Readings on L2 reading: Publications in other venues
2017–2018

Shenika Harris, Editor
Lindenwood University
United States

Carolina Bernales, Editor
Pontificia Universidad Católica de Valparaíso
Chile

Elizabeth Killingbeck Pratte, Editor
Lindenwood University
United States

David Balmaceda, Editor
Washington University
United States

Yanjie Li (Phoebe), Editor
Washington University
United States

Huan Liu, Editor
Washington University
United States

This feature offers an archive of articles published in other venues during the past year and serves as a valuable tool to readers of *Reading in a Foreign Language* (RFL). It treats any topic within the scope of RFL and second language reading. The articles are listed in alphabetical order, each with a complete reference as well as a brief summary. The editors of this feature attempt to include all related articles that appear in other venues. However, undoubtedly, this list is not exhaustive.

Abdolrezapour, P. (2017). Improving L2 reading comprehension through emotionalized dynamic assessment procedures. *Journal of Psycholinguistic Research*, *46*, 747–770.

The purpose of this quasi-experimental study was to investigate the pedagogical implications of dynamic assessment (DA) in reading by putting explicit emphasis on learner's emotional state. Explicitly, the objective of this study was to explore the impact of an emotionally-based DA on English as a foreign language (EFL) learners' reading performance. The participants in this study were 50 intermediate EFL learners taking EFL classes at a language center in Iran. All participants, ranging in ages from 12 to 15, were female with a first language (L1) of Farsi. There were three 8-week treatment conditions: (a) the experimental group ($n = 14$) which received emotionally loaded DA (EDA), (b) the comparison group ($n = 17$) students which received pure DA, and (c) the control condition ($n = 19$) which received normal classroom instruction. All students completed the Trait Emotional Intelligence Questionnaire-Adolescent Short Form (TEIQue-ASF) and a 60-item reading comprehension test. The authors in this study hypothesized that the EDA group would have higher posttest reading comprehension scores than learners in the DA condition or the control condition. The findings in this study showed that indeed, the EDA group showed a greater increase in reading performance than the other two groups indicating that EDA positively impacted EFL learners' reading performance. This study provides evidence that EFL instructors can integrate emotions in EFL reading instruction to promote reading comprehension.

Ahmadian, M., & Pasand, P. G. (2017). EFL learners' use of online metacognitive reading strategies and its relation to their self-efficacy in reading. *The Reading Matrix*, *17*(2), 117–132.

In this study, the authors set out to examine the relationship between the use of metacognitive strategies during online reading and self-efficacy in reading comprehension. This issue was further explored in relation to most and least used strategies and the influence of gender on their usage. Self-efficacy was conceptualized as learners' beliefs about their own capability to perform certain tasks. A total of 63 Iranian intermediate EFL learners took part in this study. Their ages ranged from 19 to 23, and 40 of them were female. In one data collection session, students were asked to read two passages online while recording their verbalizations about their reading process (think-aloud). After reading, they were asked to answer comprehension questions, followed by an adaptation of the Online Survey of Reading Strategies (OSORS) used in Anderson (2003), specifically tailored to study online metacognitive strategies in reading academic texts, and the Reading Self-efficacy questionnaire from Zare and Davoudi Mobarakeh (2011). Data analysis revealed that, in general, reading comprehension was enhanced by learners' sense of self-efficacy. More specifically, the most frequent strategies were problem-solving strategies like slow and careful reading, trying to regain concentration, and controlling reading speed, among others; least used strategies included support strategies (e.g., note taking or reading aloud) and global strategies (e.g., setting a purpose or chatting online with other learners), which female students used more frequently than their male peers, although male students reported a higher degree of self-efficacy in reading online texts. Data from the think-alouds provided evidence of other strategies used by learners (e.g., using online dictionaries, guessing from context, using synonyms, etc.) which, according to the authors, merit further research.

Akinwumi, J. O., & Olubunmi, O. C. (2017). Morphological instructional packages as determinants of inferring word meanings in reading comprehension among secondary school students. *International Journal of Education and Literacy Studies*, *5*(3), 67–72.

The present study examined the effectiveness of morphological instructional packages involving Problem-solving and Eclectic methods on the achievement of students in English reading comprehension as well as in inferring word meanings. A total of 270 senior secondary school Nigerian students were assigned to two experimental groups and one control group. For data collection, the following instruments were used: Morphological Production Task on Students' Academic Ability (MPTSAA), Morphological Analysis Task of Students' Academic Ability (MATSAA), and Achievement Test in Comprehension (ATC). To compare the achievement in English reading comprehension between the experimental groups using either Problem-solving or Eclectic methods with the control group, three statistical approaches were performed, which were Analysis of Covariance, Scheffe post-hoc test, and Multiple Classification Analysis (MCA). The results suggested that both Problem-solving and Eclectic methods enhanced students' achievement in English reading comprehension. To continue, the same statistical methods were used to compare the two experimental groups with the control group in students' achievement in inferring word meanings. The data confirmed the effectiveness of both Problem-solving and Eclectic methods in improving students' achievement in inferring word meaning. Hence, the researchers recommend that English language teachers employ morphological instruction packages exemplified by the Problem-solving and Eclectic methods in their teaching practice.

Alavinia, P., Shafaei, A., & Salimi, A. (2018). The effects of focused/unfocused audio-appended reading tasks on intermediate female EFL learners' written accuracy. *International Journal of Instruction*, *11*, 203–220.

In the following study, researchers sought to add to focus on form (FOF) second language research by studying the potential relationship between focused/unfocused reading tasks and second language (L2) learners' written accuracy. At an Iranian language institute, researchers selected participants ($N = 90$) from a pool of female English language learners with at least five years of EFL background and intermediate English language proficiency as determined by the Oxford Proficiency Test. Participants were divided into six equal groups: four experimental and two control groups. Each group completed the same pre- and posttest: text translation from L1 (Persian) to L2 English. Between the pre- and posttests, participants experienced focused or unfocused instruction on rule-bound (passive voice) or non-rule-bound (prepositions) English forms depending on the participant's group. The six groups were divided by instruction of a specific form: focused rule-bound, focused non-rule-bound, unfocused rule-bound, unfocused non-rule bound, rule-bound control, non-rule bound control. Both groups receiving focused instruction first received audio-appended reading texts with forms highlighted in-text and the instructor subsequently reviewed the material with focused intonation and repetition; the lesson ended with homework related to the target forms. Both groups receiving the unfocused instruction received unfocused texts while first listening to the audio files of the text, and subsequently, the instructor did not specially attend to the studied forms while reviewing the material. All groups completed the posttest, which was scored using Ellis's (2012) accuracy measure, according to the participant's use of the language form studied in the group. ANOVA

statistical analysis of the pre- and posttest scores, as well as SPSS version 19 analysis of raw test scores, found significant differences in accuracy of participants who received focused instruction and participants who received unfocused instruction. Both focused rule-bound and non-rule-bound groups performed with more written accuracy of the form studied in the respective group than the control and unfocused groups. The researchers argued that FOF instruction required learners to process the forms more deeply, thus promoting L2 acquisition to positively affect written language production.

Alfallaj, F. S. S. (2017). Reading competence of the Saudi EFL learner: Empowering the teachers through linguistics. *Advances in Language and Literary Studies*, *8*(3), 12–17.

This study evaluated the role of linguistics in empowering EFL teachers to challenge the reading failure of EFL learners in the Kingdom of Saudi Arabia (KSA). The participants were 73 intermediate English learners who signed up for the reading course at the Qassim University in Saudi Arabia. Data was collected through a questionnaire containing 21 agree/disagree survey questions. Results showed that 90% of the participants would prefer to be taught new words through learning word formation processes (i.e., derivation, compounding, and conversion). In relation to the teaching and learning of suprasegmental features in the EFL classroom, the results showed that 77% of the students would prefer that their instructors did not use Arabic intonation to teach English, the predominant practice in the KSA educational system. Furthermore, 90% of the participants agreed that with the current teaching methods, they would not be able to pronounce English like a native speaker. Several responses revealed the participant's lack of use of appropriate strategies to improve their L2 reading abilities. Additionally, 84% of the participants stated that they prefer to be taught novel words in context. Lastly, 94% of the participants preferred to use cultural familiarization to comprehend a text in English. Based on these results, the author made eight different recommendations. Among the recommendations, the author highlighted the need for EFL instructors to be equipped with basic linguistic knowledge to ensure effective teaching of their students. The author also pointed out the importance of including the teaching of reading strategies and the use of pre-, post- and during-reading activities in the English reading courses at the Qassim University in Saudi Arabia.

Al-Mekhlafi, A. M. (2018). EFL learners' metacognitive awareness of reading strategies. *International Journal of Instruction*, *11*, 297–308. doi.org/10.12973/iji.2018.11220a

This study investigated the self-reported EFL reading strategy habits of Omani language learners at the tertiary education level and compared the strategy usage between language levels and between male and female genders. Seventy-four participants from an Omani university EFL program were selected from elementary, intermediate, and advanced English levels to complete a questionnaire assessing the use of a learner's reading strategies. The think-aloud questionnaire was developed based on the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and Survey of Reading Strategies (SORS) in which participants responded using a 1–5 Likert scale number to itemized reading strategies. The questions were divided into three sub-categories related to cognitive and metacognitive strategies: global, problem-solving, and support. Results revealed that participants reported using support reading strategies the most, followed by problem-solving strategies and global reading strategies. Independent *t* tests were calculated between female and male responses at the $p < .05$ level. The data demonstrated significant

differences between male and female reading strategy use. Female participants used reading strategies more frequently overall and specifically used problem-solving and support reading strategies more frequently than males. Both females and males used global reading strategies at the same frequency. A one-way ANOVA was calculated to compare participant awareness to proficiency level. Statistically, there were no significant differences between participants of different language proficiencies and reported reading strategy use. Although, generally, all participants used reading strategies at a high rate. Also, the data generally revealed that intermediate level participants utilized support and problem-solving strategies more often than elementary level participants. Conversely, generally, intermediate level participants used global reading strategies less than elementary level participants.

Alturki, N. (2017). The effectiveness of using group story-mapping strategy to improve reading comprehension of students with learning disabilities. *Educational Research and Reviews*, *12*, 915–926.

In this study, the author examined the use of a group story-mapping graphic organizer on the reading comprehension of four 6th grade English as a second language (ESL) students with reading-related learning disabilities. All participants were native speakers of Spanish from ages 11 to 13 and were randomly assigned to either the experimental group (i.e., group story-mapping strategy intervention) or the control group. Students in both groups completed a small group reading activity which began with the instructor presenting the story and was followed by students reading the story aloud. In the experimental group, students received the treatment intervention which consisted of practice with discussing and identifying the following elements of a narrative: setting, characters, problem, solution, and opinion. Both groups completed a pretest survey about comprehension skills, a posttest reading comprehension assessment, and an open-ended interview. The results demonstrated that using the group story-mapping strategy helped students in the experimental group to better comprehend the text as indicated by the low performance of the participants in the control group, and higher performance for the participants in the experimental group. The interview data revealed that the participants in the control group found it difficult to understand what they had read. Overall, results reflected that participants in the experimental group demonstrated considerable improvement in reading comprehension after being exposed to using the group story-mapping strategy. The author recommended the use of graphic organizers such as the group story mapping to improve the reading comprehension skills of students with learning disabilities.

Awada, G. M., & Ghaith, G. M. (2018). Effect of the Paideia Seminar on the comprehension of poetry and reading anxiety. *Reading Psychology*, *39*, 69–89.

This study examined the impact of the Paideia Seminar (PS) on the reading comprehension and anxiety level of EFL students. A total of 50 Lebanese and Syrian ninth graders enrolled in two EFL classes at a public school in Beirut, Lebanon participated in the study. Both classes reviewed the same texts and completed the same pre- and posttests taken from the "Paideia Active Learning" materials. Students rated their reading anxiety level using the Reading Anxiety Scale (Young, 1999) at the initiation and conclusion of the study. While the class serving as the control group used the more traditional approach to reading comprehension with the teacher focusing on activities centered around the three main phases of the reading process, the class

serving as the experimental group used the PS approach with the teacher serving as the planner and facilitator of the reading process. The teacher provided students with relevant pictures and open-ended questions during all stages of the reading of the text which students used to discuss various elements and components of the text with their fellow classmates. Results revealed that students instructed using the PS approach performed better on the reading comprehension posttest and had lower levels of reading anxiety, as measured by the Reading Anxiety Scale (Young, 1999), compared to students instructed using the more traditional approach to reading comprehension. Given the findings, the researchers recommended the use of the PS in EFL courses to improve EFL student's reading comprehension and lower their EFL reading anxiety.

Balling, L. W. (2018). No effect of writing advice on reading comprehension. *Journal of Technical Writing and Communication*, *48*, 104–122.

The purpose of this eye-tracking study was to examine how L2 English writers interacted with recommended and non-recommended language constructs proposed by writing guides. (i.e., nominalizations vs. sentential constructions, reduced vs. full relative clauses, and active vs. passive sentences). The study is a partial replication of a study by Balling (2013) on the same topic conducted with L1 readers. A group of 27 Danish high school students, with an L2 of English, participated in this reading experiment. They were presented with four English texts that included recommended and problematic language constructions while their eye movements were recorded. To ensure careful reading, participants were given the task of looking for necessary information to spend a year abroad in the UK (e.g., taxation, healthcare, banking, and accommodation). Students also answered two reading comprehension questions that followed each text. The above-mentioned target constructions were manipulated (i.e., problematic and recommended constructions were interchanged with another) in the texts read by participants, and text manipulation did not affect text coherence. Each participant was randomly assigned to read the texts in one of two conditions: two texts in their original form and two texts that were manipulated. A mixed-effects regression model was used for data analysis. Eye-tracking measures, like Total Dwell Time, were used to measure time spent on specific constructions; the length and the position of the constructions in the sentence were also accounted for. Results failed to show a difference in time spent on recommended and non-recommended constructions as well as on the type of constructions. As expected, the length of construction was found to have an effect, as did the position of the construction in the sentence. The findings of this study were discussed in terms of the effect of writing on reading comprehension, reading speed and efficiency, and reader attitude. Although the study did not find evidence of writing advice (as reflected in text manipulations) on text comprehension, the author concluded that writing advice should be specific and contextualized.

Bellocchi, S., Tobia, V., & Bonifacci, P. (2017). Predictors of reading and comprehension abilities in bilingual and monolingual children: A longitudinal study on a transparent language. *Reading and Writing*, *30*, 1311–1334.

Based on the Simple View of Reading model (SVR), this two-year longitudinal study explored the role of L2 linguistic predictors in the decoding and comprehension skills of L2 Italian. Eighty-six first graders attending a primary school in Italy participated, among which one group (*n* = 30) consisted of bilingual children (varying in L1s) and the other *(n* = 56) of Italian

monolinguals. At the beginning of first grade, all children were measured on (a) Italian receptive vocabulary, (b) morphosyntactic knowledge, (c) pseudoword repetition, (d) phonological awareness (PA), (e) rapid automatized naming (RAN), and (f) letter knowledge (LK). Reading outcomes at the end of second grade were captured by: (a) word and pseudoword reading accuracy and speed assessments taken from the Batteria per la Valutazione della Dislessia e Disortografia Evolutiva-2 (developmental dyslexia and dysorthographia assessment battery; Sartori et al., 2007) and (b) passage reading and reading comprehension assessments using the Assessment di lettura e comprensione in eta evolutiva (ALCE Assessment of Reading and Comprehension in Developmental Age; Bonifacci, Tobia, Lami, & Snowling, 2014). Independent samples t tests revealed that the monolingual children had higher LK scores than the bilingual children ($t(84) = 3.99$, $p < .001$). Also, the monolingual children outperformed the bilingual children on the measures of morphosyntax ($t(84) = 3.67$, $p < .001$) and Italian receptive vocabulary ($t(84) = 8.53$, $p < .001$). However, both groups performed statistically identical on the pseudoword repetition and RAN tasks. For the outcome measures, bilinguals had poorer scores on the following measures: word reading accuracy ($t(84) = -2.12$, $p < .05$), pseudoword reading accuracy ($t(84) = -4.08$, $p < .001$), and reading comprehension ($t(84) = 4.78$, $p < .001$); however, the two groups were identical in word and pseudoword reading speed. Path analysis revealed different patterns of predictors in the two groups. Regarding the monolingual group, LK, morphosyntactic knowledge and RAN significantly predicted reading speed, while LK, morphosyntactic knowledge and Italian receptive vocabulary significantly predicted reading accuracy. For the bilingual group, reading speed was predicted by RAN, whereas reading accuracy was predicted by pseudoword repetition. Linear regression models indicated that LK ($\beta = .270$, $p < .05$) and Italian receptive vocabulary ($\beta = .272$, $p < .05$) were two significant predictors of reading comprehension for monolinguals, with LK, Italian receptive vocabulary and morphosyntactic knowledge together explaining 32.1% of the variance in reading comprehension. For bilinguals, morphosyntactic knowledge was a significant predictor of reading comprehension ($\beta = .496$, $p < .01$), and morphosyntactic knowledge and LK explained 34.8% of the variance in reading comprehension. In general, the study revealed the differences in reading and comprehension abilities between bilingual and monolingual groups. The study also confirmed the role of variables such as morphosyntactic knowledge and rapid automatized naming in reading and comprehension for both bilingual and monolingual children. The study called for future research examining variables associated with L2 reading achievement among bilingual children in immersion programs for better reading assessment and interventions.

Bown, A. (2018). Supporting online L2 academic reading comprehension with computer-mediated synchronous discussion and elaborative feedback. *The Reading Matrix*, *18*(1), 41–63.

Using a quasi-experimental mixed methods design, this paper investigated whether a post-reading Computer-mediated Synchronous Discussion (CMSD) activity could increase online L2 reading comprehension. Additionally, it examined the impact of adding elaborative feedback to CMSD on the improvement of reading comprehension. Two hundred and two L2 speakers of English at the Higher Colleges of Technology in the United Arab Emirates (UAE) were randomly assigned to either the treatment group or control groups. The author developed and administered the following instruments: two online reading comprehension tests, one online reading comprehension exercise, an online questionnaire, and a post-reading CMSD activity administered via Blackboard. While members of the treatment group participated in a chat room

as part of the CMSD task, members of the control group worked independently on the assigned reading comprehension exercise for an additional 15 minutes. All participants were asked to complete the posttest and an online questionnaire. The results revealed that students in the treatment group outperformed those in the control group on the posttest measure suggesting that post-reading CMSD activities could positively impact L2 reading comprehension. Peer scaffolding from more knowledgeable peers to less knowledgeable peers was reflected in several of the discussion logs. Additionally, the analysis of the chat logs showed that participants normally used the elaborative feedback during the CMSD sessions to aid their discussion partner's text comprehension. In relation to the learners' perceptions, it was found that overall learners considered all activities (i.e., the online reading exercise, the CMSD activity, and the elaborative feedback) as helpful in improving their online reading comprehension. The author concluded that the use of both elaborative feedback and CMSD could successfully aid L2 learning by providing valuable support to L2 learners.

Castro-Olivo, S., Preciado, J., Le, L., Marciante, M., & Garcia, M. (2017). The effects of culturally adapted version of First Steps to Success for Latino English language learners: Preliminary pilot study. *Psychology in the Schools*, *55*, 36–49.

With the purpose of addressing Latino students' disruptive behavior and reading difficulties, this study aimed to explore the effects of a culturally responsive intervention on English language learners (ELLs) from a Latino background. More specifically, the study sought to (a) validate the implementation of the culturally adapted version of the First Steps to Success (FSS) program and (b) explore whether this intervention and explicit decoding skills instruction can have an effect on engaged time, decoding skills, and behavior. An additional goal included knowing parents' and teachers' perceptions regarding the social validity of the intervention. Three five-year-old kindergarteners, one girl and two boys, who exhibited reading difficulties and disruptive behavior, were chosen from a suburban school district in Southern California to participate in this study. The FSS program was adapted according to the eight dimensions of the Ecology Validity model to incorporate a suitable context for the targeted participants; the parent component included six parent lessons focusing on basic parent training skills that contribute to school success (i.e., sharing the school day, enhancing cooperation/following directions, setting limits, solving problems, developing friendship skills, and building confidence/self-esteem). Both components were conducted at the same time. A reading intervention focused on Direct Instruction to enhance oral language and reading skills (oral language instruction/vocabulary, phonemic awareness, letter sounds, and decoding/blending skills) was also part of the battery of instruments. As for the culturally adapted parent component, it was administered through individual family meetings conducted at the parents' homes. The three participants were assessed with The Behavioral Observation System that measures percent of time engaged in academic activities, The Problem Behavior Measurement System (PBMS) that measures percent of time spent on problem behavior, and the Nonsense Word Fluency (NWF), and Phoneme Segmentation Fluency (PSF) assessments that served to quantify and verify students' progress on phonemic awareness and decoding skills. Teachers answered a questionnaire that assessed their satisfaction with the intervention, and parents provided verbal responses on their perception about the intervention. Results suggested that implementing a culturally adapted intervention addressing different needs was beneficial for Latino ELLs and their families, as demonstrated in a decrease in behavioral problems, an increase in academic engagement, and a low-moderate

increase in reading skills. Teachers and parents expressed satisfaction about the intervention. The authors concluded that there is a need for comprehensive and culturally responsive approaches as students who have multiple needs should receive multiple interventions that address what is beyond their immediate academic context and that include their caregivers and teachers as well.

Cheng, J., & Matthews, J. (2018). The relationship between three measures of L2 vocabulary knowledge and L2 listening and reading. *Language Testing*, *35*, 3–25.

The present study examined three dimensions of vocabulary knowledge, namely, receptive/orthographic (RecOrth), productive/orthographic (ProOrth), and productive/phonological (ProPhon) vocabulary knowledge and their relationship with L2 listening and L2 reading. Participants were 250 EFL university students (159 males and 91 females) recruited from 24 different majors at a large university in China. All participants were native speakers of Mandarin Chinese. Participants completed several tests for data collection. To assess the three dimensions of vocabulary knowledge, the format and structure of the tests for RecOrth, ProOrth, and ProPhon vocabulary knowledge were identical to the Vocabulary Levels Test, the controlled-production vocabulary levels test, and a partial dictation respectively. L2 listening was measured with a practice version of an IELTS listening test, and L2 reading was assessed with a researcher-developed multiple choice reading test. Correlational analyses showed that all three dimensions of vocabulary knowledge were significantly correlated with both L2 listening and L2 reading. Having said that, L2 listening had the strongest correlation with ProPho vocabulary knowledge ($r = .71$, $p < .001$), and L2 reading with ProOrth vocabulary knowledge ($r = .57$, $p < .001$). Hierarchical multiple regression modeling indicated that the ProPhon predictor variable explained 50.6% of the variance in L2 listening with RecOrth and ProOrth predictors adding 1.2% to the predictive power. As for L2 reading, results revealed that ProOrth vocabulary knowledge explained 32.8% of the variance whereas ProPho and ProOrth variables did not add to the predictive power. The findings advocated for pedagogical approaches that emphasize different dimensions of vocabulary knowledge to better facilitate both L2 listening and L2 reading.

Chung, W., Jarmulowicz, L., & Bidelman, G. (2017). Auditory processing, linguistic prosody awareness, and word reading in Mandarin-speaking children learning English. *Reading and Writing*, *30*, 1407–1429.

This study investigated the impact of several phonological-related variables on the word reading abilities of young learners of English. Sixty-one fourth-grade students, with an L1 of Mandarin and an L2 of English, participated in the study. Students completed measurements regarding the following abilities: nonverbal intelligence, auditory processing (i.e., a rise time task, a pitch contour task, and an interval discrimination task), linguistic prosody awareness (i.e., four tasks measuring Mandarin tone and English stress), and phonological awareness. L1 word reading ability was assessed using the Graded Chinese Character Recognition Test and L2 word reading was assessed using subtests of the Test of Word Reading Efficiency-II. Statistical analyses revealed several significant positive correlations between the following: the two pitch discrimination tasks ($r = 0.69$), the pitch discrimination task and the L1 final phoneme awareness task ($r = 0.26$), and the pitch discrimination and the L1 character recognition task ($r = 0.38$). Results also revealed several significant negative correlations between the following tasks: rise

time awareness and Mandarin L1 final phoneme awareness ($r = -0.25$), rise time and English L2 real word reading ($r = -0.41$), rise time and English L2 rhyme awareness ($r = -0.26$), and rise time and English L2 nonword reading ($r = -0.26$). Regarding students' word reading in each language, rise time discrimination was found to be the most important predictor of L2 English word reading, while pitch contour discrimination was found to be the most important predictor of Mandarin L1 word reading. Furthermore, while results revealed that linguistic prosody awareness was found to be more important to Mandarin L1 word reading, phonological awareness was found to be more important to English L2 word reading.

Dilenschneider, R. F. (2017). Examining the conditions of using an on-line dictionary to learn words and comprehend texts. *ReCALL*, *30*, 4–23.

The following study explored the impact of different look-up conditions on the reading comprehension and vocabulary learning of 84 Japanese EFL medical students. At four points during the semester, students read a different English passage containing six target words under one of three look-up situations: clicking on the target word and immediately receiving the definition in English (click), clicking on the target word and typing the word in order to receive the definition (spell), and reading the passage without the ability to look up the target words (control). All definitions for the click and the spell conditions were linked to the online Merriam-Webster's Learner's Dictionary. After reading the assigned passage for five minutes, students completed five briefs quizzes assessing comprehension of the passage and productive and receptive knowledge of the target words. Results indicated that the control condition yielded higher reading comprehension quiz scores, the spell condition higher word form quiz scores, and the click condition higher word meaning quiz scores. The researcher recommended that EFL instructors attempt to align the appropriate look-up condition with the intended learning goal of assigned passages.

Dirix, N., Cop, U., Drieghe, D., & Duyck, W. (2017). Cross-lingual neighborhood effects in generalized lexical decision and natural reading. *Journal of Experimental Psychology*, *43*, 887–915.

An orthographic neighbor is a novel word that differs from a target word by one letter and neighborhood density (*N* density) is the number of neighbors of a specific target word. The study explored the intra- and cross-lingual neighborhood effects based on the Bilingual Interactive Activation+ model (BIA+), "a language nonselective model of lexical access, which entails an integrated bilingual lexicon" (Dirix, Cop, Drieghe, & Duyck, 2017, p. 890). The first experiment investigated the effect of cross-lingual N density among 30 Dutch-English bilingual undergraduates. One hundred and sixty words (80 Dutch and 80 English) and 160 nonwords were selected. Each word was presented on a screen and participants judged whether the presented item was either a word (Dutch or English) or a nonword as quickly and accurately as possible. Reaction time (RT) was recorded. Participants were also tested on lexical knowledge in Dutch and English and completed a self-report questionnaire. Linear mixed models revealed that, with regard to the cross-lingual neighborhood effects, error rates for L1 Dutch reading depended on word frequency. For low-frequent words, increased cross-lingual *N* density was associated with lower error rates; but for high-frequent words, the impact was reversed. For L2 English reading, the effect of cross-lingual *N* density was inhibitory, in addition to more errors as cross-

lingual *N* density increased. With regard to the within-language neighborhood effects, no significant effect for L1 Dutch was identified; however, as within-language *N* density increased, fewer errors were found for low bigram frequency words. The second experiment explored the effect of *N* density and *N* frequency on natural reading from the GECO eye-tracking corpus (Cop et al., 2016) where the eye movements of 19 Dutch-English bilinguals and 13 English monolinguals were recorded. Participants silently read the novel *The Mysterious Affair at Styles* as a self-paced reading task, half in Dutch and half in English. Comprehension was checked by multiple-choice questions. Measures for eye movement included: (a) probability of first pass skipping of a word, (b) single fixation duration, (c) gaze duration (i.e., a measure of intermediate language processing), (d) total reading time, and (e) regression probability. With regard to cross-lingual neighborhood effects, linear mixed models revealed no significant effect in L1 Dutch reading. For L2 English reading, facilitatory effects were found in single fixation duration and gaze duration. Facilitatory effect was also identified with increasing L1 *N* density. In sum, when reading natural text, cross-lingual effects of neighbors were stronger for L2 reading but weak for L1 reading. In terms of the within-language neighborhood effects on L1 reading, significant effects of *N* density were found for skipping rates, single fixation durations, gaze durations, and total reading times, but the impact varied by word frequency, with increasing *N* density inhibiting the reading of the target word. For L2 reading, facilitatory effect of *N* density was only found in skipping rates and single fixation durations. As *N* density increased, high bigram frequency words were skipped more. The study highlighted the cross-lingual effects of *N* density on both lexical decision task and natural reading with bilinguals and called for future research that explores the size and direction of these effects.

Durgunoglu, A., & Bigelow, M. (2017). Classroom-based L2 vocabulary learning and comprehension: Replications of Lesaux, Kieffer, Faller & Kelley (2010). *Language Teaching*, *50*, 384–394.

Given the important impact of vocabulary knowledge on reading in an L2, the authors call for replications of the well-known study, "Classroom-based L2 vocabulary learning and comprehension," conducted by Lesaux, Kieffer, Faller, and Kelley (2010). The original study, which included 476 monolingual and bilingual sixth graders, found that an 18-week vocabulary intervention resulted in greater knowledge and understanding of the target vocabulary words in addition to better reading comprehension. Given the positive findings, the authors encourage researchers to replicate the study by implementing the original intervention in various secondary and post-secondary academic settings with participants of varying first language and second language proficiency levels. Results of such replication studies would provide valuable information regarding the relationship between vocabulary knowledge and L2 reading comprehension.

Esposito, J. (2017). Mnemonic networks: Multiple paths to learning Sino-Japanese characters. *The Reading Matrix*, *17*(2), 96–116.

Due to the importance of kanji proficiency for reading abilities in Japanese, the author proposes a new pedagogical approach to teaching kanji characters. This new approach, specifically geared towards native speakers of English, not only draws upon recent developments in the fields of memory, cognition, and applied linguistics, but also acknowledges the differences between

students' L1 and L2. Phonological awareness, a proven contributor to L2 reading ability, is a principal component of this mnemonic network method. The method consists of the following seven steps: (a) attention, (b) association, (c) identification, (d) repetition, (e) elaboration, (f) application, and (g) evaluation. Each step has a specific focus (e.g., meaning is the focus of the first step) along with appropriate activities to help learn the kanji character (e.g., a crossword puzzle is a common activity for the first step). This approach encourages both learner initiative and collaboration.

Friesen, D. C., & Haigh, C. A. (2018). How and why strategy instruction can improve second language reading comprehension: A review. *The Reading Matrix*, *18*(1), 1–18.

This review aimed to assist K-12 instructors teaching students with diverse language backgrounds. The authors linked cognitive frameworks to reading comprehension literature, demonstrated the strengths and difficulties of L2 learners in reading comprehension, and correlated reading strategy instruction to cognitive theories of reading comprehension. The article highlighted literacy development models, the Simple View of Reading (SVR; Gough & Tunmer, 1986), the Reading Rope Model (Scarborough, 2001), and the Construction-Integration (CI) Model (Kintsch, 1998, 2005; Kintsch & van Dijk, 1978), which emphasized the importance of: language skills and knowledge, the ability to mentally represent a text, executive control, and strategic reading behaviors when increasing reading comprehension. The authors also highlighted the importance of increasing a learner's L1 metacognition toward increasing L2 reading comprehension. The authors also outlined the strengths and weaknesses of integrating specific activities relating to the reviewed literacy development models. As a whole, the authors recommended a classroom balance of developing language knowledge while developing reading strategy abilities. According to the authors' research, reading strategy use reduced the cognitive expenditure of working memory which increased reading comprehension. The article found that explicit instruction on how to use reading strategies to mentally create textual representations would ultimately translate to reader autonomy and an improvement in language skills and reading comprehension development.

García, G. E., & Godina, H. (2017). A window into bilingual reading: The bilingual reading practices of fourth-grade, Mexican American children who are emergent bilinguals. *Journal of Literacy Research*, *49*, 273–301.

This study examined Mexican American emergent bilingual children's reading practices when reading texts in English and Spanish to collect evidence about bilingual development that can support new instructional standards. The focus was to identify and analyze the strategies employed by bilingual students, who were strong readers in Spanish, when reading in English. Specifically, the research questions inquired about the general and bilingual strategies used when reading in both languages, the relation between the use of strategies and cross-linguistic transfer, and the relation between the use of general and bilingual strategies. In addition, the study looked at students' reading skills in both languages and their oral proficiency in English. The participants were fourth graders who had been in transitional bilingual education (TBE) for three to four years and whose scores were above the 85th percentile on standardized Spanish reading tests. Four pen-and-pencil tasks were administered to assess students' reading level in Spanish and English. Six subjects were selected to participate in four individual reading sessions of 45 to

60 minutes in length, which were audio-recorded and transcribed, over three to four weeks. In prompted think-aloud interviews, participants were asked to read a text in silence, stop at predetermined segments, and discuss the text and their understanding of the text. After completing the reading passages, they were asked to retell what they had read. The texts read by the subjects were four, divided into Spanish and English, including narrative and expository passages in both languages. Using a constructivist/interpretive paradigm, researchers identified the strategies used by triangulating the data obtained through the think-aloud protocols, the transcript of retelling interviews, and the texts read by the participants. The use of each strategy was quantified to calculate the frequency of use for each text and classified according to the passage type and to the language. The analysis showed that most students used general and bilingual strategies when reading in English and Spanish, regardless of their oral English proficiency. The most frequent bilingual strategy used was translating, including paraphrased translating, direct translating, and summary translating, followed by code-mixing, which was mainly to deal with unfamiliar words and when the student chose to use the word from the text although its meaning was known in both languages. Results suggested that students transferred general and bilingual strategies from one language to the other. The authors called for further research on the role of oral reading fluency in emergent bilingual children's English reading comprehension, on the effectiveness of teaching bilingual children to improve their reading comprehension by focusing on their bilingual reading development, and on ways to assess their reading performance and instruction based on bilingual standards.

Gerlach, D. (2017). Reading and spelling difficulties in the ELT classroom. *ELT Journal*, *71*, 295–304.

Under the assumption that there is a relationship between students' reading and spelling skills in the L1 and low reading and spelling performance in a foreign language, the author of this article sought to examine some practical ways to identify reading and/or spelling difficulties (RSD) that learners of a foreign language may experience. In addition, the author discussed different approaches to address these difficulties to help students improve their reading and spelling abilities in English. For the first objective, the author referred to the lack of standardized instruments that can be used to identify RSD in L2 and proposed that standardized L1 instruments be used as a means to detect the occurrence of RSD difficulties in the L2 classroom. Based on the common areas of RSD difficulties for language learners (i.e., orthography, morphology, phonology), the author proposed approaches that include teaching grapheme–phoneme rules explicitly (e.g., explaining irregular roots of words), anticipating possible effects of mother tongue interference, creating frequency-based vocabulary lists, and using multisensory strategies when teaching the language. The author also highlighted the benefits of phonics instruction (i.e., teaching letter-sound relations) through the systematic use of at least two different senses. In this respect, the study emphasized the idea of using approaches from both the mother tongue and the foreign language instruction together as a way to maximize potential benefits. Other practical techniques used in L1 assessment to help students with RSD included giving these students extra time in exams that require writing, allowing them to show their abilities beyond their difficulties, and incorporating tools like dictionaries and audiobooks in the ELT classroom. The author proposed that these strategies be extended to foreign language teaching, especially because of the significant correlation between both languages regarding reading and spelling skills.

Gilbert, J. (2017). A study of ESL students' perceptions of their digital reading. *The Reading Matrix*, *17*(2), 179–195.

This study analyzed the metacognitive online reading strategies of adult intermediate and upper-intermediate ESL students by using qualitative research methods to determine learners' strategy use as well as knowledge gaps. A convenient sample of eight ethnically, linguistically, and culturally diverse ESL learners at an American private language school participated in interviews and reading workshop observations while also keeping student journals related to the experience. Data was analyzed using a strategies framework and coding process to identify patterns, categories, and themes. The themes were translated to metacognitive literacy strategies based on Sheorey and Mokhtari's (2001) categories. Coding for digital literacy education, or participants' perceptions of the necessity for digital literacy education in an ESL classroom, was also added. Participants self-reported to be active strategy users utilizing different strategies depending on reading context: printed or web text. Participants reported utilizing more strategies to engage with web than printed text. Participants' preference for a reading medium depended on reading purpose. Most preferred online reading for research and printed reading for pleasure. English language proficiency affected reading strategies with printed text: upper-intermediate level participants focused on global ideas, whereas intermediate level participants attended to line-reading. When reading online, general reading style equated to reading strategy choice instead of language level. All participants multi-tasked when reading online, but they did not demonstrate effective use of strategies when doing so. Participants were less inclined to review vocabulary when reading print than web text due to ease of access. Participants felt comfortable researching online, but they relied exclusively on the Google search engine and the first resources produced in a search. Also, participants struggled with finding appropriate search terms with which to conduct online searches, both generally and specifically in English. Many participants preferred to search for resources online, but then print the reading material to be consumed later as printed text. Navigating text online proved difficult for participants who reported struggling with reading continuity, distractions of hypermedia, and the unpredictability of clicking multiple hyperlinks that lead the participant away from the original source. Participants reported having strong digital literacy skills, but observations did not demonstrate coherent or strategic use of skills in researching or evaluating the credibility of sources. Ultimately, the author found that participants engaged in different reading patterns and strategies when reading online or printed text. When reading online, English language learners demonstrated an incomplete set of literacy skills: an inability to control the presentation of web text or strategically managing information, an inability to process information presented non-linearly and/or unstructuredly, and an unfamiliarity with techniques to assess authority and authenticity of sources. The author argued that digital literacy skills should accompany traditional literacy practices in the ESL classroom to support students since traditional literacy skills do not translate equally to online mediums.

Gottardo, A., Koh, P. W., Chen, X., & Jia, F. (2017). Models of English and Chinese word reading for adolescent Chinese–English bilinguals. *Reading and Writing*, *30*, 1377–1406.

This article reported on two studies that investigated the impact of L2 exposure and experience on Chinese-English bilinguals' word reading processes in both languages. In Study 1, the researchers examined the key variables in word reading, namely, word identification, phonological awareness, and vocabulary knowledge. A group of 87 Mandarin Chinese

adolescent speakers who attended high school in Canada participated in the study. They were divided into recent and long-term immigrants (i.e., seven or more years of residence in the country). Both groups were tested for (a) word-level reading using a measure of reading accuracy and a measure of decoding accuracy, (b) phonological awareness, (c) receptive vocabulary, and (d) nonverbal reasoning. Results showed differences in the variables that affect word reading in recent immigrants and long-term immigrants. That is, long-term immigrants scored higher than recent immigrants in all the measures tested. For long-term immigrants, more specifically, their word and pseudoword reading performances were determined by phonological awareness, which is comparable to the word reading by native speakers. For recent immigrants, however, it was found that vocabulary knowledge determined word and pseudoword reading. Study 2 investigated whether the variables in Study 1 showed similar relationships in the L1 (Chinese) and the L2 (English) in recent and long-term immigrants. In this study, word reading was further explored by morphological awareness, which was measured with a 40-item task adapted from Carlisle (2000). In addition to the measures used in Study 1 for English, a similar battery of tests was used to measure the same variables in Chinese. A sample of 117 Chinese-English bilinguals took part in this study. Findings revealed that English and Chinese share similar underlying word reading processes in the group that had recently immigrated into the target culture: vocabulary knowledge, not phonological awareness, determined word reading both in English and Chinese. In the case of long-term immigrants, reading processes were found to be different in both languages, with English word reading being related to phonological awareness. The authors argued that the L1 writing system might have influenced the L2 reading. Indeed, both groups, recent and long-term, presented a similar behavior in Chinese word reading.

Hadley, G., & Charles, M. (2017). Enhancing extensive reading with data-driven learning. *Language Learning & Technology*, *21*(3), 131–152.

Data-driven learning (DDL), in which learners use a corpus to explore grammar and vocabulary knowledge, has been found effective in developing learner autonomy and promoting language development. Taking a nested mixed-method approach, this study investigated the effect of DDL in an extensive reading program on the reading speed, vocabulary knowledge and grammar development among lower proficiency learners. Affective factors associated with the effectiveness of DDL were also analyzed. Twenty-two English learners (varying in L1s) enrolled in an Applied English course at a Japanese university were assigned to either an experimental (*n* = 12) or a control group (*n* = 10). Corpus materials were Bookworms Graded Readers containing 186 books in seven difficulty levels. In each class, participants silently read Bookworms Graded Readers for 30 to 45 minutes in each class. For an additional 30 minutes, students engaged in expansion activities in which the control group completed various conversation-based tasks, whereas the experimental group completed conversation- and DDL-based tasks. In addition, all students kept a vocabulary log worksheet, read at least 200,000 words during the treatment, and answered short online quizzes through MReader, an online program. A Vocabulary Levels Test (VLT) (Nation & Beglar, 2007) and a cloze test (C-test) (Klein-Braley & Raatz, 1984) served as a pretest as well as a posttest, which was administered at the end of the 16-week treatment period. The experimental group also completed a Personal Construct Repertory Grid to share their opinions about ER. Independent samples *t* tests comparing the pretest indicated no significant difference in lexico-grammatical proficiency ($t(22) = -0.466$, $p = .645$; $d = -0.18$) or speed reading ($t(22) = 1.031$, $p = .313$; $d = 0.44$) between the control and experimental groups.

C-test posttest scores revealed significant improvement for both the experimental ($t = 6.649$, $p < .001$, $d = 1.38$) and the control group ($t = 5.661$, $p < .001$, $d = 1.62$), but with the control group showing greater improvement. The difference in C-test posttest scores between the control and the experiment group was also significant ($t = 1.826$, $p = .041$, $d = -0.82$), with the control group slightly outperforming the experimental group. Speed reading posttest scores also revealed significant gains for both the experimental ($t = 4.538$, $p < .001$, $d = 1.13$) and the control group ($t = 6.203$, $p < .001$, $d = 2.06$), but, again, the control group outperformed the experimental group. For lexical measures, the control group had significant gains in the 3,000- and 5,000-word levels. Analysis of the Repertory Grid revealed that the experimental group enjoyed reading books and more group-based activities such as completing pair-work and role-playing and disliked more solitary activities such as writing compositions and giving presentations. The study concluded that DDL embedded in an extensive reading program for lower proficiency learners did not help improve learners' reading speed, lexical knowledge, or grammar knowledge. One potential affective reason was that learners found DDL to be unpleasant and preferred reading for enjoyment. Findings, as the study suggested, should trigger questions such as in what condition DDL would have positive effects for lower proficiency learners.

Haghani, N., & Bahmannejad, F. (2018). Reading comprehension and tolerance against comprehension ambiguities: An empirical study of Iranian GFL-learners in communicative education. *Journal of Education and Learning*, *7*(1), 1–12.

The goal of this study was to explore the relationship between ambiguity tolerance and the reading comprehension performance of Iranian German as a foreign language (GFL) learners at level B1. According to the authors, ambiguity tolerance has been defined as the "acceptance of confusing situations," (p. 2) and is a skill that can aid L2 learners with the uncertainties that form part of all L2 learning regardless of the language learning context or purpose. Forty-three GFL learners, aged 18 to 35, participated in the study. To measure reading comprehension, students answered three gap-filling tests, and an adapted version of Ely's (1995) Second Language Tolerance of Ambiguity Scale (SLTAS) was used to measure students' ambiguity tolerance. Contrary to previous studies, data analysis did not reveal a statistically significant relationship between the ambiguity tolerance of Iranian GFL learners and their achievement in reading comprehension.

Hall, C., Roberts, G. J., Cho, E., McCulley, L. V., Carroll, M., & Vaughn, S. (2017). Reading instruction for English learners in the middle grades: A meta-analysis. *Educational Psychology Review*, *29*, 763–794.

This meta-analysis analyzed 11 studies published in the last two decades on reading instruction for young English learners (ELs). Such studies employed both experimental and quasi-experimental research designs and were conducted in a variety of academic contexts (e.g., social studies, science, mathematics, English language arts) with students in fourth- through eighth-grade. The authors of this meta-analysis addressed the following research questions: "What non-program reading practices are associated with improved academic outcomes for students in grades four through eight who are ELs? What study characteristics, student characteristics, and/or features of instruction are associated with improved academic outcomes?" In total, there were 7,366 participants from all studies, and the majority of these students were middle school

students in grades fourth to eighth (n = 6,763). Results indicated that instruction combining vocabulary and comprehension resulted in higher reading outcomes than instruction consisting of vocabulary alone. In addition, the instruction that included active participation (i.e., small group activities, independent reading, and writing activities) by students was also effective in improving reading outcomes. The authors encourage the development of pedagogical approaches that include active student participation and combined vocabulary and comprehension instruction to improve the reading outcomes of young ELs.

Hassanpour, M., Ghonsooly, B., Nooghabi, M. J., & Shafiee, M. N. (2017). Investigating the relationships among metacognitive strategy training, willingness to read English medical texts, and reading comprehension ability using structural equation modeling. *The Reading Matrix*, *17*(2), 52–78.

In this quasi-experimental study, the authors examined the impact of metacognitive strategies on EFL learners' reading comprehension ability and their willingness to read English medical documents. Participants were 98 students from two medical courses. One course functioned as the control group and the other course as the experimental group. Participants in both groups, the control and experimental group, completed a Metacognitive Awareness Inventory (MAI) and the Willingness to Communicate in English questionnaire (WTC). Only the students in the experimental group; however, were provided with metacognitive reading strategies instruction (i.e., reading for main ideas and for organization). At the end of the course, all participants completed the same two pretest questionnaires in addition to a final exam. Results indicated a mutual relationship between metacognitive awareness and willingness to read in English. The final SEM model showed that students in the experimental group exhibited a higher level of metacognitive awareness than those in the control group. Through these findings, the authors concluded that teaching metacognitive strategies could lead to a higher level of student metacognition, which could also help to increase learner's willingness to read. The authors in this study made emphasis on the promotion of students' metacognitive awareness and willingness to read in English to improve their reading comprehension ability.

He, P. (2018). On reading comprehension teaching for English majors under Relevance Theory. *English Language Teaching*, *11*(1), 46–51.

In contrast to traditional teaching approaches to reading with an emphasis on linguistic and grammatical knowledge, Relevance Theory conceives reading as an ostensive-inferential process in which relevance is a key element for communication between a writer, who attempts to show or make evident their intention, and a reader, who attempts to make sense of the writer's intention if there is relevance between what is written and the reader's prior cognitive schema of information. The aim of this study was to explore how Relevance Theory can be used in teaching reading. To do so, this teaching reading study investigated students' reading abilities and attitudes towards reading before and after the experiment. Two groups of English majors in Nanchang Normal College participated in this study: Class One was chosen as the experimental group and received reading instruction according to Relevance Theory; Class Two was the control group and was taught according to traditional reading models. To measure their reading comprehension and attitudes towards reading, both classes completed a survey and a reading comprehension test based on the Test for English Majors (TEM-4), which showed the same

reading level for both groups with common characteristics, such as no clear reading goals, low reading speed, and difficulties with more demanding and longer texts. The author associated these with their low level of proficiency and their limited vocabulary. The year-long experiment was carried out in different stages in which Relevance Theory was introduced in the teaching of reading for Class One. Both groups were compared using reading examination scores and interviews. Test scores indicated that the experimental group outperformed the control group, and interviews revealed that using background information and clear reading objectives helped the reading speed and general understanding of students in Class One. The author concluded that using Relevance Theory in teaching reading can help students improve their ability to make inferences and, therefore, their reading comprehension as they are taught to identify clear reading purposes, set reading tasks, and construct a cognitive context.

Hooshyar, D., Yousefi, M., & Lim, H. (2018). A procedural content generation-based framework for educational games: Toward a tailored data-driven game for developing early English reading skills. *Journal of Educational Computing Research*, *56*, 293–310.

Considering both the designer and the user perspective, the authors in this study presented a procedural content generation framework for producing educational game content. A genetic algorithm was used to produce content that adapted to the skill level of the user allowing the user to achieve various learning objectives. The authors tested the effectiveness of the proposed framework by conducting research that involved a children's language learning game. The game was designed to help young learners improve their emerging L2 reading skills. The total number of participants in this study were 102 children from three Korean elementary schools. The participants' ages ranged from five to six years old. The participants were also randomly assigned into two groups of 51 children each. Once children in both groups were introduced to the data-driven language learning (DLL) game, the first phase of the experiment was carried out. Phase 1 consisted of pre-generated game content that helped determine each participant's performance and current proficiency in English. Phase 2 consisted of the generation of content customized to the skills of each player based on the data gathered from Phase 1. In order to have a comparison group, another set of uncustomized content was generated for participants in the second group. In other words, participants in the first group were asked to play a *customized* scenario, while participants in the second group played an *uncustomized* scenario. Results showed that participants enjoyed a greater improvement in English reading performance in playing the customized scenarios than in playing the uncustomized ones. Additionally, when playing the customized scenarios, results reflected that the lower proficiency participants showed even greater improvements in reading performance than did those of higher proficiency. The authors concluded that young students' reading performance significantly improves when interacting with individualized customized-game content.

Isaacson, S. A. (2017). The impact of interface on ESL reading comprehension and strategy use: A comparison of e-books and paper texts. *TESOL Journal*, *8*, 850–861.

In a university intensive English program, high-intermediate English level participants ($N = 22$) completed a triangulated study of observation, tests, and survey to compare the efficacy and student preference of the e-book against paper books in regard to reading comprehension. The participants were divided into two groups and each group ($n = 11$; $n = 11$) was given a text to

read in either paper or e-book form. Each participant met with a researcher one-on-one to complete a demographic survey, pretest, support strategy mini-lesson, reading session, posttest, and survey. A week later, participants returned to complete a delayed posttest. In the mini-lesson, participants were taught to perform reading support strategies specific to the reading form. The paper text group practiced highlighting/underlining/circling (HUC), English dictionary use, bilingual dictionary use, and note-taking in the mini-lesson. The e-book group learned the same strategies as well as the e-book's *comment* and *review* functions. During the reading session, the researcher noted the types and frequencies of strategy use. Upon completion of participant reading, paper texts and screenshots of the e-book pages were collected for analysis. Independent samples *t* tests were conducted to compare test scores between groups. Respectively, between groups, no statistically significant differences were found in posttest scores, delayed posttest scores, pretest to posttest score gains, or score decreases from posttest to delayed posttest. However, pretest scores revealed a significant difference ($p = .05$). Regarding strategy use, e-book participants used the bilingual dictionary most frequently, then HUC, and completely avoided note-taking. The e-book group also preferred the bilingual dictionary and completely avoided the English dictionary. On the other hand, the paper group varied more in their types of support strategies and used these strategies more frequently compared to the e-book group. The statistical data regarding strategy use varied so widely for both groups that the author suggested individual strategy use could have played a larger role than solely interface preference. Both groups reported the bilingual dictionary as a useful strategy and the majority of the paper group responded positively to choosing an electronic dictionary if one had been available. All participants using HUC recorded the strategy as useful, and no participants reported the English dictionary as a useful strategy. Participants' preferences of e-book or paper text corresponded to the text the participant used in the study. Both groups most frequently cited the text's ease of using support strategies as the reason for the preference. Ultimately, the author found that participants valued the interface used in the study as more familiar and useful than the interface the participant did not use. Additionally, e-books did not negatively or positively affect participants' L2 reading comprehension. However, because participants used support strategies differently depending on the interface, the author suggested the need to differentiate reading strategy instruction in an ESL classroom in which e-books are used by students. The author also noted that an overwhelming majority of e-book users who reported never having used e-books prior to the study reported preferring e-books after the reading session. The author suggested for ESL instructors to encourage students to try to use the technology in order to determine a student's potentially unknown preference.

Isozaki, A. H. (2018) Reading-listening and reading circles: Bimodal approaches building fluency. *The Reading Matrix*, *18*(1), 82–103.

This study investigated the effect of reading-listening at-home activities and in-class group activities on EFL learners' reading experiences. The participants were first- and second-year university EFL students, with a beginner to intermediate level of English proficiency, enrolled in four courses at two different Japanese universities. All students were instructed to read and listen to their assigned texts outside of class. Two classes read and listened to the graded reader story of A Faraway World by Maria Banfi while those in the other two classes were asked to read and listen to an ungraded memoir: Tuesdays with Morrie, by Mitch Albom. At both universities, students were grouped into several small reading circles (i.e., informal book clubs), consisting of

four to five students, during class to further discuss the assigned text. Participants in each course were asked to answer anonymous questionnaires on their experiences and opinions about the reading-listening projects. Results from all four courses and students' comments indicated that learners' self-awareness of vocabulary gains grew in part through providing a story and natural context for new vocabulary, with an audio component, and support from both the instructor and their fellow classmates. The majority of the participants reported that completing their reading-listening projects had eased and improved their experiences of reading and listening in English. Most of the participants agreed that the book club meetings (i.e., reading circles) were useful and enjoyable for them. The majority of the students also found helpful in a number of ways the listening to audiobooks before, simultaneously, or after reading. Overall, and from the results described in the study, the author concluded that giving students appropriately leveled reading and listening materials could offer positive experiences for learners of various proficiencies in foreign language reading. Such positive learning experience can be enhanced when reading and listening are accompanied by social support, options, guided autonomy in integrating student's reading, listening, and reading circle participation.

Jasińska, K. K., & Petitto, L. A. (2018). Age of bilingual exposure is related to the contribution of phonological and semantic knowledge to successful reading development. *Child Development*, *89*(1), 310–331.

This study investigated the relationship between age of language exposure and reading development in young children living in Canada. Elementary school students from first- to fourth-grade (*N* = 421) were divided into the following four groups based on their daily language exposure: (a) English monolinguals (i.e., English is the home and classroom language, (b) early bilinguals (i.e., child has two home languages before age of 3 and English is the classroom language), (c) late French bilinguals (i.e., English is the home language and French is the classroom language), and (d) late English bilinguals (i.e., child has a non-English home language before age of three and English is the classroom language). All students completed the following measures in English: three phonological awareness tasks, three semantic tasks, three reading tasks, and a language competence and expressive proficiency task (LCEP). English-French bilingual students also completed the same measures in French. Regarding the English semantic measures, results revealed that early bilinguals had higher scores than late English bilinguals on all three measures, while late French bilinguals had higher passage comprehension scores than monolinguals and late English bilinguals. Regarding English reading measures, early bilinguals and late French bilinguals had higher pseudoword reading scores than the other two groups. Regarding the English expressive language task, late English bilinguals had the lowest scores of all four groups; however, results indicated that all students, regardless of group, improved at this task with age. Overall, results revealed that later exposed English bilinguals were able to attain similar language and reading scores to those in the other groups with time. Regarding predictors of reading development, results revealed the following: (a) both semantic knowledge and phonological awareness were important for monolingual children, (b) phonological awareness was a strong predictor for early bilinguals and late French bilinguals, and (c) semantic knowledge was a strong predictor for late English bilinguals. Although preliminary, the study's results can offer possible directions for improving literacy instruction for young monolingual and bilingual learners.

Johnston, L. E., Mercer, S. H., & Geres-Smith, R. (2018). Incorporating vocabulary instruction in individual reading fluency interventions with English language learners. *Canadian Journal of School Psychology*, *33*, 63–81.

Research suggests that vocabulary knowledge can significantly impact reading comprehension. The aim of this study was to investigate the impact of adding vocabulary instruction to reading fluency interventions for young children learning English. The specific research purpose was to test if (a) students' reading comprehension benefits more from vocabulary instructional strategies than fluency-building strategies, (b) strategies focused on word definitions are as significant for students' comprehension as activities promoting engagement with word meaning, and (c) reading comprehension benefits from vocabulary instruction strategies even when reading untaught, generalization passages. Participants were two third graders and two fifth graders from a school in Vancouver, who were speakers of a language other than English at home and had no support beyond regular classes at school. Students' cognitive, receptive and reading skills were assessed with the Pattern Construction and Matrices subtests, the Peabody Picture Vocabulary Test, and survey-level assessment along with oral reading fluency (ORF) items from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), respectively. Participants were individually exposed to 15 reading intervention sessions, with five 30- to 40-minute sessions of each intervention condition, delivered two times a week. In each session, participants were assigned an ORF passage for them to read three to four times, according to one of three randomly assigned intervention conditions (i.e., fluency-only, fluency + word definitions, fluency + vocabulary processing questions). When conditions were compared, overall results showed that including vocabulary instruction did not have a significant impact on reading comprehension. This led the authors to conclude that the benefits of vocabulary instruction for English language learners' reading comprehension are not greater or more effective than those provided by fluency-building instruction.

Kakaew, J., & Damnet, A. (2017). Learning strategies model to enhance Thai undergraduate students' self-efficacy beliefs in EIL textual reading performance. *Advances in Language and Literary Studies*, *8*(6), 19–27.

Based on findings that a learner's self-efficacy (SE) seems to predict academic performance (Bembenutty, 2009), this classroom-based research investigated English language students' personal beliefs about personal ability in English as an international language (EIL) textual reading performance after receiving strategies-based training. At a Thai university, 33 first year Thai undergraduate English majors, enrolled in a preparatory EIL course, completed a pre- and post-intervention questionnaire adapted to identify a student's SE in EIL textual reading performance. Upon completion of the pre-questionnaire, throughout a 15-week course, participants completed 10 reading lessons, or 40 hours, in Rhetorical-Language Learning Strategies (RLLs), a model adapted from Oxford's (1990, 2001) Language Learning Strategies. Throughout the course, participants read differing rhetorical styles from Western and Asian sources, such as English, Singaporean, Chinese, and Vietnamese. Reading lessons linked rhetorical themes to learning strategies: organization and rhetorical textual styles to cognitive strategies, unknown content and rhetorical styles to compensatory strategies, recalling cultural styles of text to memory-related strategies. Because participants in the course were of mixed EIL proficiency, the lessons' informational texts and learning strategies model were adapted to

accommodate the varying needs of the class. The questionnaire was designed to capture demographic information as well as participant SE perceptions via a Likert scale and open-ended questions. The researchers discovered that all participants improved SE in reading and comprehension of both Western and Asian rhetorical styles, although most reported feeling more anxious reading Asian style texts. The responses also demonstrated that medium to low-proficiency EIL learners felt the most anxiety with Asian texts and reported a higher preference for working with a partner than higher proficiency students. The authors argued that the higher SE in the students' post-questionnaires related to the thoughtful and data-driven adaptation of texts and RLLs to the specific needs of the mixed EIL proficiencies in the class. Additionally, based on the participants' data, the explicit or direct instruction and practice of RLLs contributed to the students' improved perception of SE when reading different rhetorical modes.

Kim, K., & Clariana, R. B. (2017). Text signals influence second language expository text comprehension: Knowledge structure analysis. *Educational Technology Research and Development*, *65*, 909–930.

The present study delved into how text signals (i.e., underline) impact L2 expository science text comprehension and whether this influence differed due to L2 proficiency level. In addition, the concept of knowledge structure (KS) was introduced, and the researchers suggested that appropriate understanding of the KS implied that text comprehension had been achieved. A total of 88 Korean English language learners were selected based on their TOEFL score from a large Korean public university. Participants were assigned to two sections, section A and Section B. Each of the two sections had 44 participants consisting of 23 low proficiency and 21 high proficiency students. The study examined two different sets of underline signals: the non-important subtopic signal version (NIS) and an alternate substantively important subtopic signal version (SIS), and each version had seven underlined items to signal the interesting but non-important subtopics and the essential important subtopics respectively. Participants in section A completed the NIS text version while those in section B were assigned to the SIS text version. The text used to assess L2 reading comprehension was a paper-based TOEFL text passage. Participants from both sections were asked to read the same text and create an English visual map, which was followed by a multiple-choice posttest consisting of nine items. To examine the effects of text signal (NIS or SIS) and proficiency level (low or high) on text comprehension, a two-way ANOVA was run. The results demonstrated a significant effect for both factors as well as their interaction. Noteworthy, the low proficiency SIS participants (Low-SIS) achieved higher comprehension scores than the high proficiency NIS participants (High-NIS). Next, the researchers carefully analyzed participants' English visual maps to gain insight on their KS of the text. It was found that while the SIS maps were more similar to author/expert's map, the NIS maps were more idiosyncratic. Taken together, the findings suggested that test signals (SIS or NIS) substantially affected L2 readers' KS, and thus reading comprehension, of expository science texts across proficiency levels. Therefore, the researchers urged language teachers to emphasize text signals in developing learning materials to raise students' awareness of a text's overall topic structure.

Koh, P., Chen, X., Cummins, J., & Li, J. (2017). Literacy outcomes of a Chinese/English bilingual program in Ontario. *Canadian Modern Language Review*, *73*, 343–367.

The present study evaluated elementary student performance in a Canadian Chinese/English bilingual program. The program was transitional in nature and adopted a 50/50 framework with students receiving equal instruction in Chinese and English. There were three participant groups: (a) a bilingual program group (BPG) consisting of students enrolled in the beforementioned bilingual program, (b) an international languages program group (ILPG) consisting of a sub-sample of young Chinese/English bilingual students that attended English-only programs in addition to weekly 2.5 hour Chinese heritage programs, and (c) a comparison group (CG) consisting of monolingual English students that had completed the Education Quality and Accountability Office (EQAO) assessment which measured primary students' reading, writing and mathematical abilities. Participants completed tasks that measured the following in both Chinese and English: (a) receptive vocabulary, (b) phonological awareness, (c) morphological awareness, (d) word/character reading, and (e) reading comprehension. One-way analysis of covariance (ANCOVA) revealed that the BPG outperformed the ILPG on the Chinese character reading task in Grades 1 and 2. Although the BPG group generally outperformed their peers in the ILPG on all English measures, there were no significant differences in performance between both groups. In addition, results revealed that the BPG performed equally well or better than the norms of their monolingual English-speaking peers on the following English measures: phonological awareness, receptive vocabulary, word reading, and reading comprehension. Results also revealed cross-linguistic relationships between the two languages for the BPG with all measures in Chinese being positively correlated with the equivalent measures in English. When compared to the CG, students in the BPG did better than those in the ILPG in the areas of English reading and writing. Given that students that received equal instruction in both Chinese and English in the BPG normally outperformed those that received English-only instruction in ILPG, this research pointed to the efficacy of bilingual instruction in simultaneously developing literacy in both the first and second language.

Lee, H., Warschauer, M., & Lee, J. H. (2017). The effects of concordance-based electronic glosses on L2 vocabulary learning. *Language Learning & Technology*, *21*(2), 32–51.

The following study investigated the use of different types of glosses while reading texts in an online environment. One hundred thirty-eight EFL undergraduate students, with an L1 of Korean, served as participants. Students were enrolled in a mandatory English class and had at least an intermediate level proficiency in English, according to their scores on the Test of English for International Communication. Using a repeated measures design, students read a total of three digital texts containing 10 target lexical items (TLIs) in the following three conditions: (a) electronic glosses which linked to concordance lines (e.g., example sentences using the target vocabulary item), (b) electronic glosses linked to concordance lines and definitions taken from the Merriam-Webster Online Dictionary, and (c) no glosses which served as the control condition. Each concordance sentence included a checkbox so that students could identify which concordances they understood. Students completed a meaning-recall vocabulary test before and after reading each text. A sub-group of students (*n* = 3) also provided additional information and opinions about their use of the different glosses with the TLIs. Results revealed that students were able to recall more TLIs after reading the texts in the condition with the electronic gloss

linked to concordance lines and online dictionary definitions. In addition, students were able to recall more words in the concordance-only condition than the control condition of no glosses. The data also revealed a complex relationship among the glossing clicking behaviors, the difficulty level of concordance lines, the contextual environment of the target word and prior knowledge on the vocabulary recall of the participants in the study. The researchers encouraged continued research on the topic especially research that investigates different gloss conditions than those used in the study.

Lin, C. Y., Cheng, C., & Wang, M. (2018). The contribution of phonological and morphological awareness in Chinese-English bilingual reading acquisition. *Reading and Writing*, *31*, 99–132.

The study by Lin, Cheng, and Wang investigated how cross-language phonological and morphological awareness contribute to the development of reading skills in Chinese-English bilingual children. Specifically, the study focused on compound awareness (i.e., phonological and morphological awareness of the structure and meaning of compound words) in the acquisition of simultaneous L1 and L2 reading and the direction in which this transfer would occur (i.e., L1 to L2 or vice versa). One hundred and forty primary school children, in first to fourth grade, participated in the study. To measure phonological and morphological awareness (i.e., awareness of phoneme, onset-rime, compound structures, and polysemy) and its relationship to reading comprehension, children were asked to perform comparable tasks in Chinese and English. The measures to test L2 English awareness included a compound structure task, a polysemy identification task, a phoneme deletion task, an oral receptive vocabulary test, a real word reading task, and a reading comprehension test. For Chinese, children were tested using six measures: a compound structure task, a polysemy identification task, an onset-rime, and tone oddity task, an oral vocabulary test, a character and real word reading task, and a reading comprehension test. Data analysis revealed interesting cross-language transfer effects that lend support to the existence of bidirectional phonological and morphological transfer in reading development in both languages. For example, rime awareness in Chinese L1 directly affected word reading and comprehension in English, and at the same time, phoneme awareness in English directly affected single character word reading in Chinese. Other findings include an effect of polysemy identification in Chinese on English reading comprehension. There was also an indirect bidirectional effect of compound structure awareness in one language on reading in the other language. Several implications for Chinese-English bilingual education were discussed.

Lin, D. T. A., Pandian, A., & Jaganathan, P. (2017). Facilitating learner autonomy: Reading and effective dictionary use for lexical development. *The Reading Matrix*, *17*(2), 40–51.

This paper pointed out that possessing a large vocabulary is crucial for language competence. Previous research has shown that effective dictionary use promoted reading comprehension and subsequently lexical development. However, limited classroom time was simply not enough for students' vocabulary development. Therefore, it is essential for students to have a certain level of accountability and to enhance their vocabulary knowledge by using dictionaries autonomously outside the classroom. This paper provided a review of past studies on the advantages and disadvantages of using different types of dictionaries: monolingual, bilingual, and bilingualized. Although the findings of past research have not reached a consensus, the authors were in favor of monolingual dictionaries due to their accuracy, appropriateness for all proficiency levels and

exposure to the target language. In addition, the paper offered several pedagogical suggestions such as training learners to use dictionaries effectively, providing further explanation on easily confused words, and adopting online dictionaries. To conclude, the authors provided a post-reading vocabulary worksheet designed to enhance autonomous learners' vocabulary learning yet not disrupt their reading process.

Lin, L. (2017). Impacts of the problem-based learning pedagogy in English learners' reading comprehension, strategy use, and active learning attitudes. *Journal of Education and Training Studies*, *5*(6), 109–125.

This study examined the outcomes of an EFL learners' English reading comprehension (RC) ability, language strategy use, and active learning attitude in a problem-based learning (PBL) classroom. The study also investigated the potential correlation between EFL learners' English learning attitudes and RC abilities. Fifty-four native Mandarin-speaking undergraduate university students in Taiwan were chosen from two intact courses and then randomly assigned to groups taught with either the PBL method or non-PBL (teacher lecture) method. All participants demonstrated intermediate level English proficiency. The experimental group ($n = 26$) experienced PBL English reading instruction while the control group ($n = 30$) experienced non-PBL instruction. After separation, all participants: completed an English RC pretest, received either PBL or non-PBL instruction for 10 weeks, completed an English RC posttest, completed an active English learning attitude (AELA) questionnaire, and completed a self-report on the tasks completed in the course. Both groups demonstrated a similar English RC skill level prior to the teaching intervention as determined by independent samples *t* test performed on the pretest results. Both groups were taught using the same topics and intermediate-level reading materials. In the PBL course, participants were divided into small groups based on pretest scores to create heterogeneous groups. Each group chose a leader to assist the group in moments of misunderstanding as well as to organize meetings and distribute tasks to group members. The course began with a video and readings. At this point, the instructor established main ideas, themes, and vocabulary. For the rest of the intervention, the participants were required to discuss and read supplementary materials to solve the problem stated in the video and original texts. Participants were then instructed to, as a group, use all course materials to solve the problem and present a final solution to the class in English. The groups met in and outside of class to complete coursework. The instructor provided feedback on the group presentation. In the non-PBL course, participants completed coursework individually and completed a series of activities such as article read-alouds, text translations, and grammar exercises for each instructional segment. When students experienced uncertainty, the instructor assisted students individually. The instructor provided individual in-class feedback and out-of-class feedback on participants' exercises. Both groups completed a posttest which, like the pretest, measured: identifying main ideas (MAIN), synthesizing the subject matter of a passage (SUBM), searching for supporting details (SDET), drawing conclusions from a passage (CONC), identifying the devices used by the writer (DEVI), and decoding the meaning of the vocabulary from a passage (VOCA). Pre- and posttest data, as well as the AELA questionnaire responses, were analyzed for between-group and within-group significant differences. The data revealed that the PBL group's English RC was higher than the non-PBL group. A comparison of PBL and non-PBL pretest to posttest scores demonstrated that PBL instruction statistically significantly increased participant RC. Both groups varied significantly in the use of RC strategies; all PBL participants used SUBM

and SDET strategies better than non-PBL participants. According to the AELA questionnaire analysis, PBL participants demonstrated a significantly higher level of active learning attitude in learning English than non-PBL participants. The AELA questionnaire analysis also revealed that PBL-instructed participants demonstrated a significantly higher motivation intensity, desire to learn English, and communication inside and outside of the classroom than non-PBL participants. A Pearson correlation analysis on the RC posttest and AELA questionnaire responses revealed a strong correlation between reading comprehension ability and participants' AELAs. A calculation of task frequency in the self-report showed stronger use of active learning tasks by PBL participants. Ultimately, data analysis revealed that PBL instruction significantly improved an English learner's reading comprehension and the ability to apply SUBM and SDET strategies.

Lin, L. (2018). Integrating the problem-based learning approach into a web-based English reading course. *Journal of Educational Computing Research*, *56*, 105–133.

This study examined the impact of problem-based learning (PBL) on English reading comprehension (RC) and measured the English learner perspective of PBL. Sixty native Mandarin-speaking university students in Taiwan, with a background of eight to 10 years of English instruction, were randomly separated into two web-based English courses taught with either the PBL method or non-PBL (teacher lecture) method. All participants demonstrated an intermediate level English proficiency. After selection, all participants: completed an English RC pretest, received either PBL or non-PBL instruction for 10 weeks, completed an English RC posttest, and completed a self-reflective questionnaire and written self-report. Both groups demonstrated a similar English RC skill level prior to the teaching intervention as determined by an independent samples *t* test performed on the pretest results. Both groups were taught using the textbook Read and Think (Beatty, 2004), materials from a Moodle LMS, the Internet, and a social networking website. Both groups read the same texts and accessed the same materials throughout the courses. In the PBL course, participants received a problem which required research to solve. The participants were divided into smaller groups led by student leaders. Participants were required to analyze the problem and develop a plan and schedule of research to develop a solution. Misunderstandings were resolved by the group leader. Each participant synthesized ideas by writing a summary and then with group members presented the group's solution via PowerPoint slides to the class. The teacher acted only as a facilitator for research and as a reviewer of major themes and concepts over the course's progression. In the non-PBL course, students followed the teacher's directions, which included interpretations of content and focused vocabulary words related to the texts. Students also completed exercises related to content, vocabulary, and grammar. Data was analyzed for between-group and within-group significant differences using the ANCOVA analysis, independent-sample *t* tests, paired *t* tests, and content analysis which established themes, perception units and categories related to the participant learning outcomes and English learning perception. Data analysis demonstrated PBL to have a significant impact on the participants' English RC. As a whole, the PBL group demonstrated higher English RC after PBL instruction compared to the non-PBL group. Pretest and posttest within-group data analysis also demonstrated that PBL participants made significant English RC progress. The authors correlated PBL participants' significant agreement of being inspired to learn actively after completing a PBL course to the active student involvement inherent to the PBL method. PBL Participants also significantly reported that PBL instruction

offered increased English speaking practice and the opportunity to synthesize information. The author posited that the positive results and responses by participants were related to the nature of PBL as well as the application in a web-based context, which allowed participants to autonomously retrieve relevant information. Ultimately, in addition to the English RC gains, PBL participants also demonstrated significant agreement with the PBL curriculum.

Logan, J. K., & Kieffer, M. J. (2017). Evaluating the role of polysemous word knowledge in reading comprehension among bilingual adolescents. *Reading and Writing*, *30*, 1687–1704.

This study explored the relationship between students' knowledge of the academic meanings of polysemous words and reading comprehension skills. In order to test this relationship, the authors also reported on the development of a new measure of polysemy knowledge. One of the main assumptions of this study was that academic language is difficult to comprehend for students not only because of unfamiliar words, but also because familiar words are used in unfamiliar ways. To test this assumption, the authors investigated whether students' polysemous word knowledge predicted reading comprehension, regardless of their vocabulary size and decoding skills. Participants included 107 Spanish-English bilingual seventh graders. All participants took the Gates-MacGinitie Reading Comprehension Test, which required students to read and understand short passages of narrative and informational texts, followed by a set of literal and inferential multiple- choice questions. They also completed the research-designed instrument, Polysemous Word Test, in which they had to select the correct meaning of target words situated in both casual and academic contexts. In addition, students' decoding skills were assessed using the Woodcock-Johnson III Word Attack subtest (Woodcock, McGrew, & Mather, 2001) and their breadth of vocabulary knowledge using the Peabody Picture Vocabulary Test (4th edition; Dunn & Dunn, 2007). Results showed that knowledge of academic meanings of polysemous words predicted participant's reading comprehension levels even after controlling for decoding skills and vocabulary breadth, confirming that polysemous vocabulary is problematic for learners of a second language. The authors argued that the results of their study support the conclusion that understanding various meanings of words aids reading comprehension. Pedagogical implications included developing students' awareness of lexical ambiguity and teaching students various strategies to identify the different meanings of words as a way to improve their ability to successfully comprehend abstract academic language.

Mak, B. S., Cheung, A. C., Guo, X., Abrami, P. C., & Wade, A. (2017). Examining the impact of the ABRACADABRA (ABRA) web-based literacy program on primary school students in Hong Kong. *Education and Information Technologies*, *22*, 2671–2691.

This article discussed the effects of a web-based literacy program called A Balanced Approach for Children Always Designed to Achieve Best Results for All (ABRA), a free tool that facilitates learning and teaching of English reading and writing skills to young children. This tool has proven successful for improving young children's reading proficiency with the help and close guidance of their teachers. Following previous studies on the use of ABRA in different cultures and contexts, the authors of this study sought to investigate the effects of ABRA in Hong Kong as well as the attitudes and experiences of teachers, parents, and students with the application of the program. The participants of this study were 249 primary school students from two similar schools in Hong Kong, one of which used ABRA for an entire year. A subgroup of

145 students from one of the schools was split into six mixed ability classes that had three lessons of ABRA activities per week. One lesson was delivered as a whole-class instruction and the other two included workstation activities in a computer lab; students worked mostly in groups, and they were assigned different tasks related to the four language skills. The control school did not use ABRA, but the curriculum was similar to the treatment school. All students were pretested at the beginning of the school year. The measures included the Group Reading Assessment and Diagnostic Evaluation (GRADE), the Dynamics Indicators of Basic Early Literacy Skills (6th edition) (DIBELS), classroom observations of the program implementation, a teacher questionnaire, a parent questionnaire, and ABRA trace data reports. Using pretest scores as the covariate, students in the ABRA condition scored significantly higher than their control counterparts on phoneme-grapheme correspondence, phoneme segmentation, and nonsense word fluency. No differences were found in word reading, listening comprehension, and initial sound fluency. Parents and teachers agreed that ABRA was user-friendly and increased students' motivation for learning. Teachers also considered it useful in enriching the regular curriculum and consolidating students' knowledge. Research findings supported the idea that ABRA was beneficial to students from a low socioeconomic background or in remote school settings.

Mikami, A. (2017). Students' attitudes toward extensive reading in the Japanese EFL context. *TESOL Journal*, *8*, 471–488.

Research has found that extensive reading (ER) contributes to language learners' reading abilities, linguistic aptitude and motivation (e.g., Elley, 1991; Mason & Krashen, 1997). This study, utilizing a mix-methods approach, investigated learners' experience, attitudes, and motivation toward ER. One hundred forty-one Japanese learners of English at a university in Japan participated in the study. Participants majored in either business administration or pharmacy and were enrolled in first, second, and third year English language classes. All participants completed a questionnaire modified from Yamazaki (2008) and Dornyei (2010). The questionnaire consisted of six questions, three quantitative and three qualitative (i.e., open-ended questions), which attempted to grasp participants' past and current ER experience and motivation. Qualitative data was analyzed via content analysis based on Miles and Huberman (1994). Results revealed that very few participants, eight of 141 participants (5.67%), had prior experience with ER. In terms of the current ER experience, only five of 141 participants (3.55%) regularly read supplemental English materials. Reading time varied from five to 420 minutes per week. It was concluded that very few students read extensively, though most participants implied that they wished to read more English books. Participants' attitudes were categorized into three types: negative feelings (45.93%), positive feelings (40.74%), and ambivalent feelings (13.33%). Participants' negative feelings included matters such as comprehension difficulties and low interest levels while positive feelings included the desire to improve language abilities and to create and enjoy more opportunities in their lives. Ambivalent feelings were a mix of both negative and positive feelings, for instance, lack of confidence but a desire to read. In general, findings showed that ER instruction was not popular in English classrooms in the Japanese EFL context, particularly for non-English majors. Also, students held more negative than positive attitudes towards ER. Even though some students held positive attitudes, it was hard to maintain such attitudes. The researcher called for a "proactive" (p. 483) implementation of ER in language

classrooms and encouraged language teachers to consider students' motivation towards ER, promote students' integrative motivation for language learning, and support their confidence.

Minkyung, K., Crossley, S. A., & Skalicky, S. (2018). Effects of lexical features, textual properties, and individual differences on word processing times during second language reading comprehension. *Reading and Writing*, *31*, 1155–1180.

The following self-paced reading study investigated the impact of lexical features (e.g., frequency, concreteness, associations, and word neighborhood density), textual properties (e.g., simplification and order), and individual reader differences (L2 proficiency, L2 reading proficiency, and background knowledge) on the rate of word processing during the reading of English texts. Forty-eight learners, with an L1 of Spanish and an L2 of English, read nine English passages online using a self-paced word-by-word reading design which allowed researchers to capture the processing time for each word. The nine passages included three authentic/non-simplified texts and six simplified texts (i.e., three at the intermediate level and three at the beginning level), and students' comprehension of each passage was assessed immediately after finishing each passage. All participants completed assessments that measured their background knowledge about the passage topics, their overall proficiency in English, and their reading proficiency in English. Overall, results indicated that the following variables were predictors of students' word processing times while reading the passages: word frequency, word concreteness, orthographic neighborhood density, text level, passage order, word encounter order while reading each passage, and L2 reading proficiency. Specifically, results revealed that those with a higher reading proficiency in English processed words at a faster rate than those of lower L2 reading proficiency. While students processed a higher frequency word at a faster rate, they processed words with higher levels of concreteness and orthographic differences at a slower rate. Regarding textual properties, students read authentic passages slower than the simplified passages. While this study has added to our knowledge on the topic, the researchers called for future research with participants of various L1 and L2 backgrounds.

Naderi, N., & Akrami, A. (2018). EFL Learners' reading comprehension development through MALL: Telegram groups in focus. *International Journal of Instruction*, 11, 339–350.

Previous research has shown that mobile technologies can help promote language teaching and learning (e.g., Chang & Hsu, 2011; Chiang, 2012; Mosavi & Nezarat, 2012). The present study, taking a quasi-experimental approach, scrutinized the effect of the use of telegram groups on EFL reading comprehension as well as gender differences in reading comprehension after the telegram group instruction. A homogenous group of 103 EFL learners (ages 19 to 46) were recruited based on their English proficiency placement test results and then were assigned to two experimental (i.e., one group male only and the other female only) and two control groups (i.e., one group male only and the other female only). Each experimental group reviewed 6 reading passages using the telegram instruction method once a week for 2.5 hours. The telegram group instruction included the following activities: the teacher providing key lexical terms, students sharing pre-reading questions, students reading and sharing texts, and students completing comprehension questions in groups. The same book and texts were used in the control group which was characterized by traditional teacher-centered instruction for the same 2.5 hours once a week. In addition, all participants completed a reading comprehension test developed by the

researchers as a pre- and posttest. Independent samples *t* tests indicated no difference in pretest scores between the experimental and control group ($t = .32$, $p > .05$). However, Mann-Whitney *U* test results revealed a significant difference in posttest scores ($U = 791.5$, $Z = -3.51$, $p < .001$), with the experimental group significantly outperformed the control group. The gain score difference between the experimental and control group was also significant ($U = 551.5$, $Z = -5.12$, $p < .001$). In terms of the telegram group gender differences in reading comprehension after the instruction, independent samples *t* tests revealed no significant difference in posttest scores between males and females. The gain scores between male and female learners were also not statistically significant. The study concluded that reading instruction through telegram groups helped improve learners' reading comprehension ability, and the positive effect did not vary by gender. Findings echoed previous research illustrating the positive effect of the use of new technologies for language learning and instruction. The study called for an integration of such new technologies into current teaching practices.

Nakashima, K., Stephens, M., & Kamata, S. (2018). The interplay of silent reading, reading-while-listening and listening-only. *The Reading Matrix*, *18*(1), 104–123.

This study sought to understand the impact of L2 listening skills on L2 reading skills by assessing learners' proficiencies and the learners' reported preferences and struggles when reading-while-listening, silent reading, or listening-only. The study was conducted in two parts at a Japanese university. In the first study, participants from a mandatory English unit were chosen from three first-year classes and were respectively provided with a text to read in different modes: Medicine ($n = 33$) completed listening-only, Dentistry ($n = 32$) completed silent reading, and Pharmacy ($n = 44$) completed reading-while-listening. Participants in all groups completed a multiple-choice test related to the text as well as questions related to the participants' perceptions of the task difficulty. In the second study, English majors ($n = 21$) each chose graded EFL readers over the course of 15 weeks and were asked to read-while-listening first and then listen-only to the same story each week. At the end of the semester, participants completed a questionnaire regarding reading style preferences. Participants in the first study demonstrated the highest reading comprehension when reading-while listening and a higher reading comprehension when silent reading compared to listening only. Based on these results, the authors suggested incorporating classroom activities that emphasize L2 listening and reading simultaneously. In the second study, 11 of 21 participants preferred listening-only to reading-while-listening. The authors posited that traditional pedagogical practices favoring text and memorization, as well as the ability to discern morphology and phonology from written text, may have contributed to participants' preferences to listening-while-reading. Ultimately, the authors argued that instructors preferring to teach L2 reading comprehension and listening skills separately may be losing the opportunity to optimally develop both skills.

O'Neal, C. R. (2018). The impact of stress on later literacy achievement via grit and engagement among dual language elementary school students. *School Psychology International*, *39*, 138–155.

Taking an ecological developmental approach, this short-term longitudinal experiment investigated the relationship between stress and the academic reading achievement of young dual language learners. One hundred and forty-two elementary school students and nine elementary school teachers participated in the study. Data was collected at three points, Time 1 (T1), Time 2

(T2), and Time 3 (T3), with approximately four months between T1 data collection and T3 data collection. Participating teachers completed items to assess their participating students' grit and emotional engagement, the mediating factors in the study, at T1 and T2. Participating students completed assessment measures for their perceived levels of stress at T1 and reading ability at T3. Statistical analyses revealed a relationship among stress, engagement, and reading achievement. Specifically, students' stress levels at T1 impacted their academic engagement at T2 which impacted their reading achievement at T3. While engagement was found to be a significant mediator, results did not reveal a similar finding for grit. Due to study's finding of the negative impact of stress on the crucial skill of reading for dual language learners, the researchers called for more research that investigates the causes of stress (e.g., systematic) for this growing population.

Ozturk, M. (2017). Words with multiple meanings in authentic L2 texts: An analysis of Harry Potter and the Philosopher's Stone. *The Reading Matrix*, *17*(2), 133–141.

The current study explored how words with multiple meanings were used in an authentic English novel, J. K. Rowling's *Harry Potter and the Philosopher's Stone*, in terms of their primary or secondary meaning. The digitalized version of the book had 249 pages with 78,546 words in it. Based on the presentation order of different meanings for a given word in two dictionaries, the *Oxford Advanced Leaner's Dictionary* and the *Longman Dictionary of Contemporary English*, the first meaning cited in the word entries was assumed to be the primary meaning and any other meaning was considered a secondary meaning. By using the Vocabulary Frequency Profile Analysis on the Lextutor Website, two samples of word lists were drawn from the book. Each word list ($n = 75$) contained 25 words for each of the following categories: nouns, adjectives, and verbs. The first sample was selected from the first chapter of the book, whereas the second sample was selected from the whole book. A chi-square test of independence was employed for data analyses. The findings suggested that roughly two-thirds of the sampled words were used with their primary meaning. Regarding word categories, secondary meanings tended to be less common in nouns and more common in adjectives and verbs. In addition, results revealed that adjectives were generally used more with a secondary meaning in the earlier part of the novel. Given the use of secondary meanings, the author concluded that knowing how to handle words with multiple meanings is critical for L2 readers.

Pollard-Durodola, S. D., Gonzalez, J. E., Saenz, L., Resendez, N., Kwok, O., Zhu, L., & Davis, H. (2018). The effects of content-enriched shared book reading versus vocabulary-only discussions on the vocabulary outcomes of preschool dual language learners. *Early Education and Development*, *29*, 245–265.

This study investigated the use of interactive shared book-reading instruction on the vocabulary gains of preschool students enrolled in dual language bilingual programs. Forty-eight bilingual preschool instructors and 281 dual language learners (DLLs), identified as having a low proficiency in English, severed as participants. Participants were divided into two groups. The first group consisted of 25 instructors that delivered a 20-min shared book-reading intervention to the participating students ($n = 6$) in their classrooms while the remaining students in the classroom completed activities with the instructional teacher's aid. Teachers in the comparison group ($n = 23$) followed a similar format with the participating students ($n = 6$) but used a 20-

min. explicit-vocabulary intervention instead of the shared-reading intervention. Two weeks before and two weeks after the 18-week treatment period, students completed two standardized and two researcher-developed tasks that measured receptive and expressive vocabulary knowledge in English. While all students, regardless of 20-min intervention, exhibited vocabulary gains, results revealed that there was no statistically significant difference between students that received the shared book-reading intervention and those that received the explicit-vocabulary intervention. Given the large presence of DLLs in today's educational system, the researchers called for more research on the most effective ways to increase DLLs' vocabulary knowledge which contributes to their reading ability.

Raudszus, H., Segers, E., & Verhoeven, L. (2018). Lexical quality and executive control predict children's first and second language reading comprehension. *Reading and Writing*, *31*, 405–424.

The present study investigated possible direct and indirect predictors of reading comprehension for young L1 and L2 readers. Participants were 178 fourth grade children living in the Netherlands, of which 76 were monolingual and 102 were bilingual with diverse language backgrounds. Children were asked to complete specific subtasks assessing their vocabulary knowledge (depth and breadth), decoding skills, syntactic integration, working memory, inhibition, and reading comprehension. All tasks were adapted from pre-existing instruments or test batteries such as the Language Test for Minority Children Grades 4 to 6. To analyze data, in addition to the multigroup path analyses, two-tailed *t* tests were performed as well. The findings showed that for both L1 and L2 readers, linguistic knowledge (vocabulary and decoding) both directly and indirectly predicted children's reading abilities, and working memory was also an indirect predictor of reading comprehension. As for inhibition, it was found to predict reading comprehension indirectly via syntactic integration for L2 readers but not for L1 readers. The results also supported the positive effects of L1 vocabulary on L2 reading comprehension. Together, the findings suggested that although L2 readers may require more executive control and rely on both L1 and L2 language resources to achieve successful comprehension, the reading processes were similar for both monolingual and bilingual children.

Richings, V. A., & Nishimuro, M. (2017). Introduction and effectiveness of new methods of instruction using literature in a Japanese high school setting. *The Reading Matrix*, *17*(2), 1–15.

This paper reported the findings of a structured project regarding new pedagogical methods for using English literature with adolescent Japanese high school students. The authors of this study designed a two-year project, in which the first year consisted of three terms. In each term, students completed specific activities that included the reading of literature: graded readers. In term one of year one, for example, story-writing activities were chosen to gradually acclimate students to interact with literature. Artwork activities were chosen for term two, and drama activities were part of term three. Timed reading activities were applied throughout the three terms of year one and year two to improve student's reading speed. The second year of the project involved two terms. Movie and reading activities were practiced in each of the two terms. Additionally, an authentic reading material in the form of a novel was used for the second year of the study. Forty-one Japanese male high school students, ranging in ages from 16 to 17 years old, participated in the study. Pre- and post-student questionnaire responses and perceptions were used to measure the effectiveness of the method proposed in this study. Analysis of student

responses revealed that, overall, students' perceptions of including literature in their English class were significantly positive. All students thought that reading literary texts along with the different activities had helped improve their English reading, writing, and speaking skills. In addition, the majority of the students found significant value in doing the timed reading activities and enjoyed the artwork and drama activities. The authors concluded that overall, the students' enjoyment of English literary texts had increased due to their participation in this study.

Saadatnia, M., Ketabi, S., & Tavakoli, M. (2017). Levels of reading comprehension across text types: A comparison of literal and inferential comprehension of expository and narrative texts in Iranian EFL learners. *Journal of Psycholinguistic Research*, *46*, 1087–1099.

The researchers of the study investigated the impact of text type on reading comprehension by comparing literal and inferential reading comprehension across narrative and expository texts. Participants were 180 male and female EFL Iranian learners. Participants' English proficiency was at the upper-intermediate level as determined by the Oxford Placement Test (OPT). Each participant completed a reading comprehension test which consisted of the following: four narrative and four expository texts selected from ETS TOEFL practice tests, eight multiple-choice comprehension questions (i.e., five literal and three inferential) for each text, and an additional question regarding the amount of prior background knowledge about each text topic. For data analyses, paired-samples t tests were performed and produced several findings. First, when comparing the literal comprehension of the narrative text with that of the expository text, it was found the participants did significantly better on the expository texts. However, when the inferential comprehension of one text type was compared with the other, no significant difference was found. Results also revealed that while students had better literal comprehension of the expository texts, no significant difference was detected for comprehension type of the narrative texts. The findings provided several implications for teaching reading in a foreign language such as the need to improve learners' awareness of different text types and develop learners' inference making skills.

Sadeghi, K., Khezrlou, S., & Modirkhameneh, S. (2017). Calling Iranian learners of L2 English: Effect of gloss type on lexical retention and reading performance under different learning conditions. *Journal of Research in Reading*, *40*, S66–S86.

The researchers of the study investigated two factors: gloss type (text-picture, text-audio, and text-picture-audio) and learning condition (incidental, intentional, and explicit), and compared their effects on Iranian upper-intermediate level EFL learners' reading comprehension and vocabulary acquisition. One hundred and thirty-five university students, including both males ($n = 59$) and females ($n = 75$), were recruited from four intact classes. Each class was randomly assigned to one of the learning conditions: incidental ($n = 33$), intentional ($n = 35$), explicit ($n = 31$), and control ($n = 36$). All participants from the experimental groups received the treatment of all three gloss types using the Foreign Language Annotator (FLAn) Program. To assess reading comprehension, participants read a text and completed multiple-choice and written recall questions. Also, vocabulary knowledge scale (VKS) and contextualized vocabulary knowledge test (CVKT) were employed to measure vocabulary acquisition. For data analysis, a series of ANOVA tests were performed to provide answers for the investigation. The overall results provided evidence for the positive effects of multimedia glosses on reading comprehension and

vocabulary acquisition. In the study, the text-picture-audio group consistently outperformed the other groups across all posttest assessments. In addition, the effects of learning condition on vocabulary and reading score varied. The findings revealed that those in the intentional condition had higher scores on the VKS and reading tests, whereas those in the incidental condition performed better on the immediate CVKT. The study therefore encouraged the utilization of multimedia instructions such as text-picture-audio glosses and suggested that different learning conditions should be differentiated and chosen based on the learning objectives.

Sagarra, N. (2017). Longitudinal effects of working memory on L2 grammar and reading abilities. *Second Language Research*, *33*, 341–363.

The researchers of the study conducted two experiments to examine whether working memory (WM) has an impact on the development of L2 grammatical knowledge and reading skills. The study incorporated two types of WM tests: Daneman and Carpenter's (DC's) test, which only measures the recall span (storage), and Waters Caplan's (WC's) test, which measures both the recall span and the response time (processing). Experiment 1 was a one-year longitudinal study and the participants were 82 beginning L1 English learners of Spanish. To collect data, pretests and posttests were conducted to measure participants' growth in both grammar knowledge and reading skills. Also, to measure WM, only DC's test was used to assess participants' recall span. A general linear model (GLM) and a correlational analysis were conducted for data analyses. The results showed that WM did not correlate with either the reading tests or the grammar tests, suggesting that WM difference did not have an impact on beginning L2 learners' grammatical knowledge and reading skills. Experiment 2 was a modification of Experiment 1 with a larger sample size of 330 students yet a shorter duration: only one semester. The data collection process was the same as in Experiment 1 with the addition of WC's test, which assesses both span recall and response time. The results of two ANCOVAs with DC's test were the same as those in Experiment 1, showing that WM did not play a role in the development of L2 grammar and reading. However, the two ANCOVAs with WC's test demonstrated a significant effect for WM in both the grammar and reading tests as well as significant positive correlations between WM and both the grammar and reading tests. The results suggested that WM tests with or without a cognitively demanding processing measure yield distinct outcomes. To further the investigation, two additional ANCOVAs were performed to analyze WM's test response time scores (processing). The results revealed a significant effect for WM and showed that response time scores were negatively correlated with both the grammar learning gain scores and reading learning gain scores, suggesting faster processing facilitates better learning outcomes. Noteworthy, the results evidenced that recall span scores (storage) negatively correlated with response time scores (processing), indicating that the two functions of WM, storage and processing, share and compete for the same pool of cognitive resources. Taken together, the findings provided evidence for WM's longitudinal effects on beginner L2 learners' grammar and reading development and supported resource-sharing WM models.

Sakurai, N. (2017). The relationship between the amount of extensive reading and the writing performance. *The Reading Matrix*, *17*(2), 142–164.

This study attempted to measure the relationship between the number of words read during extensive reading (ER) and the potential improvement in general writing skill and writing sub-

skills. Building on previous findings that L2 ER positively correlates to L2 writing-related skills, the author attempted to replicate these findings while specifically studying the English ER texts in conjunction with language levels and numerical reading amounts to identify ER texts and numerical thresholds previously unaccounted for (Hafiz & Tudor, 1990; Lee, 2005; Lee & Hsu, 2009; Lai, 1993; Mermelstein, 2015; Tsang, 1996). The participants ($N = 157$), a heterogeneous group of undergraduate English learners with Asian and European L1s, were enrolled in a partially elective English program at a private Japanese university. The English program's courses required ER in which students tracked word count through MReader, although these requirements differed by course or language level. Participants' experience with ER varied. Participants in intermediate, intermediate to advanced, and advanced level English courses were asked to write a letter to a friend for 30 minutes, which was then scored by five full-time instructors (first raters) and the author (second rater). The letters were evaluated for writing sub-skills: task achievement (TA) coherence and cohesion (C&C), lexical resource (LR) and language use (LU) using an integrated IELTS and Common European Framework of Reference for Languages evaluation tool. The author compared the writing test scores to the total number of words participants had read at that point. Participants' word totals were downloaded from MReader and participants were divided into four groups: group one had no ER experience or had read > 36,000 words, group two had read between 36,000 to 71,999 words, group three had read between 72,000 to 107,00 words, and group four had read more than 108,000 words. Results revealed that ER was positively correlated with LR ($p < .001$) and LU as well as the total scores ($p < .01$). A one-way ANOVA analysis between the groups found statistical significance in the mean score of LR and LU ($p < .01$; $p < .01$). Participants who read more than 108,000 words outperformed all other groups in LR ($p < .001$) and LU ($p < .01$). Extended reading contributed to language learners' vocabulary and grammar reproduction but a correlation to task achievement and writing coherence and cohesion could not be found. The author inferred that the participants' use of graded readers (GRs) and leveled readers (LRs) may have played a role in the transition of passive lexical and grammatical knowledge to accurate production as displayed in the writing tests. The author also noted that participants who read at least 108,000 words had read a wider range of texts, including more fundamental or basic texts, when compared to the other groups. The author inferred that ER sequentially, from basic to advanced texts, over time could play a significant role in the transition of receptive lexical and grammatical knowledge to accurate lexical and grammatical reproductive skills. Ultimately, the author found that reading more than 108,000 words yielded measurable gains in productive uses of vocabulary and grammar.

Schröter, P., & Schroeder, S. (2017). The impact of L2 German on component processes of reading. *Journal of Research in Reading*, *40*, S107–S124.

The present study attempted to pinpoint where the reading performance differences are between L1 and L2 German-speakers in terms of component processes of reading. The researchers referred to component processes of reading as four levels: letter, word, sentence, and text processing. In their model, linguistic skills (i.e., vocabulary knowledge, verbal intelligence, and listening comprehension) and executive functioning skills (i.e., shifting, updating, and inhibition) were examined as the possible reasons for reading differences between groups of L1 and L2 German speakers. The participants were 98 children in fifth, sixth, and seventh grade with comparable socio-economic status (SES), including 64 L1 speakers and 34 L2 speakers. Each participant completed assessments for the specific components of linguistics skills and executive

functioning skills, as well as reading performance on each of the four levels. A series of hierarchical regression analyses were performed, and the data analyses evidenced that the disparity in reading abilities between L1 and L2 speakers was at the text level, and the performance differences were moderated by linguistics skills, especially vocabulary knowledge which was weaker for the L2 group. On the other hand, the data revealed that both groups performed similarly in the areas of cognitive functioning skills. Taken together, the researchers suggested that interventions to improve L2 speakers' reading performances should focus on their linguistic skills, such as vocabulary knowledge, and listening comprehension skills.

Shabani, S., Ramazani, M., & Alipoor, I. (2017). The effect of impulsivity vs. reflectivity on reading comprehension of Iranian EFL learners. *International Journal of Education & Literacy Studies*, *5*(3), 52–56.

A good deal of language learning research has focused on studying the effects of language learning styles on the language learning process. Within learning styles research, empirical evidence about aspects such as impulsivity and reflectivity seem insufficient when compared to the number of studies conducted on extroversion and introversion, for example. The study presented in this article sought to identify the extent to which impulsivity and reflectivity affect language learning, and particularly the reading comprehension skills of Iranian EFL learners. It also sought to compare the possible effect of these two learning styles. Seventy-two intermediate EFL adult learners, with at least two years of EFL instruction, participated in the study. They were selected from four different classes at a language institute in the Iranian city of Tehran. The Nelson language proficiency test was used to assess their level of proficiency; the Barrat's impulsiveness questionnaire was administered to measure their impulsivity and reflectivity; and the IETL reading test measured their reading comprehension skills. Participants were divided into three groups according to their Barrat's impulsiveness questionnaire scores, namely, a reflective group, an impulsive group, and a control group, formed by the less impulsive and less reflective learners. When reading scores for the impulsive and the reflective groups were compared to those of the control group, there was no significant difference among them, which led the authors to assert that impulsivity and reflectivity do not have an effect on reading comprehension and, therefore, are not relevant learning styles for reading comprehension. As for the pedagogical implications of these results, the authors propose that teachers plan their lessons according to students' learning preferences in general as opposed to planning lessons aimed at matching specific learning styles since the impact of learning styles on language learning has often produced mixed results.

Shahar-Yames, D., & Prior, A. (2018). The challenge and the opportunity of lexical inferencing in language minority students. *Reading and Writing*, *31*, 1109–1132.

Vocabulary research has proposed that readers tend to rely on their vocabulary size and reading comprehension skills to efficiently infer the meaning of unfamiliar words and that, at the same time, lexical inferencing has a significant impact on reading comprehension and vocabulary development. However, language minority (LM) students may encounter difficulties in lexical inferencing due to their smaller vocabulary size in comparison to native speaking peers. In this study, Shahar-Yames and Prior sought to compare Russian-speaking LM students' lexical inferencing abilities with those of native Hebrew-speaking students in Israel. A group of 48

Russian-speaking LM students and 53 native Hebrew-speaking students were recruited from five different schools in Israel. A battery of standardized tests was administered to measure students' lexical inferencing ability, productive vocabulary, Hebrew reading ability, non-verbal inferencing ability, and reading comprehension. Data analysis revealed no significant differences in lexical inferencing between the two groups, but lexical inferencing was found to strongly correlate with reading comprehension, reading accuracy, non-verbal inferencing ability, and vocabulary. Results also revealed that LM and Hebrew speaking children used different skills to aid their performance on lexical inferencing: while the native Hebrew group relied more on reading accuracy, the LM group used their vocabulary ability in addition to reading accuracy. Another difference was found with regards to non-verbal inferencing abilities, which were only found to be a significant predictor for LM students' lexical inferencing. Both groups seemed to equally rely on reading comprehension above the other underlying skills to support their performance in lexical inferencing. Based on these results, the authors proposed that educators provide language minority students with texts whose difficulty matches the students' vocabulary level so that they can successfully infer the meaning of unfamiliar words and enhance incidental learning. The authors also suggested that teachers train students to pay attention to unfamiliar words while reading and raise awareness about the importance of incidental word learning.

Shang, H., & Chen, Y. (2018). The impact of online autonomous learning on EFL students' reading skills. *International Journal on E-Learning*, *17*, 227–249.

The following study examined the effect of online reading activities on the reading abilities of EFL students. Sixty-five university seniors, majoring in English, enrolled in a Taiwan university participated in the study. A 30-minute pretest reading assessment taken from the General English Proficiency Test (GEPT) ensured that there were no differences regarding students' proficiency levels in English. Students were divided into two groups: the control group and the experimental group. Regardless of their group, all students took part in instructor-guided activities during class time. During these activities, instructors asked questions and provided activities to help students activate their background knowledge about the reading topics and encouraged students to utilize metacognitive strategies to comprehend the readings and unfamiliar vocabulary. During weekly classes, students in the control group received the instructor-guided intervention for two hours, while those in the experimental group received the instructor-guided intervention for one hour. After the one-hour intervention, students in the experimental group continued practicing reading in English by using FunDay, an online tool that offered students access to online dictionaries, comprehension activities and immediate feedback while reading English newspaper articles about daily life. After the 15-week treatment period, all students completed a posttest using the same 30-minute reading assessment taken from the GEPT that was used for the pretest. In addition, all students in the experimental group completed a 20-item questionnaire regarding their thoughts about their online reading experience. A subset of the experimental group, 15 students, shared more in-depth thoughts about the online reading activities during semi-structured interviews. Results indicated that students in the experimental group had statistically significant higher posttest reading comprehension scores ($M = 13.93$, $SD = 2.22$) than those in the control group ($M = 12.25$, $SD = 4.19$). Results from the qualitative data, the questionnaire, and semi-structured interview, showed that students primarily had favorable attitudes towards their online experience. In particular, students believed that the online software helped them monitor their reading process, outline their learning objectives, plan their learning schedules and

successfully complete the assigned tasks. Given the positive findings, the researchers encourage more research on the topic with larger sample sizes and non-English majors.

Shepherd, D. L. (2018). Understanding language in education and grade 4 reading performance using a 'natural experiment' of Botswana and South Africa. *Assessment in Education: Principles, Policy & Practice*, *25*, 87–106.

Using test scores from the 2011 pre-Progress in International Reading and Literacy Study (prePIRLS), the following study explored the impact of formal language instruction on the reading development of young elementary students. Specifically, the researcher examined the impact of instruction in one's mother tongue versus one's second language on the assessed reading abilities of Botswanan and South African fourth graders. While the two countries have similar cultural and linguistic backgrounds (i.e., the same official languages of English and Setswana), they differ regarding their educational policies about the language of instruction for elementary students. In Botswana, students are taught in Setswana during first and second grade before the classroom instruction is switched to English. In third grade and beyond, Botswanan students have continued exposure to Setswana as a subject throughout the remaining primary school years. In contrast, students in South Africa have three years of instruction in Setswana before the switch to English in fourth grade. Data consisted of the students' prePIRLS test scores and parents' take-home questionnaire responses about their children's language exposure outside of the classroom. Results showed that students that received both earlier and ongoing language exposure and instruction in their native language performed better on the prePIRLS than those with less exposure to instruction in their native language. Given the findings, Shepherd recommended that elementary school children receive instruction in their native language for several years and that they have continued exposure to the language in order to help improve their reading abilities.

Shorkaee, H. Z., & Talebi, S. H. (2018). Effects of reading strategy instruction on attitude toward strategies and performance in reading texts of different difficulty levels. *The Reading Matrix*, *18*(1), 64–81.

The researchers of this study examined the relationship between reading strategy instruction (RSI) and the reading performance of Iranian college EFL learners. Particularly, the researchers investigated the impact of RSI on EFL learners' comprehension of texts of varying difficulty levels. Also, the impact of RSI on EFL learners' reading strategy attitudes was also examined. The participants were divided into an experimental group ($n = 24$) and a control group ($n = 24$) and completed the following measures: The Appropriate Difficulty Test (ADT), the Higher Difficulty Test (HDT), and a questionnaire about attitudes toward reading strategies, which was a modified version of Mokhtari and Sheorey's 2002 questionnaire. All instruments were employed as pretests and posttests. The experimental group received reading strategy instruction through a model known as the Cognitive Academic Language Learning Approach (CALLA), while the control group was taught using a vocabulary-based method that did not include reading strategies instruction. The results in this study reflected the following conclusions: (a) students that received the RSI performed better on both tests (i.e., ADT and HDT), (b) RSI was more effective for reading comprehension when employed with texts of an appropriate difficulty level, (c) RSI had statistically significant effects on attitude toward reading strategies for ADT and HD,

and (d) RSI had a greater impact on students' reading strategies attitudes when students read texts at their current proficiency level. This study demonstrated that through RSI in L2, students were able to improve their reading performance and attitudes toward reading strategies when the text was at an appropriate level, and when it was a level more difficult than their reading ability level. This study also showed that RSI in L2 could be more effective in terms of both, attitude toward reading strategies, and reading performance when students read the appropriate level text.

Sinambela, S. E. (2017). Prosody as a tool for assessing reading fluency of adult ESL students. *Advances in Language and Literary Studies*, *8*(6), 83–87.

This study aimed to examine the use of prosody as a reliable measurement of reading comprehension and reading fluency. The participants were ten (six females, four males) Indonesian ESL undergraduate students. All participants were asked to complete an oral reading task, which consisted of students reading aloud five texts in English. The Multidimensional Fluency Scale was used to score students' prosody skills for each text. In addition, students answered comprehension questions about each of the five texts. Results showed that prosody was a reliable indicator of both reading comprehension and reading fluency. The author concluded that a reading aloud assignment is a useful tool to measure students' reading comprehension abilities.

Sparks, R. L., & Luebbers, J. (2018). How many U.S. high school students have a foreign language reading "Disability"? Reading without meaning and the Simple View. *Journal of Learning Disabilities*, *51*, 194–208.

The simple view of reading (SVR) model proposes that reading skills are products of word decoding and language comprehension (Gough & Tunmer, 1986). Good readers can decode words and comprehend language, while poor readers are categorized as those that exhibit decoding problems (dyslexia), comprehension problems (hyperlexia), and problems with both decoding and comprehension (garden variety). Based on the SVR model, the study assessed high school U.S. FL learners' Spanish decoding and reading comprehension ability, their reader profiles based on the SVR model, and the criteria for FL reading disability. Three hundred and seven monolingual English speakers, of different ethnicities, in grades 9 to 11 that had completed either first-, second-, or third-year Spanish courses participated in the study. All participants completed the following tasks: (a) Spanish word decoding, (b) Spanish pseudoword decoding, (c) Spanish reading comprehension, and (d) Spanish vocabulary. All the instruments were subtests taken from Batería III Woodcock-Muñoz Pruebas de Aprovechamiento. To fit the profiles proposed by the SVR, the participants' performances were compared with monolingual Spanish-speaking students from first to 11th grade. Results revealed that the participants did not achieve adequate levels of FL reading skills even after the third-year Spanish course, with performance even below the average of Spanish monolingual primary school readers. Spanish word-decoding skills were also below the average of monolingual Spanish readers. With this group of Spanish learners, there was a strong relationship between Spanish word-decoding and Spanish pseudoword decoding, of which the finding was consistent with previous research by Carver (2003). The study noted that one reason for the poor reading comprehension was due to learners' weakness in Spanish vocabulary knowledge which was manifested by the lower score of the Spanish vocabulary test. According to the categorization proposed by the SVR model, all

participants who completed first-year and second-year Spanish courses demonstrated hyperlexia when compared with first to 10th grade Spanish monolinguals. A very small number of the participants were garden variety learners. All learners in third-year Spanish courses met the criteria for hyperlexia when compared with third to 11th grade Spanish monolinguals, and 86% met the hyperlexic criteria when compared with second grade Spanish monolinguals. However, when compared with first grade Spanish monolinguals, 78% of third-year high school learners of Spanish could be categorized as good readers. The finding that all participants had an FL reading disability triggered questions on the operationalization of FL learning disability. Teachers and researchers might need to reconsider whether additional language instruction should be limited to those who are defined as "learning disabled". The study suggested that instruction in FL classes in U.S. high schools should focus on the skills associated with reading comprehension. In addition, instructors should understand the classification of reader types in order to provide specific instructions.

Tabatabaee-Yazdi, M., & Baghaei, P. (2018). Reading comprehension in English as a foreign language and some Cattell-Horn-Carroll cognitive ability factors. *The Reading Matrix*, *18*(1), 19–26.

The research reported in this article investigated the cognitive abilities that underlie reading comprehension processes in a second language; more specifically, the skills necessary to extract meaning from a text. The study is based on the assumption that deficiencies in reading performance are linked to cognitive disabilities (when all other factors are ruled out). On this basis, the authors argued that reading comprehension is mediated by cognitive individual differences and that research into cognitive factors may help in distinguishing poor from competent readers. Using Cattell-Horn-Carroll (CHC) model of cognitive abilities by Schneider and McGrew (2012), the authors examined the relationship between reading comprehension and specific cognitive abilities, such as fluid intelligence (Gf), crystallized intelligence (Gc), verbal analogical reasoning, and speed of processing (Gs). The instruments used to measure the variables under study were: the Pearson Test of English General for L2 reading comprehension, an adapted version of the Raven's Advanced Progressive Matrices (APM) for fluid intelligence, a four-passage C-Test for crystallized intelligence, a multiple choice verbal analogies test for verbal analogical reasoning, the letter-digit substitution (LDS) test and a simple math operations (SMO) test for processing speed. A total of 84 EFL undergraduate students from two universities in Iran participated in the study, which took place over two consecutive class sessions. A multiple regression analysis was conducted to assess the explanatory power of the five variables in question (i.e., Gf, Gc, Gs, LDS, and verbal analogical reasoning) with regards to reading comprehension. Of all the variables in the model, only verbal analogical reasoning was found to significantly explain variance in reading comprehension scores with partial effects. Thus, the full model was able to only explain 21% of the variance in reading comprehension. Based on the finding that verbal reasoning can predict performance in reading comprehension, the authors concluded that low EFL reading performance has a relationship with insufficient development of cognitive abilities. The pedagogical implication derived from these results was that more attention should be given to the development of reasoning and inference making in language teaching.

Thomason, B., Brown, C. L., & Ward, N. (2017). Rigor or restriction: Examining close reading with high school English language learners. *TESOL Journal*, *8*, 969–994.

The close reading procedure, which consists of multiple readings of a difficult text, has been highly recommended by the Common Core State Standards (CCSS) and widely implemented by teachers as a method to improve reading comprehension among ELLs in the U.S. This action research study, through a mixed-method approach, investigated the effectiveness of this close reading procedure and its impact on ELLs' reading motivation and engagement. The study was conducted in a U.S. history class designed specifically for ELLs. Six high school ELLs (ages 12 to 18) from 10th, 11th, and 12th grade participated in the study. L1 reading proficiency was measured by the Reading A–Z leveling system and L2 reading proficiency was captured by IDEAS Proficiency Test scores. Reading materials for the close reading procedures were selected from a wide range of sources including textbooks, news and periodical articles, and were sorted into two units: World War II and the Great Depression. Texts were selected to represent both grade-level and instructional-level complexities. For each text, the close reading procedure involved three major steps: (a) teacher read aloud and discussed vocabulary with learners, and learners answered *main idea and key details* questions through pair work; (b) learners reread the text and answered *craft and structure* questions through pair work; and (c) learners reread the text and answered *integration of knowledge and ideas* questions through pair work. For each unit, participants completed pre- and posttests developed by the teacher. Upon finishing the two units, participants were interviewed about their perception of the close reading procedure. Content comparative analysis indicated that background knowledge contributed to reading comprehension. The participants were more familiar with World War II unit and scored higher in comprehension than on the Great Depression unit. In addition, comprehension varied by text level (grade-level vs. instructional-level text). Instructional-level texts did not contain excessive subject-specific vocabulary or linguistically complex structures whereas grade-level texts used longer, more complex sentences with sophisticated vocabulary. Participants comprehended instructional-level texts more accurately (49%) than grade-level texts (35%), which, as the study suggested, can be explained by the zone of proximal development. With regard to participants' motivation and engagement, participants did not feel excited or interested when asked to repeatedly read the same text. Participants felt that reading the same text multiple times did not improve comprehension. The study concluded that close reading procedures diminished learners' motivation to read, especially when the texts were not comprehensible. The study argued that the close reading procedure prevented students from reading texts appropriate to their levels. The study suggested that language teachers and administrators consider both text complexity and text accessibility so to better improve ELLs' reading comprehension.

Thoms, J. J., & Poole, F. (2017). Investigating linguistic, literary, and social affordances of L2 collaborative reading. *Language Learning & Technology*, *21*(2), 139–156.

Taking an ecological theoretical perspective, this study explored the relationship between readers and texts during online collaborative reading activities. Fifteen undergraduate students majoring in Spanish participated in the study. As a part of a Hispanic poetry course, students collaboratively read 18 Spanish poems using Hylighter, a digital annotation tool (DAT). Students were instructed to comment on each poem at least twice: an original comment and a response to another student's comment. In addition to the students' comments, data also consisted of a

student survey completed at the end of the four-week experiment, an interview with the instructor, and interviews with a focal group of four students. Using a grounded theory approach, the researchers identified 13 categories for the students' comments. The 13 categories were then grouped into three main affordance groupings: linguistic (e.g., comments regarding explicit linguistic information), literary (e.g., comments regarding the analysis of the texts), and social (e.g., comments regarding thoughts about students' comments or comments unrelated to the texts). Results revealed that the majority of students' comments were literary affordances followed by social affordances. Student survey and interview data revealed that students found collaborative reading to be problematic, primarily due to the difficulty in posting an original comment that had not been mentioned by others. In addition, some students felt that, at times, comments made by their classmates hindered their comprehension of the text in some way. Instructor data revealed that not only did collaboratively reading result in more participation from quieter students, but also helped to develop a sense of community among the students. Given the scarcity of research on the topic and the increasing popularity of digital literacies, the researchers encouraged future research on this topic.

Thoms, J. J., Sung, K., & Poole, F. (2017). Investigating the linguistic and pedagogical affordances of an L2 open reading environment via eComma: An exploratory study in a Chinese language course. *System*, *69*, 38–53.

Due to the increasing popularity and use of digital texts in college courses, the following qualitative study examined the use of eComma, a digital annotation tool (DAT), in an L2 Chinese course at an American university. This exploratory study sought to identify possible positive and negative benefits of using a DAT to improve L2 reading experience. Eleven second-semester college students studying Chinese used eComma to read two reading passages in their L2. After receiving training regarding the DAT, students were instructed to read and annotate a Chinese passage as an outside class assignment. After this activity, students completed a comprehension and vocabulary test. The same procedure was repeated with the second passage. After completing all readings and assessment measures, students reported their feelings regarding digital reading and the use of eComma via an anonymous survey. More detailed responses regarding the use of eComma for the two passages were collected from four focal students and the instructor of the course. Analysis of the data indicated that students' annotations were focused on vocabulary (61.7%), content (23.4%), and grammar (10.6%). In addition, participants' responses indicated that the DAT would have been more beneficial if there were fewer technical difficulties, and if students had higher L2 proficiency and opportunities to practice forming Chinese characters. While the participants and researchers acknowledged the possible value of adding eComma to the L2 classroom, they cautioned that L2 instructors would need to consider questions of due dates for comments, provide adequate training for more in-depth comments and offer sufficient support for beginning-level L2 students.

Trainin, G., Wessels, S., Nelson, R., & Vadasy, P. (2017). A study of home emergent literacy experiences of young Latino English learners. *Early Childhood Education Journal*, *45*, 651–658.

Based on the Model of Home Literacy Impacts in which the home literacy environment (e.g., access to reading materials and family literacy experiences) predicts oral language and emergent literacy, this study probed the home literacy experience of young Latino ELLs in the United

States and the relationship between emergent literacy experiences and later literacy achievement. Two groups of Latino ELLs and their parents participated in the study. The first group had 117 Latino ELLs and the other 97. All participants were students in 26 classrooms in six elementary schools. Ninety-four percent self-reported that Spanish was the only language spoken at home. Parents self-rated literacy behaviors at home by completing the Home Literacy Environment Questionnaire (Griffin & Morrison, 1997). Latino ELLs were measured on oral language and emergent literacy. Oral language was captured by three tasks: receptive English vocabulary via the Peabody Picture Vocabulary Test-IIIA (Dunn & Dunn, 2006), English language proficiency via the preLAS (DeAvila & Duncan, 2000) and a vocabulary test developed by the researchers. Emergent literacy was captured by letter knowledge via the Phonological Awareness Literacy Screening (Invernizzi et al., 2009), phonological awareness via the PALS-K (Invernizzi et al., 2009), spelling via the Wide Range Achievement Test (Jastak & Wilkinson, 1984), and word identification and decoding via the Woodcock Reading Mastery Test (Woodcock, 1987, 1998). Descriptive statistics showed that, though there was a lack of resources, Latino parents created an adequate literacy environment at home. For instance, 61.6% of fathers and 88.7% of mothers did shared reading with children at least once a week, and 90 % of families provided certain literacy instructions (reading and writing) at least once a week. An exploratory factor analysis revealed four factors depicting the family literacy practices of Latino ELLs: (a) Periodicals Availability, (b) Book Availability, (c) Family Practices, and (d) Child Initiated Literacy. Follow-up latent structural equation model to test the relationship between home literacy practices and literacy achievement had adequate fit indices ($\chi 2(50) = 174.4$, RMSEA = .03, GFI = .92, CFI = .99). This model explained 52% of the variance in phonological processing, 39% of the variance in alphabetic knowledge, and 8% of the variance in oral language. Book availability was significantly related to oral language ($\beta = .24$, $t = 3.9$, $p < .001$), and child-initiated literacy was significantly related to phonological processing ($\beta = .20$, $t = 3.2$, $p < .001$). Findings of the study demonstrated the patterns of the home literacy experiences of young Latino ELLs and their impact on later literacy achievement. The study suggested that teachers consider the role of culturally-based home practices, and schools and communities should make literacy resources available to Latino families. In addition, the study called for more research on Latino ELLs.

Tsai, A. (2017). Conceptualizations of vocabulary knowledge in second language reading. *The Reading Matrix*, *17*(2), 16–39.

The goal of this study was to investigate how vocabulary knowledge has been conceptualized in reading comprehension studies; more specifically, the focus was on studying the influence of an instrumental view of vocabulary knowledge on second language reading studies. The author conducted a systematic search for empirical studies targeting adult vocabulary knowledge and reading comprehension, which was finally composed of a selection of 15 studies. Thirteen out of the fifteen studies reviewed were found to follow overall trends confirming that vocabulary knowledge contributes significantly to reading comprehension. Six studies, in total, conceptualized vocabulary knowledge as the number of words known (i.e., vocabulary size) and used the Vocabulary Levels Test to measure vocabulary size. In seven studies, vocabulary knowledge was conceptualized in terms of depth (i.e., how well words are known) and was measured with the Word Association Task (WAT) and the Qian's Depth of Vocabulary Knowledge (DVK) test, which measure learners' knowledge of word associations, collocations, synonyms, and polysemic words. Only two of the sampled studies were aligned to some extent

with more interactive views of reading comprehension, according to which both vocabulary knowledge and previous knowledge of the world help to construct an appropriate mental representation of a text. The author concludes that this review confirms a strong relationship between reading comprehension and vocabulary size. The author suggests that reading comprehension research that investigates the reciprocal relationship between vocabulary and reading would add to our knowledge of the topic. The article concludes with a call for further research that includes technologies such as eye-tracking software, technology-enhanced learning tools, and other forms of digital media to study the complex relationship between vocabulary and reading comprehension.

Tulgar, A. T. (2018). A tale of two skills: Attitudes of learners towards reading and writing in foreign context and target context. *The Reading Matrix*, *18*(1), 139–157.

This study analyzed the relationship between learning context on the development of target language reading and writing attitudes. Through purposeful sampling, 10 linguistically and culturally heterogeneous Turkish language learners (target context) in Turkey and 10 monolingual English learners (foreign context) in Turkey were selected to participate in a comparative case study by answering open-ended questions and completing semi-structure interviews. Each group respectively represented a foreign and target language learning context. Participants were asked questions related to attitudes and comfort toward target-language reading and writing. Participants completed interviews evaluating the learning context in which the participant was studying and the relationship or effect of the context on reading and writing skills. The data was collected at the end of the educational year. Coding was developed for both research instruments through content, in-group, and cross-group analysis. Participants in the foreign context held more positive views toward reading and liked reading more than writing. This group reported that reading was a way to access the target language. Foreign context participants generally disliked writing due to anxiety related to lower target-language vocabulary and grammar knowledge. Other participants in the same group cited contextual and pragmatic differences between the target language and L1 as stressors. With writing, foreign context participants stated that grammar-focused instructor feedback, rather than comprehensive feedback on pragmatics, reduced learner confidence in target-language writing. Conversely, participants in the target context group enjoyed developing both reading and writing skills. Target context participants positively evaluated reading due to the ease of accessing reading materials and the integrated nature of reading in every-day life. This group overwhelmingly enjoyed writing and cited the ability to create a product in the target language as motivation. Target context participants reported enjoying feedback on both linguistic aspects and contextual features of writing. These participants also reported frustrations in grammar and lexicon use, but also reflected that environmental opportunities to augment these deficiencies were very helpful. The author found that foreign language learners developed negative attitudes toward writing due to the lack of environmental language input, opportunities for writing practice, and dynamic feedback focused on pragmatics and process; however, foreign language learners held a more positive attitude toward reading as a means for receiving target language input. While context language learners also enjoyed reading for similar reasons as foreign language learners, learning a language in the same linguistic context improved the learners' attitude toward writing.

Uğurlu, N. I., & Kayhan, N. (2017). Teacher opinions on the problems faced in reading and writing by Syrian migrant children in their first class at primary school. *Journal of Education and Learning*, *7*(2), 76–88.

With the influx of Syrian immigration to Turkey, the author attempted to identify the specific linguistic struggles of Syrian children learning Turkish as a foreign language as new immigrants in Turkey. By recording the opinions and perceptions of the first teachers that Syrian immigrant children encountered, the author intended to understand the specific reading-writing struggles these children face in acquiring Turkish as an L2. Using a purposive sampling method, seven teacher participants were selected from a Turkish public-school system after satisfying four criteria including attainment of an undergraduate degree related to classroom teaching, current teaching placement in the school district with Syrian migrant children in attendance, current placement in the first primary classroom, and voluntary agreement to participate in the study. Data was collected by questionnaire in two stages. The first questionnaire collected demographic characteristics of the teachers and each participant's respective teaching context. In the second stage, researchers conducted written interviews, classroom observations, and oral interviews with note-taking in lieu of audio recording. Using the content analysis method and inductive approach, the authors coded the written interview responses into four main themes: opinions on preparatory practices in teaching Turkish as a foreign language, opinions on communication during second language reading and writing instruction program implementation, emphasis on cooperation in solving problems, and opinions on increasing efficacy in Turkish language instruction. These themes yielded sub-themes in which the participant responses were calculated in frequency. Based on the participants' responses, the authors found that most Syrian students entering Turkish schools for the first time did not speak Turkish. Participants reported lacking specialized reading and writing arrangements for Syrian children as a major concern. Participants also largely reported that migrant Syrian families were not prepared to support their children in developing Turkish language skills and furthermore that families lacked social and environmental resources, which negatively affected Syrian students' ability to acquire Turkish reading and writing skills. Turkish teachers' lack of educational background in teaching Turkish as a foreign language was also cited as a major dilemma in educating Syrian migrant students. Many participants highlighted this fact compounded with the lack of classroom resources for instructing Turkish as a foreign language. Overall, participants circumvented these realities by using nonverbal cues, such as gestures, mimics, and visual materials to communicate with students along with relying on colleagues whose backgrounds included teaching Turkish as a foreign language for educational practices. Based on these findings, the authors recommended the inclusion of teaching Turkish as a foreign language in teacher preparation programs. The authors also recommended that government ministries develop instructor materials on Turkish foreign language instruction for in-service teacher training as well as develop more accommodations for Turkish language learners within public school districts.

van Viersen, S., de Bree, E. H., Kalee, L., Kroesbergen, E. H., & de Jong, P. F. (2017). Foreign language reading and spelling in gifted students with dyslexia in secondary education. *Reading and Writing*, *30*, 1173–1192.

Based on the hypothesis that giftedness-related aspects can compensate for low reading ability, the study examined the FL development of Dutch secondary school students. Specifically, the

researchers were interested in the differences in the FL literacy development of gifted students with dyslexia and students of average intelligence with dyslexia. The researchers also investigated the role of native language (NL) development on the FL literacy development of these students. One hundred forty-eight secondary school Dutch-speaking students were divided into four groups: dyslexia, gifted with dyslexia, typically developing, and gifted. Data collection occurred twice: one data collection when students were in seventh or eighth grade, and the other was a subsample of students ($n = 71$) when they moved to eighth or ninth grade. All students completed the following measures: the Wechsler Intelligence Scale for Children (3rd edition, Wechsler, 1991), timed word reading assessments in Dutch, French, English, and German, and orthographic knowledge assessments in the same four languages. Bayesian analyses comparing group differences showed that whether FL literacy ability of gifted students with dyslexia was higher than average students with dyslexia depended on the foreign language. In addition, the effect of NL as a covariate also varied by foreign languages. Specifically, without controlling for NL literacy skills, gifted students with dyslexia outperformed their average peers with dyslexia in English word reading and spelling. After controlling for NL literacy skills, the effect size for such group differences in English word reading and spelling decreased; however, the stepwise pattern still remained (dyslexia < gifted with dyslexia < typically developing < gifted). Gifted students with dyslexia slightly outperformed their average peers with dyslexia in English word reading and spelling. However, such patterns of group differences were absent in French or German literacy abilities. Regardless of whether NL literacy skill was controlled or not, gifted students with dyslexia did not outperform their average peers with dyslexia in French or German word reading and spelling. The study concluded that although NL skills had an impact on FL word reading and spelling abilities, the impact was language specific. The researchers concluded that such language-specific patterns were due to the difference in orthographic depth among the FLs and students' overall exposure to the FLs. Given the results, the researchers call for more research that addresses a wider range of FLs with varying amounts of instructional time.

Wong, Y. K. (2018). Exploring the reading-writing relationship in young Chinese language learners' sentence writing. *Reading and Writing*, *31*, 945–964.

Using structural equation modeling, this study analyzed young Chinese-as-a-second language (CSL) learners' Chinese character literacy and the predictive power of a learner's character-writing fluency and written syntactic skills on Chinese reading and writing competencies. The influence of these fluencies on Chinese reading and writing skills was also assessed. Based on characteristics specific to the Chinese language, such as the importance of word-order and word-related knowledge, the author specifically analyzed the relationship between the component skills of transcription and syntactic skills shared between reading and writing in young CSL learners. One hundred twenty-six ethnic minority students of mostly South Asian descent from Hong Kong government-subsidized senior primary schools were selected as participants. Participants learned English and Chinese as a second language at school and spoke a different language at home. Prior to the study, participants had been receiving customized Chinese curricula focused on Chinese literacy acquisition with an emphasis on character reading and writing, written vocabulary, and syntactic structure. Participants were assessed twice (Time-1 and Time-2) over a period of a year in two grade levels (grade 5 and grade 6). At Time-1 in grade 5, participants were given Chinese reading comprehension tests focused on the sentence and passage level. At Time-2 in grade 6, participants completed a sentence reading

comprehension test, character-writing, word order, and sentence picture writing tests. Measures were adapted from the Hong Kong Attainment Test (HKAT). Participant Chinese reading comprehension was assessed at Time-1 by a Chinese character read-aloud, sentence-level multiple choice or cloze format fill-in, and passage-level multiple choice or short-answer formats. Time-2 assessed participants' sentence reading comprehension using adapted HKATs which required sentence writing using a target word to describe an image presented in the test. Tests were assessed for correctness, accuracy and when relevant (Time-2), elaboration of content. The author developed two structural equation models (concurrent and longitudinal) to assess the reading-writing relationship and confirmatory factor analysis to evaluate the significance and inter-factor relationships, respectively. Results revealed that Time-1 reading ability was highly related to Time-2 sentence writing and sentence reading. Also, Time-1 character-writing competence and written syntactic skills predicted Time-2 sentence reading and sentence writing. Time-1 written syntactic skill produced a more sizable prediction of Time-2 sentence reading and sentence writing than Time-1 character-writing competence. Similarly, based on the longitudinal structural model, Time-1 reading ability influenced Time-2 Chinese literacy skills. According to the data, for CSL learners, literacy component skills are linked as predictors of Chinese sentence writing competencies.

Ying, Z. (2018). Exploring construction of college English writing courses from the perspective of output-driven hypothesis. *English Language Teaching*, *11*, 188–192.

This review outlined a description of a teaching mode applicable to college writing courses using Swain's (1995) output hypothesis in an attempt to address the current gaps Chinese EFL learners experience in Chinese college English writing courses. The author linked Krashen's (1985) Input-hypothesis to Swain's (1995) Output-hypothesis which was then expounded on by Wen's (2008) Output-driven hypothesis. The author also presented data related to the inter-relatedness of reading and writing skills. Based on Wen's (2008) premises that language output plays a larger role in a language learner's acquisition and as such, instructors should focus more time on developing productive language skills with an output-oriented teaching method, the author offered a sample teaching method for Chinese EFL college writing classrooms. The teaching mode included: pre-writing reading, while-reading discussion, content, cohesion and coherence, language competence, in-class writing, writing assessment, and after-class reading. Most instruction components involved focusing learners on linguistic or rhetorical components of reading as input while simultaneously asking students to notice and/or practice or reproduce (output) extended pieces of writing related to the studied input. The author argued this teaching mode employed a joint process of reading and writing, thereby increasing learners' awareness of the inter-related nature of English language input and output, which in turn enhanced interest and confidence in English writing.

Zhang, D. (2017). Derivational morphology in reading comprehension of Chinese-speaking learners of English: A longitudinal structural equation modeling study. *Applied Linguistics*, *38*, 871–889.

The present study explored the role of morphological awareness in the reading comprehension of third grade ESL students. One hundred and eight students, with a mother tongue of Chinese, participated in the study. At the end of third grade (Time 1) and again at the end of fourth grade

(Time 2), students completed tasks that measured the following: (a) morphological relatedness, (b) real morphological awareness, (c) pseudo morphological awareness, (d) word reading fluency, (e) vocabulary knowledge, and (f) reading comprehension. Statistical analyses, including structural equation modeling, revealed several interesting findings for both Time 1 and Time 2. Regarding Time 1, results revealed significant correlations among the following groups: (a) the three morphological awareness measures, (b) the three morphological awareness measures and the measures of word reading fluency, vocabulary knowledge, and reading comprehension, and (c) the three reading measures. In addition, word reading fluency was predicted by morphological awareness (β =.768, $p < .001$) and accounted for 59% of its variance. Together morphological awareness and word reading fluency accounted for 57.5% of the variance in vocabulary knowledge. Overall, Time 1 results indicated that morphological awareness, over and above lexical measures, both directly and indirectly contributed to reading comprehension. Time 2 results showed similar correlations to those of Time 1, with an even stronger correlation with the three morphological awareness measures and the measures of word reading fluency, vocabulary knowledge, and reading comprehension. Like Time 1, Time 2 results also showed that word reading fluency was predicted by morphological awareness (β =.790, $p < .001$) and accounted for 62.5% of its variance. Together morphological awareness and word reading fluency accounted for 56.5% of the variance in vocabulary knowledge. Similar to Time 1, Time 2 results also indicated that morphological awareness both directly and indirectly contributed to reading comprehension; however, this contribution was stronger at Time 2. Finally, no statistically significant direct longitudinal effect was found for the impact of Time 1 morphological awareness on Time 2 reading comprehension. However, results indicated a significant indirect effect of Time 1 morphological awareness on Time 2 reading comprehension. Given the results, the researcher encouraged more focused instruction and classroom activities on developing ESL learners' derivational morphological awareness.

About the Editors

Shenika Harris is an Assistant Professor of Spanish at Lindenwood University, where she teaches undergraduate courses in Spanish and bilingualism. She earned a Ph.D. in Second Language Acquisition with a minor in Spanish from the University of Wisconsin-Madison. She holds a Graduate Certificate in Language Instruction from Washington University in St. Louis and a MA in Spanish from Saint Louis University. Her current research interests include foreign language pedagogy, second language literacy, and translanguaging during second language writing. She is currently conducting research regarding the effect of course format (online vs. face-to-face) on the acquisition of Spanish. Email: SHarris@lindenwood.edu.

Carolina Bernales is Assistant Professor in SLA and Research Director in the Institute of Literature and Language Science at the Pontificia Universidad Católica de Valparaíso-Chile. She holds a MA in Applied English Linguistics and a Ph.D. in Second Language Acquisition from the University of Wisconsin-Madison. Her current research focuses on reading comprehension and lexical processing in a foreign language. She also teaches graduate and undergraduate courses in English syntax, second language learning theories, and methods in English Applied Linguistics. She has published her work on classroom interaction, foreign language learning, and

language processing in peer-reviewed journals and edited volumes. Email: carolina.bernales@gmail.com

Elizabeth Killingbeck Pratte teaches reading and writing in an undergraduate EAP program at Lindenwood University. She earned a Bachelor of Arts in Spanish Language and Literature and a Master of Arts in Teaching English as a Second Language at Southern Illinois University Edwardsville. Her academic interests include composition and second language acquisition pedagogies. Email: ekillingbeck@lindenwood.edu

David Balmaceda M. is a former Fulbright scholar, and currently an Applied Linguistics doctoral student at Washington University in St. Louis in the Department of Education with concentrations in Language Learning and Teaching, and Language Program Administration. He holds a Master of Arts in Teaching English to Speakers of Other Languages, and a MA in Foreign Languages, Cultures, and Literatures in Spanish from Southern Illinois University. In 2009, he was granted a fellowship sponsored by the United States Department of State's Bureau of Education and Cultural Affairs http://exchanges.state.gov/ to participate in an Undergraduate Intensive English Language Study Program at St. Michael's College, Colchester, Vermont, USA. Some of his research interests include Language Teaching and Learning, Language Teaching Material Development, Spanish Second Language Acquisition, and Gender in Second Language Acquisition. Email: dbalmaceda@wustl.edu

Yanjie Li (Phoebe) is a PhD student in the Department of Education with a concentration in Applied Linguistics at Washington University in Saint Louis. She holds a Master of TESL (Teaching English As a Second Language) from Webster University, and a Bachelor of English Language from Qingdao Agricultural University. Her research interests include second language acquisition, L2 reading, L2 writing, L2 assessments, cognitive psychology and Psycholinguistics. She is currently investigating the effects of working memory on L2 reading. Email: Li.yanjie@wustl.edu

Huan Liu is a doctoral student at Washington University in St. Louis in the Department of Education, with concentrations in Applied Linguistics and English Language Learners. She holds a Master of Education in Foreign Language Education from the University of Georgia. Her research interests include L2/FL reading and writing development, impact of nonlinguistic variables on L2/FL acquisition, and foreign language pedagogy. Email: huan.liu@wustl.edu