

Readings on L2 Reading: Publications in other Venues 2021-2022

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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.

Almanea, M. (2021). Brain Hemisphericity and Saudi students' EFL reading comprehension. *Arab World English Journal* 12(2), 436-456.

Almanea explored the relationship between brain hemisphericity and two outcomes: (i) L2 (second language) English reading comprehension, including the understanding of main ideas, inferential questions, literal meaning (word meaning identification), and text-bond questions requiring a restatement of the passage; and (ii) the effects of a mind map (a visual tool) on L2 English reading comprehension. A total of 122 Saudi Arab L2 novice English college students were randomly and equally distributed into either a control or an experimental group. Participants' hemisphericity mode was determined through the standardized Hemispheric Mode Indicator® (HMI). Sixteen participants were left-brained, 17 were right-brained, ten were whole-brained favoring left mode, 13 were whole-brained favoring right mode, and five were whole-brained. English reading comprehension was assessed by the completion of a reading comprehension pretest and a posttest three weeks later. Both tests consisted of five short reading

passages followed by multiple-choice questions. Participants in the experimental group were trained on the use of the visual tool Mind Mapping® to summarize each passage. A one-way ANOVA showed that left-brained participants statistically outperformed participants with different hemisphericity modes on the reading comprehension tests, except participants with whole-brained favoring left mode. According to the authors, the advantage of left-brained participants on linguistic tasks is in line with previous research. However, none of the different hemisphericity groups statistically outperformed the others, although left-brained participants obtained the highest scores and whole-brained favoring right and right-brained participants obtained the lowest scores. The overall better performance of left-brained participants contradicts previous findings involving Mandarin Chinese. The authors suggested this contradiction may stem from the differences between the English phonological alphabet system and Mandarin Chinese orthography. Nonetheless, the overall poorer performance of those involving the right hemisphere is congruent with previous research. The authors also analyzed the performance of each hemisphericity group on the different reading comprehension questions. All participants performed the best in the main idea questions, especially right-brained participants, which is consistent with previous research. Left-brained participants statistically outperformed other groups on the inferential questions and achieved statistically insignificant better results on the literal meaning and text-bound questions. Following the authors, the poorer performance on inferential and literal meaning questions by right-brained participants contradicts previous research. The authors attributed the lack of statistical significance and this contradiction to participants' low proficiency level. However, the better performance by left-brained participants on text-bound questions was expected following previous research. Regarding the effects of the visual tool on L2 English reading based on hemisphericity, t-tests showed statistically insignificant differences between the control and experimental groups in the pretest, but significant differences in the posttest. Participants in the experimental group improved in all questions except in the main idea questions, in which there was a statistically significant decrease in scores. Although the performance in the main idea questions was poorer, the authors stated that the participants' mind maps clearly depicted the main idea. Right-brained and whole-brained favoring right benefited the best from this mind map, especially for inferential questions. The decrease in the main idea questions was only statistically significant for left-brained participants.

Ardasheva, Y., Crosson, A. C., Carbonneau, K. J., & French, B. F. (2021). Unpacking contributions of morphosyntactic awareness and vocabulary to science reading comprehension among linguistically diverse students. *TESOL Quarterly*, 55(3), 931-965.

Drawing on the knowledge and aptitude hypothesis (Nagy, 2005), Ardasheva et al. (2021) aimed to disentangle the contributions of morphosyntactic awareness (derivational morphology and connectives) and science vocabulary (size and depth) on physical science text reading comprehension among emergent and proficient English L2 users in middle school. The knowledge hypothesis claims that knowledge on a topic, instead of knowing the meaning of words, facilitates reading comprehension. The aptitude hypothesis states that metalinguistic

awareness, such as derivational morphology and connectives awareness, helps reading comprehension. A total of 213 8th-graders (118, 64 and 31 former, current, and non- English learners, respectively) participated in this study. Participants were 12-14 years old with different home languages, being Spanish the most prominent (82%). Most participants were at or above the literacy and science proficiency levels. Participants completed a 10-week physical science unit which included selected readings, laboratory activities and explicit instruction of process skills. Participants also completed an 8-week science vocabulary training through multimodal vocabulary activities and repeated exposures to target words. After the completion of the physical science unit and vocabulary training, participants completed five tasks. The first task was a science vocabulary test consisting of a five-item picture match task based on the vocabulary subscale of the Language Assessment Scales-Oral to measure science vocabulary depth. There was also a 15-item definition match task adopted from Vocabulary Levels Test to assess science vocabulary breadth. The next task was a 12-item short version of a connectives task including connectives from different categories. Participants were asked to choose the appropriate connector to link two clauses or short sentences out of four connectors. The third task was an 18-item nonword derivation task in which participants had to choose a nonsense word featuring the correct derivational suffix to complete a sentence out of four choices. The next task measured scientific text reading comprehension and consisted of a multiple-choice with four options. Eighteen items assessed the understanding of science vocabulary, while 14 items gauged learners' comprehension of two scientific passages. To measure participants' English proficiency, the authors utilized the Washington English language proficiency assessment whose levels ranged from beginning to transitional. A significant correlation between all the variables was found. Results from a structural equation model (SEM) showed that morphosyntactic awareness, science vocabulary and reading comprehension were directly predicted by English proficiency status. Indirect effects of English proficiency status on science vocabulary and reading comprehension through morphosyntactic awareness were also found. Morphological awareness was in turn a strong predictor of science vocabulary, which was found to directly predict reading comprehension. Additionally, reading comprehension was indirectly predicted by morphosyntactic awareness and English proficiency status through science vocabulary. The model accounted for 80% of the variance in science reading comprehension and science vocabulary scores, and only 17% of the morphosyntactic awareness scores. The authors concluded that these findings are fully in line with the knowledge hypothesis and partially aligned with the aptitude hypothesis, given the lack of direct effects of morphosyntactic knowledge on science reading comprehension. The authors attribute this lack of direct effects to the high vocabulary density in science texts. Finally, the authors recommend explicit teaching of science vocabulary, connectors, and derivational morphology.

Askari, H., & Chen, L. (2021). Challenges and opportunities of teaching online in an Iranian EFL high school context during the Covid-19 pandemic. *The Reading Matrix: An International Online Journal*, 22(2), 32-46.

In this article, Askari reflects upon the challenges he faced as he transitioned to teaching online English courses for advanced high school students during the coronavirus pandemic. Among the challenges listed, the author discussed course planning, students' access to technology and digitalized teacher presence. Through the guidance of Chen, Askari was able to address these dilemmas and make the necessary changes to create a more effective learning experiences for his students.

Aslan Berzener, Ü., & Deneme, S. (2021). The effect of cooperative learning on EFL learners' success of reading comprehension: An experimental study implementing Slavin's STAD Method. *Turkish Online Journal of Educational Technology-TOJET*, 20(4), 90-100.

This quasi-experimental study examined the effects of Student-Teams-Achievement Divisions (STAD) method of cooperative learning (CL) on reading comprehension of Turkish EFL (English as a foreign language) learners. Cooperative learning was introduced as a group learning strategy that allowed students to work together on a task as they helped and learned from each other. Through convenient sampling, 169 10th-grade students (114 female and 55 male) from state high school in İstanbul were selected to participate in this study. Before the intervention, Cambridge Empower Placement Test (2018) was administered to make sure students in both groups have equal linguistic levels. Based on the result, students were divided into 4 classes, two classes of experimental groups A and B (n=85) and two classes of control groups A and B (n= 84). Students in control group A class had equal language level as students in experimental group A class and the same for students in group B classes. For 4 weeks, both experimental and control groups were taught 8 lessons from the "Count Me In" textbook in 4 sessions (two lessons per session). Students in the control group received the traditional method of direct instruction, while the students in the experimental groups were taught each lesson through the Slavin's (1999) STAD method of instruction which had 5 components: a) *Class presentation*: Teacher presented the material and introduced the lesson and reading task to the group and asked them to read the text; b) *Teams*: Teacher chose the responsible team for a given reading task and ask them to work together reading different sections of the text, discussing their understanding and reaching a shared goal; c) *Quizzes*: Students took individual text-related quizzes and they were not allowed to help one another; d) *Individual improvement*: Each student's score showed their individual improvement score or how much they had improved from the previous tasks and then the sum of individual improvement score for all team members was formed into the team/group score; and e) *Team recognition*: At the end of the session, the group with the highest team score was announced as the winner of that session. To collect data, a pre-achievement test and post-reading comprehension achievement test, designed by the Ministry of National Education of Turkey, were implemented to measure students' progress before and after the teaching lessons taught by different teaching methods. Findings showed that students in the experimental group who were taught by cooperative learning method outperformed control group students, as they improved in their vocabulary and grammar knowledge as well as reading comprehension abilities. Students in the experimental group also showed positive attitudes towards English lessons and their learning process which increased

their self-esteem. The study suggested that using teaching strategies with collaboration between small groups of students would lead to a more effective language learning experience and encouraged foreign language teachers to follow STAD methods in their classroom. The researchers also recommended further research on the effect of using this method for students in different grade levels.

Brunfaut, T., Kormos, J., Michel, M., & Ratajczak, M. (2021). Testing young foreign language learners' reading comprehension: Exploring the effects of working memory, grade level, and reading task. *Language Testing*, 38(3), 356-377.

Drawing on Francis et al.'s (2018) Complete View of Reading through an interactive lens (CVRi), Brunfaut et al. (2021) investigated the effects of school grade level, reading task, and working memory capacity on L2 English reading comprehension accuracy among young learners. The school grade level was used to operationalize development. The reading tasks consisted of four TOEFL® Junior™ Comprehensive texts of different types (email, school news, academic and short story), followed by 28 items targeting diverse reading skills. Working memory was operationalized through two digit-span tasks (one forward and one backward) and a Symmetry Span task. For the digit span tasks, participants had to recall a series of numbers of increasing length either in forward or backward order of presentation. The Symmetry Span task involved remembering the location of a block sequence after being interrupted by a task asking participants to decide if a block pattern was symmetrical. The three working memory tasks were combined into one single score after identifying significant correlations among the tasks and performing a Principal Component Analysis. A total of 94 11-14 year-old learners from Grade 6 (n=51) and Grade 7 (n=43) in a Hungarian school, and whose English proficiency ranged from CEFR A2–B2 participated in this study. In the first session, participants completed the working memory tasks. In a second consecutive session, participants completed the four reading tasks and a personal background questionnaire. All instruments were piloted by 14 learners from the same target population. Descriptive analyses indicated that participants had the highest probability of performing the best on the email task and the lowest on the school news task, although the differences between the tasks were small. In addition, 7th graders outperformed 6th graders in all tasks. Afterwards, the authors utilized a Generalized Linear Mixed-Effects Models for their statistical analyses. In these analyses, participants and test items were considered as random variables to minimize the chances of Type I error. After running various models, the optimal model considered that working memory effects on reading comprehension accuracy varies depending on each item. This model showed that 4.76% of the variance can be explained by the targeted independent variables (i.e., grade, reading task, and working memory). The better reading accuracy of 7th graders was statistically significant, which the authors attributed to age-related cognitive development and longer English experience. In addition, the model found a significant correlation between working memory and reading accuracy performance, suggesting a better reading accuracy among 6th and 7th graders with higher working memory. Finally, no significant correlations were found between reading tasks and reading accuracy. The authors explained that this result may stem from the balance in difficulty between texts and items. The authors concluded that these findings support the CVRi model. As limitations, they mentioned

the content-based language instruction approach schools were following and the small size of their dataset that prevented them from exploring relationships between all the variables.

Can, F. (2021). An examination of reading texts in a journey to Turkish A1 and A2 level textbooks in terms of readability. *Shanlax International Journal of Education*, 9(2), 139-149.

This qualitative study examined the readability levels of textbooks designed to teach L2 Turkish. Notably, it attempted to determine the readability levels of texts in L2 Turkish textbooks. The author used the textbooks “Journey to Turkish A1” and “Journey to Turkish A2” because these textbooks are commonly used to teach beginning levels of Turkish to foreigners. This study followed a document analysis model that included thirty texts from the textbook Journey to Turkish A1 and thirty-five texts from the Journey to Turkish A2 textbook. The analysis consisted of word count, sentence length, and syllable count. Readability scores of the texts were determined via the Flesch formula, which had been adapted to Turkish by Ateşman (1997). Results indicated that overall, the readability of the texts in Journey to Turkish A1 and A2 were similar and appropriate for beginning levels of Turkish. However, the average readability score of the Turkish Journey A1 textbook appeared to be higher than the average readability score of the Turkish Journey A2. Additionally, none of the textbooks showed a logical readability order of the texts (e.g., from easy to more difficult), which led the author to assume that the placement of the texts in both textbooks was random. Among some final suggestions, the author emphasized the relevance of ordering texts in a textbook according to readability levels.

Cheetham, C., Elliott, M., & Tagashira, M. (2022). Outcomes of two reading management systems: Printed graded readers vs. digital graded readers. *The Reading Matrix: An International Online Journal*, 22(1), 20-36.

Digital graded readers (DGRs) became necessary for extensive reading (ER) courses during the Covid-19 pandemic. Accordingly, the authors in this study sought to compare the extensive reading outcomes of printed graded readers (PGRs) and DGRs while using two reading management systems. Mainly, this study assessed: (1) the average number of words read by PGR and DGR users, (2) the extent to which PGR and DGR users’ attitudes differ toward ER, (3) the way instructors evaluated ER materials used in PGR and DGR courses, and (4) the number of ER students who reached the set reading goal of 150,000 words from quizzes completed in MReader and Xreading. MReader and Xreading are reading management systems designed for reading accountability purposes such as setting reading targets, tracking student reading progress by the number of words read, and assessing comprehension via quizzes. Participants were ninety-five Japanese university students. Fifty-two students were in ER courses using PGR, and 43 were in ER courses using DGR. All participants were encouraged to read over 150,000 words for 14 weeks. The number of words was measured by quizzes that participants passed on either MReader or Xreading. MReader and Xreading also tracked the total number of words read by all participants over the semester, their reading level, and the number of passed and failed quizzes. Attitudes toward extensive reading and the type of ER were measured via a voluntary short online survey given at the end of the semester. Three instructors who also taught in both formats,

PGR and DGR, completed a qualitative survey about their perception and use of both ER formats (systems). Results demonstrated that students were motivated to read independently of the type of ER they participated in (PGR or DGR), that is because students in both groups reached the goal of 150,000 words with quizzes passed. On the other hand, results also indicated that PGR users read more words than DGR users. Regarding the benefits of using MReader and Xreading, instructors reported that both systems promoted students' autonomy, empowerment, and built classroom community. Concerning the difficulties using both systems, instructors reported that monitoring the book review portion of weekly graded-reader activities was more difficult when using Xreading (DGRs) than when using MReader (PGRs).

Dolgunsöz, E. (2021). Numeral processing in second language oral reading: An eye-tracking study. *The Reading Matrix: An International Online Journal*, 21(2), 133-144.

With the hypothesis that numbers required more time to process during L2 oral reading due to their phonological load compared to familiar words and non-words, the present study evaluated: (1) the speed numbers were read orally compared to the speed of non-words and familiar words, (2) the significant difference between familiar words, non-words, numerals (total fixation duration), and revisiting times during L2 oral reading, and (3) the effect of multiple digits on eye movements during L2 oral reading. Participants were 40 intermediate EFL first-year students. All participants were tested under three conditions, familiar words, non-words, and numerals. Students read out loud a total of 30 short sentences containing ten familiar words, ten non-words, and ten numerals. GP3 eye tracker with a 60hz speed was used to measure eye movements. Results indicated that sentences containing numerals slowed the reading speed. More attentional resources and revisits were detected when learners processed numerals than when they processed familiar words and non-words. Given these results, the authors proposed that numerals are cognitively demanding and potentially negatively affect the oral reading rate and reading fluency.

Du, W., & Ma, X. (2021). Probing what's behind the test score: Application of multi-CDM to diagnose EFL learners' reading performance. *Reading and Writing*, 34(6), 1441-1466.

In this study, the authors set out to implement a multi-cognitive diagnostic model (multi-CDM) to diagnose Chinese EFL learners' reading performance in a low stake reading comprehension test. CDMs reveal a learner's underlying performance beyond their test score. Most EFL reading studies have implemented a single CDM. Hence, this study attempted to explore how a multi-CDM outperforms any single CDMs in diagnosing Chinese EFL learner reading performance, as well as the levels of diagnostic feedback that can be extracted with the multi-CDM. The participants were 740 EFL freshmen at a Chinese university. All participants completed a reading comprehension test with the multi-CDM designed by the PELDiaG (Personalized English Learning: Diagnosis & Guidance) research team. Participants' multi-CDM performance was compared with that of five single CDMs. Results showed that the multi-CDM outshined its rival models, suggesting its advantage over single CDMs. Regarding inter-skill relationships, results demonstrated a compensatory relationship between syntax and vocabulary. In other words, lack of word deducing appeared to be compensated by literal sentence meaning and vice

versa. This study also presented a synthesized and fine-grained diagnostic feedback for students to evaluate their reading performance at the individual and group levels.

Durgunoglu, A. Y., Sagar, A., Fagan, K. E., & Brueck, A. (2021). Improving the comprehension and vocabulary skills of English language learners with content integrated language instruction for adults. *Adult Literacy Education*, 3(1), 34-48.

In the present study, the authors presented an evaluation of a newly developed curriculum entitled “Content Integrated Language Instruction for Adults” (CILIA). The approach seamlessly incorporated content instruction into L2 instruction with vocabulary development to ease adult learners’ comprehension of complex content. In particular, with the implementation of this approach, the authors sought to explore how vocabulary and comprehension instruction integrated with academic content affected vocabulary learning and the understanding of complex content. This study also attempted to gather learners’ perceptions of such an approach. Reports on this program evaluation were done via two studies. Study one had twenty-six ESL learners from an adult education center in three classrooms. Their ages ranged from 19-68. Participants completed vocabulary tests, quizzes targeting vocabulary and content knowledge, and a survey on the students’ views on the strength and weaknesses of the program. Study two included a control and an experimental group. Ages in both groups ranged from 19-51 years old. The experimental group (35 participants) was instructed with a CILIA approach, while the control group (26 participants) followed usual classroom instruction. Both control and experimental groups completed the same tests implemented in study one. Additionally, in both studies, participants were instructed on the specific content of American history and civics. Results in studies one and two indicated significant growth in the students’ vocabulary gains and post-test scores in study one and the post-test scores in the experimental group in study two. Moreover, students’ perceptions of the program were overwhelmingly positive, with students stating they learned a lot about civics and American history and gained much new vocabulary through the program. Overall, results in both studies favored the implementation of the CILIA approach.

Fareed, M., Sultan, S. R., & Shireen, K. (2021). Pakistani English stories for children: Linguistic and technical analysis. *Journal of Education and Educational Development*, 8(1), 95-108.

Considering the importance of input and reading for pleasure in acquiring a language, this study explored Pakistani English storybooks’ linguistic and technical features. Language learning materials, including books and storybooks in Pakistan, are produced locally. Therefore, the authors considered the importance of evaluating the quality of Pakistani English storybooks. Five storybooks written for children by Pakistani writers and published in Pakistan were selected for this study. Two of the five books were from Paramount Publishers, and three were from Children’s publishers. All the books were analyzed on linguistics features related to spelling errors, word repetition, adverb placement, adverb choice, sentence structure, diction, tense, punctuation, and word order. Additionally, all materials were analyzed for their literary elements,

such as the stories' plot, character, setting, and theme. The analysis indicated that the storybooks contained several language-related errors such as spelling, word repetition, adverb placement, sentence structure, diction, tense punctuation, and word order. The literary analysis showed that four out of the five books had stories with male protagonists, while only one storybook had a female protagonist represented by a donkey. Most stories lacked variety in literary elements such as imagery, character, plot, and theme development. The authors concluded that locally produced books require careful editing and technical refinement.

Fesi, L., & Mncube, V. (2021). Challenges of English as a first additional language: Fourth grade reading teachers' perspectives. *South African Journal of Education, 41*(3), 1-11.
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Using a constructivist case study methodology, this study investigated the challenges teachers encountered when teaching English reading skills to Grade 4 English First Additional Language (EFAL) learners and how to address their challenges. To get a deeper understanding of the challenges, researchers interviewed 12 teachers from 4 schools in Cape Town, South Africa and observed their lesson presentations and classroom management. Using purposive sampling, three Grade 4 educators were selected from each school, two language teachers and one natural science teacher. Researchers used critical discourse analysis to analyze and code the data collected from interviews and observations and five themes emerged as the main challenges that teachers encountered when teaching reading, including inadequate resources and inadequate training, overcrowded classrooms, EFAL learners' poor level of reading, decrease in teacher and learner motivation, and parental involvement and socioeconomic environment. Findings showed that these challenges negatively influenced teaching English reading and learning progress. To address these challenges, researchers suggested that teachers should receive robust reading strategy training and how to implement them to develop learners' reading skills. The reading strategies included reading aloud (to model reading, teachers would read the text out loud for the learners to help with difficult words and decrease reading anxiety), silent reading (learners would do a recreationally and free reading of a text in a timed period) and cognitive reading strategy (direct language learning strategy that enables the reader to decode the meaning of the reading text and understand it), and metacognitive reading strategy (indirect language learning strategies that make the learner aware of their own reading process and help them control their understanding). Based on their findings, researchers recommended a Comprehensive Model of teaching reading and encouraged future action research to use the model to eliminate L2 reading problems. They also recommended further qualitative studies to identify both English teachers and learners need to create more reading models for language reading development.

Fraser, C., Pasquarella, A., Geva, E., Gottardo, A., & Biemiller, A. (2021). English language learners' comprehension of logical relationships in expository texts: Evidence for the confluence of general vocabulary and text-connecting functions. *Language Learning, 71*(3), 872-906.

Highlighting the role of conjunctions on English language learner's (ELL) reading comprehension, this 2-year longitudinal study explored ELLs' comprehension of connectives and their functions within texts and its relationship with their reading comprehension. Seventy-four ELLs (42 female and 32 male) in grade 3 and 4 from 22 elementary schools in Ontario, Canada participated in this study. Data were collected through measuring ELL's comprehension of conjunctions as predictor and their reading comprehension as outcome, controlling their L1 background, general vocabulary knowledge, nonverbal reasoning, working memory, untimed decoding ability and prior reading comprehension. Students' comprehension of logical relationships was measured using Geva (2007) and Geva and Ryan's (1985) experimental logical relations task, where they read 4 expository texts, each including 10 to 12 conjunctions, followed by 3 multiple choice questions. The Peabody Picture Vocabulary Test–Third Edition–Form B (Dunn & Dunn, 1997) was used to measure students' general vocabulary knowledge, where they were shown 4 pictures and listened to a word and then were asked to point to the picture related to that word as the difficulty the words in texts progressively increased. ELLs' reading comprehension was measured using the standardized test of Neale analysis of reading ability (Neale, 1989) where students read six narrative passages with increasing length and complexity and answered 4 questions on the first passage and eight questions for each of the next 5 passages. Then, a screening test of nonverbal reasoning was performed using Matrix Analogies Test–Expanded Form (Naglieri, 1989) to measure students' problem-solving skills where they were shown an incomplete visual pattern and asked to complete the pattern by selecting a piece among the options provided. In addition, ELLs' working memory was measured by means of the backward digit span subtest of the Wechsler Intelligence Scale for Children–Third Edition or WISC III (Wechsler, 1991), where in 8 sets, students were presented with a list of digits and asked to recall and repeat them in a reverse order. The number of digits were gradually increasing in each set and the longest length sequence of digits that they could repeat correctly showed their digit span or memory span. Moreover, the Word Attack subtest of the Woodcock Reading Mastery Test–Revised or WRMT-R (Woodcock, 1987) was used to assess students' decoding ability where they read pseudowords that followed rules of English but were not real English words. Path analysis was conducted to explore the relationship between these variables. Results showed that ELL readers' comprehension of conjunctions directly and their knowledge of general vocabulary were indirectly related to their reading comprehension which would predict their deeper understanding of the text. The study suggested an overlap in the knowledge of general vocabulary and conjunction comprehension that would explain different reading comprehension skills among ELLs' with diverse L1 background. Given the findings, researchers encouraged further research to examine benefits of explicitly teaching specific types of conjunctions as well as general and academic vocabulary to enhance ELLs' reading comprehension and educational outcomes.

Garrison-Fletcher, L., Martohardjono, G., & Chodorow, M. (2022). Impact of home language reading skills' on L2 reading comprehension: A study of newcomer emergent bilinguals. *International Journal of Bilingual Education and Bilingualism*, 25(1), 287-300.

Garrison-Fletcher et al. investigated how L1 Spanish reading skills and L2 English language skills (i.e., L2 vocabulary and syntactic skills) relate to L2 reading comprehension among adolescents with different degrees of low L1 reading skills and low L2 proficiency levels. This study tests two hypotheses: (i) the Interdependence Hypothesis, which claims that L1 reading skills transfer to the L2; and (ii) the Threshold Hypothesis, which posits that the transfer of L1 reading skills can only occur when learners reach a minimum L2 proficiency level. Sixty-two Spanish-speaking adolescents in 9th grade (59%) and 10th grade (41%) who were newcomers and whose age ranged from 15 to 20 years old participated in this study. Most of the students came from the Dominican Republic (85%). Twenty participants had missed at least two years of schooling in their country of origin, while the remaining participants did not. The authors used the Academic Language and Literacy Diagnostic (ALLD) to measure participants' academic reading skills in both Spanish and English, as well as participants' L2 English vocabulary knowledge. The authors also included the *Evaluación Diagnóstica de la Comprensión Lectora (EDICOLE)* to measure participant's L1 Spanish reading comprehension of general texts. To assess participants' L1 Spanish as a control variable and L2 English syntactic comprehension, the authors employed the RLSUS Syntax Test. This test consists of the selection of an appropriate picture based on the oral interpretation of a sentence. The first research question aimed to explore which variable (L1 reading comprehension, L2 vocabulary syntax or L2 vocabulary) was the strongest predictor of L2 reading comprehension. A hierarchical multiple regression analysis showed that L1 reading comprehension played the biggest role in L2 reading comprehension, followed by L2 vocabulary and syntax. The second question investigated whether the use of a separate measure of L1 reading comprehension affects the results in the previous question. In their results, the role of the L1 reading skills is still the strongest predictor of L2 reading comprehension. The third question examined which variable, L1 reading skills or L2 language skills, played a stronger role in L2 reading comprehension. Two regression analyses showed that L1 reading comprehension accounted for 14.6% of the variance compared to the 7.1% accounted by the L2 language skills. Regression analyses were also carried out to assess the effects of country of origin, age, and length of time in the USA, and whether participants had missed two or more years of schooling in their country of origin. The results showed that these factors did not play a role in L2 reading comprehension. Therefore, the authors concluded that these findings support the Interdependence Hypothesis and call for pedagogical practices that help immigrant students maintain and support their L1 to accelerate L2 development.

Gönen, S. İ. K., & Kızılay, Y. (2022). Reading beyond the lines: Teaching critical reading in higher education. *The Reading Matrix: An International Online Journal*, 22(1), 73-92.

The present study examined EFL teachers' views on the concept of critical reading (CR), the application of such views in their classes, and their perceived challenges and difficulties while implementing CR. Participants were seven EFL instructors from a state university in Turkey. Qualitative data was collected via an open-ended questionnaire, semi-structured interviews, and self-reflection reports. Results revealed that CR was perceived differently from reading comprehension tasks and a general understanding of the text. Instead, participants associated CR

with a particular skill that requires strategies and involves close inspection and further analysis of a passage. Even though instructors' self-reflections showed that they value and believe in the relevance of CR in their classroom, qualitative data on their classroom practices revealed that instructors used limited CR features in their course materials and lesson plans. Finally, lack of training and knowledge on implementing CR and student-related reasons were reported as the main challenges for implementing CR in the classroom.

Goto, T. (2021). The effect of 20-minute extensive reading activities on TOEIC IP Scores. *The Reading Matrix: An International Online Journal*, 21(2), 145-152.

Highlighting the role of extensive reading (ER) in language learning, this quasi-experimental study explored the effect of ER on EFL university students' TOEIC IP scores. Test of English for International Communication (TOEIC) is a standardized test implemented by an institutional program (IP) such as a university in Japan that measures applicants' English language skills. The TOEIC IP consists of a listening and reading section, and each section has 100 questions and time limits to answer these questions (45-mins for listening; and 75 mins for reading). The total scores of TOEIC IP range from 10 to 990 points. Sixty-two Japanese EFL students who were in their first semester of Nursing school participated in the study. Students were assigned into two classes based on the Japanese alphabetical order. One class was allocated to the control group (n=32) and the other class to the experimental group (n=30). The experimental group was guided to do a 20-min in-class ER as well as an out-of-class ER assignment once a week. The control group did not receive any treatment. Students in both groups used the same textbooks to learn grammar and listening skills preparing for the TOEIC IP which they were going to take at the end of the semester. In addition to these textbooks, students in the experimental group read graded readers for ER, borrowed from campus libraries, starting with easier texts. Experimental group students did the ER following Sakai's (2002, 2014) rules by a) not using dictionaries; b) skipping unfamiliar words and phrases during reading to keep the flow and guess their meaning instead; and c) changing the book if they were not interesting and hard to read. During each session, students kept a record of their reading in record sheets including information, such as dates, title of books, book series, word counts, and ratings for how much in a scale of 1-10 they found the books interesting. At the end of the semester, all reading record sheets were collected for analysis and students in both groups took the TOEIC IP test. Results of the analysis of reading record sheets and word counts showed that students had read between 582 to 108,242 words after finishing a book with an average of 37,554.7 words per person for the whole semester. In addition, results of the TOEIC IP tests revealed that the experimental group outperformed the control group as their scores moved to a higher level with a significant difference existing between scores of students in these two groups. The study, thus, emphasized the positive effect of ER on EFL university students' language competence when they did extensive reading of easier texts for a short period of time and encouraged language teachers to apply this method in their classrooms.

Ismailov, M., & Ono, Y. (2021). Assignment design and its effects on Japanese college freshmen's motivation in L2 emergency online courses: A qualitative study. *The Asia-Pacific Education Researcher*, 30(3), 263-278.

In this study, the authors sought to investigate factors influencing EFL learners' motivation to complete online assignments during an asynchronous English reading course. Participants were 80 Japanese first-year college students enrolled in online English reading courses at a large university in Japan. A week after students received their final grades, an online semi-structured question guide was sent to them. The questionnaire was designed to collect data on factors influencing students' motivation to complete course tasks. It targeted motivation theories and constructs and gathered feedback to redesign assignments for future learners of the same course. The authors used a combination of thematic and narrative analyses followed by an inductive content approach. Ten themes associated with motivation and interest to complete online assignments emerged from the content analyses of the student's responses. Out of the ten themes, learner autonomy, social interaction, and personal interest in the topic of assignment were more frequently mentioned. Similarly, ten themes were associated with decreased motivation and disengagement when given online assignments. Perceived high difficulty of task, negative self-efficacy, and cognitive overload were the most popular themes associated with decreased motivation and disengagement when given online assignments. Overall results indicated that learners' narratives did not reflect single motivation factors but were endorsed by various motivation constructs from different motivation theories. Therefore, the authors suggested applying a multi-faceted approach in future research that considers motivation-related factors.

Jamali Kivi, P., Namaziandost, E., Fakhri Alamdari, E., Ryafikovna Saenko, N., Inga-Arias, M., Fuster-Guillén, D., Inga-Arias, M., & Nasirin, C. (2021). The comparative effects of teacher versus peer-scaffolding on EFL learners' incidental vocabulary learning and reading comprehension: A socio-cultural perspective. *Journal of Psycholinguistic Research*, 50(5), 1031-1047.

The authors of this study sought to investigate the impact of teacher and peer scaffolding on EFL learners' incidental vocabulary learning and reading comprehension through a sociocultural perspective. Accordingly, this study explored whether teacher and peer scaffolding significantly affect Iranian pre-intermediate EFL learners' incidental vocabulary learning and their reading comprehension. From a pool of 80 EFL learners studying English at a private Language Institute in Amol, Mazandaran Province, 60 were selected for this study, given that their scores from a placement test fell between one standard deviation above or below the mean. Participants were divided into three groups, two experimental groups, and one control group. One experimental group received teacher scaffolding, the other group received peer scaffolding, and the control group did not receive any scaffolding. All of the participants completed pre- and post-vocabulary and reading comprehension tests. Results indicated that participants in both experimental groups had significant gains in vocabulary learning and reading comprehension compared to the control group. A significant difference was also found between the teacher-

scaffolding group and the peer-scaffolding, with the peer-scaffolding group showing higher reading comprehension scores than those in the teacher-scaffolding group.

Kaban, A. L. (2021). EFL students' personalized reading experiences and its influence on engagement and online presences. *Shanlax International Journal of Education*, 9(4), 196-209.

This quasi-experimental study examined the use of personalized electronic reading approach through Microsoft Teams in EFL classes and how it influenced L2 learners' interaction, presence during online learning and perceptions toward EFL lessons. Participants of the study were 60 6th-grade students (30 in experimental group and 30 in control group) with the same level of English proficiency. Participants were selected from two English courses taught by the same teacher at a Turkish state secondary school in Turkey. Students in the control group were in a traditional English reading class where they acquired basic reading knowledge through in-class mobile language tasks, textbook lectures, and printed book reading. The experimental group attended a personalized digital reading class where they learned basic reading skills through out-of-class activities, reading digital story books and creating oral summaries, as well as in-class discussion and mobile language learning. During the 14 weeks of this study, four types of data were collected from students in both groups. First, students recorded 4 video clips of their English story telling/summarizing performance and uploaded it to a learning management system (LMS). These data were then scored based on 5 aspects of *ideas* (opening sentences and descriptive details and examples), *organization*, *voice*, *word choice* (use of sensory language, fragments and run-on sentences, and variety of structures), and *conventions* (spelling and grammar). Also, students' communication activities and oral interaction in the personalized class, recorded weekly via the "Insights" application on Microsoft Teams, were collected to explore their study habits and interactive patterns. In addition, before and after the treatments, students completed a 14-item, 5-point Likert scale questionnaire exploring their reflections and perceptions towards personalized electronic reading items. The 14 items were categorized based on 4 dimensions of *content*, *communication*, *performance* and *interest*. Analysis of the learning analytics (LA) data collected through the LMS and "Insights" application revealed that students in the experimental group were more motivated and more engaged in the personalized e-book learning program due to the larger number of replies, reactions and posts they shared in their in-class and out-of-class interactions. Researchers suggested that a personalized electronic reading environment not only motivated students' interaction and online presence but also improved their reading skills and class participation and thus created autonomous learners.

Kalita Nath, P. (2021). The effect of planned instruction on metacognitive awareness of reading strategies. *LEARN Journal: Language Education and Acquisition Research Network*, 14(2), 194-221.

Considering the interaction of two aspects of metacognition- 'knowledge about cognition' and 'regulation of cognition', this study explored the effect of the strategy instruction incorporating 'knowledge about cognition' on ESL learners' metacognitive awareness of reading strategies.

Twenty-seven non-native ESL students (23 female and 4 male) in an academic reading course participated in the study. They were in the first semester of their MA studies in the Linguistics and English Language Teaching program in India. Students' metacognitive awareness of reading strategies was measured using the Survey of Reading Strategies (SORS) questionnaire (Mokhtari & Shorey, 2002). SORS consisted of 30 statements divided in three different strategies: Global Reading Strategies (GLOB), Problem Solving Strategies (PROB), and Support Strategies (SUPP), with a 5-point Likert scale (1=I never or almost never do this, to 5 =I always or almost always do this). Based on the mean scores interpreted from the average scores that students obtained for their self-reported reading strategy usage, three levels of strategy use- high (3.5 or higher), moderate (2.5 to 3.4), and low (2.4 or lower) were identified. SORS was distributed twice, once at the beginning of the semester before the planned strategy instruction intervention and once at the end of the semester after the intervention. During the instructional phase, using 'before reading' and 'after reading' activities for 8 texts from an ELT textbook, students were explicitly introduced with multiple reading strategies and given opportunities to practice them and discuss their use. In this phase, the first dimension of metacognition- knowledge about cognition, was taught in three steps of *declarative knowledge* (knowledge about strategies, what a strategy was and why they were useful), *procedural knowledge* (knowledge about how strategies were used through experience), and *conditional knowledge* (knowledge about why, when and where to use the strategies). The second aspect of metacognition, regulation of cognition, was planned to be taught in the second semester which was not the focus of this paper. After the intervention, SORS was administered again to reassess the effect of the planned instruction on students' metacognitive awareness. Results of pre- and post-instructional SORS assessment showed that students had statistically significant gain, at the medium level, in their metacognitive awareness of academic reading strategies, which revealed the positive effect of the knowledge of cognition instruction. In addition, it was found that among the three strategies, the highest level of awareness was reported for PROB usage and the lowest for GLOB. In other words, participants mainly focused on using the lower-level localized and focused strategies to deal with reading comprehension difficulties while the higher-level GLOB or monitoring strategies to manage or regulate their reading behavior were used the least. Results also showed that after the instruction and receiving awareness raising activities about strategies and why, how, when and where to use them, students with lower level of metacognitive awareness benefited more than those with higher level of awareness, although overall students gained a higher level of awareness in using lower-level identification abilities and higher-level comprehension skills. The study suggested that exposing students with mixed levels of perceived awareness with various kinds of reading strategies and opportunities to use would reduce the gap between lower-level and higher-level students. Given the findings and limitations of the study, the researcher recommended further research to consider the effect of the linguistic background of learners on their awareness of reading strategies as well as their actual use of strategies.

Kapperman, G., Kelly, S. M., & LeRette-Kauffman, H. (2021). The study of Russian as a foreign language for English-speaking braille readers using the job access with speech or nonvisual

desktop access screen reader and a refreshable braille display. *Journal of Visual Impairment & Blindness*, 115(4), 347-351.

In this report, the authors described the procedures that would aid braille readers in studying the Russian language through assistive technology. Two approaches were described. One approach detailed the steps to gain access to language content in Russian through the Job Access with Speech (JAWS) screen reader and a refreshable braille display. The second one described the steps to navigate language content in Russian through Nonvisual Desktop Access (NVDA) and a refreshable braille display. The steps targeted Windows 10 users. One main difficulty encountered when using NVDA was the inconsistent switch between languages, in this case, Russian and English, when the languages had been typed into a document with their respective language-appropriate keyboards. On the contrary, JAWS showed no issues switching between languages. This report also described Russian braille symbols presented on the refreshable braille display and how to manage stress indicators using NVDA and JAWS. The authors concluded that the reported information could be relevant for language instructors of Russian, as it can help their students access educational language materials with content in both languages, Russian and English.

Karimova, K., & Csapó, B. (2021). The relationship between cognitive and affective dimensions of reading self-concept with reading achievement in English and Russian. *Journal of Advanced Academics*, 32(3), 324-353.

This study examined the multidimensional structure of reading self-concept in two foreign languages. Particularly, it sought to demonstrate (1) the twofold multidimensionality of reading self-concepts (cognitive and affective components) in English and Russian, (2) the internal/external (I/E) frame of reference model within reading self-concept, (3) the relationships between reading achievements in two target languages and reading self-concepts, and (4) the invariance test of the I/E model based on cognitive and affective components of reading self-concept and reading achievement in English and Russian across gender. There were 349 secondary school students from Baku (44.7% girls, 54.7% boys). Participants completed a reading achievement test in English and Russian and the reading-self-concept questionnaire. Structural equation modeling supported the twofold multidimensional structure of reading self-concept in English and Russian and the applicability of the I/E frame of reference model within the foreign language domain. Moreover, gender results indicate that boys and girls tended to develop similar structures of reading self-concept in their two foreign languages. However, girls showed higher correlations between cognitive self-concepts and achievements in two foreign languages than boys.

Klassen, K. (2021). Second language readers' use of context to identify proper names. *The Reading Matrix: An International Online Journal*, 21(2), 85-105.

In this study, the author explored how Japanese intermediate L2 readers of English use sentential context to identify proper names correctly. This study was the first step in exploring the assumption that L2 readers can quickly identify proper names by recognizing their form and function. The function of proper names was omitted in this study to test if context can help identify proper names. Sixty-one Japanese first-year university students participated in this study. All participants were asked to read sentences, each of which was presented in lower case letters and contained names with both a proper name usage and another common word meaning (i.e., Mark, mark). Participants were asked to add upper-case letters to each sentence when appropriate. Descriptive statistics from correct responses indicated that only 28.4% of participants correctly identified proper names, and 91.4% correctly identified non-proper names. Overall, results also indicated that sentential context was not helpful for Japanese L2 low intermediate readers of English to identify proper names. Given the results, the author offered various strategies instructors can use to help students become more familiar with L2 proper names in L2 texts.

Kobrin, J., Bullock, P. G. N., Gierke, J., & Heil, C. (2021). Adult educators adopting technology in their classrooms through innovation, collaboration, and inquiry. *Adult Literacy Education, 3*(1), 49-54.

This article presented a collaborative professional development initiative focused on how three adult EFL teachers use technology in their classrooms. The EFL instructors were part of the professional development project PHL Technology in Adult Education Initiative, which ran for 18 months. The project followed a collaborative, inquiry-based approach, and a community of practice approach, which emphasizes learning and knowledge creation as a social process. Participants were teachers and administrators from ESL programs, workforce development, and high school. This article presented three main sections written by the three EFL instructors in this project. Each instructor described how they incorporated technology in their unique classroom context. An EFL instructor used mind maps in a youth workforce program to support informational interviews and develop critical thinking. A second EFL instructor used texting with new immigrants and refugees to boost their language learning outside the classroom and emphasized the importance of developing reading and writing in multiple forms, on paper or screen, with pens or keyboards, and turning pages or scrolling. Finally, the last EFL instructor in this article described how blended learning was helpful for busy students that work at restaurants. The instructor described how using Google Classroom in an advanced book club helped learners gain a more profound understanding of the text through online discussions. The authors hoped this article would inform administrators interested in implementing similar professional development projects and inform educators interested in using technology in their classrooms.

Krepel, A., de Bree, E. H., Mulder, E., van de Ven, M., Segers, E., Verhoeven, L., & de Jong, P. F. (2021). The unique contribution of vocabulary in the reading development of English as a foreign language. *Journal of Research in Reading, 44*(3), 453-474.

Krepel et al. explored the effects of L2 English vocabulary and orthographic knowledge on L2 English word reading among seventh graders. A final sample of 455 proficient Dutch speakers were assessed on their L2 English vocabulary, orthographic and reading skills at the beginning (Time 1) and end (Time 2) of the school year. Vocabulary was measured through a shortened version of the Peabody Picture Vocabulary Test, where participants were asked to choose the correct picture among four after hearing a word. Orthographic knowledge was operationalized through a dictation task that consisted of words participants had to spell after hearing the sentences in which those words were embedded. Most of the words were irregular to make the task challenging enough and to tackle word-specific knowledge. Reading skills were measured in two ways: (i) reading accuracy, and (ii) reading fluency. To measure reading accuracy, participants were asked to read a list of 40 regular and 40 irregular words as accurately as possible. Articulation errors were considered acceptable while decoding errors were considered unacceptable. Reading fluency was assessed through two subsets of the Test of Word Reading Efficiency: (i) The Sight Word Efficiency containing 109 regular and irregular words of increasing difficulty, and (ii) The Phonemic Decoding Efficiency featuring 66 pseudowords with regular pronunciations. For both subsets, participants were allotted 45 seconds to accurately read as many words as possible. Longitudinal regression analyses were employed to investigate contributions of vocabulary and orthographic knowledge on reading. Commonalities analyses were used to break down the contribution of vocabulary and orthographic knowledge. Separate analyses were also carried out to investigate whether vocabulary and orthographic knowledge affected regular, irregular, and pseudo- words in a similar fashion, while controlling for regular, irregular, and pseudo- word reading accuracies. Vocabulary and orthographic measures in Time 1 were used to predict reading accuracy and fluency in Time 2 while controlling for the reading measures in Time 1. Results showed that vocabulary and orthographic measures were correlated with each other, and more strongly correlated with the reading of irregular words than the reading of regular or pseudo- words. More specifically, vocabulary correlated more strongly with irregular (as opposed to regular) word reading accuracy at both Times, as did orthographic knowledge at Time 2. According to the authors, this role of vocabulary on irregular word reading is in line with Harm and Seidenberg's (2004) Triangle Model, in which orthography activates semantics and semantics activates phonology. However, the authors warned that it is difficult to ascertain if word meaning was accessed at all in the reading tasks. The authors also claimed that this finding on vocabulary is comparable to findings from L1 English studies, suggesting that this role of vocabulary on reading is specific to English. Therefore, the use of the L1 will rely on the orthographic overlap between the languages. Results also showed that both vocabulary and orthographic knowledge correlated more strongly with word reading fluency, as opposed to pseudoword reading fluency; in fact, vocabulary and orthographic knowledge hardly contributed to word or pseudo-word reading fluency. Moreover, orthographic knowledge was found to affect irregular and regular word reading accuracy and fluency, which is in line with previous L1 studies. Following the authors, future studies should consider orthographic knowledge.

Li, M., Geva, E., D'Angelo, N., Koh, P. W., Chen, X., & Gottardo, A. (2021). Exploring sources of poor reading comprehension in English language learners. *Annals of Dyslexia, 71*(2), 299-321.

The authors of this study sought to identify common reading comprehension difficulties encountered by English language learners (ELLs). Remarkably, the authors sought to investigate if ELL poor comprehenders differed in oral language, metalinguistic skills, working memory, and higher-level processing skills from ELL average and good comprehenders. It also explored similarities or differences in the reading comprehension profile of ELLs versus first language English learners (EL1). Participants were 124 Chinese ELLs and 79 EL1 students from a Canadian elementary school. All measures were administered to all participants during the spring semester. A regression technique was used to classify learners by poor, average, and good comprehenders. Fifteen ELL and eleven EL1 were identified as poor comprehenders. Thirteen ELL and eleven EL1 were identified as good comprehenders, and 14 ELL and twelve EL1 were grouped as comprehenders. Significant differences were found between ELL and EL1 poor comprehenders on oral language and metalinguistic skills and between ELL poor and average comprehenders. ELL poor comprehenders showed lower performance on vocabulary breadth, listening comprehension, and morphological awareness than their EL1 counterparts and ELL average comprehenders. Additionally, ELL poor and average comprehenders performed lower than ELL good comprehenders on all three higher-level processing skills. Findings on the reading profile of poor comprehenders revealed that they experienced difficulties in oral language skills (e.g., vocabulary breadth and listening comprehension) and metalinguistic skills (e.g., morphological awareness). Altogether, results indicated that vocabulary, listening comprehension, and morphological awareness are sources of difficulties for ELL poor comprehenders in elementary grades.

Li, R. (2022). Foreign language reading anxiety and its correlates: A meta-analysis. *Reading and Writing, 35*, 995–1018. <https://doi.org/10.1007/s11145-021-10213-x>

This meta-analysis sought to provide a detailed description of the correlation between foreign language reading anxiety and several correlates such as language anxiety, reading performance, reading self-efficacy and reading strategy. The analysis included 40 studies with a total of 9,785 participants. Results indicated that three correlates (language anxiety, reading self-efficacy, reading strategy) were negatively correlated with foreign language reading anxiety. In addition, foreign language proficiency and age affected the correlation between foreign language reading anxiety and reading performance.

Lo, C. C., Wen, H., & Lin, Y. S. (2021). The effect of readers theater on EFL seventh-graders' reading and listening comprehension. *SAGE Open, 11*(3), 1-12. <https://doi.org/10.1177/21582440211038388>

Highlighting the role of reading fluency in reading and listening comprehension, this quasi-experimental study explored the effect of Readers Theater (RT) instruction on EFL students' language ability in a peer-assisted learning environment. RT activities referred to the opportunities that students were provided to select or create scripts similar to the one that performers, such as actors and singers use, and then with the help of their peers repeatedly read it to understand, memorize and finally perform it. Sixty-eight seventh-grade students from two junior high school classes in Taiwan participated in the study. Each class consisted of 34 students with mixed English abilities/achievement levels- 'pre-intermediate', 'intermediate' and 'upper-intermediate'. One class was assigned to the experimental group (19 male and 15 female) and the other class to the control group (18 male and 16 female). The study took 10 weeks. The first and last weeks of the study were devoted to the data collection using a background questionnaire, pre- and post-reading and listening comprehension tests and interviews. During the first week, all participants' English learning background was collected through a background questionnaire and then they took both the pre-reading comprehension test and the pre-listening comprehension test to make sure both groups were similar in their reading and listening proficiency levels before the intervention. Then, for 8 weeks, students in the experimental group received 12 periods of RT instruction on four outside reading passages/scripts. RT instruction for each reading passage took three periods or 45-min sessions. In the first period, students received instruction on listening to the passage and reading it orally, and became familiar with its main idea, new words and phrases, followed by the RT rehearsal and performance in cooperation with their peers in the next two periods. The control group received the same reading material in the first period instruction but without RT activities and any assistance from peers. Finally, 9 experimental group students from three different levels were interviewed, using a five open-ended question survey, to learn about their reflections and feelings about RT instruction and its effect on their English learning. Then, students in both groups took the post-reading and post-listening comprehension tests that assessed their reading and listening proficiency, understanding of the 4 passages and the usage of their words and phrases. Results of the quantitative data revealed that students in the RT group significantly outperformed students in the control group in reading comprehension tests, but not in the listening comprehension that could be due to repeated and cooperative reading and rehearsal which led to their oral reading fluency. Majority of students in the experimental group also believed that RT instruction had a positive effect on their English reading and listening. Given the findings, the study suggested that teachers apply RT instructional strategy to encourage interaction and mutual help between high-achieving and low-achieving students that ultimately helped improve their confidence in their language skills and language learning process. Researchers also encouraged future research to explore the factors that would impact the listening comprehension and reading fluency development of the students involved in RT instructions, and also the impacts of student anxiety on their willingness to interact with their peers.

Marsa, S.S., Kuspiyah, H. R., & Agustina, E. (2021). The effect of Kahoot! game to teaching reading comprehension achievement. *Journal of English Teaching*, 7(2), 133-149.

<https://doi.org/10.33541/jet.v7i2.2738>

Using quasi-experimental mixed method design, this study explored the effect of using Kahoot! Game on teaching reading comprehension achievement of 4th semester EFL students. According to researchers, Kahoot! Game application was classified as a game-based student response system in which teachers managed and designed a game based on the topics and materials provided and taught in class, and then students got engaged in the game. Using purposive sampling, participants of this study were 39 fourth-semester students (30 in experimental group and 9 in control group) selected from 2 classes in the English Education Program of STKIP Nurul Huda Sukaraja in Indonesia. Quantitative data was collected through a reading comprehension test consisting of the pre-test and post-test with similar topics to obtain the students' reading comprehension achievement. Qualitative data was collected through observation, a 26-item questionnaire, and semi-structured interviews to explore students' engagement, perception, motivation, and attitudes towards Kahoot! Game and if they had any suggestions. Students in the control group completed reading comprehension tasks using a conventional game, and the experimental group completed similar tasks in a Kahoot! Game. Results of the quantitative data showed that there was a significant difference between reading comprehension achievements of students in the experimental and control group, as students in the experimental group who were taught by Kahoot! had higher reading comprehension scores on their post-test. Results of qualitative data showed that students in the experimental group, compared to the control group, had more motivation and positive attitudes towards Kahoot! as they were highly engaged in activities and enjoyed their interactions with group members and members of other groups and found the course more fun and enjoyable using this game. Researchers recommended the use of Kahoot! Games in the learning process as it would have a positive impact on students' attitudes and increase their motivation and involvement.

Maurer, U., Jost, L. B., Pfenninger, S. E., & Eberhard-Moscicka, A. K. (2021). Effects of German reading skills and bilingualism on early learning of English as a foreign language in primary school children. *Reading and Writing, 34*(10), 2673-2689.

Maurer et al. explored how reading fluency in L1 German and language background (bilingual/monolingual) impact the learning of L2 English in primary schools. German reading fluency was assessed by averaging the scores of three measures: (i) correct words per minute based on Salzburger Lese- und Rechtschreibtest I "frequent word" and "long text" subsets; (ii) correct words per minute based on Salzburger Lese- und Rechtschreibtest II word list subtest; and (iii) the Salzburger Lesescreening 1-4 correct sentences per minute. L2 English and L1 German knowledge was measured through category-member naming, digit and picture naming (RAN measure), and repeating words without first speech sound (phoneme deletion). Additional measures were taken to assess L2 English knowledge: reading and translating English words, picture naming in English, picture selection after English oral cue, and an English spelling task. Eighty-three 3rd-graders with different L1 reading abilities were tested on their English knowledge after a year of two 45-minute communicative English lessons per week. Many students were either poor readers (27) or dyslexic (14). Twenty-seven students came from a bilingual household, where one or two of their parents were native speakers of a language

different from English or German. The remaining 56 students were from Swiss-German families, where two dialects of German were used, and were classified as monolinguals by the authors. All students belonged to a homogeneous group in terms of age, gender ratio, non-verbal IQ (according to the German Wechsler intelligence scale for children), and socioeconomic status (based on the International Socio-Economic Index of Occupational Status). A MANOVA was carried out featuring the English knowledge scores as multivariate dependent variables, language background as a predictor variable, and reading fluency as a covariate variable. An additional regression analysis was performed with age, gender, block design and SES as covariates, and the German knowledge measures were used as a covariate control variable. All English measures apart from sentence comprehension significantly correlated with German reading fluency indicating that the slower the students read in their L1 German, the poorer their English knowledge in all measures but sentence comprehension, probably due to the simplicity of this task. Unpaired t-tests showed no significant differences between the monolingual and bilingual groups. The authors explained these results by stating that phonological deficits typically present in dyslexic and poor readers may result in L2 learning difficulties, including vocabulary and sentence comprehension at both written and phonological processing. However, they also considered students' motivation as another explanation. The authors mentioned that the absence of differences between the monolingual and bilingual groups in the language tests showed no bilingual advantage in word learning, contradicting previous research. As for the study limitations, the authors acknowledged that the study was underpowered given the small and unequal sample size, which may have affected the results despite statistical analyses showing the groups' homogeneity. In addition, the bilingual group was heterogeneous in terms of the official status of the languages they spoke, which may have affected the lack of differences in SES between the two groups. Finally, the authors commented that the bidialectal condition of the monolingual students may have accounted for the lack of differences between the two groups, even though differences in L1 German knowledge were found between the two groups. The authors encouraged future studies to identify optimal intervention methods for dyslexic and poor readers, to explore how L1 reading fluency may impact L2 knowledge in a more intense L2 learning context, as well as to investigate how age or the length of L2 instruction can affect L1 reading fluency.

Nahatame, S. (2021). Text readability and processing effort in second language reading: A computational and eye-tracking investigation. *Language Learning*, 71(4), 1004–1043.

Considering traditional and most recent text readability formulas, the author of this study investigated the construct validity and potential of traditional and newer L2 text readability formulas for predicting the processing effort involved during L2 reading via eye movement. Eye tracking was used as a more precise measure of natural text processing. This study measured four eye moments: mean fixation duration, mean saccade length, skipping rate, and regression rate. Two studies with different methodological approaches were conducted to explore a broader range of readability formulas. Study one included 48 undergraduate and graduate Japanese students. It used shorter texts with readability formulas less likely to be affected by text length.

The participant's eye movements were recorded via the eye tracker EyeLink 1000 Plus. Study two used longer texts to include a broader range of formulas. It analyzed selected data from a large dataset found in an eye-tracking corpus. Participants were 19 Dutch L1–English L2 bilinguals. Results from study one indicated that traditional formulas failed to predict eye movement measures; however, in study two, traditional formulas significantly predicted mean fixation durations. The author suggested that these results may indicate that traditional formulas may have the potential to predict L2 reading processing patterns by mean fixation durations. Overall results from both studies also showed that newer formulas, especially those cognitively inspired, outperformed traditional formulas in predicting eye movement patterns. In general, results showed that the validity of traditional formulas is not weak. However, newer formulas have shown more theoretically valid and accurate measures of the processing effort involved in L2 reading.

Park, J. H., Kuo, L. J., Dixon, Q., & Kim, H. (2022). Korean-English bilingual children's stress cue sensitivity and its relationship with reading in English. *Journal of Psycholinguistic Research, 51*(2), 397-415.

This study reported findings on how two major English lexical stress cues (e.g., morphological, and orthographic) affect word reading performance. It investigated the sensitivity of speakers from different prosodic systems in assigning stress to English pseudowords and how that stress sensitivity relates to reading ability. Participants were forty-two bilingual children from Korean-speaking homes enrolled in elementary U.S. schools in California (grades 3-5). Children's general reading ability was assessed through two standardized reading tasks (Word Identification and Word Attack subtests of the Woodcock Reading Mastery Test). Bilingual children's sensitivity to probabilistic orthographic cues was measured via 32 disyllabic pseudowords. Participants were asked to circle one of the two syllables within disyllabic pseudowords that they would put stress on. Morphological cues to the stress assignment tasks were also measured by requesting participants circle one of the segmented syllables on which they would put the stress. The Peabody Picture Vocabulary Test- IV was used to measure the participants' English receptive vocabulary. Results revealed that Korean-English bilingual children relied on both orthographic and morphological cues when assigning lexical stress to multisyllabic English pseudowords. The bilingual children also performed significantly better when assigning stress to orthographic cues than morphological cues. However, the current study found no significant correlations between variables on stress cue sensitivity and variables on reading performance, even after controlling for age, English vocabulary, and Korean vocabulary knowledge.

Peterson, J. (2022). Japanese extensive reading: Reading goals and learner perceptions. *The Reading Matrix: An International Online Journal, 22*(1), 114-135.

This study examined the feasibility of setting lengthy reading goals for FL learners and their perceptions of extensive reading (ER) and its relationship with their reading rate gains. Using non-probability sampling, eight intermediate level Japanese FL learners from Brigham Young

University and Utah Valley University voluntarily participated in the study. Two students had started learning Japanese from the first level at school and six were immersion learners who lived in Japan for 16 to 22 months where they used the language daily. Before the intervention, students completed a 10-item, 10-point Likert scale pre-questionnaire exploring not only their perceptions of the reading methods they had already used but also their perceptions of Japanese reading. In addition, participants completed both a pre-vocabulary size test and a pre-proficiency test. Then, after explaining ER and its rules and principles to all participants, the researcher conducted a single-subject study design to collect data from each participant. Participants individually met with the researcher 2-3 times a week where they got engaged in ER, reading 7,200 standard Japanese words per week, and filled out reading logs for 10 to 18.5 weeks. Over these weeks, the researcher observed students' engagement in ER and tracked their reading rates through reading tests and also recording the number of characters and minutes each student read. After the interventions, students completed a 20-item, 10-point Likert scale post-questionnaire exploring their reflection on their pre-study reading habits, any increase in their enjoyment, motivation and reading ability after using ER approach and their attitudes towards it. Results of data analysis revealed that after multiple months of being engaged in ER, learners' reading rates and gains increased for better understanding what they were reading, which also confirmed that it was feasible for intermediate level students to set a reading goal of 7,200 words per week. Results also showed that overall students had a positive attitude towards ER as it helped them lower their affective filter, and thus made reading a more enjoyable experience than intensive reading (IR) approaches they did pre-study. The study suggested that providing learners with level-appropriate reading materials and the ability to choose what to read were the factors which boosted their confidence and engagement in reading and made ER a motivating experience for them. Given the findings and limitations of the study, the researcher encouraged future research to replicate the study with larger numbers of language learners from different backgrounds and to explore other effects of ER including increase in the learners' vocabulary size and language proficiency gains as well as incidental learning of Japanese vocabulary or kanji characters.

Pongsatornpipat, W. (2021). Interactive group in extensive reading to enhance reading ability of Thai undergraduate students. *LEARN Journal: Language Education and Acquisition Research Network*, 14(2), 342-371.

Highlighting the role of extensive reading (ER) in language learning, this study investigated effects of ER on EFL students' reading ability and opinion regarding their reading development. Extensive reading was defined as reading for pleasure on topics of interest and in combination with interactive groups to get a general understanding of the content. Participants of the study included 30 Thai students (13 male and 17 female) from English courses in a university in Thailand. This ten-week mixed methods research used pre- and post-vocabulary and reading comprehension tests and interviews to collect data. In the first week, the vocabulary and reading comprehension pre-test was administered to assess participants' reading ability. Then, participants were grouped into three groups of high (n=5), average (n=9), and low (n=16) levels based on their scores and their topics of interest. For eight weeks, each group was given an

article from BBC, CNN or National Geographic to read and discuss using their background knowledge. After each ER activity, they completed a weekly journal in which they wrote their background information about the article that they read and discussed in their group and the new vocabularies they learned, gave a summary of main ideas, and then reflected on the activity and their interactions. In the last week of the study and after eight weeks of doing ER activities, the vocabulary and reading comprehension post-test was conducted to reassess each student's reading ability. Later, based on post-test scores, nine students (4 from highest scoring group, 3 from average, and 2 from lowest scoring group) were interviewed about their opinions about their interactive group activity, reading comprehension development, and self-autonomy in learning. Results of the pre- and post-tests showed that ER had significantly increased vocabulary and reading abilities of students in all three levels. Furthermore, results of the interview analysis showed students' positive attitudes toward their reading development and ER interactive activity that increased their motivation to learn autonomously. Therefore, researchers suggested that using interactive groups in ER would not only generate autonomy among low level learners but also strengthen higher level student's autonomous skills, and thus recommended teachers to organize and implement these activities in language learning classrooms.

Prichard, C., & Atkins, A. (2021). The effect of different vocabulary coping strategies on incidental vocabulary acquisition: An eye tracking study. *The Reading Matrix: An International Online Journal*, 21(2).

Prichard and Atkins explored the effects of three reading strategies on the incidental learning of word meaning through eye and navigation tracking and an unannounced post-reading vocabulary test. The examined reading strategies were the use of dictionaries, the attention to context cues, and ignoring unknown words (or read on). Sixty-three Japanese intermediate learners of English read a 400-word text that contained 96% of known words. The text featured 16 target pseudowords. Each pseudoword was a noun, appeared only once and was placed within the second sentence of two-sentence paragraphs. These pseudowords were hyperlinked to a dictionary page with short definitions in English and Japanese. There were a total of four conditions resulting from the combination of two factors: relevance of the meaning of the pseudoword, and the provision of context cues to infer its meaning (i.e., use of synonyms, in-text definitions, and examples). There were four pseudowords in each condition. Participants were allotted a maximum of fifteen minutes to read the text after completing a pre-reading training task. During the reading task, participants were not allowed to go back to previous pages or take notes. Afterwards, participants completed the vocabulary test. Participants had to provide a synonym or definition of each pseudoword to score a point, regardless of spelling accuracy. Forty-one participants took a working memory test to account for this variable. In the results, participants scored a mean of 1.44/16 in the vocabulary test. Pseudowords in context yielded statistically significant better results than those without context, as did relevant words in opposition to irrelevant words. Relevant and context-cued pseudowords obtained the best results. Considering the total number of encounters with the pseudowords by all participants, dictionaries

were used 79.16% of those encounters, which led to a retention of 10.78% of those pseudowords. Out of these encounters in which participants used dictionaries, attending to context cues was found beneficial. When failing to attend context cues, 10.15% of words were recalled, as opposed to 14.4% when doing so. This advantage was especially true for relevant pseudowords, yielding a 24.13% of word recall. The authors mentioned that this finding highlights the importance of attending to context when relevant, and not solely relying on dictionaries. For the encounters in which participants could not attend to context cues and did not use a dictionary, the recall percentage was 7.35%. When pseudowords were embedded in context cues but participants did not look up their meaning, 13.16% of the words were recalled. In the instances in which context cues followed the pseudoword, reading the whole sentence and using a dictionary helped participants remember 11.32% of the words. Among participants with higher working memories, a significant correlation was found between the number of regressions after fixating on a pseudoword and vocabulary scores. Furthermore, this correlation increased for relevant and context-cued pseudowords. The extent of dictionary use affected incidental vocabulary learning differently among participants with higher and lower working memory. A negative correlation between look ups and vocabulary recall was found among participants with higher working memory, while there was a positive correlation among those with lower working memory. Furthermore, the duration of fixation on definitions significantly correlated with vocabulary scores among participants with lower working memory, which the authors interpreted as a support for the Involvement Load Hypothesis (Hulstijn & Laufer, 2001). Concerning the study limitations, the authors mentioned the quality of the dictionary and the text, which consisted of 96% of known words, and one occurrence of each pseudoword and context cues for half of the target pseudowords.

Qaddumi, H. A. (2021). A study on the impact of using Edmodo on students' achievement in English language skills and retention. *Education and Information Technologies*, 26(5), 5591-5611.

In this study, the researcher sought to explore the impact of Edmodo application on EFL students' language skill achievement and retention. Edmodo is a social learning network that can be used on cell phones via a free application. With Edmodo, language instructors can monitor student achievements and communicate and share language learning materials. This study used a quasi-experimental design with 53 eleventh-grade Palestinian students, of which 27 were assigned to the experimental group and 26 to the control group. For twelve weeks, the experimental group was exposed to Edmodo as part of their L2 instruction, while the control group attended regular class sessions without Edmodo exposure. Pre- and Post-tests scores from both groups were assessed to determine the effectiveness of Edmodo on language achievement skills and retention. Results showed significant differences in language skills achievement and retention, favoring students in the experimental group. The author attributed such results to the incorporation of Edmodo in the L2 instruction in the experimental group and encouraged the application of Edmodo in the language classroom to facilitate English learning, learners' interaction opportunities, and retention.

Rich, K., Eckstein, G., & Lynn, E. (2022). Reading rate gain in a second language: The effect of unassisted repeated reading and intensity on word-level reading measures. *The Reading Matrix: An International Online Journal*, 22(1), 1-19.

This study aimed to investigate the extent to which intensity and the duration of a repeated reading (RR) intervention affect the reading rate and early and late reading behavior among adult ESL readers. Additionally, it explored the extent to which interaction between intensity/duration affects reading rates. Participants were forty-six ESL students enrolled in an intensive English program (IEP) in the western United States. Through a semester, all of the participants completed 26 RR sessions. Students in the control group read all passages only once. Participants in one of the treatment groups read all passages twice, and those in another treatment group read all passages three times. Comprehension scores and reading speed for all readings were tracked throughout the semester. At the same time, eye-tracking data was collected three times (i.e., in the beginning, middle, and end of the semester). The results showed that students increased their words per minute (WPM) even with unfamiliar passages after seven weeks of RR intervention. Both early and late reading behaviors were affected by the duration of treatment. However, there was no significant difference in intensity on WPM or any eye-tracking measures, and there was no significant interaction between intensity and duration. The study concluded that reading rate and behavior changed in meaningful ways as a result of time. Participants became faster and more fluent readers over a minimum of seven weeks as a product of engaging in RR. The author encouraged reading teachers to include an element of fluency instruction in their curriculum.

Schmidtke, D., & Moro, A. L. (2021). Determinants of word-reading development in English learner university students: A longitudinal eye movement study. *Reading Research Quarterly*, 56(4), 819-854.

Schmidtke and Moro investigated how text and reader-specific characteristics affect lexical processing effort in L2 English reading among 70 L1-Chinese college students in an eight-month intensive English bridging program for low-proficiency learners in Canada. The text characteristics included the length and frequency of words. Word frequency measures were obtained from SUBTLEX-US corpus. The reader-specific characteristics were comprised of phonological processing, vocabulary knowledge and listening comprehension skills. Phonological processing measures were based on the Comprehensive Test of Phonological Processing battery which assesses phonological awareness and memory, as well as Rapid symbolic naming. Vocabulary knowledge was assessed through forms A and B of the Peabody Picture Vocabulary Test. Listening comprehension scores from the program exams were used to measure students' listening comprehension abilities. Seven stories of increasing complexity from Gray Oral Reading Tests were used to measure reading comprehension and were presented in a counterbalanced fashion. All tests were presented at the beginning (Time 1) and end (Time 2) of the program. The authors evaluated processing effort through six eye-tracking measures: first-fixation duration, gaze duration, go-past time, total reading time, re-fixation probability and

regression-in probability. The authors interpreted fewer and shorter fixations as an indication of reduced lexical processing effort. Two analyses were conducted. The first analysis focused on the effects of text characteristics. In this analysis, participants' age, age of arrival to Canada, age of initial English instruction, and IELTS scores were also included as predictors. The authors also included the passage complexity and word position as fixed effects. Results showed significant interactions between the time point and word length on refixation probabilities, gaze durations, go-past times, and total reading times. Word length effects were larger at Time 1, suggesting a decrease in lexical processing effort and a more direct and holistic processing. A reduction of 10% in total reading times was found for long words, which is in line with previous research. Similarly, gaze durations, refixation probabilities and go-past times were reduced an 8%, suggesting a later boost in lexical processing. Additionally, there was a significant effect among word frequency: more frequent words were the easiest to process. However, no significant interaction was found between time point and word frequency. The authors explained that this lack of interaction may be due to students' low English proficiency, the possible existence of a durational threshold to detect effects of word frequency, and a compromise of the learners' lexical representations. The second analysis used the random forests technique and focused on the reader-specific characteristics. Phonological awareness at the beginning of the program strongly predicted reductions in refixation likelihoods, total reading times, and first-pass regressions for short words. Phonological awareness also contributed to shorter first-fixation durations and first pass regressions for short words, but this contribution was not statistically significant. Moreover, phonological memory was a strong predictor of an increase in first-pass regression for long words from Time 1 to Time 2. However, phonological memory was not a significant predictor of a reduction in gaze durations. Rapid symbolic naming predicted an increase of first-pass regressions for short and long words, although this prediction was only statistically significant for the former. Vocabulary knowledge strongly predicted go-past times, a reduction in reading times for long and short words, and an increase in regression rates for long words. This increase in regression rates due to vocabulary may indicate that the latter helps learners to integrate the meanings of words in the context. A post hoc analysis revealed that there was a statistically significant interaction between vocabulary growth and reading complexity on regression-in probability at Time 2. Higher listening comprehension abilities were shown to predict longer fixation durations for long words.

Serra, J., & Gilabert, R. (2021). Algorithmic versus teacher-led sequencing in a digital serious game and the development of second language reading fluency and accuracy. *British Journal of Educational Technology*, 52(5), 1898-1916.

This study sought to compare the impact of the iRead game on second language (L2) reading development versus a traditional teacher-led sequence. Mainly, it investigated whether and how adaptive components (e.g., the algorithmic and adaptive sequence) of a serious game such as iRead may contribute to L2 reading skills over a generalized teacher-led sequencing. This study involved 107 sixth-grade students from two schools in Spain. However, data from only 67 students were considered for final analysis, given that only 67 participants completed all of the

tests in the study. The pretests included a background questionnaire and reading measures (fluency, vocabulary size, and reading comprehension), which were also assessed in all posttests. All of the participants used the iRead system for about six months. Nevertheless, instructors in the A groups were asked not to intervene with the algorithm's adaptivity parameters in the system. In contrast, instructors in the B groups (two) were asked to select the games and content in the iRead system based on what they preferred or considered the most logical sequence for every iRead session. Students in groups A and B had very similar session experiences, playing games for one hour per week and reading texts from an e-reader. The only difference among groups was the adaptive or teacher-led sequence. Students in this study played a total of 7896 games. Results indicated that the type of sequence did not affect improvement in reading skills differently, nor did playing more games result in decoding and reading skills. Even though no significant differences were found between the type of sequences, this study showed that all learners made significant progress in reading skills from the start to the end of the project and independently of the type of sequences. Additionally, results indicated that teacher-led sequences increased the number of games played on a narrower set of features.

Shamida, A., Sidhu, G. K., & Nawi, S. M. (2021). Postgraduate students' perceived and actual performance in critical reading skills. *Asian Journal of University Education*, 17(3), 76-84.

The present study sought to explore postgraduate students' perceived and actual performance on critical reading skills and if there was any significant difference between the two. Fifty postgraduate students from a private Malaysian university participated in this study. Participants completed a questionnaire containing a demographic section and a section exploring students' perceived performance and readiness in critical reading skills. Moreover, all participants completed a reading test that measured students' ability to summarize, make inferences, synthesize, and draw conclusions. Regarding students' perceptions of their critical reading skills, participants reported having a good ability to summarize and draw conclusions and a moderate ability to make inferences and synthesize. Students' actual performance showed a low average score when making inferences ($M=2.47$, $SD=.754$) and drawing conclusions ($M=2.68$, $SD=.683$). Students showed the lowest performance in their ability to synthesize ($M=2.34$, $SD=.779$). Students' ability to summarize was also moderate ($M=3.12$, $SD=.861$). A paired sample t-test revealed a statistically significant difference in the mean scores between postgraduate students' perceived ($M=3.75$) and actual performance ($M=2.65$) in their overall critical reading skills. This study's results suggested that postgraduate students overestimated their actual critical reading skills performance compared to their perceived performance. The researchers suggested the need for innovative methods to develop postgraduate students' critical reading skills.

Sladoljev-Agejev, T., & Kolić-Vehovec, S. (2021). Effects of searching for rhetorical relations on university-level text comprehension in L2. *Reading and Writing*, 35, 1035–1057.

In this quasi-experimental study, the researchers sought to investigate the effects of a coherence-building strategy aimed at strengthening the macrostructure of a university-level expository text

in English as a L2. One of the main hypotheses the authors attempted to explore was that complex reading may turn into manageable reading while enabling deeper reading comprehension in L2 by the segment-by-segment build-up of a text's rhetorical structure. In other words, the ability to identify rhetorical relations may lead to deeper L2 comprehension. A total of 117 first-year undergraduate students participated in this study. Sixty-six were assigned to the experimental group and 61 to the control group. All participants completed a pre-test that measured L2 proficiency, prior knowledge, vocabulary, and comprehension of Text 1. After the pre-test, only the students in the experimental group were trained to use rhetorical structure strategy (RSS) in twelve regular classes. Participants in the control group attended regular classes with the same syllabus but did not receive RSS training. A post-test was also administered to the participants using a second text and following the same procedures as the pre-test. Participants were asked to write linear-text summaries for both texts while reading, organize their notes with rhetorical relations, and answer comprehension questions. Comprehension outcomes were then compared between the experimental and control group. The experimental group made significantly better notes and summaries in 8 out of 10 variables. Results indicated that RSS significantly contributed to text comprehension, especially when identifying the text's relevance, coherence, and accurate rhetorical relations. However, the RSS group was weaker in some accuracy-related measures, and no effect was found on local summary accuracy, note completeness, and comprehension questions. Overall, results indicated that RSS is an essential tool that enhances reading performance at the university level since it significantly improves macro processing in L2.

Sok, S., Shin, H. W., & Do, J. (2021). Exploring which test-taker characteristics predict young L2 learners' performance on listening and reading comprehension tests. *Language Testing*, 38(3), 378-400.

With 107 six-grade EFL learners from Korea, the researchers in this study examined the extent to which test-taker characteristics (TTCs) predict learners' performance on L2 listening and reading comprehension tests. Aptitude, phonological working memory (PWM), and L1 competence were the main TTCs explored in this study, given that they have been found to influence L2 acquisition and test performance. Demographic variables such as socioeconomic status and gender were also considered as part of the data analysis. At the onset of the semester, all participants completed assessments targeting each of the three TTCs (aptitude, PWM, and L1 competence), as well as questionnaires targeting motivation, socioeconomic status (SES), and gender during multiple 40-minute-long English language sessions. At the end of the semester, participants completed an L2 listening comprehension test and a reading comprehension test during different class sessions. Results revealed that higher aptitude, PWM, and motivation contributed to higher L2 listening scores, and only higher aptitude and PWM contributed to higher L2 reading comprehension. The authors highlighted the positive impact that higher aptitude, PWM, and motivation have on young learners' L2 listening and reading comprehension outcomes.

Soruç, M., & Gündüz, S. (2021). Usability evaluation of e-textbooks by EFL teachers. *Shanlax International Journal of Education*, 9(4), 157-162.

Considering the demand for electronic textbooks for language teaching and learning during the COVID-19 pandemic, this study investigated the usability of e-textbooks by measuring their effectiveness, efficacy, and satisfaction principles from the International Organization for Standardization (ISO). Three e-textbooks were evaluated considering the experience of seven EFL instructors, who were recorded while using and completing online tasks related to the e-textbooks. The instructors also completed an online survey with items targeting the effectiveness, efficacy, and satisfaction when using the three e-textbooks. Descriptive results showed very high effectiveness level scores for all three e-books. However, only two e-textbooks showed a high efficacy score, with one showing a moderate effectiveness score (e.g., Marathon Plus). Furthermore, the satisfaction level score for all e-textbooks was high. The authors offered some recommendations for e-textbook developers based on the participants' feedback.

Sulistiyawati, E., Nugroho, A., & Bram, B. (2021). Morphological teaching strategies to enhance students' vocabulary knowledge and reading comprehension. *Journal of English Teaching*, 7(2), 179-190. <https://doi.org/10.33541/jet.v7i2.2472>

This literature review study highlighted the role of morphological awareness and strategies in the teaching-learning process and explored the morphological teaching strategies that were used in reading comprehension to improve English language learners' vocabulary knowledge of prefixes and suffixes in reading activities. Data for this study were collected from books, articles, journals on morphological instruction. Using content analysis, the researchers identified a) the advantages and disadvantage of using morphological strategies in English teaching and learning process; b) the key role of morphological awareness implemented; c) the importance of applying morphological strategies in learners' mastering of English skills; and d) the way learners used these strategies to meet learning objectives. Reviewing the literature on themes identified above, the study introduced the variety of strategies that teachers used to develop students' morphological knowledge and enhance their vocabulary, reading and pronunciation skills in both written and oral communication. Some examples of these strategies that teachers used in their classroom teaching were teaching about the existence and the significance of morphology and morphemes, such as prefixes, and suffixes (derivational and inflectional), how words are created from the combinations of these prefixes, suffixes, and roots in the language process, as well as some of the phonological rules and processes, such as in English several words are spelled with the same letter combination but their pronunciation are different. Moreover, other morphological studies in the literature focused on discussions with language learners who were weak at specific theory-based, and strategy-based morphology learning methods and the strategies that teachers could use to help them. These results, finally, showed how learners' use of morphology learning strategies helped them engage in the teaching and learning processes to achieve their learning objectives regularly. This way, the significant role of morphological literature studies and their

advantages in increasing learner's pronunciation, vocabulary and reading comprehension skills and language learning in general was highlighted. Given the findings, this study encouraged researchers to use the current guidelines and realistic design of morphology research to assess proposed strategy approaches and identify characteristics of effective morphological knowledge instruction that would improve the vocabulary and reading learning and teaching process.

Sun, X. (2021). Integrating extensive reading into school curriculum: A veteran EFL teacher's perspective. *The Reading Matrix: An International Online Journal*, 21(2), 17-31.

The current qualitative study investigated the effects of extensive reading (ER) in a secondary L2 teaching context. It used the perspectives of an experienced EFL teacher who has practiced and advocated for implementing ER in the curriculum of a Beijing secondary school. The instructor has taught English and used ER methods for about twenty-eight years. The instructor participated in three in-depth interviews conducted at the beginning, middle, and end of a school year. The first interview targeted the participant's perceptions of ER, his implementation methods, and the whole year's plan for the integration of ER into the curriculum of a secondary school. The middle and final interviews targeted the instructor's prior-semester experiences in the implementation and integration process of ER. In the end, data were collected from multiple sources such as the instructor's interviews, school-based learning materials, teaching plans, and students' assignments. With the collected data, the author also attempted to investigate the role an L2 teacher plays in integrating ER into a school curriculum. Results from the first interview revealed data gathered by the instructor at the beginning of the school year on the students' prior experiences using ER and encountered difficulties. Students expressed having no interest, time, and guidance in their prior ER courses. Consequently, the instructor shared a follow-up plan targeting the concerns mentioned above. Results from the follow-up interviews revealed in more detail the instructor's approach and strategy to tackle students' prior negative experiences with ER and to improve the integration of ER in the curriculum. The author later described the role of teachers when integrating ER into a school curriculum based on the participant's ER integration model. The model suggested following a three-step ER integration approach: curriculum design, classroom implementation, and after-school reinforcement. Given that the effectiveness of such a model was not measured in this study, the author encouraged future discussion and research on the model.

Tang, M., & Chan, S. D. (2022). Effects of word semantic transparency, context length, and L1 background on CSL learners' incidental learning of word meanings in passage-level reading. *Journal of Psycholinguistic Research*, 51(1), 33-53.

Through a mixed method study, Tang and Chan explored how the incidental learning of 17 Chinese disyllabic compound word meanings relates to three main factors: (i) semantic transparency; (ii) the interactions among semantic transparency, context length, and students' L1 background; and (iii) context length. Semantic transparency refers to how easily the meaning of a compound word can be understood by its components. Semantic transparency was evaluated by

20 Chinese native speakers through a 1-5 Likert scale in which half points were used as gaps between the three types of transparency (transparent, semi-transparent, and opaque). In the study, six words were transparent, six semi-transparent and five opaque. Context length included sentence-level reading and passage-level reading of 3-4 sentences. Both contexts included the target word and cues to facilitate its meaning comprehension, although the passage-level context provided more synonyms or antonyms for each target word. The students' L1 background comprised a group of 49 learners from the Chinese culture sphere (i.e., L1 languages that have been influenced by Chinese), and a group of 41 students from non-Chinese culture sphere (i.e., L1 languages with no Chinese influence). Both groups featured intermediate learners of Chinese. Participants read the sentence-level reading containing the target words in one normal class period and the passage-level readings in a consecutive class period. While reading, students had to infer and write the meaning of the target words. Inferred meanings were scored as correct (1 point), partially correct (0.5 point) or incorrect (0 point). Inter- and intra- reliability tests were conducted to ensure the accuracy of the scores. The 17 target words were selected after excluding those suspected to be known and those whose morphemes were supposed to be unknown. Twenty-nine learners who completed the readings were randomly selected for an individual semi-structured interview in which they indicated what context length was more useful to them, how they inferred the meaning of target words and what cues helped them. Linear mixed model analyses indicated that transparency and context length were significant in word meaning inferring: the more transparent the word, the better the inferring. The authors concluded that it is impossible for students to incidentally learn all words and support from dictionaries may occasionally be needed. They also encouraged instructors to consider the word semantic transparency and the difference among the cues needed. Additionally, the role of context length was significant when inferring semi-transparent and opaque words. Passage readings were found to be more effective than sentence readings. Therefore, the authors suggested learners to make use of extensive readings out of class. Moreover, non-Chinese culture sphere participants performed significantly better than Chinese culture sphere participants at inferring semi-transparent words. This finding is not in line with previous research suggesting a better performance of Chinese culture sphere participants. The authors attributed this conflicting result to the misuse of L1 transfer by Chinese culture sphere participants, as well as to the exclusion of words which were suspected to be known by participants. Results from the interviews showed that 75.9% of the interviewees found passage readings more helpful than sentence readings since the former provided more information. Participants identified six main ways in which passage-reading cues influenced them: (i) pointing out the relevant cues for meaning inferencing; (ii) improving inferencing despite pointing out the relevant cues; (iii) realizing wrong inferences; (iv) no influence because participants are confident of earlier inferencing; (v) no influence due to lack of comprehension; (vi) misleading effects. Given the usefulness of the cues in larger contexts, the authors recommended instructors to make use of them in their lessons. Future research may consider replicating the study with authentic texts.

Teng, M. F., & Zhang, L. J. (2021). Development of children's metacognitive knowledge, reading, and writing in English as a foreign language: Evidence from longitudinal data using multilevel models. *British Journal of Educational Psychology*, 91(4), 1202-1230.

Adopting latent growth curve (LGC) modeling, this six-year longitudinal study investigated the development of metacognitive knowledge, reading and writing skills of L2 learners of English through primary grades. It also examined the predictive effects of their metacognitive knowledge and strategies on their L2 reading and writing performance. Participants of the study were 420 Chinese students (213 boys and 207 girls) from a primary school in China who were followed from Grade 1 to Grade 6. At the end of each grade year, participants completed three tests including metacognitive knowledge, reading comprehension, and writing tests. Metacognitive knowledge was measured in relation to three cognitive dimensions of memory, comprehension, and learning (adapted from Annevirta and Vauras, 2001, and modified). Throughout this test, participants were shown line drawing pictures with familiar learning scenarios, and then asked to explain their way of remembering, understanding, and acquiring knowledge in each cognitive task. Students' explanation and reference to their own mental processes were then scored on a 4-point scale (1= naive; 2= implicit, 3= fairly adequate; and 4= more explicit explanation or reference). The reading comprehension test was administered through three target texts with pictures. Each text was about 300 words and on daily or school life topics. After reading each text, participants were asked to answer 10 multiple-choice and fill-in the blank questions about the main ideas or details of the text. To assess students' writing skills, they were given the writing test and asked to write their opinions about one of the three reading texts that they had done earlier with no word limit. Their writings were then scored based on the following criteria: task achievement, coherence, grammatical accuracy, lexical resources, organization, and punctuation. The Mplus program was used to analyze data. Findings showed that learners' metacognitive knowledge, L2 reading and writing skills increased at a stable rate grade by grade as they were completing increasingly complex tasks. Findings, however, revealed individual differences in the growth of metacognitive knowledge of learners entering school with initially low or strong metacognitive skills and that their progress could depend on their initial level. Given the findings, researchers suggested that teachers and program administrators include more attentional and memory resources in the curriculum so that students with initially low skills did not lag behind those with stronger abilities. To better understand the development of school children's metacognitive knowledge, reading and writing skills, researchers encouraged more future research to be conducted in other contexts using carefully designed approaches.

Tilahun, A., Teka, M., & Simegn, B. (2022). Investigating effects of integrated reading and writing skills instruction in enhancing students' critical thinking skills in EFL classroom. *Theory and Practice of Second Language Acquisition*, 8(1), 105-127.

In this quasi-experimental study, the researchers sought to investigate the effectiveness of an integrated reading and writing instruction on students' critical thinking development in EFL classrooms. Participants consisted of 96 first-year undergraduate students enrolled in the same level English language courses at Bahir Dar University in Ethiopia. These English courses

fulfilled the communicative language skills I requirement of the university which aimed to develop students' oral and written communicative and reasoning competence. Participants were randomly sampled and assigned into an experimental (n= 48) and control (n=48) group. During this 12-week study, students in the control group were taught with a conventional reading and writing teaching approach to read a text and complete a set of activities on understanding the text and their teacher provided them with feedback on their answers correcting their errors. They also wrote on prescribed topics as end products of the texts they had read and received feedback on their grammatical accuracy. The experimental group received an integrated reading and writing instructional method which included three steps, 1) "Write-before-you-read activities"; 2) "Read and respond through writing activities"; and 3) Write-text connecting activities" (p. 117). In the first step, before reading the text, they wrote short paragraphs about the content of the reading passage that they predicted to read, and then discussed them. In the second step, students read the text and answered open-ended questions on "comparing their prediction, identifying the main idea of paragraphs, paraphrasing, summarizing, interpreting texts, analyzing, explaining, inferring information, writing the gist of the text" (p.117). In the end, with their teacher's explicit instructions, they implemented cognitive writing strategies to make connections between the text and themselves, the text itself and the world and what they had read before and received feedback through their teacher's reflective observations. To collect data, both groups were given pre- and post-tests to assess their critical thinking skills. The pretest was used to make sure all students were at the same level before the treatment and the post test was used to measure the changes in the critical skills of students in the experimental group after interventions. In collaboration with university curriculum experts, researchers adapted TOEFL tests to design pre- and post-tests and reading passages followed by 25 open-ended questions measuring students' critical thinking abilities based on the passages. Results of quantitative data showed that students in the experiment developed higher critical skills over the 12 weeks of interventions than students in the conventional group. Researchers suggested that integrating reading and writing instruction helped learners develop not only critical thinking skills but also self-confidence and motivation to work on their own and become more active readers and writers. Highlighting the role of this integrated method in teaching communicative language skills, the researchers encouraged future research to investigate effects of this pedagogical approach at different grade levels, using multiple data collection tools.

von Hagen, A., Kohnen, S., & Stadie, N. (2021). Foreign language attainment of children/adolescents with poor literacy skills: A systematic review and meta-analysis. *Educational Psychology Review*, 33(2), 459-488.

This systematic review and meta-analysis study investigated how individual students' characteristics, classroom instruction, and assessment predict scores on foreign language tests. In particular, the authors sought to explore how children/adolescents EFL learners with poor literacy skills learn a foreign language compared to those with typical literacy skills. Some of the general parameters for the selection of studies in this meta-analysis included the selection of group comparison studies with poor literacy skills EFL learners attending a primary or secondary

school. Poor literacy skills were defined as performing at least 1 *SD*, year, or grade below the expected level on one or more measures such as word/nonword reading accuracy, reading fluency, and spelling. In the end, 16 studies met the inclusion criteria, with a total of 968 participants, of which 404 were identified as poor readers/spellers and 564 as students with typical literacy skills. However, only 15 studies entered the meta-analysis as one of the 16 showed a high risk of bias. Due to insufficient data, ten foreign language (FL) outcome measures were considered in the meta-analysis. Six revealed uninterpretable overall standard mean differences (SMDs) given significant between-study heterogeneity. Overall, the meta-analyses on the difference of performance variation (CVR) showed that children/adolescents with poor literacy skills performed lower on FL phonological awareness, letter knowledge, and reading comprehension measures than their counterpart children/adolescents with typical literacy skills. However, the performance of poor readers/spellers varied significantly compared to those with typical literacy skills. Poor readers/spellers showed higher performance variation than the control group in phonological awareness outcomes. Given the results in this review, the authors concluded that individual characteristics of children/adolescents with poor literacy skills do not determine the success in FL attainment. A student with poor literacy skills may be as successful as a student with typical literacy skills.

Wallace, M. P., Li, V. M., Huang, T. C., & He, N. C. (2021). Metacognitive strategy use for EFL readers: Differences in gender and reading ability. *TESL-EJ*, 25(2), 1-22.

The authors of this study sought to investigate how the use of metacognitive strategies varies according to EFL learners' characteristics. In particular, this study addressed how frequently Chinese university EFL learners use reading strategies, which strategies are the most and least frequently used, and the effect gender and reading ability may have on metacognitive strategies. The participants were 137 undergraduate EFL students, of whom 49 were male, and 88 were female. Students read, in electronic format, two passages with corresponding reading comprehension questions, followed by the metacognitive awareness of reading strategies inventory (MARSII). ANOVAs, t-tests, and descriptive statistics indicated that participants used moderately global and support strategies, while problem-solving strategies were used persistently. Rereading the text and applying what the reader already knows about the text were some of the most frequently used strategies. Some of the least frequently used strategies were taking notes and generating mind maps. Additionally, female participants appeared to use more strategies than male participants, but these results were not statistically significant. Concerning reading ability, results showed that the lower-level group used all three types of strategies moderately, while the intermediate and high-level reading groups favored problem-solving strategies. Across all groups, results indicated that high-level readers used significantly fewer strategies than low-level readers.

Wang, W., & Gan, Z. (2021). Development and validation of the reading motivation questionnaire in an English as a foreign language context. *Psychology in the Schools*, 58, 1151-1168. <https://doi.org/10.1002/pits.22494>

Wang and Gan developed and validated the reading motivation questionnaire in an English as a foreign language (RMQ-EFL) context of China and explored the relationships between Chinese students' EFL reading motivation and their learning strategies in reading, English learning achievement, gender and grade level. Participants of the study were 278 EFL high-school students (119 male and 157 female) from a southern city in China. To measure students' reading motivation, the researchers developed a 22-item 4-point Likert scale RMQ-EFL survey based on reading motivation models proposed by scholars in the field (Mori, 2002; Wang & Guthrie, 2004; Wigfield and Guthrie, 1997). The items were categorized into 5 categories of reading efficacy, reading enjoyment, involvement, compliance and recognition. They established the credibility and quality of the items through focus group interviews with 5 high school students. They measured concurrent validity of the survey by exploring the correlations between students' metacognitive strategies (control strategies) and cognitive strategies (memorization and elaboration) in learning reading and their reading motivation through Learning Strategies in Reading Questionnaire developed for PISA 2009. The predictive validity of the questionnaire was also measured by exploring the correlations between students' EFL reading motivation and their English learning achievement through self-reported scores of the end of semester English exam including 4 components- reading comprehension, writing, knowledge of vocabulary and grammar knowledge. Results of data analysis confirmed that the RMQ-EFL had good internal construct validity among Chinese EFL students and also showed that all the 5 RMQ-EFL motivation factors were found to be significantly and positively correlated with their metacognitive and cognitive learning strategies in reading. Thus, the questionnaire was found to be a reliable and valid tool to measure students' EFL reading motivation. Results also showed the positive effect of reading motivation on L2 learners' reading performance which had confirmed the RMQ-EFL's predictive validity. However, no significant gender differences were found in the five RMQ-EFL motivation factors. Given these findings, the researchers recommended further research to explore developmental patterns in L2 reading motivation between male and female learners from elementary school to high school.

Watkins, P., & Mulling, A. B. F. (2022). Reading in self-access material: What can we learn from self-instructed learners and their reported experience? *The Reading Matrix: An International Online Journal*, 22(1), 37-55.

This qualitative study explored perceptions and reactions of Brazilian EFL learners about the reading material *Catching a Glimpse (CaG)*, in English M1, a coursebook designed for self-access use. Participants of the study were 24 beginner-level adult learners of English who were students and staff members in vocational schools in Brazil. Participants had self-studied English using this English textbook designed for beginner EFL learners in Brazil. English M1 had 18 units and each unit ended with a reading material, called CaG, to review the vocabulary and grammar structures taught in that unit. The reading material GAG consisted of a prose text, a text

title, an image used as the visual representation to make reading of the text more engaging, an oral rendition of the text, and an English-Portuguese word list. No instruction and follow up questions or reading comprehension activities were provided for this section. The texts used in these 18 units were of different topics on the USA and American culture, and of varied sizes increasing from 116 words to 579 words. A semi-structured interview was conducted to collect data on the self-instructed learners' experiences and attitudes towards this self-access material and CaG as well as their expectations from reading materials. Results showed that overall learners found this experience engaging and had positive attitudes towards the texts and their helpful topics although some expected cultural information about other English-speaking countries as well. Findings also revealed learners' positive attitudes toward the consistency of texts with their language level that increased their motivation to read more. In addition, participants reported that absence of follow-up text-related activities had made their reading experience more relaxing and entertaining. Learners also showed positive views about the glossary provided and its effectiveness as a vocabulary learning strategy. Participants, however, had a different opinion about the images and visual input provided. They believed that although illustrations played an aesthetic role and, in some cases, activated their background knowledge, they did not help with their reading comprehension as they could not relate the image to the idea and content of the texts. To facilitate reading comprehension and language learning process, these findings suggested a more critical view of what low-level self-instructed learners' need to appropriately use reading-related features as well as the values that self-access reading materials promote, such as a) exposing learners to other English speaking countries and cultures; b) providing efficient visual input that would help learners make a meaningful connection between the image and texts; and c) delivering instructional guidance on the role of glossary and effective use of oral rendition of texts.

Wong, Y. K., & Zhou, Y. (2022). Effects of metalinguistic awareness on Chinese as a second language spelling through the mediation of reading and copying. *Reading and Writing, 35*(4), 853-875.

Wong and Zhou investigated the effects of orthographic, phonological, and morphological awareness on L2 Chinese spelling regarding character reading and copying among 7–11 year-old learners from different minority ethnic groups (mostly Pakistani and Nepalese) in Hong Kong. Orthographic awareness was measured through a test consisting of two parts. The first part required participants to break a 12 compound character into two immediate radicals, while in the second part participants were given 20 items, each featuring one image and three characters; participants were asked to choose the character that matched the image. The test measuring phonological awareness also consisted of two parts. In the first part, participants had to reproduce 18 Chinese words or phrases without a syllable. In the second part, participants were given 18 items, each featuring four options; participants had to choose the one with a syllable that was systematically different from the others. Morphological awareness was also measured with a two-part test. In the first part, participants were required to identify 12 homophones with a different meaning among three options. The second part consisted of seven items. For each item,

participants were shown a simple morphological analysis of a word compound and were asked to construct a new compound with the previous morphological structure. To assess participants' character copying skills, learners were given Chinese characters and were asked to copy as many as possible within one minute at a normal pace. Participants' Chinese character reading ability was measured by asking participants to read aloud 100 characters. To evaluate participants' spelling skills, a dictation of single- and two-character words as well as four-character phrases was used. In addition to these variables, the authors included a two-part listening comprehension test to control for the participants' oral proficiency in Chinese. The first part consisted of 24 word-picture matching items, while the second part featured 16 multiple-choice questions assessing participants' comprehension of oral content. Additionally, the authors added age as a control variable and conducted a one-way ANOVA analysis to ensure the homogeneity in participants' Chinese literacy skills. All the tests showed a good reliability and all the words used in the tests were basic words at the junior-primary level as indicated by the Chinese Language Education Section of the Hong Kong Education Bureau (2008). Results showed that when controlling for age, all correlations were statistically significant. The highest correlation was between character reading and spelling, while the lowest was between orthographic and phonological awareness. In a first analysis, a mediation path model was tested in which spelling was expected to be indirectly influenced by orthographic awareness through character copying as well as by orthographic, phonological, and morphological awareness through character reading. This model was not very successful and indicated a strong direct influence of orthographic awareness on spelling as well as of listening comprehension on character copying. Based on that finding, a more successful model that explained 83% of the variance was created. In this model, spelling was significantly and strongly influenced by character reading and orthographic awareness, and significantly but slightly affected by copying. Both character reading and copying were found to be directly influenced by listening comprehension and orthographic awareness. Character reading and copying were also found to partially mediate the effects of orthographic awareness and fully mediate the influence of listening comprehension on L2 spelling. In addition, character reading acted as a mediator between morphological awareness and spelling. However, no statistically significant effects were found for phonological awareness. The authors attributed this finding to the possible automatization of syllabic awareness for character reading.

Xu, Q. (2021). Incorporating reading circles into a task-based EAP reading scheme. *ELT Journal*, 75(3), 341-350.

With twenty-six EFL college learners majoring in Business English, this study investigated how reading circles (RCs) could be merged with a task-based reading approach in a regular English for Academic Purposes (EAP) college classroom. It also explored students' perceptions when incorporating RCs in a task-based EAP reading scheme and the effectiveness of such an approach in developing reading skills and critical thinking. This study was conducted in a Comprehensive Business English course at a Chinese university. Participants were sophomore students with an average age of nineteen. Students read eight original articles for the weekly RC

tasks, completed reflective journals, pre-, and post-study questionnaires, and participated in semi-structured interviews. Weekly RC homework and reading proficiency tests were used to examine students' critical thinking and the improvement of reading abilities. Qualitative data revealed that many participants considered RCs in a task-based EAP reading scheme useful in developing their critical thinking and reading abilities. Quantitative data confirmed students' perceptions by revealing that the average post-test scores were significantly higher than pre-test scores. Additionally, a deeper analysis of students' weekly homework showed that by the end of the semester, students had reached a higher level of critical thinking by being able to analyze, evaluate, and create solutions to the articles they were reading. That is compared to the first weeks of the semester when students only reported a few key points from the readings. The author concluded that overall, the implementation of RC in a task-based reading scheme EAP context positively impacted students' language development.

Yaghoubi, M., & Farrokh, P. (2022). Investigating Iranian English learners' private speech across proficiency levels and gender based on Vygotsky's Sociocultural Theory. *Journal of Psycholinguistic Research*, 51(2), 273-292.

The authors explored the private speech of EFL Iranian learners across different proficiency levels while engaging in reading comprehension tasks. Particularly, the authors sought to investigate if there was any statistically significant relationship between the forms of private speech produced by Iranian EFL learners and proficiency levels (low- intermediate- high). This article also explored if there was any statistically significant relationship between the forms of private speech produced by Iranian EFL learners and their gender. A total of 90 EFL Iranian students (45 males and 45 females) with different proficiency levels participated in this study. This study assessed forms of private speech, such as affective markers, sub-vocalization, switch from L2 to L1, repetition, unfinished sentences, and self-directed questions. The private speech of participants was recorded while performing five reading comprehension tests. It was then transcribed and analyzed. Results indicated a statistically significant relationship between learners' forms of private speech and their proficiency levels. On the other hand, a not statistically significant correlation was found between learners' gender and their private form of speech. Furthermore, advanced learners used more private speech forms than beginner and intermediate learners. Given the findings, the authors highlighted the role of private speech as a mediating tool in cognitive regulation while engaging in L2 tasks.

Yén, T. T. N. (2021). The relationship between EFL oral reading fluency and silent reading fluency: What can a speed-reading course tell us? *TESL-EJ*, 25(2), 1-22.

This quasi-experimental study examined the reading fluency development of EFL learners by exploring whether an increase in silent reading rate also increases the oral reading rate. Participants were 116 students in their first year of English major in Vietnam. All students were divided into four groups: two experimental groups (group A with 31 students and group B with 30 students) and two control groups (group C with 26 students and group D with 29).

Participants completed pre-tests and post-tests on silent reading and oral reading. Only participants in the treatment group (groups A and B) engaged in a speed-reading course while following regular English courses. The treatment groups showed substantial improvement in their reading speed while maintaining comprehension accuracy at the same level as their reading speed. The author suggested that these results may indicate that reading speed does not appear to affect reading comprehension. Additionally, minimal improvement in oral reading rate was found in all four groups. Nevertheless, a significant difference was also found between the average increases in the control and treatment groups, specifically with the number of participants with no improvement and participants with significant increases, indicating that the treatment group outperformed the control group in oral reading. The silent reading rates from the pre-test to the post-test of the treatment group also improved significantly. Given these results, the author encouraged instructors and program designers to maintain a balance of receptive-oriented activities and productive-oriented activities in the language classroom.

Yuan, H., Segers, E., & Verhoeven, L. (2022). Predicting the development of early reading in Chinese–Dutch bilinguals. *Reading and Writing*, 35(3), 617-643.

The purpose of this study was to investigate the concurrent and longitudinal relationships between phonological processing skills (phonological awareness, rapid naming—RAN, short-term verbal memory—STM), letter knowledge, visual skills, and reading skills in bilingual children speaking Chinese (L1) and Dutch (L2). Particularly, this study aimed to investigate: (a) the extent to which early literacy variables in kindergarten (phonological processing skills, letter knowledge, and visual skills) predict Chinese and Dutch word reading in kindergarten and first grade; (b) the extent to which early literacy variables and word reading in first grade are explained by word reading in kindergarten; (c) the extent to which word reading skills in the dominant language add to the prediction of word reading in the less proficient language in both kindergarten and first grade. Fifty-two Chinese–Dutch bilingual children were recruited and first tested in their last kindergarten year in five Chinese Sunday schools in the Netherlands. Only 41 out of the original 52 were tested again a year later, making a total sample of forty-one participants for this study. Hierarchical regression analyses indicated that phonological awareness in kindergarten predicted word reading in L1 and L2. Dutch word reading, in particular, was predicted by letter knowledge and phonological awareness. Additionally, phonological awareness was the sole predictor of word reading in Chinese. Results also showed that Chinese and Dutch phonological awareness, as well as Dutch letter knowledge in kindergarten, had a significant indirect effect on word reading of first graders. Results in this study provided evidence that access to phonological representations and grapheme-phoneme knowledge is critical for bilingual children reading ability.

Zarfsaz, E., & Yeganehpour, P. (2021). The impact of different context levels on vocabulary learning and retention. *Shanlax International Journal of Education*, 9(4), 24-34.

Zarfsaz and Yeganehpour explored how different degrees of context (zero, reduced or high) affect vocabulary learning and retention among L1 Turkish upper-intermediate English learners. Sixty college students from three intact classes and with similar vocabulary proficiency level according to the Nelson proficiency test were equally distributed into the three context conditions in a random fashion. Researchers developed a 30-element vocabulary test containing words from the students' textbook with three sections, one per condition. The zero-context condition featured 10 word-definition matching questions; the reduced-context condition contained 10 multiple-choice items with disconnected sentences; and the high-context condition featured 10 cloze-test items within passages or paragraphs. The definitions and disconnected sentences were obtained from the Longman Dictionary of Contemporary English (1995), while the articles and paragraphs were chosen from the Top Notch series (Summit 1B) (Saslow & Ascher, 2012). Additionally, the validity and reliability of the researchers' test was checked through a piloting study. The same vocabulary test was used as a pre-, post- and delayed post-test. However, the orders of sections, words, and distractors were altered each time. After completing the pre-test, participants were exposed to a 10-session treatment in their classes. Participants in the zero-context condition were provided concepts without any references. Students in the reduced-context condition were given a description featuring disconnected sentences, while those in the high-context condition read the target words in paragraphs. After the treatment, participants completed a post-test, as well as a delayed post-test three weeks later. A one-way ANOVA indicated that there were no differences across context groups in the pre-test. However, statistically significant differences were found across context groups in the post-test, but there were no statistically significant differences between the reduced- and high- context groups. Similar results were found in the delayed posttest. The authors stated the importance of context in the learning of word meanings and concluded that context helps students learn, infer and retain word meanings. The authors claim that these findings have pedagogical implications for teachers, students, and text developers.

Zhou, J. (2022). The contribution of morphological awareness and vocabulary knowledge to Chinese as a second language reading comprehension: A path analysis. *Journal of Psycholinguistic Research*, 51(1), 55-74.

Zhou explored the interrelationships between L2 Chinese morphological awareness, reading comprehension, and vocabulary. Morphological awareness included morpheme discrimination and compound structure. To measure morpheme discrimination, participants completed a test featuring 20 items where they had to select the disyllabic word whose meaning did not derive from the meaning of the individual morphemes. A test containing 15 items in which participants had to choose the word whose morphemes followed the same structure as a target word was utilized to measure compound structure knowledge. The vocabulary knowledge was measured through a matching test consisting of 30 distractors and 30 target words of varying frequency from *The Graded Chinese Syllables, Characters, and Words*. Participants were exposed to five blocks featuring three target and three distractor words at a time and were asked to match explanations on the right to words on the left. A cloze test where participants had to restore 37

words in a text was used to measure reading comprehension. The test was piloted twice, one time to ensure that only one answer was possible and another time to check for test length and reliability. A background information questionnaire was also administered. A total of 134 Chinese L2 learners of different backgrounds participated in this study. Most of the participants reported having an intermediate proficiency level in Chinese, having a major related to Chinese culture and language, speaking 20 languages and lacking experience living or speaking with Chinese families. About half of the participants were from countries in central Asia. Path analysis was used to identify direct, indirect, or correlated effects among morphological awareness, vocabulary and reading comprehension. Two models were created for this analysis. Model 1 assumed that morphological awareness affects reading comprehension directly and through vocabulary knowledge (partial mediation). Model 2 only assumed morphological knowledge to indirectly affect reading comprehension through vocabulary knowledge (complete mediation). These two models were compared by using chi-square tests and no differences were found. Hence, the researchers chose Model 2. In this model, morphological awareness was found to indirectly influence reading comprehension in a significant fashion. The author explained that the conflicting findings regarding the direct or indirect effects of morphological awareness on reading comprehension may be due to differences in the operationalization of the latter and participants' language proficiency. Morphological awareness directly and strongly predicted vocabulary and vocabulary directly and strongly predicted reading comprehension. The author mentioned that the finding that vocabulary affects reading comprehension is in line with previous research. The author also commented that the fact that morphological awareness predicted vocabulary knowledge is not surprising given that morpheme awareness relies on homophones/homonyms and compound structure knowledge helps learning and understanding new words and inferring their meaning. Hierarchical regression analyses were employed to explore the effects of morpheme and compound structure awareness on vocabulary and reading comprehension. The two morphological awareness measures significantly correlated with one another and with vocabulary and reading comprehension. Unlike other previous studies, the predicting variables (i.e., morpheme discrimination and compound structure knowledge) were entered in different orders to control for differences in the relative contribution of each variable. The findings showed that morpheme discrimination influenced vocabulary knowledge and reading comprehension more than compound structure knowledge. Following these results, the author called for more instruction on Chinese morphology awareness. Among the limitations of the study, the author mentioned the focus on vocabulary width and not depth, the absence of character recognition as a controlling variable, and the homogeneity of proficiency level among participants.

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