

# Incorporation of Advance Organizers and Annotations in Online Reading Comprehension Tutorials

林旻璇、曹秀蓉

E-mail: 9800881@mail.dyu.edu.tw

## ABSTRACT

This study aimed to investigate the effect of annotations and advance organizers on EFL learners' vocabulary acquisition and reading comprehension.

A 3 × 3 between-subject factorial design is used. Under the CALL setting, two independent variables are involved: annotations (online dictionary, margin and pop-up) and advance organizers (none, descriptive and question). Seventy two English-majored students, based on their English scores, were systematically assigned to nine groups. The instruments used for data collection were vocabulary tests (word recognition and application), reading comprehension tests (literal comprehension, interpretive comprehension) and questionnaires. To answer the research questions, two-way analysis of variance and the goodness of fit test were conducted.

It is found that students in the margin annotation and the pop-up annotation group outperformed the online dictionary group in vocabulary tests but not in the reading comprehension test. This result suggested that EFL learners' vocabulary acquisition was facilitated by margin and pop-up annotations more than by an online dictionary. However, when compared with an online dictionary, annotation did not enhance students' reading comprehension. Furthermore, there was no significant difference among none, descriptive and question advance organizer groups regarding their reading comprehension. The results indicated that reading comprehension might be hindered by advance organizers. Nevertheless, most of the students hold positive attitudes toward the use of web-based instruction (online annotations and advance organizers) for vocabulary acquisition and article comprehension. Based on the findings, some pedagogical implications and design of web-based annotations and advance organizers were derived for future relevant studies of second language learning and strategy.

Keywords : Advance organizer、 annotation、 reading comprehension、 vocabulary knowledge scale

## Table of Contents

AUTHORITY ?

ABSTRACT(CHINESE) ?

ABSTRACT(ENGLISH) ?

ACKNOWLEDGEMENT ?

TABLE OF CONTENTS ?

LIST OF FIGURES ?

LIST OF TABLES ??

CHAPTER I. INTRODUCTION 1

1.1 Background of the Study 1

1.2 Purpose of the Study 4

1.3 Research Questions 4

1.4 Significance of the Study 5

1.5 Definition of Terms 6

1.6 Limitations of the Study 7

CHAPTER II. LITERATURE REVIEW 8

2.1 L2 Reading Comprehension 8

Schema Activation.....10

Levels of Comprehension.....10

2.2 Theoretical Basis of Advance Organizers 12

Effectiveness of Advance Organizer in Reading Comprehension .....14

Question Advance Organizers.....16

2.3 Relationship between Reading and Vocabulary Knowledge.....17

Incidental Vocabulary Learning.....	18
Annotation and Reading Comprehension.....	19
Effect of Multimedia Annotations.....	21
CHAPTER III. METHODOLOGY	23
3.1 Design of the Study	23
3.2 Sampling and Assignment of Participants	24
3.3 Materials and Instruments	25
3.4 Research Procedure	32
3.5 Data Analysis	34
3.6 Pilot Study	35
CHAPTER . Results and Discussions	44
4.1 Impact of Online Annotations	44
4.2 Advance Organizers and Reading Comprehension	56
4.3 Students ' Attitudes Toward the Use of Web-based Instructional Materials	61
CHAPTER . Conclusion	72
5.1 Summary of the Main Findings	72
5.2 Pedagogical Implications	75
5.3 Suggestions for Future Research	77
References	79
Appendix A: Chinese and English Annotations	93
Appendix B: Descriptive Advance Organizers and Question Advance Organizers.....	100
Appendix C: Word Recognition Test and Word Application Test	108
Appendix D: Literal Comprehension Test and Interpretive Comprehension Test	111
Appendix E: Questionnaires	118

## REFERENCES

- Abraham, L. B. (2001). The effects of multimedia on second language vocabulary learning and reading comprehension. Doctoral Dissertation: University of New Mexico.
- AbuSeileek, A. F. M. (2008). Hypermedia annotation presentation: learners' preferences and effect on EFL reading comprehension and vocabulary acquisition. *Computer Assisted Language Instruction Consortium Journal*, 25, 260-275.
- Akbulut, Y. (2007). Effects of multimedia annotation on incidental vocabulary and reading comprehension of advanced learner of English as a foreign language. *Instructional Science*, 35, 499-517.
- Allwood, C. M., & Kalen, T. (1997). Evaluating and improving the useability manual. *Behaviour and information Technology*, 16, 43-57.
- Alvarez, M. & Risko, V. (1989). Using a thematic organizer to facilitate transfer learning with college developmental studies students. *Reading Research and Instruction*, 28, 1-15.
- Alvarez, M. (1980). The effect of using an associate passage with guided instruction to evoke thematic conceptual linkage. *Dissertation Abstracts International*, 41, 1000A. (University Microfilms No. 8019163).
- Alvarez, M. (1983). Using a thematic pre-organizer and guided instruction as an aid to concept learning. *Reading Horizons*, 24, 51-58.
- Alvermann, D. (1981). The compensatory effect of graphic organizers in the learning and retention of meaningful verbal material. *Journal of Educational Research*, 75, 44-48.
- Ariew, R. & Eretin, G. (2004). Exploring the potential of hypermedia annotations for second language reading. *Compute Assisted Language Learning*, 17(2), 237-259.
- Ariew, R. (2006). A template to generate hypertext and hypermedia reading materials: its design and associated research finding. *The Reading Matrix: An International Online Journal*, 6, 195-209.
- Aust, R., Kelley, M.J., & Roby, W. (1993). The use of hyper-reference and conventional dictionaries. *Educational Technology Research and Development*, 41(4), 63-73.
- Ausubel, D. (1959). Viewpoints from related disciplines: Human growth and development. *Teachers College Record*, 60, 245-254.
- Ausubel, D. P. (1960). The use of advance organizers in the learning and retention of meaningful verbal learning. *Journal of Educational Psychology*, 51, 267 – 272.
- Ausubel, D. P. (1961). The role of discriminability in meaningful verbal learning and retention. *Journal of Educational Psychology*, 52, 266 – 274.
- Ausubel, D. P. (1963). The psychology of meaningful verbal learning: An introduction to school learning. New York: Grune & Stratton.
- Ausubel, D. P. (1968). *Educational Psychology: A cognitive view*. New York: Rinehart & Winston.
- Ausubel, D. P., & Fitzgerald, D. (1961). The role of discriminability in meaningful verbal learning and retention. *Journal of Educational Psychology*, 53, 267 – 272.
- Ausubel, D. P., Novak, J. D., & Hanesian, H. (1978). *Educational Psychology: A Cognitive View*. New York: Holt, Rinehart and Winston.
- Barnett, M. (1986). Syntactic and lexical/semantic skill in foreign language reading: Importance and interaction. *Modern Language Journal*, 70, 343-349.
- Bensoussan, M., Sim, D. & Weiss, R. (1984). The effect of dictionary usage on EFL test performance compared with student and teacher attitudes and expectations. *Reading in a Foreign language*, 2, 262-276.
- Bernhardt, E. B. (1991). *Reading development in a second language: Theoretical, empirical and classroom perspectives*. Norwood, NJ: Ablex.
- Bransford, J. (1979). *Human cognition: Learning, understanding, and remembering*. Belmont, CA: Wadsworth Publishing Company.
- Campbell, N. (1987). Adapted literary texts and the EFL reading comprehension. *ELT Journal*, 41, 132-135.
- Carr, T., & Levy, B. (1990).

Reading and its development: Component skills approaches. San Diego: Academic Press.

Carrell, P. L. (1988). Text-boundedness and schema interference. In Carrell, P.L., Devine, J. and Eskey, D. E. (eds), *Interactive Approaches to Second Language Reading*, pp. 101-113. Cambridge: Cambridge University Press.

Carrell, P. L., Devine, J., & Eskey, D. E. (1988). *Interactive approaches to second language reading*. Cambridge: Cambridge University Press.

Carrell, P.L. & Eisterhold, J.C. (1989). Schema theory and EFL reading pedagogy. In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), *Interactive approaches to second language reading*. New York: Cambridge University Press.

Chang, S. F., & Huang, S. C. (1999). Taiwanese English learners' learning motivation and language learning strategies. *Proceedings of the 16th conference on English teaching and learning in the republic of China* (pp.111-28) Taipei The Crane Publishing Co.

Chun, D. (2001). L2 reading on the web: Strategies for accessing information in hypermedia. *Computer Assisted Language Learning*, 14(5), 367-403.

Chun, D. M. (2001). A longitudinal study of user behavior and L2 reading comprehension in a multimedia CALL environment. Paper Presented at the Annual Meeting of the American Association of Applied Linguistics, St. Louis, MO.

Chun, D. M., & Plass, J. L. (1996). Effects of multimedia annotations on vocabulary acquisition. *Modern Language Journal*, 80, 183-198.

Chun, D. M., Plass, J. L. (1997). Research on text comprehension in multimedia environments. *Language Learning & Technology*, 1, pp. 60-81.

Chung, J.M., Huang, S.C. (1998). The effects of three aural advance organizers for video viewing in a foreign language classroom. *System*, 26, pp. 553-565.

Clarke, M. A. (1988). The short circuit hypothesis of EFL reading- or when language competence interferes with reading performance. In P.L. Carrell, J. Devine, & D. E. Eskey (Eds.), *Interactive approaches to second language reading* (pp. 114-124). New York: Cambridge University Press.

Coady, J. (1993). Research on EFL/EFL vocabulary acquisition: Putting it in context. In T. Huckin, M. Haynes, & J. Coady (Eds.), *Second language reading and vocabulary learning*, pp. 3-23. Norwood, NJ: Ablex Publishing.

Coady, J. (1997). L2 vocabulary acquisition: A synthesis of the research. In J. Coady & T. Huckin (eds.), *Second language vocabulary acquisition* (pp.273-290). New York: Cambridge University Press.

Corkill, A. J., Glover, J. A., Burning, R.H., & Krug, D. (1988). Advance organizers: Retrieval hypotheses. *Journal of Education Psychology*, 80, 304-311.

Davies, A. (1984). Simple, simplified and simplification: What's authentic? In Alderson & Urquhart (Eds.) *Reading in a foreign language*. London: Longman.

Davis, J. N. & Lyman-Hager, M. (1997). Computers and L2 reading: student performance, student attitudes, *Foreign Language Annals*, 30(1), 58-72.

Davis, J. N. (1989). Facilitating effects of marginal glosses on foreign language reading. *The Modern Language Reading*, 73, 41-52.

Dechant, E. (1991). *Understanding and Teaching reading: An Interactive Model*. New Jersey: Lawrence Erlbaum Associate, Inc.

Derry, S. J. (1984). Effects of an organizer on memory for prose. *Journal of Educational Psychology*, 76, 98 – 107.

Devine, J. (1988). The relationship between general language competence and second language reading proficiency: Implications for teaching. In P. Carrell, J. Davine & Eskey (Eds.), *Interactive approaches to second language reading* (pp. 260-277). Cambridge, UK: Cambridge University Press.

Ercetin, G. (2003). Exploring EFL learners' use of hypermedia reading glosses. *CALICO Journal*, 20, 261-283.

Evans, S. (2003). Graphic organizers for Japanese readers of expository texts. *English Language Research Bulletin*, 18, 1-17.

Eysenck, M. W. (1982). Incidental learning and orienting tasks. In C. R. Puff (Ed.), *Handbook of research methods in human memory and cognition* (pp. 197-228). New York: Academic Press.

Faerch, K. Haastrup and R. Phillipson. (1984) *Learner Language and Language Learning*. Copenhagen: Multilingual Matters.

Frase, L. T. (1975). Prose processing. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 9). New York: Academic.

Gagn?, R. M., & Wiegand, V. K. (1970). Effects of superordinate context on learning and retention of facts. *Journal of Educational Psychology*, 61, 406 – 409.

Gass, S. (1999). Incidental vocabulary learning. *Studies in Second Language Acquisition*, 22, 319-333.

Gentner, D. & Gentner, D. (1983). Flowing waters or teeming crowds: Mental models of electricity (pp. 99-129). In D. Gentner & A. L. Stevens (Eds.), *Mental models*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Goodman, K. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6, 126-135.

Gottfried, A. E. (1990). Academic intrinsic motivation in young elementary school children. *Journal of Educational Psychology*, 82, 525-538.

Gottfried, A. W., Cook, C. R., Gottfried, A. E., & Morris, P. E. (2005). Educational characteristics of adolescents with gifted academic intrinsic motivation: A longitudinal investigation from school entry through early adulthood. *Gifted Child Quarterly*, 49, 172-186.

Gove, M. K., Vacca, J. A. L., & Vacca, R. T. (1987). *Reading and learning to read*. Boston: Scott, Foresman and Company.

Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly*, 25(3), 375-406.

Graves, M. F., Juel, C. & Graves, B. B. (2001). *Teaching Reading in 21st Century*. (2nd). Needham Heights, MA: Allyn & Bacon.

Graves, M., et al., (1983). Effects of previewing difficult short stories on low ability junior high school students' comprehension, recall, and attitudes. *Reading Research Quarterly*, 18, 262-276.

Hanley, J. E. B., Herron, C. A. & Cole, S. P. (1995). Using video as an advance organizer to a written passage in the FLES classroom. *Modern Language Journal*, 79(1), 57-66.

Harmon, J. M. (1998). Vocabulary teaching and learning in a seventh-grade literature-based classroom. *Journal of Adolescent Adult Literacy*, 41, 518-529.

Harmon, J. M. (2002). Teaching independent word learning strategies to struggling readers. *Journal of Adolescent Adult Literacy*, 45, 606-615.

Hazenber, S. & Hulstijn, J. (1996). Defining a minimal receptive second-language vocabulary for non-native university students: An empirical investigation. *Applied Linguistics*, 17, 145-163.

Henriksen, B. (1996). Semantisation, Retention and accessibility: Key concepts in vocabulary learning. Paper presented at the AILA Congress, Jyvaskyla, Finland.

Henriksen, B. (1999). Three dimensions of vocabulary acquisition. *Studies in second language acquisition*, 21, 303-317.

Herron, C., York, H., Cole, S. P., & Linden, P. (1998). A comparison study of student retention of foreign language video: Declarative versus interrogative advance organizer. *The Modern Language Journal*, 82(2), 237-247.

Holmes, B.C. (1983). The effect of prior knowledge on the question answering of good and poor readers. *Journal of Reading Behavior*, 15(1), 1-18.

Huckin, T., & Coady, J. (1999). Incidental vocabulary acquisition in a second Language. *Studies in Second Language Acquisition*, 21, 181-193.

Hudson, T. (1982). The effects of induced schemata on the 'Short Circuit' in L2 reading: non-decoding factors in L2 reading performance. *Language Learning*, 32, 1-31.

Hulstijn, J. H., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced

foreign language students: The influence of margin glosses, dictionary use, and reoccurrence of unknown words. *The Modern Journal*, 80(3), 327-339.

Hung, F. (1997). The effect of content and linguistic schemata on Chinese students' L2 reading. *Studies in English language and literature*, 2, 93-105.

Jacobs, G., Dufon, P., & Fong, F. C. (1994). L1 and L2 glosses in reading passages: Their effectiveness for increasing reading and vocabulary knowledge. *Journal of Research in Reading*, 17(1), 19-28.

Jacobs, G. (1991). Second language reading recall as a function of vocabulary glossing and selected other variables. Unpublished doctoral dissertation, University of Hawaii at Manoa.

Johnson, P. (1982). Effects on reading comprehension of background knowledge. *TESOL Quarterly*, 19, 503-516.

Karp, A. (2001). The effects of glosses and tasks on vocabulary growth and retention for L2 readers of Spanish. Unpublished Doctoral Dissertation, University of California, Davis.

Kellogg, G. S., & Howe, M. J. A. (1971). Using words and pictures in foreign language learning. *Alberta Journal of Educational Research*, 17, 87-94.

Kloster, A. M., & Winne, P. H. (1989). Effects of different types of organizers on students' learning from text. *Journal of Educational Psychology*, 81(1), 9-15.

Knight, S. (1994a). Dictionary: The tool of last resort in Foreign language? A new perspective. *The Modern Language Journal*, 78(3), 285-299.

Knight, S. (1994b). Dictionary use while reading: The effects on comprehension and vocabulary acquisition for students of different verbal abilities. *Modern Language Journal*, 78(3), 285-299.

Ko, M. H. (2005). Glosses, comprehension, and strategy use. *Reading in a Foreign Language*, 17. Retrieved November 24, 2006 from <http://nflrc.hawaii.edu/rfl/October2005/ko/ko.html>.

Kommers, P. A. M., Grabinger, S. & Dunlap, J. C. (1996). *Hypermedia Learning Environments: Instructional Design and Integration*. Lawrence Erlbaum, Hillsdale, NJ.

Kost, C. R. Foss, P. & Lelenzini, J.J. (1999). Textual and pictorial glosses: Effectiveness on incidental vocabulary growth when reading in a foreign language. *Foreign Language Annals*, 32(1), 89-113.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. New York: Pergamon Press.

Laflamme, J. G. (1997). The effect of the multiple exposure method and the target reading/ writing strategy on test scores. *Journal of Adolescent Adult Literacy*, 40, 372-381.

Langan-Fox, J., Waycott, J. & Albert, K. (2000). Text and Graphic Advance Organizers: Properties and Processing. *International Journal of Cognitive Ergonomics*, 4(1), 19-34.

Laufer, B. & Hill, M. (2000). What lexical information do L2 learners select in a CALL dictionary and how does it affect word retention? *Language Learning and Technology*, 32, 58-76. Available from: <http://ilt.msu.edu/vol3num2/laufer-hill/index.html>

Laufer, B. & Kimmel, M. (1997) Bilingualised dictionaries: how learners really use them. *System*, 25, 361-369.

Laufer, B. (1997). The lexical plight in second language reading. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 20-34). Cambridge: Cambridge University Press.

Laufer, B., & Hulstijn, J. H. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*, 22, 1-26.

Lawton, J. T., & Wanska, S. K. (1977). Advance organizers as a teaching strategy: A reply to Barnes and Clawson. *Review of Educational Research*, 47, 233 – 244.

Leffa, V. J. (1992). Making foreign language texts comprehensible for beginners: An experiment with an electronic glossary. *System*, 20, 63-73.

Levie, W. H. & Lentiz, R. (1982). Effects of text illustrations: A review of research. *Educational Communication and Technology Journal*, 30, 195-232.

Levin, J. R. (1981). On the functions of pictures in prose. In Priozzolo, F.J and Wittrock, M.C. (eds), *Neuropsychological and Cognitive Processes in Reading*, pp. 203-228. NY: Academic Press.

Liao, Y. F. (2000). A study of Taiwanese junior high school students' EFL learning motivation and learning strategies. Unpublished master thesis, National Changhua University of Education, Changhua, ROC.

Lin, H. & Chen, T., (2007). Reading authentic EFL text using visualization and advance organizers in a multimedia learning environment. *Language Learning & Technology*, 11, pp. 83-106.

Lin, H., Chen, T. (2006). Decreasing cognitive load for novice EFL learners: Effects of question and descriptive advance organizers in facilitating EFL learners' comprehension of an animation-based content lesson, *System*, 31(3), 416-431.

Liou, H. C. (2000). The electronic bilingual dictionary as a reading aid to EFL Learners: Research findings and implications. *Computer Assisted Language Learning*, 13, 467-476.

Liu, M. (1995). Contextual enrichment through hypermedia technology: implications for second-language learning. *Computers in Human Behavior*, 11, 439-450.

Lomika, L. (1998). To gloss or not gloss: An investigation of reading comprehension online. *Language Learning and Technology*, 1(2), 41-50.

Martinez-Lage, A. (1997). Hypermedia technology for teaching reading. In Bush, M. D. & Terry, R. M. (Eds.), *Technology enhanced language learning* (pp. 122-163). Lincolnwood, IL: National Textbook Company.

Mayer, R. E. (1979). Can advance organizers influence meaningful learning? *Review of Educational Research*, 49, 371 – 383.

Mayer, R. E. (1979). Twenty years of research on advance organizers: Assimilation theory is still the best predictor of results. *Instructional Science*, 8, 133-167.

Mayer, R. E. (1980). Elaboration techniques that increase the meaningfulness of technical text: An experimental test of the learning strategy hypothesis. *Journal of Educational Psychology*, 72, 770-784.

Mayer, R. E. (1983). Can you repeat that? Qualitative effects of repetition and advance organizer on leaning from science prose. *Journal of Education Psychology*, 75, 40-49.

Mayer, R. E. (1987). *Educational psychology: A cognitive approach*. Boston: Little, Brown & Company.

Mayer, R. E. (1989). Models of understanding. *Review of Educational Research*, 59, 43-64.

Mayer, R. E., Bayman, P., & Dyck, J. L. (1987). Learning programming languages: Research and applications. In D. E. Berger, K. & W. P. Banks (Eds.), *Applications of Cognitive Psychology: problem Solving, Education and Computing* (pp. 33-45). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Mayer, R. E., Bromage, B. K. (1980). Different recall protocols for technical texts due to advance organizers. *Journal of Educational Psychology*, 72, 209-225.

McEneaney, J. E. (1990). Do advance organizers facilitate learning? A review of subsumption theory. *Journal of Research and Development in Education*, 23, 89 – 96.

McKeown, M., & Curtis, M. (1987). The nature of vocabulary acquisition. Hillsdale, NJ: Lawrence Erlbaum.

Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.

Moore, P. J., & Scevak, J.J. (1997). Learning from texts and visual aids: a developmental perspective. *Journal of Research in Reading*, 20(3), 205-223.

Nagy, W. E. (1988). Teaching vocabulary to improve reading comprehension. Newark, DE: International Reading Association.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. UK: Cambridge.

Novak, J. & Gowin, D. (1984). *Learning how to learn*. New York: Cambridge University Press.

Nuttall, C. (1996). *Teaching reading skills in a foreign language*. (2nd ed.).

Oxford: Heinmann Press. Omaggio Hadley, A. (1993). *Teaching Language in Context*. (2nd edn). Boston: Heinle & Heinle.

Omaggio, A. C. (1979). Pictures and second language comprehension: Do they help? *Foreign Language Annals*, 12, 107-116.

Ostyn, P. & Godin, P. (1985). RALEX: an alternative approach to language teaching. *Modern Language Journal*, 69(4), 346-355.

Ostyn, P., Deville, G., Vandesteelle, M. & Kelly, P. (1985). Towards an optional programme of foreign language vocabulary acquisition. In A.M Cornu., J. Vanparys, M. Delahaye & L. Baten (eds.). *How do we approach LSP?* (pp. 292-305). Leuven: Beads or Bracelets.

Oxford, R., & Nyikos, M. (1989). Variables of affecting choice of language learning strategies by University students. *The Modern Language Journal*, 73, 404-419.

Pak, J. (1986). *Mental representations: A dual coding approach*. Oxford: Oxford University Press.

Panel, N. R. (2000b). *Teaching Children to Read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, DC: National Institute of Child Health and Human Development.

Paribakht, T. S. & Wesche, M. (1996). Accessing second language vocabulary knowledge: Depth versus breadth. *The Canadian Modern Language Review*, 53, 13-40.

Parry, K. (1993). Too many words: Learning the vocabulary of an academic subject. In T. Huckin, M. Haynes, & J. Coady, (eds.), *Second Language Reading and Vocabulary Learning*. (pp. 109-129). Norwood, NJ: Ablex.

Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95, 667-686.

Pintrich, P. R., Marx, R. W., & Boyle, R. A. (1993). Beyond cold conceptual change: The role of motivational beliefs and classroom contextual factors in the process of conceptual change. *Review of Educational Research*, 63, 167-199.

Rayner, K., & Pollatsek, A. (1989). *The psychology of reading*. Englewood Cliffs, NJ: Prentice Hall.

Rayner, K., & Pollatsek, A. (1989). *The psychology of reading*. Englewood Cliffs, NJ: Prentice Hall.

Read, J. (2000). *Accessing vocabulary*. Cambridge, UK: Cambridge University Press.

Reinking, D. & Rickman, S. S. (1990). The effects of computer-mediated texts on the vocabulary learning and comprehension of intermediate-grade readers. *Journal of Reading Behavior*, 12(4), 395-411.

Risko, V. & Alvarez, M. (1986). An investigation of poor readers' use of a thematic strategy to comprehend text. *Reading Research Quarterly*, 21, 298-316. EJ 337 401.

Roby, W. B. (1999). What 's in a gloss? [online] *Language Learning & Technology*, 2, 94-101. Retrieved from the World Wide Web April 21, 2008: <http://ilt.msu.edu/vol2num2/roby/index.html>.

Royer, J. M., & Cable, G. W. (1976). Illustrations, analogies, and facilitative transfer in prose learning. *Journal of Educational Psychology*, 68, 205-209.

Ruddell, M. R., Shearer, B. A. (2002). "Extraordinary, " " tremendous, " " exhilarating, " " magnificent " : Middle school at-risk students become avid word learners with the Vocabulary Self-Collections Strategy (VSS). *Journal of Adolescent Adult Literacy*, 45, 352-363.

Rupley, W. H., Logan, J. W., & Nichols, W. D. (1999). Vocabulary Instruction in a balanced reading program. *The Reading Teacher*, 52, 336-346.

Sakar, A., & Ercetin, G. (2005). Effectiveness of hypermedia annotations for foreign language reading. *Journal of Computer Assisted Learning*, 21, 28-38.

Samuels, J., & Kamil, M. (1984). Models of the reading process. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *The handbook of reading research* (pp. 185-224). New York: Longman.

Schmidt, R. (1993). Awareness and second language acquisition. *Annual Review of Applied Linguistics*, 13, 206-226.

Schumacher, G. M. (1987). Executive control in studying. In B. Britton & M. Glynn (Eds.), *Executive control of processing in reading* (pp. 107-144). Hillsdale, NJ: Lawrence Erlbaum Associates.

Schwartz, N. H., Ellsworth, L. S., Graham, L., & Knight, B. (1998). Accessing Prior Knowledge to Remember Text: A Comparison of Advance Organizers and Maps. *Contemporary Educational Psychology*, 23, pp. 65-69.

Shelton, D., & Newhouse, R. (1981). Incidental learning in a paired-associate task. *Journal of Experimental Education*, 50, 36-38.

Silberstein, S. (1987). Let's take another look at reading: Twenty-five years of reading instruction. *English Teaching Forum*, 25, 28-35.

Silberstein, S. (1994). *Techniques and Resources in Teaching Reading*. New York: Oxford University Press.

Smith, F. (1971). *Understanding reading*. New York: Holt, Rinehart & Winston.

Smith, F. (1979). *Reading without nonsense*. New York: Teachers College Press.

Stanpovich, K. E. (1980). Changing models of reading and reading acquisition. In L. Rieben & C. Perfetti (Eds.). Hillsdale, NJ: Lawrence Erlbaum.

Swaffar, J., Arens, K., & Byrnes, H. (1991). *Reading for meaning: An integrated approach to language learning*. Englewood Cliffs, NJ: Prentice Hall.

Taglieber, L. K., Johnson, L. L. & Yarbrough, D. B. (1988). Effects of prereading activities on EFL reading by Brazilian college students. *TESOL Quarterly*, 22(3), 455-471.

Ulijn, J. M. (1984). Reading for professional purposes: psycholinguistic evidence in a cross-linguistic perspective. Teoksessa A.K Pugh & J.M. Ulijn (eds.). *Reading for Professional Purposes*. London: Studies and Practice in Native and Foreign Languages.

Widdowson, H. G. (1984). *Teaching language as communication*. Oxford: Oxford University Press.

Williams, E., & Moran, C. (1989). Reading in a foreign language at intermediate and advanced levels with particular reference to English. *Language Teaching*, 22, 217-228.

Yano, Y., Lone, M. H. & Ross, S. (1994). The effects of simplified and elaborated texts on foreign language reading comprehension. *Language Learning*, 44(2), 189-219.

Zhan, W., & Lu, Y. (Eds.). (2004). *Smart Reading 4*. Taiwan: Lighthouse Publishing Company.

Zintz, M. V., & Maggart, Z. R. (1984). *The reading process: The teacher and the learner*. Dubuque: William C. Brown Company.