions about such an ability.

# The Contribution of Knowledge of Formulaic Sequences to Fluency: A Study Among Beginner L2 Learners of English

**Author:** Kholood Alali, *University of Reading*

A key problem for second language (L2) learners in many contexts is to improve the fluency of their speech (Tavakoli & Wright, 2020). While fluency practice should be an integral part of the curriculum (Nation, 2007), it is often not included in L2 curricula. Several researchers (e.g. Goncharov, 2019; Liang, 2017; Martinez & Schmitt, 2012) have highlighted the benefits of introducing fixed expressions – i.e. formulaic sequences (FSs) – for improving fluency and called for their inclusion in L2 curricula. However, there are still very few in-depth studies that examine the complexity, accuracy and fluency (CAF) of the FSs found in L2 speech in detail. The current study fills an important gap in our understanding of bigrams and trigrams in spontaneous L2 speech in that we developed a novel complexity index for FSs on the basis of indices from TAALES (Kyle et al., 2018), and monolinguals' judgements of the transparency of each FS and their complexity. The target population of this study are adult L2 learners of English in Kuwait. The sample under study (N=51) are all at A1 to A2 level according to the CEFR. The specific focus of the current paper is on the computation of CAF of FSs. We use our novel index of complexity to study the complexity of the FSs, and evaluate the fluency of FSs by studying pauses before and within each FSs. In addition, we focus on errors and error-free chunks in FSs, subsequently analysing the CAF of L2 learners' overall speech samples, and correlating this with the CAF of the FSs. Results from the pilot study show that CAF of students' speech correlate significantly with participants' use of FSs in a speaking task, revealing a clear link between overall fluency of L2 learners' speech and the CAF of FSs.

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# **Lexical Attrition in L2 among Bilingual Saudi Arabic-English Returnees and Saudi Heritage Speakers in the United States**

**Author:** Hadil Alraddadi, *University of Reading*

This study analyses the impact of the L1 on processing of L2 verb-noun collocations among returnees and heritage speakers. As noted by Schmid and Köpke (2009), the most sensitive feature of the linguistic system is the lexicon. The available empirical research to date investigating attrition in lexical knowledge is scarce, particularly attrition in collocational knowledge (Schmitt, 2010). One of the few available studies (Kopotev, Kisselev, & Polinsky, 2020) suggests that heritage speakers (HSs) use transfer-based non-standard word combinations, and that analysing such combinations can throw new light on the role of input in HSs language development. Here we aim to contribute to this discussion in a study of English L2 verb-noun collocations in which we compare 30 child and 30 adult HSs and returnees (RTs) against monolingual users of English. Participants are 30 child and 30 adult RTs who had lived in the US for an extended period of time and returned to their country of origin, Saudi Arabia, either in early childhood or in adolescence. They are compared to 60 Saudi HSs living in the US, and a group of monolinguals. Receptive knowledge of English collocations was measured with a novel online lexical decision task (LDT) consisting of English collocations which were either congruent, such as ‘have experience’ or incongruent between Arabic and English, for example, ‘do homework’, or belonged to two types of unattested collocations, half of which were L1-based, such as ‘grow fear’ and the other half were unattested in either language, for instance, ‘do mistakes’. Furthermore, a picture description task and an online gap-filling task focusing on verb-noun collocations were used to measure productive knowledge of collocations, and a range of baseline tests are administered to test vocabulary and grammar knowledge. It was predicted that HSs would achieve higher scores and experience less influence from Arabic on all productive and receptive tasks and would process English collocations faster than RTs, as the HSs are exposed to more and a richer input in English, whereas Saudi returnees are rarely exposed to English input. Preliminary results from 26 participants and a small control group of monolinguals reveal that RTs obtain lower scores than monolinguals on the LDT, whereas HSs perform at similar levels as monolinguals despite being younger and less experienced. In addition, there is a trend for RTs to be less good at identifying unattested transfer-based collocations with an Arabic equivalent than the HSs. Thus, the current study can throw new light on the role of input in collocational attrition among different groups of bilinguals.

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## Commercial off-the-shelf Game in English as a Foreign Language Classroom

**Author:** Maha Alzahrani, *University of Reading*

Learning new vocabulary is a challenging task for L2 learners and it is even more difficult for them to retain these new words in the longer term. One suggestion to enhance vocabulary learning and retention is the utilization of digital games. Recently, the use of digital games in L2 has grown in popularity and some empirical research has yielded positive results in terms of the number of learned words and levels of retention following playing digital games (Franciosi, Yagi & Tomoshige, 2016; Miller & Hegelheimer, 2006; Ranalli, 2008). However, more empirical studies are needed to fully understand the potential of these digital games and to implement them in purposive approaches in teaching and learning vocabulary in L2 classroom. This study aims to explore the effectiveness of commercial off-the-shelf (COTS) games, by comparison with an interactive e-learning platform (Active Presenter). In addition, we focus on the role of pre-teaching vocabulary of target words and learners' perceptions of and experiences with integrating COTS game in the L2 classroom. This study reports findings from an intervention study with 2x2 factorial design among 150 adults Saudi EFL learners. Two different teaching interventions were compared: a COTS game was compared with Active Presenter, and half of each group were taught target words with Quizlet prior to the intervention. A control group received vocabulary teaching through Quizlet only without any gaming or multimedia resources for 60 minutes. Semantic priming and form recognition tasks were conducted to measure vocabulary learning and retention at pretest, immediate post test and delayed post test. At the conference I hope to present findings of the study.

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## Introducing an English-Japanese Abstract Corpus System for EAP Vocabulary Learning

**Author:** Motoko Asano, *Osaka Medical and Pharmaceutical University*; Megumi Nakano, *Shizuoka University*; Yoshinori Miyazaki, *Shizuoka University*; Miho Fujieda, *Osaka Medical and Pharmaceutical University*

Genre-based instruction is essential for understanding English for academic purposes (EAP) discourse, in which discipline-specific lexical items realize textual purposes. These language items often carry general meanings in non-specialized texts, posing difficulties in learning. Identifying and understanding how these language items function in contexts are essential. The efficacy of using students' first language has been underscored. Building parallel corpora for classroom use is considered helpful for learners having shared L1-related difficulties. This study introduces an English-Japanese parallel corpus system, based on an international journal article abstracts and their official Japanese translations, to medical students. The bilingual-display system has a keyword-in-context concordancing function and records usage history. The system was used in first-year EAP classes; we used science news to exemplify genre communicating research to a general audience and then asked students to use the system to explore language items of their interest and report their findings. The most frequently searched language items were case, subject, and find, having multiple meanings in English for general purposes and EAP. Many students expressed their surprise with newly learned connotations of words such as mean for average and to find meaning to ascertain. Usage history analyses of the data from diverse-year undergraduates revealed that about 35% of search instances were unsuccessful, with around 18% attributable to various spelling errors. The findings have allowed us to add a suggesting function to the system to guide search activities to success. The first-year classroom activities and the students' comments will be reported in our presentation. We will explain how we have utilized the search history to add new features to the system, suggesting pedagogical implications of sustainable development-and-practice cycles with the system for supporting EAP learners.

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## Fluency Development With ESL Speed Readings, the Free Mobile App

**Author:** TJ Boutorwick

Speed reading is an important skill for language learning. It is categorized into Paul Nation's (2013) fluency strand of language learning. This is because there should be no unknown vocabulary, or at least very little, in the readings. In this way, learners can focus on increasing their reading speed, instead of learning vocabulary. At the English Language Institute, Victoria University of Wellington, teachers have been incorporating speeding reading for years. Over these years, Sonia Millett, Paul Nation, and Emmy Quinn have written over 100 stories for the speed reading component at the Institute. Each of these stories has a comprehension quiz which consists of 8-10 multiple-choice questions. Until recently, these stories were only available in PDF format. This presentation introduces the newest format for the speed readings. The speed readings have been used to create a mobile app titled 'ESL speed readings'. This is a free app and is available for both Android and iOS devices. The app currently has 120 stories graded into four different levels. The app manages the entire speed reading process, from easy selection of the readings, to automatic quiz scoring, and also data visualization. By automatizing this process, learners can focus on increasing their reading speed without worrying about writing down their reading time or grading their own quizzes. The presenter, who is also the developer of the app, will first outline the history of the readings. Next, they will mention some of the mechanics built into the app. The remaining portion of the presentation will be dedicated to a live demonstration of the app.

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## Why Do EAL Learners Struggle to Read Their Classroom Textbooks

**Author:** Gavin Brooks, *Nagoya University of Commerce and Business*; Jon Clenton, *Hiroshima University*; Simon Fraser, *Hiroshima University*

Given the rapid expansion of EAL education worldwide (Smith, 2015), combined with a commensurate increase in EAL learners in the UK (Strand et al., 2015), there is a pressing need to better support these learners. A growing body of evidence shows (e.g., Hessel & Murphy, 2019; Spencer et al., 2017; Townsend et al., 2016) that one vital area where teachers can provide support for EAL learners is English academic vocabulary. However, while research shows vocabulary knowledge is an important indicator of EAL learners' academic success, more research is required to better understand what words these learners actually need to know.

In this study, we try to answer this question by measuring the receptive vocabulary (Updated Vocabulary Levels Tests (uVLT), Webb et al., 2017) of 145 participants and the reading comprehension (York Assessment of Reading Comprehension (YARC), Snowling et al., 2009) scores of 38 participants enrolled in two international schools in Japan. We first used the participant's VLT scores to determine what percentage of vocabulary learners would be expected to know on the YARC. We then used a regression analysis to determine the effect vocabulary knowledge had on the participants' reading compressions scores. Finally, these results were used along with a corpus-based lexical analysis of a 6-million-word corpus of representative EAL textbooks compiled by the researchers to investigate the percentage of vocabulary the participants would be likely to know in these textbooks.

The results of our analysis highlight the struggles that EAL learners are likely to have in understanding the texts that they are being asked to read in the classroom, with the majority of the participants being three or more frequency bands lower than the 98% coverage necessary to understand these texts. We will discuss the implications of this and offer suggestions for better scaffolding academic vocabulary in the UK context.

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# High-School Learners' Productive Knowledge of English Collocations: A Cross-Sectional Investigation

**Author:** Dale Brown, *Kanazawa University*; David Coulson, *Ritsumeikan University*

Collocations are ubiquitous in language use and crucial for fluency and accuracy. Collocations have been described as an area of difficulty for L2 learners, even for those of advanced proficiency, with productive use in particular being seen as challenging (Bonk, 2000; Nesselhauf, 2005; Paquot & Granger, 2012). Notwithstanding the difficulties associated with the learning of collocations, learners do though, to some extent, gain the ability to use some collocations. How this knowledge develops is, however, as yet unclear. Some studies report a correlation between overall proficiency and collocation knowledge (e.g. Barfield, 2009; González Fernández and Schmitt, 2015; Revier, 2009), while others do not (e.g. Howarth, 1998; Nesselhauf, 2005), and at the same time, there are methodological problems with much of the research in this area. This paper will report on a study which aimed to improve understanding of the relationship between the productive collocation knowledge of L2 learners and general L2 proficiency by looking at a cross-section of learners among whom L2 proficiency differences could be expected. Specifically, the presentation will provide an analysis of data from a total of 621 learners across three grades of a single high school in Japan: 193 in first grade, 226 in second grade, and 202 in third grade. Data collection utilized a new measurement tool, LexCombi 2, which has undergone extensive trialling and development to overcome some of the methodological challenges in this area (see Brown, 2018). The paper will report on the extent of each groups' productive knowledge of English collocations, and on the development of collocation knowledge across the three groups.

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# Investigating Subjective Ratings and Objective Measures of Fluency and Vocabulary

**Author:** Dion Clingwall, *Prefectural University of Hiroshima*

We previously considered how fluency varies according to task (e.g., Tavakoli, 2016) and vocabulary knowledge varies according to fluency (e.g., Clenton, de Jong, Clingwall, & Fraser, 2021; Uchihara & Clenton, 2018). Although recent research has considered relationships within the fluency construct (e.g., Suzuki & Kormos, 2022) to our knowledge none have yet investigated whether objective measures of fluency, as used in our previous study, relate to subjective judgments of fluency (e.g., Isaacs & Thomson, 2013; Saito et al., 2016). Therefore, building on our initial study, the current paper examines whether listener judgments of accentedness and comprehensibility relate to objective measures of oral fluency and productive vocabulary.

Participants were 44 L1 Japanese learners of L2 English, (CEFR: B1-B2). Participants completed the three IELTS speaking tasks (monologic, quasi-dialogic, and dialogic) and recordings were made. Participants then completed both productive (Lex30) and receptive (X\_Lex) vocabulary knowledge tasks. The fluency measures included pause frequency, pause length, and articulation rate (e.g., de Jong, Steinel, Florijn, Schoonen, & Hulstijn, 2012; Tavakoli, 2016). Twelve experienced raters listened to the speech samples and rated them for accentedness and comprehensibility using a modified 1000-point slider scale (Saito et al., 2015).

We found: i) significant positive correlations between both accentedness and comprehensibility scores and speed of articulation – response duration, phonation rate, and speech rate (aspects of speed fluency); ii) significant negative correlations between accentedness scores and both silent pause ratio and silent pause duration (clause internal); and iii) significant negative correlations between the comprehensibility scores and silent pause ratio (clause internal, between clauses), silent pause duration (aspects of breakdown fluency). These results suggest speed fluency plays a significant positive role in both accentedness and comprehensibility, while breakdown fluency plays a significant negative role. I discuss the implications of these findings in terms of assessment and fluency research.

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# **A Study Investigating Word Association Behaviour in People with Acquired Language and Communication Disorders**

**Author:** Angela Maria Fenu, *Swansea University*

While a large proportion of word association research has been conducted on groups of typical language users, are very few the studies that have focused on atypical language users. This study was designed with the purpose to better characterize the nature of word association responses in people with aphasia. The participants selected for the experimental group were 4 individuals with aphasia without impaired auditory comprehension, or the absence of expressive speech. The control group consisted of 51 cognitively intact age- and gender-matched individuals. The participants were asked to perform a word association task in which they had to say the first word they thought of when hearing each cue. The cue words (n= 16) were selected from a translation in Italian of a set of English cue words from a published study on WA ("Altered Patterns of Word Associations in Dementia and Aphasia", Gewirth et al, 1984). The participants from the experimental group were administered the word association test every two weeks, for a period of two months. With the purpose of analysing different patterns of word association responses in people with aphasia, the nature of the relationship between the cue and the response was examined. Responses were divided into five categories of association, in line with the categorization analysis done in the original study. Before categorising the entire data set, it was decided to categorise at first the responses to the cues of four participants. In order to examine, instead, the similarity between aphasic individuals and non-aphasic subjects, the stereotype of responses will be examined.

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## **Incidental Learning of words and Formulaic Sequences from Audiovisual Input**

**Author:** Shi Haoting, *Ritsumeikan University*

For second language learners of English, audiovisual material is a rich source of comprehensible input. Evidence provided by previous research indicates that such material can help learners learn single words and formulaic sequences incidentally in a foreign language. However, the effect of the number of repetitions of individual words and phrases from the input and the effect of bilingual subtitles are still unclear. The present study aims to investigate the impact of bilingual subtitles and factors that influence learning at an intermediate level of proficiency. To do this, an 18-minute TED Talk video (Barrett, 2017) was used as the audiovisual material. Data were collected from twenty Chinese-L1 English-as-a-foreign language (EFL) learners. Learning gains were measured in three ways: form recall, form recognition, and meaning recall. A design including a pre-test, an immediate test, and a delayed test was used. The results showed that the effect of bilingual subtitles on the learning of both single words and formulaic sequences was significant compared to a control group in which subtitles were not used. More specifically, learning of single words can be better achieved on the level of form recall, while form recognition and meaning recall can be promoted for the learning of formulaic sequences. Moreover, repetitions did not play a role in both groups. No significant learning gains were found for the target items with and without repetitions. As video consumption has shifted from traditional to streaming, language learners now have easy access to authentic L2 videos. Thus, in order to fully grasp the learning process, more research is needed to explore the impact of bilingual subtitles on incidental learning through audiovisual input.

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## Comparing Human and Objective Vocabulary Ratings

**Author:** Philip Head, *Osaka Jogakuin University*

My research project attempts to compare groups of raters with different L1 and teaching experience backgrounds in terms of how they rate various aspects of English L2 speech comprehensibility. As a part of this research, I would like to use an “objective” measure of vocabulary in 1-2 minute monologues and see how this correlates to ratings of lexical resources (on a 9-point scale) by human raters. Hopefully this could be used to see how well different raters are able to recognize differences in the variety and complexity of the vocabulary in samples of L2 English speakers, as well as if there are any background factors that help the raters better reflect this complexity in their ratings. I would appreciate advice on the following areas: 1) What is the best method to objectively measure vocabulary in short speech samples? and 2) what sort of statistical analysis would be best suited to answer the question of correlation between the human 9-point scale vocabulary ratings and the objective measures? At the moment I have ratings of 44 different speaker recordings (Japanese, Thai, or Bengali L1) by approximately 150 different raters. The rater background factors being investigated are L1 (English, Japanese, or other), country of residence (Japan or Canada), and English teaching experience (teachers or students).



## Investigating Second Language Speaker Fluency with Processing Units

**Author:** Daniel Hougham, *Hiroshima University*; Jon Clenton, *Hiroshima University*; Takumi Uchihara, *Waseda University*

This paper contributes to discussions on how second language (L2) speaker multi-word sequence (MWS) use relates to oral fluency. Recent studies (e.g., Tavakoli & Uchihara, 2019) that take a learner-external approach (i.e., measuring MWS use according to their relative frequency in an external reference corpus) report the importance of this but a potential limitation of such approaches is that identified sequences might lack learner-internal validity (i.e., might not represent a processing advantage in the individual learner mind) (Myles & Cordier, 2017). To date, no single study has adopted a text-internal approach (i.e., measuring MWS use according to their frequency of occurrence within the learner corpus) when exploring the extent to which MWS use might represent a processing advantage for individual L2 learners of English. This presentation, accordingly, focuses on reporting the extent to which the most frequent MWS occurrences represent a processing advantage for individual learners.

Participants were 50 L1 Japanese undergraduate learners of English (estimated CEFR levels A1-B1). All took the same three speaking fluency tasks as Clenton et al. (2021) and de Jong et al. (2013). Both a text-internal approach and a modified version of Myles and Cordier's (2017) hierarchical identification method were adopted to examine the extent to which highly frequent four- and five-word sequences represented a processing advantage for individual learners. Our analysis involved examining the original sound files and spectrograms in PRAAT to see the extent to which each occurrence is phonologically coherent.

Our findings suggest (a) considerable variation in the extent to which each MWS is identified as a processing unit, and (b) some MWSs can be considered as being learner-internal processing units in progress even though individual learners do not always produce them with perfect phonological coherence. We discuss these findings in relation to innovative future research directions in applied linguistics.

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# **A Meta-analysis of Incidental Vocabulary Acquisition through Watching Subtitled Videos**

**Author:** Satsuki Kurokawa, *Tokyo University of Foreign Studies*; Aung Myo Hein, *Tokyo University of Foreign Studies*; Takumi Uchihara, *Waseda University*

Montero Perez et al.'s (2013) meta-analysis demonstrates the benefit of L2-captioned videos for vocabulary learning. Despite an increasing number of subsequent studies, however, no definite consensus has been reached regarding how a plethora of variables (e.g., learning context, L1-L2 writing system difference) influence the effect of captioning. Another point worth exploration, which is not addressed in Montero Perez et al. (2013), relates to the use of L1 subtitles and how it aids low-proficiency L2 learners' vocabulary acquisition. These research gaps motivate our meta-analysis to first expand Montero Perez et al. by incorporating studies published up to 2022, and secondly to compare the effectiveness of L2 captions and L1 subtitles.

Two separate meta-analyses are conducted, focusing on the group mean difference in vocabulary gains between caption and audio-only conditions (11 studies, 12 effect sizes, 1159 students) and between caption and L1 subtitle conditions (7 studies, 8 effect sizes, 369 participants). Amongst 18 coded variables, three moderator variables (i.e., L2 proficiency, learning context, and difference in L1-L2 writing system) will be presented.

Preliminary results suggest greater vocabulary learning for the captioning condition than the audio-only or L1 subtitle condition. Moderator analyses for the caption-control contrast show a greater advantage for the captioning group studying in second language contexts than in foreign language contexts. Captions also have a positive impact on lower-level learners rather than advanced ones. As for the caption-subtitle contrast, it is found that the advantage of captions over L1 subtitles is maximized when both L1 and L2 are alphabetic languages and that lower proficiency learners benefit more from L1 subtitles. Pedagogical implications will be considered with the aim of optimising the effectiveness of watching television with on-screen text in and outside the classroom.

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## Reading and Listening Vocabulary in Second Language Learning Textbooks

**Author:** Naheen Madarbakus-Ring, *University of Tsukuba*; Stuart Benson, *University of Aizu*

The textbook is considered a core teaching component in many English for Academic Purposes (EAP) programs at tertiary level institutions. Richards (2001) comments on how the textbook provides learners with programme structure, varied learning resources, and language models for effective practice to use in second language (L2) classrooms. Teachers use textbooks to standardize instruction, guide their own teacher training, and structure the course syllabus more systematically (Richards, 2001). In many cases, the textbook provides integral guidance for teachers and offers a constant source of support for learners in language learning.

Although commercial textbooks are well-developed and structured instructional tools for the classroom, textbooks may not provide learners with the necessary vocabulary knowledge to progress or support educators with suitable teaching content. Research focusing on different teaching contexts in China (Yang & Coxhead, 2020; Sun & Dang, 2020), Japan (O'Loughlin, 2012), and Australia (Matsuoka & Hirsh, 2010), have shown a variance in the lexical demands needed by learners to understand the textbook content. Therefore, this presentation investigated the reading and listening vocabulary load of two commercial textbooks to determine their suitability for learners in the Japanese tertiary-level context.

Analysis conducted using the BNC/COCA 25,000 lists show the lexical demands needed for second language learners. Additional analysis using the context-specific JACET8000 list suggest that learners' language experience influences their lexical knowledge in the Japanese tertiary-level context. The results show that the vocabulary load of listening, compared to reading, becomes increasingly difficult in the textbook. Further, the lexical demands of learners using the context-specific word list is higher than the learners using the general word list. Finally, pedagogical implications including suggested vocabulary tasks to attend to these learners' needs are discussed.

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# Different Text Lengths and LD Measure Speaking Predictability, Based on Simple, Flemma, and Lemma Counts

**Author:** Myint Maw, *Hiroshima University*; Jon Clenton, *Hiroshima University*; George Higginbotham, *Eikei University of Hiroshima*

Lexical diversity (LD) measures have been widely used to predict writing as well as speaking proficiency. However, two major issues with LD measures are that LD measure predictability is dependent on the analysis unit (Treffers-Daller et al., 2018; Maw et al., 2022), and LD measures are sensitive to text sample size (Zenker & Kyle, 2021). Treffers-Daller et al.'s (2018) study shows that 200 tokens seem a sufficient written constant text length for LD measures to predict general language proficiency, based on the lemma count. However, no single study, has guided the minimum ideal length at which LD measures show speaking predictability, based on different analysis units. The current paper, therefore, explores LD measure speaking predictability with different lengths, based on the simple, flemma, and lemma counts.

Data included 55 spoken transcripts with each consisting of two parts (presentation and seminar discussion) produced by ESL learners from a UK university. We analyzed only presentation part, and the texts with varying (431 to 1437 tokens) lengths were cleaned, flemmatized, and lemmatized using Python program. We created seven texts with different constant (200, 250, 300, 350, 400, and 450 tokens) lengths as well as full length for all three text (non-lemmatized, flemmatized, lemmatized) versions of each transcript. We computed LD scores using three basic LD measures (Types, TTR, Guiraud's Index), and three sophisticated LD measures (D, MTL, HD-D).

Our findings show that basic measures seemed more effective on different text lengths, based on the simple count while sophisticated measures were more useful once lemma count was used. Among all LD measures, only TTR could discriminate between 6.5 and 7.5 speaking levels for 450-non-lemmatized, full-length flemmatized and lemmatized texts. Regression analyses indicate the LD measure speaking predictability from 300 words onward once the measures were combined and the greater predictability on the longer texts.

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## Learning Secondary Meanings From Reading: The Role of Exposure Frequency

**Author:** Nurul Aini Mohd Jelani, *Victoria University of Wellington*; Irina Elgort, *Victoria University of Wellington*

Most words have more than one meaning. Readers encounter and learn new meanings of known words throughout their life, but does adding a new meaning affect the processing of previously-known meanings? And, if yes, what is the trajectory of change as the new meaning is incorporated in the lexical semantic networks of the learner? Recent research has contributed to our understanding of the learning mechanisms in biasing the activation a particular word's meaning (Rodd et al., 2013; 2016). In this experiment, we investigate the changes taking place in the lexical-semantic representations of a learner as a result of encountering new meanings of known words multiple times (2,4,6, or 8 times) in reading short stories. The effect of learning new (unrelated) meanings on the processing of the old meanings of known words was operationalised using a semantic relatedness judgement (SRJ) task, administered before and after the learning treatment. By looking at how access to the old meanings changed as a result of learning the new unrelated meanings, this study investigated whether (1) learning new meanings interferes with the processing of the old meanings and (2) whether the level of exposure (low versus high) modulates the degree of competition between the old and new meanings. The findings suggest that access to the old meanings was slower following the learning of new meanings, confirming the competition hypothesis. Stronger inhibitory effect was found when the exposures were lower (2 and 4) than when the exposures were higher (6 and 8), indicating that number of exposures modulates the degree of competition. Overall, the findings in the present study are consistent with previous research (Fang and Perfetti, 2017; Maciejewski et al., 2020). An explanation for this finding is offered using the co-activation hypothesis (Fang et al., 2017).

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## Examining EAP instructor ratings of corpus-derived academic written phrases

**Author:** Lewis Murray, *Kanazawa University*; Dale Brown, *Kanazawa University*

Formulaic language is a prominent feature of discourse, and this is especially so in the case of academic discourse (e.g. Hyland, 2008). Accordingly, a number of researchers have produced lists of useful academic phrases for pedagogical purposes. However, while various formulaic phrase types (e.g. collocations, lexical bundles and phrase frames) fall under the umbrella term ‘formulaic language’, the phrasal list studies to date, reflecting research in the field as a whole, have each tended to confine themselves to one single item type. That is, considerable efforts have been made in identifying what is of value with regard to specific formulaic phrase types, yet very little has been done by way of comparison across types.

In a step towards rectifying this, this presentation will report on a study of teacher ratings of different types of formulaic phrase with respect to the usefulness and cohesiveness of the items. Ten experienced EAP instructors provided ratings for 1,457 items, with five instructors rating items on their usefulness for L2 learners and five rating items on their cohesiveness as units of language. These ratings were collected as part of a project that is seeking to develop an academic phrasebank to support learners’ writing in the L2, and the 1,457 items were sourced from six lists of academic formulae: Simpson-Vlach and Ellis’s (2010) Academic Formulas List; Liu’s (2012) list of the most frequently used constructions in academic writing; Ackermann and Chen’s (2013) Academic Collocations List; and researcher-produced lists of n-grams, phrase frames and collocations derived from the British Academic Written English (BAWE) corpus. The presentation will discuss the consistency of ratings for each type of formulaic phrase and reveal whether certain types of phrase are more favoured by instructors in terms of usefulness and/or cohesiveness.

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## Reflecting on L2 Collocation Test Design

**Author:** Hang Nguyen, *Victoria University of Wellington*

This presentation reports the development of two Academic Collocation Tests (ACTs) for diagnostic purposes: the AC Recognition Test and the AC Recall Test. Knowledge of academic collocations (i.e., frequent two-word combinations in academic texts such as 'significant difference' and 'key element') is essential for EFL/ESL learners studying at English-medium universities. Although numerous tests on collocational knowledge have been published (e.g., Gyllstad, 2009; Nguyen & Webb, 2017), there is still a lack of in-depth discussion on how the test design reflects the test construct. The purpose of this talk is to discuss how different decisions throughout the development of the ACTs were related to the test construct. Issues addressed include component versus holistic view of collocations, wordlist-based test development, and recognition and recall test format.

Following the holistic approach, the current study defined the test construct as high-frequency academic collocations that function as unitary units in written academic contexts. A total of 60 collocations were sampled from the list of Ackermann and Chen (2013) to be used in the ACTs. A multiple-choice format was adopted for the AC Recognition Test and a gap-filling format was employed for the AC Recall Test. While wordlist-based test development supports the representativeness of the test items, the selected list is not ready to be used for developing frequency-based tests. This is because the list is neither published with collocation frequency information nor arranged by frequency. The formats of the ACTs are practical but may not accurately reflect how the language is used in real-world contexts. In particular, the AC Recognition Test format needs improvement to better correspond with the test construct. Lessons learned from the test development in this study provide useful implications for test developers in designing collocation tests.

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## Retrieval Practice Spacing, Definition Placement, and Learning of Phrasal Verbs

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This presentation is an overview of a planned research project. Previous research has found that retrieving information from memory produces better retention compared to restudying the same material for an equivalent amount of time (e.g., Roediger & Karpicke, 2006b). This effect has been referred to as retrieval practice (Roediger & Butler, 2011). In contextual vocabulary learning conditions, however, it is not clear whether there should be a short or a long space between the study phase and the retrieval practice. Previous L2 vocabulary learning studies with single words have obtained evidence in favour of providing definitions in contextual word learning conditions (e.g., Knight, 1994). What is less clear, however, is whether the definitions should be placed before learners encounter the novel items in the text or after they have made their meaning inferences (Elgort et al., 2020). Considering these gaps, the present study will investigate the effects of retrieval practice spacing and definition placement on the contextual learning of figurative phrasal verbs. Sixty figurative phrasal verbs will be embedded in thirty short texts developed by the researchers. One hundred EFL pre-intermediate learners will read the texts with the presence and placement of definitions being manipulated using counterbalancing. Next, participants will complete immediate and delayed retrieval tasks. The Immediate retrieval will be done after each text (approximately five minutes of spacing). The Delayed retrieval will be completed after reading two texts (approximately ten minutes of spacing). Participants' explicit knowledge of form and meaning of the target phrasal verbs will be measured through immediate and delayed multiple-choice, meaning retrieval out of context, and gap-fill posttests.

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## A Case Study of an ESP Textbook in Mechanical Engineering

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In vocational education in Vietnam, students take English for Specific Purposes (ESP) as part of their studies. In the ESP courses, teachers prepare their own materials in English but are not experts in the trades. In this presentation, I report on the number of words students need to know to understand the texts (vocabulary load) and the impact of Vietnamese translations on students' understanding of an ESP textbook in mechanical engineering of a vocational college in Vietnam. Using Nation's (2017) BNC/COCA 25,000 lists and AntWordProfiler (Anthony, 2021), I categorized and analyzed the 14,142-token corpus (12,949 tokens in English) and found that 6,000 and 9,000 word families of BNC/COCA lists including supplementary word lists were needed to understand 95% and 98% of the texts in English, respectively. This is a high vocabulary load compared to 5,000 families for 95% of understanding and 8,000 families for 98% in a study on trades language in New Zealand context (Coxhead et al., 2020). The translations of 218 English words and phrases were provided (e.g., force: lực, in theory: về lý thuyết) accounting for 70.32% of the vocabulary drawn attention to by ESP teachers followed by the uses of pictures and vocabulary-focused exercises. The impact of Vietnamese on the vocabulary load of the texts were examined by removing translated words and phrases. The vocabulary load decreased to 4,000 and 7,000 families with the supplementary lists to reach 95% and 98% of understanding, respectively. The findings imply that teachers should consider students' vocabulary level when designing textbooks. When the texts included in textbooks are too demanding for students, Vietnamese can be provided as a support for students' vocabulary learning.

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## **An Exploration Into L2 Postgraduate Reading Behaviour**

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This primarily qualitative study explores the reading behaviour of L2 students on an LL.M programme at a UK Higher Education Institution.

Thirty-four new entrants to an LL.M International Commercial Law module provided biodata and took a vocabulary test; fourteen of these then progressed to the interview stage to discuss their reading relating to two separate weeks of this module and their required module assignment. The fourteen reading sub-scores ranged from IELTS 5.5 to 8.5, and 20k vocabulary size test scores ranged from 2,600 to 15,800 word families (Coxhead et al., 2015). Reading behaviour observed during interviews therefore covered a wide range of proficiency levels.

Interviews have shed rich insights into the factors which underlie L2 reader comprehension behaviour at cognitive, affective and conative levels. These constitute each participant's unique "complex, dynamic system" (Dörnyei & Ryan, 2015) which underlies reading behaviour.

Written texts for the two module weeks formed two separate corpora on Sketch Engine. In order to estimate levels of reading challenge, texts were analysed for key words, collocations and multi-word units; readability scores were ascertained via Text Inspector, vocabulary burden levels estimated via Compleat Lexical Tutor and core academic vocabulary profile measured.

There was a medium-strength correlation both between the VST and overall IELTS scores and VST and IELTS reading sub-scores; indeed interview findings showed that it was clearly more challenging to extract and construct meaning if IELTS reading sub-scores were lower than 6.5 and VST lower than 7,000 word families, particularly without relevant background knowledge. However, there was no correlation between overall IELTS scores or reading sub-scores and assignment results. Readers' complex dynamic systems clearly play an important role in understanding reading behaviour. The insights afforded by this research may offer new ways to deliver pre-arrival programmes that are in line with PG L2 law student needs.

### **References**

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