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References

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References

- Airasiain, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Rath, J., & Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives* (Complete edition). New York, NY: Longman.
- Allington, R. L., & Johnston, R. H. (2002). *Reading to learn: Lessons from exemplary fourth-grade classrooms*. New York: The Guilford Press.
- Anderson, R. C., & Pearson, P. D. (1984). (Report No. 306). Champaign, IL: University of Illinois.
- Anderson, R. C., & Pichert, J. W. (1978). Recall of previously unrecallable information following a shift in perspective. *Journal of verbal learning and verbal behavior*, 17(1), 1-12. doi:10.1016/S0022-5371(78)90485-1
- Baayen, R. H., Davidson, D. J., & Bates, D. M. (2008). Mixed-effects modeling with crossed random effects for subjects and items. *Journal of memory and language*, 59(4), 390-412. doi:10.1016/j.jml.2007.12.005
- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly*, 34, 452-477. doi:10.1598/RRQ.34.4.4
- Barr, D. J., Levy, R., Scheepers, C., & Tily, H. J. (2013). Random effects structure for confirmatory hypothesis testing: Keep it maximal. *Journal of memory and language*, 68(3), 255-278. doi:10.1016/j.jml.2012.11.001
- Bates, D., Kliegl, R., Vasishth, S., & Baayen, H. (2015). Parsimonious mixed models. arXiv preprint arXiv:1506.04967.
- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting Linear Mixed-Effects Models Using {lme4}. *Journal of Statistical Software*, 67(1), 1–48. doi:10.18637/jss.v067.i01
- Becker, M., McElvany, N., & Kortenbruck, M. (2010). Intrinsic and extrinsic reading motivation as predictors of reading literacy: A longitudinal study. *Journal of Educational Psychology*, 102, 773-785. doi:10.1037/a0020084

References

- BeeLine Reader: making reading on-screen easier and faster. (n.d.). Retrieved May 18, 2018, from <http://www.beelinereader.com/>
- Benedetto, S., Carbone, A., Pedrotti, M., Le Fevre, K., Bey, L. A. Y., & Baccino, T. (2015). Rapid serial visual presentation in reading: The case of Spritz. *Computers in Human Behavior*, 45(JUNE), 352–358. doi:10.1016/j.chb.2014.12.043
- Berkel, van, S., Engelen, R., Groen, van, M., Hilte, M., Wouda, J., & Van der Zanden, J. (2013). *Wetenschappelijke verantwoording Begrijpend luisteren groep 3*. Arnhem: Cito B.V.
- Best, R. M., Floyd, R. G., & McNamara, D. S. (2008). Differential Competencies Contributing to Children's Comprehension of Narrative and Expository Texts. *Reading Psychology*, 29(2), 137-164. doi:10.1080/02702710801963951
- Best, R., Ozuru, Y., Floyd, R., & McNamara, D. S. (2006). Children's text comprehension. Effects of genre, knowledge, and text cohesion. In S. A. Barab, K. E. Hay, & D. T. Hickey (Eds.), *Proceedings of the Seventh International Conference of the Learning Sciences* (pp. 37–42). Mahwah, NJ: Erlbaum.
- Best, R. M., Rowe, M., Ozuru, Y., & McNamara, D. S. (2005). Deep-level comprehension of science texts: The role of the reader and the text. *Topics in Language Disorders*, 25(1), 65-83. doi: 10.1097/00011363-200501000-00007
- Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I, Cognitive Domain*. New York, NY: Longmans.
- Blythe, H.I., Häikiö, T., Bertam, R., Liversedge, S.P., & Hyönä, J. (2011). Reading disappearing text: Why do children refixate words? *Vision Research*, 51, 84–92. doi:10.1016/j.visres.2010.10.003
- Blythe, H. I., Liversedge, S. P., Joseph, H. S. S. L., White, S.J., Findlay, J. M., & Rayner, K. (2006). The binocular co-ordination of eye movements during reading in children and adults. *Vision Research*, 46, 3898–3908. doi:10.1016/j.visres.2006.06.006
- Blythe, H.I., Liversedge, S.P., Joseph, H.S.S.L., White, S.J., & Rayner, K. (2009). The uptake of visual information during fixations in reading in children and adults. *Vision Research*, 49, 1583–1591. doi:10.1016/j.visres.2009.03.015

References

- Boland, J. (2004). Linking eye movements to sentence comprehension in reading and listening. In M. Carreiras & C. Clifton Jr. (Eds.) *The on-line study of sentence comprehension* (pp. 51-76). New York: Psychology Press.
- Boston, M. F., Hale, J. T., Kliegl, R., Patil, U., & Vasishth, S. (2008). Parsing costs as predictors of reading difficulty: An evaluation using the Potsdam Sentence Corpus. *Journal of Eye Movement Research*, 2(1).
- Bourg, T., Bauer, P. J., & van den Broek, P. (1997). Event comprehension and representation. In P. W. van den Broek, T. Bourg, & P. J. Bauer (Eds.), *Developmental spans in event comprehension and representation: Bridging fictional and actual events* (pp. 385-407). New York, NY: Lawrence Erlbaum Associates Publishers.
- Busler, J. N., & Lazarte, A. A. (2017). Reading time allocation strategies and working memory using rapid serial visual presentation. *Journal of Experimental Psychology: Learning Memory and Cognition*, 43(9), 1375–1386. doi:10.1037/xlm0000392
- Cain, K. (1999). Ways of reading: How knowledge and use of strategies are related to reading comprehension. *British Journal of Developmental Psychology*, 17(2), 293-309. doi:10.1348/026151099165285
- Cain, K., & Oakhill, J. V. (1999). Inference making ability and its relation to comprehension failure in young children. *Reading and writing*, 11(5-6), 489-503. doi:10.1023/A:1008084120205
- Cain, K., & Oakhill, J. (2006). Profiles of children with specific reading comprehension difficulties. *British Journal of Educational Psychology* 76(4), 683-696. doi:10.1348/000709905X67610
- Cain, K., & Oakhill, J. (2007). Reading comprehension difficulties: Correlates, causes, and consequences. In K. Cain & J. Oakhill (Eds.), *Children's comprehension problems in oral and written language: A cognitive perspective* (pp. 41-75). New York, NY: Guilford.
- Cain, K., Oakhill, J. V., Barnes, M. A., & Bryant, P. E. (2001). Comprehension skill, inference making ability and their relation to knowledge. *Memory and Cognition*, 29, 850–859. doi:10.3758/BF03196414

References

- Cain, K., Oakhill, J., & Bryant, P. (2004). Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology, 96*, 31-42. doi:10.1037/0022-0663.96.1.31
- Carlson, S. E., Seipel, B., & McMaster, K. (2014). Development of a new reading comprehension assessment: Identifying comprehension differences among readers. *Learning and Individual Differences, 32*, 40-53. doi:10.1016/j.lindif.2014.03.003
- Castelhano, M. S., & Muter, P. (2001). Optimizing the reading of electronic text using rapid serial visual presentation. *Behaviour & Information Technology, 20*(4), 237–247. doi:10.1080/01449290110069400
- Chall, J. S. (1983). *Stages of reading development*. New York: McGraw-Hill.
- Chall, J. (1996) *Stages of reading development* (2nd ed.). Fort Worth, Tex.: Harcourt Brace.
- Chall, J. S., Jacobs, V. A., & Baldwin, L. E. (1990). *The reading crisis: Why poor children fall behind*. Cambridge, Mass: Harvard University Press.
- Chen, H.-C. (1986). Effects of reading span and textual coherence on rapid-sequential reading. *Memory & Cognition, 14*(3), 202–208. doi:10.3758/BF03197693
- Chi, M. T. H., de Leeuw, N., Chiu, M., & LaVancher, C. (1994). Eliciting self-explanations improves understanding. *Cognitive Science, 18*(3), 439-477. doi:10.1207/s15516709cog1803_3
- Chung-Fat-Yim, A., Peterson, J. B., & Mar, R. A. (2017). Validating self-paced sentence-by-sentence reading: story comprehension, recall, and narrative transportation. *Reading and Writing, 30*(4), 857–869. doi:10.1007/s11145-016-9704-2
- Cito (2006). *LOVS Begrijpend lezen groep 3* [Reading comprehension test for grade 1]. Arnhem: Cito.
- Cito (2009). *Drie-Minuten-Test* [Three Minutes Test]. Arnhem: Cito.
- Cito (2011). *LOVS Begrijpend Luisteren groep 3* [Listening comprehension test for grade 1]. Arnhem: Cito.

References

- Clifton, C., Staub, A., & Rayner, K. (2007). Eye movements in reading words and sentences. In R. van Gompel, M. H. Fischer, W. S. Murray, & R. L. Hill (Eds.), *Eye movements: A window on mind and brain* (pp. 341–372). Oxford, UK: Elsevier.
- Clinton, V., & van den Broek, P. (2012). Interest, inferences, and learning from texts. *Learning and Individual Differences*, 22(6), 650-663. doi:10.1016/j.lindif.2012.07.004
- Conway, A. R. A., Kane, M. J., Bunting, M. F., Hambrick, D. Z., Wilhelm, O., & Engle, R. W. (2005). Working memory span tasks: A methodological review and user's guide. *Psychonomic Bulletin & Review*, 12, 5, 769-786. doi:10.3758/BF03196772
- Coté, N., Goldman, S. R., & Saul, E. U. (1998). Students making sense of informational text: Relations between processing and representation. *Discourse Processes*, 25(1), 1–53. doi:10.1080/01638539809545019
- Currie, C. E., Elton, R. A., Todd, J., & Platt, S. (1997). Indicators of socio-economic status for adolescents: The WHO health behaviour in school-aged survey. *Health Education Research*, 12, 385-397. doi:10.1093/her/12.3.385
- Demetriou, A., Christou, C., Spanoudis, G., & Platsidou, M. (2002). The development of mental processing: Efficiency, working memory, and thinking. *Monographs of the Society for Research in Child Development*, 67, 1-155. doi:10.1111/1540-5834.671174
- Denton, C. A., Enos, M., York, M. J., Francis, D. J., Barnes, M. A., Kulesz, P. A., ... & Carter, S. (2015). Text-Processing Differences in Adolescent Adequate and Poor Comprehenders Reading Accessible and Challenging Narrative and Informational Text. *Reading Research Quarterly*, 50(4), 393-416. doi:10.1002/rrq.105
- Diergarten, A. K., & Nieding, G. (2015). Children's and Adults' Ability to Build Online Emotional Inferences During Comprehension of Audiovisual and Auditory Texts. *Journal of Cognition and Development*, 16(2), 381-406.
- Dole, J. A., & Smith, E. L. (1989). Prior knowledge and learning from science text: An instructional study. In S. McCormick & J. Zutell (Eds.), *Cognitive and social perspectives for literacy research and instruction* (pp. 345-352). Chicago, IL: NRC.
- Drummond, A. (2013). Ibex farm. *Online Server: Http://Spellout. Net/Ibexfarm.*

References

- Duke, N.K. (2000a). For the rich it's richer: Print experiences and environments offered to children in very low- and very high-socioeconomic status first-grade classrooms. *American Educational Research Journal*, 37(2), 441–478. doi:10.3102/00028312037002441
- Duke, N. K. (2000b). 3.6 Minutes per Day: The Scarcity of Expository Texts in First Grade. *Reading Research Quarterly*, 35(2), 202-224. doi:10.1598/RRQ.35.2.1
- Duke, N. K., Bennett-Armistead, V. S., & Roberts, E. M. (2002). Incorporating informational text in the primary grades. In C. Roller (Ed.), *Comprehensive reading instruction across the grade levels* (pp. 40–54). Newark, DE: International Reading Association.
- Duke, N. K., Bennett-Armistead, V. S., & Roberts, E. M. (2003). Bridging the gap between learning to read and reading to learn. In D. M. Barone & L. M. Morrow (Eds.), *Literacy and young children: Research-based practices* (pp. 226–242). New York: Guilford.
- Duke, N. K., & Pearson, P. (2002). Effective Practices for Developing Reading Comprehension. In Alan E. Farstrup & S. Jay Samuels (Eds.), *What Research Has to Say About Reading Instruction* (3rd ed., pp. 205-242). Newark, DE: International Reading Association, Inc. doi:10.1598/0872071774.10
- Eason, S. H., Goldberg, L. F., Young, K. M., Geist, M. C., & Cutting, L. E. (2012). Reader-text interactions: How differential text and question types influence cognitive skills needed for reading comprehension. *Journal of educational psychology*, 104(3), 515. doi:10.1037/a0027182.
- Ehrlich, M. F., Remond, M., & Tardieu, H. (1999). Processing of anaphoric devices in young skilled and less skilled comprehenders: Differences in metacognitive monitoring. *Reading and Writing*, 11(1), 29–63. doi:10.1023/A:1007996502372
- Ericsson, K. A., & Simon, H. A. (1980). Verbal reports as data. *Psychological Review*, 87, 215-251. doi:10.1037/0033-295X.87.3.215
- Ericsson, K. A., & Simon, H. A. (1993). *Protocol Analysis: Verbal Reports as Data* (revised edition). Cambridge, MA: Bradford books/MIT Press. doi:10.1524/anly.1993.13.12.121

References

- Espin, C. A., Busch, T. W., & Shin, J. (2001). Curriculum-based measurement in the content areas: validity of vocabulary-matching as an indicator of performance in social studies. *Learning Disabilities Research & Practice* 16(3), 142-151. doi: 10.1111/0938-8982.00015
- Evers, G. (2008). *Programma voor berekening Cito LeesIndex voor het Basisonderwijs. P-CLIB versie 3.0.* Arnhem: Cito.
- Evers-Vermeul, J. (n.d.). Short sentences easy to read? Effects of connectives and layout on text comprehension by beginning readers.
- Feeenstra, H., Kamphuis, F., Kleintjes, F., & Krom, R. (2010). *Wetenschappelijke verantwoording Begrijpend lezen voor groep 3 tot en met 6.* Arnhem: Cito B.V. Retrieved September 23, 2018, from <http://docplayer.nl/370648-Wetenschappelijke-verantwoording-begrijpend-lezen-voor-groep-3-tot-en-met-6.html>.
- Ferreira, V., Ferreira, F., & Henderson, J. M. (2015). Keith Rayner (1943–2015). *American Psychologist*, 70(6), 568. doi:10.1037/a0039152
- Feskens, R., Kuhlemeier, H., & Limpens, G. (2016). *Resultaten PISA-2015 in vogelvlucht. Praktische kennis en vaardigheden van 15-jarigen.* Samenvatting van de Nederlandse uitkomsten van het Programme for International Student Assessment (PISA) op het gebied van natuurwetenschappen, leesvaardigheid en wiskunde in het jaar 2015. Arnhem: Cito.
- Fox, J. (n.d.). Effect Displays in R for Generalised Linear Models. Retrieved from <http://psfaculty.ucdavis.edu/bsjjones/effectdisplays.pdf>
- Fox, J., & Hong, J. (2009). Effect Displays in R for Multinomial and Proportional-Odds Logit Models: Extensions to the effects Package. *JSS Journal of Statistical Software*, 32(1). Retrieved from <http://www.jstatsoft.org/>
- Fox, J., & Weisberg, S. (2011). *An {R} Companion to Applied Regression* (Second). Thousand Oaks {CA}: Sage. Retrieved from <http://socserv.socsci.mcmaster.ca/jfox/Books/Companion>

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References

- Gathercole, S. E., Pickering, S. J., Ambridge, B., & Wearing, H. (2004). The structure of working memory from 4 to 15 years of age. *Developmental Psychology, 40*(2), 177-190. doi:10.1037/0012-1649.40.2.177
- Gerrig, R. J., & O'Brien, E. J. (2005). The scope of memory-based processing. *Discourse Processes, 39*, 225–242.
- Godfroid, A., & Spino, L. A. (2015). Reconceptualizing Reactivity of Think-Alouds and Eye Tracking: Absence of Evidence Is Not Evidence of Absence. *Language Learning, 65*(4), 896-928.
- Goldman, S. R., & Saul, E. U. (1990b). Flexibility in text processing: A strategy competition model. *Learning and Individual Differences, 2*, 181-219.
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(1), 6–10. doi:10.1177/074193258600700104
- Graesser, A. C., & Clark, L. C. (1985). *Structures and procedures of implicit knowledge*. Norwood, NJ: Ablex.
- Graesser, A. C., Singer, M., & Trabasso, T. (1994). Constructing inferences during narrative comprehension. *Psychological Review, 101*, 371-395.
- Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (pp. 403-424). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Hall, L. A. (2004). Comprehending expository text: Promising strategies for struggling readers and students with reading disabilities? *Reading Research and Instruction, 44*(2), 75-95. doi:10.1080/19388070409558427
- Helder, A., Kraal, A., & van den Broek, P. (2015). De ontwikkeling van begrijpend lezen: Oorzaken van succes en falen vanuit een cognitief perspectief. In D. Schram (Ed.), *Hoe maakbaar is de lezer?* (pp. 59-78). Stichting Lezen: Eburon.

References

- Helder, A., van den Broek, P., Van Leijenhorst, L., & Beker, K. (2013). Sources of comprehension problems during reading. In B. Miller, L. Cutting & P. McCardle (Eds.), *Unraveling reading comprehension: Behavioral, neurobiological, and genetic components* (pp. 43-53). Baltimore, MD: Paul H. Brookes Publishing.
- Holmqvist, K., Nyström, M., Andersson, R., Dewhurst, R., Jarodzka, H., Van de Weijer, J. (2011). *Eye Tracking: A Comprehensive Guide to Methods and Measures*. Oxford University Press (1).
- Hoover, W. A. & Gough, P. B. (1990). The simple view of reading. *Reading and Writing*, 2(2), 127-160. doi:10.1007/BF00401799
- Huestegge, L. (2010). Effects of vowel length on gaze durations in silent and oral reading. *Journal of Eye Movement Research*, 3(5). doi:10.16910/jemr.3.5.5
- Huestegge, L., & Bocianski, D. (2010). Effects of syntactic context on eye movements during reading. *Advances in cognitive psychology*, 6, 79. doi:10.2478/v10053-008-0078-0
- Huestegge, L., Radach, R., Corbic, D., & Huestegge, S.M. (2009). Oculomotor and linguistic determinants of reading development: A longitudinal study. *Vision Research*, 49, 2948–2959. doi:10.1016/j.visres.2009.09.012
- Huizinga, M., Dolan, C. V., & Molen, M. W. van der (2006). Age-related change in executive function: Developmental trends and a latent variable analysis. *Neuropsychologia*, 44, 2017-2036. doi:10.1016/j.neuropsychologia.2006.01.010
- Hyona, J., Lorch, R. F., & Kaakinen, J. K. (2002). Individual differences in reading to summarize expository text: Evidence from eye fixation patterns. *Journal of Educational Psychology*, 94(1), 44-55.
- Jong, P. F. de, & Leij, A. van der (2002). Effects of phonological abilities and linguistic comprehension on the development of reading. *Scientific Studies of Reading*, 6(1), 51-77. doi:10.1207/S1532799XSSR0601_03
- Joseph, H. S., Bremner, G., Liversedge, S. P., & Nation, K. (2015). Working memory, reading ability and the effects of distance and typicality on anaphor resolution in children. *Journal of Cognitive Psychology*, 27(5), 622-639. doi:10.1080/20445911.2015.1005095

References

- Joseph, H.S.S.L., Liversedge, S.P., Blythe, H.I., White, S.J., & Rayner, K. (2009). Word length and landing position effects during reading in children and adults. *Vision Research*, 49, 2078–2086. doi:10.1016/j.visres.2009.05.015
- Juhasz, B. J., & Pollatsek, A. (2011). Lexical influences on eye movements on reading. In S. P. Liversedge, I. Gilchrist, & S. Everling (Eds.), *The Oxford Handbook of Eye Movements* (pp. 643-662). Oxford: Oxford University Press. doi:10.1093/oxfordhb/9780199539789.013.0048
- Just, M. A., & Carpenter, P. A. (1980). A theory of reading: from eye fixations to comprehension. *Psychological Review*, 87(4), 329.
- Just, M. A., & Carpenter, P. A. (1992). A capacity theory of comprehension: Individual-differences in working memory. *Psychological Review*, 99(1), 122-149. doi:10.1037/0033-295X.99.1.122
- Kaakinen, J. K., & Hyona, J. (2005). Perspective effects on expository text comprehension: Evidence from think-aloud protocols, eyetracking, and recall. *Discourse processes*, 40(3), 239-257. doi:10.1207/s15326950dp4003_4
- Kaakinen, J. K., Hyönä, J., & Keenan, J. M. (2003). How prior knowledge, WMC, and relevance of information affect eye fixations in expository text. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 29(3), 447. doi:10.1037/0278-7393.29.3.447
- Kaakinen, J. K., Lehtola, A., & Paattilammi, S. (2015). The influence of a reading task on children's eye movements during reading. *Journal of Cognitive Psychology*, 27(5), 640-656. doi:10.1080/20445911.2015.1005623
- Karlsson, J., van den Broek, P., Helder, A., Hickendorff, M., Koornneef, A., & van Leijenhorst, L. (2018). Profiles of young readers: Evidence from thinking aloud while reading narrative and expository texts. *Learning and Individual Differences*, 67, 105-116. doi:10.1016/j.lindif.2018.08.001
- Kendeou, P., Bohn-Gettler, C., White, M. J., & van den Broek, P. W. (2008). Children's inference generation across different media. *Journal of Research in Reading*, 31(1), 259-272. doi:10.1111/j.1467-9817.2008.00370.x

References

- Kendeou, P., Lynch, J. S., van den Broek, P., Espin, C. A., White, M. J., & Kremer, K. E. (2005). Developing successful readers: Building early comprehension skills through television viewing and listening. *Early Childhood Education Journal*, 33(2), 91-98. doi:10.1007/s10643-005-0030-6
- Kendeou, P., Papadopoulos, T. C., & Spanoudis, G. (2012). Processing demands of reading comprehension tests in young readers. *Learning and Instruction*, 22, 354-367. doi:10.1016/j.learninstruc.2012.02.001
- Kendeou, P., Rapp, D. N., & van den Broek, P. (2004). The influence of readers' prior knowledge on text comprehension and learning from text. In R. Nata (Ed.), *Progress in Education* (pp. 189-210). New York, NY: Nova Science Publishers.
- Kendeou, P., & van den Broek, P. (2005). The effects of readers' misconceptions on comprehension of scientific text. *Journal of Educational Psychology*, 97, 235-245. doi:10.1037/0022-0663.97.2.235
- Kendeou, P., & van den Broek, P. (2007). The effects of prior knowledge and text structure on comprehension processes during reading of scientific texts. *Memory and Cognition*, 35(7), 1567-1577. doi:10.3758/BF03193491
- Kendeou, P., van den Broek, P., Helder, A., & Karlsson, J. (2014). A cognitive view of reading comprehension: Implications for reading difficulties. *Learning Disabilities Research & Practice*, 29(1), 10-16. doi:10.1111/ladr.12025
- Kendeou, P., van den Broek, P., White, M. J., & Lynch, J. S. (2009). Predicting reading comprehension in early elementary school: The independent contributors of oral language and decoding skills. *Journal of Educational Psychology*, 101(4), 765-778. doi:10.1037/a0015956
- Kintsch, W. (1988). The role of knowledge in discourse comprehension: a construction-integration model. *Psychological Review*, 95, 163-182. doi:10.1037/0033-295X.95.2.163
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. New York: Cambridge University Press.

References

- Kintsch, W., & Van Dijk, T. A. (1978). Toward a model of text comprehension and production. *Psychological Review, 85*, 363-394. doi:10.1037/0033-295X.85.5.363
- Kintsch, W., & Young, S. R. (1984). Selective recall of decision-relevant information from texts. *Memory & Cognition, 12*, 112-117. doi:10.3758/BF03198424
- Kleeck, A. van (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools, 45*(7), 627-643
- Konheim-Kalkstein, Y. L., & van den Broek, P. (2008). The effect of incentives on cognitive processing of text. *Discourse Processes, 45*, 180-194. doi:10.1080/01638530701792883
- Koornneef, A. W. & Mulders, I. C. M. C. (2016). Can we 'read' the eye-movement patterns of readers? Unraveling the relationship between reading profiles and processing strategies. *Journal of Psycholinguistic Research, 45*(1), 1-18. doi:10.1007/s10936-016-9418-2
- Koornneef, A. W., & Van Berkum, J. J. A. (2006). On the use of verb-based implicit causality in sentence comprehension: Evidence from self-paced reading and eye tracking. *Journal of Memory and Language, 54*(4). doi:10.1016/j.jml.2005.12.003
- Kraal, A., Koornneef, A. W., Saab, N., & van den Broek, P. W. (2018). Processing of expository and narrative texts by low-and high-comprehending children. *Reading and writing, 31*(9), 2017-2040. doi:10.1007/s11145-017-9789-2
- Kraal, A., van den Broek, P. W., Koornneef, A. W., Ganushchak, L. Y., & Saab, N. (2019). Differences in text processing by low- and high-comprehending beginning readers of expository and narrative texts: Evidence from eye movements. *Learning and Individual Differences 74*, 101752. doi:10.1016/j.lindif2019.101752
- Krom, R., Jongen, I., Verhelst, N., Kamphuis, F., & Kleintjes, F. (2010). *Wetenschappelijke verantwoording DMT en AVI*. Arnhem: Cito. Retrieved September 23, 2018, from <https://docplayer.nl/9490037-Wetenschappelijke-verantwoording-dmt-en-avi.html>.

References

- Kuhlemeier, H., Jolink, A., Krämer, I., Hemker, B., Jongen, I., Berkel, S. van, Bechger, T. (2014). *Balans van de leesvaardigheid in het basis- en speciaal basisonderwijs 2. Uitkomsten van de peilingen in 2011 en 2012 in groep 8, groep 5 en de eindgroep van het SBO (PPON-reeks nummer 54)*. Arnhem: Cito.
- Kuperman, V., & Van Dyke, J. A. (2011). Effects of individual differences in verbal skills on eye-movement patterns during sentence reading. *Journal of memory and language*, 65(1), 42-73. doi:10.1016/j.jml.2011.03.002
- Land, J. F. H. (2009). *Zwakke lezers, sterke teksten? Effecten van tekst- en lezerskenmerken op het tekstbegrip en de tekstwaardering van vmbo-leerlingen* [Less-skilled readers, well-built texts? Effects of text and reader characteristics on text comprehension and text appreciation]. Delft, The Netherlands: Eburon.
- Land, J., Sanders, T., & van den Bergh, H. (2008). Effectieve tekststructuur voor het vmbo: een corpus-analytisch en experimenteel onderzoek naar tekstbegrip en tekstwaardering van vmbo-leerlingen voor studieteksten. *Pedagogische Studiën*, 82(2), 76–94. Retrieved from https://pure.uva.nl/ws/files/1085403/62360_301087.pdf
- Leeuw, L., Segers, E., & Verhoeven, L. (2016). Role of text and student characteristics in real-time reading processes across the primary grades. *Journal of Research in Reading*, 39(4), 389-408. doi:10.1111/1467-9817.12054
- de Leeuw, L., Segers, E., & Verhoeven, L. (2016). The Effect of Student-Related and Text-Related Characteristics on Student's Reading Behaviour and Text Comprehension: An Eye Movement Study. *Scientific Studies of Reading*, 20(3), 248-263. doi:10.1080/10888438.2016.1146285
- Lemarié, J., Eyrolle, H., & Cellier, J.-M. (2008). The segmented presentation of visually structured texts: Effects on text comprehension. *Computers in Human Behavior*, 24(3), 888–902. doi:10.1016/J.CHB.2007.02.016
- Lemarié, J., Lorch, R. F., Jr., Eyrolle, H., & Virbel, J. (2008). A text-based and reader-based theory of signaling. *Educational Psychologist*, 43, 27-48. doi:10.1080/00461520701756321

References

- Levasseur, V. M., Macaruso, P., Palumbo, L. C., & Shankweiler, D. (2006). Syntactically cued text facilitates oral reading fluency in developing readers. *Applied Psycholinguistics*, 27(3), 423–445. doi:10.1017/S0142716406060346
- Linderholm, T., & van den Broek, P. (2002). The effects of reading purpose and working memory capacity on the processing of expository text. *Journal of Educational Psychology*, 94, 778-784. doi:10.1037/0022-0663.94.4.778
- Linderholm, T., Therriault, D. J., & Kwon, H. (2014). Multiple science text processing: Building comprehension skills for college student readers. *Reading Psychology*, 35(4), 332-356. doi:10.1080/02702711.2012.726696
- Live Ink | - the ignition for cognition. (n.d.). Retrieved May 18, 2018, from <http://www.liveink.com/>
- Lorch, R. F., Jr. (1989). Text signaling devices and their effects on reading and memory processes. *Educational Psychology Review*, 1, 209-234. doi:10.1007/BF01320135
- Lorch, R.F. jr. (2017). What is so difficult about expository text? In J.A. León & I. Escudero (Eds.), *Reading comprehension in educational settings* (pp. 145-167). Amsterdam: John Benjamins.
- Lorch, Jr, R. F., Lemarié, J., & Grant, R. A. (2011). Three Information Functions of Headings: A Test of the SARA Theory of Signaling. *Discourse Processes*, 48(3), 139-160. doi:10.1080/0163853X.2010.503526
- Lorch, R. F., Jr., Lemarié, J., & Grant, R. A. (2011). Signaling hierarchical and sequential organization in expository text. *Scientific Studies of Reading*, 15, 267-284. doi:10.1080/10888431003747535
- Luna, B., Garver, K. E., Urban, T. A., Lazar, N. A., & Sweeney, J. A. (2004). Maturation of cognitive processes from late childhood to adulthood. *Child Development*, 75, 1357-1372. doi:10.1111/j.1467-8624.2004.00745.x
- Lynch, J. S., & van den Broek, P. (2007). Understanding the glue of narrative structure: Children's on- and off-line inferences about characters' goals. *Cognitive Development*, 22, 323-340. doi:10.1016/j.cogdev.2007.02.002

References

- Magliano, J. P., & Millis, K. K. (2003). Assessing reading skill with a think-aloud procedure and latent semantic analysis. *Cognition and Instruction*, 21(3), 251-283. doi:10.1207/S1532690XCI2103_02
- Magliano, J. P., Trabasso, T., & Graesser, A. C. (1999). Strategic processes during comprehension. *Journal of Educational Psychology*, 91, 615–629.
- Mason, L., Gava, M., & Boldrin, A. (2008). On warm conceptual change: The interplay of text, epistemological beliefs, and topic interest. *Journal of Educational Psychology*, 100, 291-309. doi:10.1037/0022-0663.100.2.291
- McCradden, M. T., & Schraw, G. (2007). Relevance and goal-focusing in text processing. *Educational Psychology Review*, 19, 113-139. doi:10.1007/s10648-006-9010-7
- McDaniel, M. A., & Einstein, G. O. (1989). Material-appropriate processing: A contextualist approach to reading and studying strategies. *Educational Psychology Review*, 1, 113-145. doi:10.1007/BF01326639
- McKenna, M. C., & Kear, D. J. (1990). Measuring attitude towards reading: a new tool for teachers. *The reading teacher*, 43(9). doi:10.1598/RT.43.8.3
- McKeown, M. G., Beck, I. L., Sinatra, G. M., & Loxterman, J. A. (1992). The contribution of prior knowledge and coherent text to comprehension. *Reading Research Quarterly*, 27(1), 78–93. doi:10.2307/747834
- McMaster, K. L., Espin, C. A., & van den Broek, P. (2014). Making connections: Linking cognitive psychology and intervention research to improve comprehension of struggling readers. *Learning Disabilities Research & Practice*, 29(1), 17-24. doi:10.1111/ldrp.12026
- McMaster, K. L., van den Broek, P., Espin, C. A., White, M. J., Rapp, D. N., Kendeou, P., ... Carlson, S. (2012). Making the right connections: Differential effects of reading intervention for subgroups of comprehenders. *Learning and Individual Differences*, 22, 100-111. doi:10.1016/j.lindif.2011.11.017
- McNamara, D. S. (2001). Reading both high-coherence and low-coherence texts: Effects of text sequence and prior knowledge. *Canadian Journal of Experimental Psychology*, 55(1), 51–62. doi:10.1016/j.lindif.2011.11.017

References

- McNamara, D. S., & Magliano, J. (2009). Toward a comprehensive model of comprehension. *Psychology of Learning and Motivation*, 51, 297-384. doi:10.1016/S0079-7421(09)51009-2
- McNamara, D. S., Kintsch, E., Songer, N. B., & Kintsch, W. (1996). Are good texts always better? Interactions of text coherence, background knowledge, and levels of understanding in learning from text. *Cognition and instruction*, 14(1), 1-43. doi:10.1207/s1532690xci1401_1
- Meyer, B. J. F. (1975). *The organization of prose and its effects on memory*. Amsterdam: North Holland.
- Meyer, B. J. F. (1985a). Prose analysis: Purposes, procedures and problems. In B. K. Britton & J. Black (Eds.), *Understanding expository text* (pp. 11-64, 269-304). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Meyer, B. J., & Freedle, R. O. (1984). Effects of Discourse Type on Recall. *American Educational Research Journal*, 21(1), 121-143. doi:10.3102/00028312021001121
- Meyer, B. J., & Ray, M. N. (2011). Structure strategy interventions: Increasing reading comprehension of expository text. *International Electronic Journal of Elementary Education*, 4(1), 127-152.
- Miyaki, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., Howerter, A., & Wagner, T. D. (2000). The unity and diversity of executive functions and their contributions to complex 'frontal lobe' tasks: A latent variable analysis. *Cognitive Psychology*, 41(1), 49-100. doi:10.1006/cogp.1999.0734
- Nation, K. (2005). Children's reading comprehension difficulties. In M. J. Snowling & C. Hulme (Eds.), *The science of reading* (pp. 248-265). Oxford: Blackwell. doi:10.1002/9780470757642.ch14
- National Center for Education Statistics (2011). *The nation's report card: Reading 2011*. Retrieved May 1, 2014, from <https://nces.ed.gov/nationsreportcard/pdf/main2011/2012457.asp>

References

- Oakhill, J. V., & Cain, K. (2007). Issues of causality in children's reading comprehension. In D. McNamara (Ed.), *Reading comprehension strategies: Theories, interventions, and technologies*. (pp.47–72). New York: Erlbaum.
- Oakhill, J. V., & Cain, K. (2011). The precursors of reading ability in young readers: Evidence from a four-year longitudinal study. *Scientific Studies of Reading*, 16, 91-121. doi:10.1080/10888438.2010.529219
- Oakhill, J. V., & Cain, K. (2012). The precursors of reading ability in young readers: evidence from a four-year longitudinal study. *Scientific Studies of Reading*, 16(2), 91-121. doi:10.1080/10888438.2010.529219
- Oakhill, J. V., Cain, K., & Bryant, P. E. (2003). The disassociation of word reading and text comprehension: Evidence from component skills. *Language and cognitive processes*, 18, 443-468. doi:10.1080/01690960344000008
- Oakhill, J., Cain, K., & Elbro, C. (2014). *Understanding and teaching reading comprehension: a handbook*. London: Routledge.
- Oakhill, J., Hartt, J., & Samols, D. (2005). Levels of comprehension monitoring and working memory in good and poor comprehenders. *Reading and writing*, 18(7), 657-686. doi:10.1007/s11145-005-3355-z
- Oakland, T. & Lane, H. B. (2004). Language, reading, and readability formulas: Implications for developing and adapting tests. *International Journal of Testing*, 4(3), 239–252. doi:10.1207/s15327574ijt0403_3
- Organisation for Economic Co-operation and Development (OECD) (2009). *PISA 2009 assessment framework - Key competencies in reading, mathematics and science*. Paris: Author. Retrieved from <http://www.oecd.org/pisa/pisaproducts/pisa2009assessmentframeworkkeycompetenciesinreadingmathematicsandscience.htm>
- Organisation for Economic Co-operation and Development (OECD) (2017). PISA 2015 Reading Framework. In *PISA 2015 Assessment and Analytical Framework: Science, Reading, Mathematic, Financial Literacy and Collaborative Problem Solving* (pp 49-63). Paris: OECD Publishing. doi:10.1787/9789264281820-4-en

References

- Olson, R. K., Kliegl, R., Davidson, B. J., & Foltz, G. (1985). Individual differences and developmental differences in reading disability. In G. MacKinnon & T. G. Waller (Eds.), *Reading research: Advances in theory and practice* (pp. 1-64). New York: Academic Press.
- Öquist, G., & Goldstein, M. (2003). Towards an improved readability on mobile devices: evaluating adaptive rapid serial visual presentation. *Interacting with Computers*, 15(4), 539–558. doi:10.1016/S0953-5438(03)00039-0
- Pearson, P. D., Roehler, L., Dole, J., & Duffy, G. (1992). Developing expertise in reading comprehension. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about reading instruction* (2nd ed., pp. 145–199). Newark, DE: International Reading Association.
- Pelli, D. G., & Tillman, K. A. (2008). The uncrowded window of object recognition. *Nature Neuroscience*, 11(10), 1129–1135. <https://doi.org/10.1038/nn.2187>
- Perfetti, C. A., & Hart, L. (2002). The lexical quality hypothesis. In L. Verhoeven, C. Elbro & P. Reitsma (Eds.), *Precursors of functional literacy* (pp. 189–213). Amsterdam/Philadelphia: John Benjamins. doi:10.1075/swll.11.14per
- Perfetti, C. A., Landi, N., & Oakhill, J. (2005). The acquisition of reading comprehension skill. In M. J. Snowling & C. Hulme (Eds.), *The science of reading: A handbook* (pp. 227-247). Oxford: Blackwell. doi:10.1002/9780470757642.ch13
- Pressley, M., & Afflerbach, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Pressley, M., & Wharton-McDonald, R. (1997). Skilled comprehension and its development through instruction. *School Psychology Review*, 26(3), 448-467.
- Programme for International Student Assessment (PISA), (2018). *Resultaten PISA-2018 in vogelvlucht*. Geraadpleegd van <http://www.pisa2018.nl/resultaten> op 6 december 2019.
- R Core Team. (2017). R: A Language and Environment for Statistical Computing. Vienna, Austria. Retrieved from <https://www.r-project.org/>

References

- Rapp, D. N., & Mensink, M. C. (2011). Focusing effects from online and offline reading tasks. In M. T. McCrudden, J. P. Magliano, & G. Schraw (Eds.), *Text relevance and learning from text* (pp. 141-164). Charlotte, NC, US: IAP Information Age Publishing.
- Rapp, D. N., van den Broek, P., McMaster, K. L., Kendeou, P., & Espin, C. A. (2007). Higher-Order Comprehension Processes in Poor Readers: A Perspective for Research and Intervention. *Scientific Studies of Reading*, 11(4), 289–312. doi:10.1080/10888430701530417
- Raven, J., Raven, J. C., & Court, J. H. (1998). *Manual for Raven's Progressive Matrices and Vocabulary Scales. Section 1: General Overview*. San Antonio, TX: Harcourt Assessment.
- Ray, M. N., & Meyer, B. J. (2011). Individual differences in children's knowledge of expository text structures: A review of literature. *International Electronic Journal of Elementary Education*, 4(1), 67-82.
- Rayner, K. (1986). Eye movements and the perceptual span in beginning and skilled readers. *Journal of Experimental Child Psychology*, 41(2), 211-236. doi:10.1016/0022-0965(86)90037-8
- Rayner, K. (1998). Eye movements in reading and information processing: 20 years of research. *Psychological Bulletin*, 124, 372-422. doi:10.1037/0033-2909.124.3.372
- Rayner, K., Castelhano, M. S., & Yang, J. (2009). Eye movements and the perceptual span in older and younger readers. *Psychology and Aging*, 24(3), 755. doi:10.1037/a0014300
- Rayner, K., & Clifton Jr, C. (2009). Language processing in reading and speech perception is fast and incremental: implications for event-related potential research. *Biological Psychology*, 80(1), 4–9. doi:10.1016/j.biopspsycho.2008.05.002
- Rayner, K., Reichle, E. D., Stroud, M. J., Williams, C. C., & Pollatsek, A. (2006). The effect of word frequency, word predictability, and font difficulty on the eye movements of young and older readers. *Psychology and Aging*, 21(3), 448. doi:10.1037/0882-7974.21.3.448
- Rayner, K., Schotter, E. R., Masson, M. E. J., Potter, M. C., & Treiman, R. (2016). So Much to Read, So Little Time. *Psychological Science in the Public Interest*, 17(1), 4–34. doi:10.1177/1529100615623267

References

- Reinders, H. (2017). Digital Games and Second Language Learning. In S. Thorne & S. May (Eds.), *Language, Education and Technology* (pp. 1–15). Cham: Springer International Publishing. doi:10.1007/978-3-319-02328-1_26-2
- Reynolds, R. E., Cho, B., & Hutchinson, A. (2016). Cognitive processing and reading comprehension: issues of theory, causality, and individual differences. In P. Afflerbach (Ed.), *Handbook of individual differences in reading: Reader, text, and context* (pp. 364–376). New York: Routledge.
- Rhenius, D., & Deffner, G. (1990, October). Evaluation of concurrent thinking aloud using eye-tracking data. In *Proceedings of the human factors society annual meeting* (Vol. 34, No. 17, pp. 1265–1269). Sage CA: Los Angeles, CA: SAGE Publications. doi:10.1177/154193129003401719
- Ricciardi, O., & Di Nocera, F. (2017). Not so fast: A reply to Benedetto et al. (2015). *Computers in Human Behavior*, 69, 381–385. doi:10.1016/j.chb.2016.12.047
- Rosch, J. L., & Vogel-Walcutt, J. J. (2013). A review of eye-tracking applications as tools for training. *Cognition, Technology & Work*, 15(3), 313–327. doi:10.1007/s10111-012-0234-7
- Sanders, T., Land, G., & Mulder, G. (2007). Linguistic markers of coherence improve text comprehension in functional contexts. *Information Design Journal*, 15(3), 219–235. doi:10.1075/idj.15.3.04san
- Sanford, A. J. S., Sanford, A. J., Molle, J., & Emott, C. (2006). Shallow processing and attention capture in written and spoken discourse. *Discourse Processes*, 42(2), 109–130. doi:10.1207/s15326950dp4202_2
- Schiefele, U. (1999). Interest and learning from text. *Scientific Studies of Reading*, 3, 257–279. doi:10.1207/s1532799xssr0303_4
- Schlichting, L. (2005). *Peabody Picture Vocabulary Test-III-NL*. Amsterdam: Harcourt Test Publisher.
- Schneps, M. (2015). Using Technology to Break the Speed Barrier of Reading. Scientific American MIND. Retrieved from <https://www.scientificamerican.com/article/using-technology-to-break-the-speed-barrier-of-reading/>

References

- Schneps, M. H., O'Keeffe, J. K., Heffner-Wong, A., & Sonnert, G. (2010). Using Technology to Support STEM Reading. *Journal of Special Education Technology*, 25(3), 21–33. doi:10.1177/016264341002500304
- Schneps, M. H., Thomson, J. M., Chen, C., Sonnert, G., & Pomplun, M. (2013). E-Readers Are More Effective than Paper for Some with Dyslexia. *PLoS ONE*, 8(9), e75634. doi:10.1371/journal.pone.0075634
- Schneps, M. H., Thomson, J. M., Sonnert, G., Pomplun, M., Chen, C., & Heffner-Wong, A. (2013). Shorter Lines Facilitate Reading in Those Who Struggle. *PLoS ONE*, 8(8), e71161. doi:10.1371/journal.pone.0071161
- Schotter, E. R., Tran, R., & Rayner, K. (2014). Don't Believe What You Read (Only Once). *Psychological Science*, 25(6), 1218–1226. doi:10.1177/0956797614531148
- Schroeder, S. (2011). What readers have and do: Effects of students' verbal ability and reading time components on comprehension with and without text availability. *Journal of Educational Psychology*, 103(4), 877. doi:10.1037/a0023731
- Schunk, D. H., & Rice, J. M. (1985). Verbalization of comprehension strategies: Effects on children's achievement outcomes. *Human Learning*, 4(1), 1-10.
- Sesma, H. W., Mahone, E. M., Levine, T., Eason, S. H., & Cutting, L. E. (2009). The contribution of executive skills to reading comprehension. *Child Neuropsychology*, 15, 232-246. doi:10.1080/09297040802220029
- Sharmin, S., Špakov, O., & Räihä, K.-J. (2012). The Effect of Different Text Presentation Formats on Eye Movement Metrics in Reading. *Journal of Eye Movement Research*, 5(3), 1–9. doi:10.16910/jemr.5.3.3
- Shaywitz, B. A., Holford, T. R., Holahan, J. M., Fletcher, J. M., Stuebing, K. K., Francis, D. J., & Shaywitz, S. E. (1995). A Matthew Effect for IQ but Not for Reading: Results from a Longitudinal Study. *Reading Research Quarterly*, 30(4), 894. doi:10.2307/748203
- Slavin, R. E., Lake, C., Chambers, B., Cheung, A., & Davis, S. (2009). Effective Reading Programs for the Elementary Grades: A Best-Evidence Synthesis. *Review of Educational Research*, 79(4), 1391-1466. doi:10.3102/0034654309341374

References

- Spritz. (n.d.). Retrieved May 18, 2018, from <http://spritzinc.com>
- Surber, J. R., & Schroeder, M. (2007). Effect of prior domain knowledge and headings on processing of informative text. *Contemporary Educational Psychology, 32*, 485-498. doi:10.1016/j.cedpsych.2006.08.002
- Swanson, H. L., Cochran, K. F., & Ewers, C. A. (1989). Working memory in skilled and less skilled readers. *Journal of Abnormal Child Psychology, 17*, 145-156. doi:10.1007/BF00913790
- Tiffin-Richards, S. P., & Schroeder, S. (2018). The development of wrap-up processes in text reading: A study of children's eye movements. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 44*(7), 1051.
- Trabasso, T., & Magliano, J. P. (1996). Conscious understanding during comprehension. *Discourse Processes, 21*(3), 255-287. doi:10.1080/01638539609544959
- Trabasso, T., & van den Broek, P. (1985). Causal thinking and the representation of narrative events. *Journal of memory and language, 24*(5), 612-630. doi:10.1016/0749-596X(85)90049-X
- Trabasso, T., Secco, T., & van den Broek, P. W. (1984). Causal cohesion and story coherence. In H. Mandl, N. L. Stein, & T. Trabasso (Eds.), *Learning and comprehension of text* (pp. 83-111). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Traxler, M. J., Bybee, M. D., & Pickering, M. J. (1997). Influence of connectives on language comprehension: eye tracking evidence for incremental interpretation. *The Quarterly Journal of Experimental Psychology: Section A, 50*(3), 481-497. doi:10.1080/027249897391982
- van den Broek, P. W. (1994). Comprehension and memory of narrative texts: Inferences and coherence. In M. A. Gernsbacher (Ed.), *Handbook of Psycholinguistics* (pp. 539-588). New York: Academic Press.
- van den Broek, P. W. (1997). Discovering the cement of the universe: The development of event comprehension from childhood to adulthood. In: Broek, P. W. van den, Bauer, P., Bourg, T. (Eds.), *Developmental spans in event comprehension and representation: Bridging fictional and actual events*, (pp.321-342).

References

- van den Broek, P. (2010). Using Texts in Science Education: Cognitive Processes and Knowledge Representation. *Science*, 328, 453-456. doi:10.1126/science.1182594
- van den Broek, P., Bohn-Gettler, C., Kendeou, P., Carlson, S., & White, M. J. (2011a). When a reader meets a text: The role of standards of coherence in reading comprehension. In M. T. McCrudden, J. Magliano, & G. Schraw (Eds.), *Relevance instructions and goal-focusing in text learning* (pp. 123-140). Greenwich, CT: Information Age Publishing.
- van den Broek, P. & Espin, C.A. (2012). Connecting cognitive theory and assessment: Measuring individual differences in reading comprehension. *School Psychology Review*, 41, 315-325.
- van den Broek, P. W., Helder, A., & Van Leijenhorst, L. (2013). Sensitivity to Structural Centrality: Developmental and individual differences in reading comprehension skills. In: M. A. Britt, S. R. Goldman & J-F Rouet (Eds.), *Reading: From words to multiple texts* (pp. 132-146). New York: Routledge, Taylor & Francis Group.
- van den Broek, P., & Kendeou, P. (2017). The development of language comprehension skills: Change and continuity in the ability to build coherence. In K. Cain & D. Compton (Eds.), *Theories Of Reading Development, a 20 year celebration of Scientific Studies of Reading*. Amsterdam: John Benjamins.
- van den Broek, P., Kendeou, P., Kremer, K., Lynch, J. S., Butler, J., White, M. J. & Lorch, E. P. (2006). Assessment of comprehension abilities in young children. In S. Paris & S. Stahl (Eds.), *Children's reading comprehension and assessment* (pp.107-130). Mahwah, NJ: Erlbaum.
- van den Broek, P., Lynch, J. S., Naslund, J., Ievers-Landis, C. E., & Verduin, C. (2003). The development of comprehension of main ideas in narratives: Evidence from the selection of titles. *Journal of Educational Psychology*, 95(4), 707-718. doi:10.1037/0022-0663.95.4.707
- van den Broek, P., Mouw, J., & Kraal, A. (2016). Individual differences in reading comprehension. In P. Afflerbach (Ed.), *Handbook of individual differences in reading: Reader, text, and context* (pp. 138-150). New York: Routledge.

References

- van den Broek, P., Rapp, D., & Kendeou, P. (2005). Integrating memory-based and constructionist processes in accounts of reading comprehension. *Discourse Processes, 39*, 299-316. doi:10.1080/0163853X.2005.9651685
- van den Broek, P., Risden, K., Fletcher, C. R., & Thurlow, R. (1996). A 'landscape' view of reading. Fluctuating patterns of activation and the construction of a stable memory representation. In B. K. Britton & A. C. Greassner (Eds.), *Models of understanding text* (pp. 165-187). Hillsdale, NJ: Lawrence Erlbaum Associates.
- van den Broek, P., Tzeng, Y., Risden, K., Trabasso, T., & Basche, P. (2001). Inferential questioning: Effects on comprehension of narrative texts as a function of grade and timing. *Journal of Educational Psychology, 93*, 521-529. doi:10.1037/0022-0663.93.3.521
- van den Broek, P., White, M. J., Kendeou, P., & Carlson, S. (2009). Reading between the lines: Developmental and individual differences in cognitive processes in reading comprehension. In R. K. Wagner, C. Schatschneider & C. Phythian-Sence (Eds.), *Beyond decoding: The behavioral and biological foundations of reading comprehension* (pp. 107-123). New York, NY: Guilford Publications.
- Van der Schoot, M., Reijntjes, A. & Van Lieshout, E. C. M. D. (2012). How do children deal with inconsistencies in text? An eye fixation and self-paced reading study in good and poor reading comprehenders. *Reading and Writing, 25*(7), 1665–1690. doi:10.1007/s11145-011-9337-4
- Van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.
- Van Renswoude, D. R., Johnson, S. P., Raijmakers, M. E. J., & Visser, I. (2016). Do infants have the horizontal bias? *Infant Behavior and Development, 44*, 38–48. doi:10.1016/j.infbeh.2016.05.005
- Van Silfhout, G. (2014). *Fun to read or easy to understand? Establishing effective text features for educational texts on the basis of processing and comprehension research*. Utrecht: LOT. Retrieved from http://www.lotpublications.nl/Documents/368_fulltext.pdf

References

- Van Silfhout, G., Evers-Vermeul, J., & Sanders, T. (2015). Connectives as Processing Signals: How Students Benefit in Processing Narrative and Expository Texts. *Discourse Processes*, 52(1), 47-76. doi:10.1080/0163853X.2014.905237
- Van Silfhout, G., Evers-Vermeul, J., & Sanders, T. J. M. (2014). Establishing coherence in schoolbook texts: How connectives and layout affect students' text comprehension. *Dutch Journal of Applied Linguistics*, 3(1), 1–29. doi:10.1075/dujal.3.1.01sil
- Van Silfhout, G., Evers-Vermeul, J., Mak, W. M., & Sanders, T. J. M. (2014). Connectives and layout as processing signals: How textual features affect students' processing and text representation. *Journal of Educational Psychology*, 106(4), 1036–1048. doi:10.1037/a0036293
- Virtue, S., van den Broek, P., & Linderholm, T. (2006). Hemispheric processing of inferences: The effects of textual constraint and working memory capacity. *Memory & Cognition*, 34, 1341-1354. doi:10.3758/BF03193276
- Vorstius, C., Radach, R., & Lonigan, C. J. (2014). Eye movements in developing readers: A comparison of silent and oral sentence reading. *Visual Cognition*, 22(3-4), 458-485. doi:10.1080/13506285.2014.881445
- Voss, J. F., Vesonder, G. T., & Spilich, G. J. (1980). Text generation and recall by high-knowledge and low-knowledge individuals. *Journal of Verbal Learning and Verbal Behavior*, 19, 651-667. doi:10.1016/S0022-5371(80)90343-6
- Walczyk, J. J., Marsiglia, C. S., Johns, A. K., & Bryan, K. S. (2004). Children's compensations for poorly automated reading skills. *Discourse Processes*, 37(1), 47-66. doi:10.1207/s15326950dp3701_3
- Walker, S., Schloss, P., Fletcher, C. R., Vogel, C. A., & Walker, R. C. (2005). Visual-syntactic text formatting: A new method to enhance online reading. *Reading Online*. Retrieved from http://www.liveink.com/VSTF_ReadingOnline_IRA_2005_Walker.pdf
- Wang, J. H. Y., & Guthrie, J. T. (2004). Modeling the effects of intrinsic motivation, extrinsic motivation, amount of reading, and past reading achievement on text comprehension between U.S. and Chinese students. *Reading Research Quarterly*, 39, 162-186. doi:10.1598/RRQ.39.2.2

References

- Ward Jr, J. H., & Hook, M. E. (1963). Application of an hierarchical grouping procedure to a problem of grouping profiles. *Educational and Psychological Measurement, 23*(1), 69-81. doi:10.1177/001316446302300107
- Whitney, D., & Levi, D. M. (2011). Visual crowding: A fundamental limit on conscious perception and object recognition. *Trends in Cognitive Sciences, 15*(4), 160–168. doi:0.1016/j.tics.2011.02.005
- Whitney, P., Ritchie, B. G., & Clark, M. B. (1991). Working-memory capacity and the use of elaborative inferences in text comprehension. *Discourse processes, 14*(2), 133-145. doi:10.1080/01638539109544779
- Wickham, H. (2009). *ggplot2: Elegant Graphics for Data Analysis* Springer-Verlag. New York.
- Retrieved from
https://scholar.google.nl/scholar?q=++H.+Wickham.+ggplot2%3A+Elegant+Graphics+for+Data+Analysis.+Springer-Verlag+New+York%2C+2009.&btnG=&hl=nl&as_sdt=0%2C5
- Williams, J. P. (1993). Comprehension of students with and without learning disabilities: Identification of narrative themes and idiosyncratic text representations. *Journal of Educational Psychology, 85*, 631-641. doi:10.1037/0022-0663.85.4.631
- Williams, J. P., Hall, K. M., & Lauer, K. D. (2004). Teaching expository text structure to young at-risk learners: Building the basics of comprehension instruction. *Exceptionality, 12*(3), 129-144. doi: 10.1207/s15327035ex1203_2
- Williams, J. P., Nubla-Kung, A. M., Pollini, S., Stafford, K. B., Garcia, A., & Snyder, A. E. (2007). Teaching cause-effect text structure through social studies content to at-risk second graders. *Journal of Learning Disabilities, 40*(2), 111-120. doi:10.1177/00222194070400020201
- Wolfe, M. B. (2005). Memory for narrative and expository text: independent influences of semantic associations and text organization. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 31*(2), 359. doi:10.1037/0278-7393.31.2.359
- Young, S. R. (1984). RSVP: A task, reading aid, and research tool. *Behavior Research Methods, Instruments, & Computers, 16*(2), 121–124. doi:10.3758/BF03202369

References

- Yuill, N., & Oakhill, J. (1991). *Children's problems in text comprehension: An experimental investigation*. Cambridge: Cambridge University Press.
- Zabrocky, K., & Ratner, H. H. (1992). Effects of passage type on comprehension monitoring and recall in good and poor readers. *Journal of Reading Behavior*, 24(3), 373-391.
doi:10.1080/10862969209547782
- Zorzi, M., Barbiero, C., Facoetti, A., Lonciari, I., Carrozza, M., Montico, M., ... Ziegler, J. C. (2012). Extra-large letter spacing improves reading in dyslexia. *Proceedings of the National Academy of Sciences of the United States of America*, 109(28), 11455–9.
doi:10.1073/pnas.1205566109

Curriculum vitae

Astrid Kraal was born on November 12, 1968 in Capelle aan den IJssel, the Netherlands. She graduated from the Rijksscholengemeenschap Oud-Beijerland in 1987 and obtained her master's degree in General Arts with a specialization in Applied Linguistics in 1993 at the Faculty of Humanities at Utrecht University.

In 1991, Astrid started as an intern at the CED-Groep in Rotterdam as part of her study and continued to work there on all sorts of language-related projects relating to Dutch as a second language, content and language integrated learning, vocabulary, and reading comprehension. She is co-originator and -author of *Nieuwsbegrip*, a method for reading comprehension based on topical matters, and was project manager until 2012. Through her work, Astrid developed a strong interest in the development of reading comprehension skills and in potential causes of failure in comprehension of beginning readers. That is how she came in contact with (the work of) Prof. dr. Paul van den Broek.

In 2012, she got the opportunity to start a PhD project at the Department of Educational Studies at the Institute of Education and Child Studies of Leiden University under supervision of Prof. dr. Paul van den Broek, Dr. Arnout Koornneef, and Dr. Nadira Saab. The PhD project '*Texts that teach and readers that learn: The role of text characteristics and children's reading skills in comprehending and learning from informational texts*', with the CED-Groep as societal partner, was part of the NWO research programme *Begrijpelijke Taal*. In addition, Astrid was involved in various university teaching activities; e.g., teaching and supervising Bachelors, Master's and ACPA (Academic Teacher Training) students.

In 2017, Astrid returned to the CED-Groep as senior researcher. She is member of the Expertise Centre for Reading Comprehension (Kenniscentrum Begrijpend Lezen), an initiative of the CED-Groep and Sardes in cooperation with Leiden University and Utrecht University.

List of publications

Helder, A.* , Kraal, A.* , & van den Broek, P. (2015). De ontwikkeling van begrijpend lezen: Orzaken van succes en falen vanuit een cognitief perspectief. In D. Schram (Ed.), *Hoe maakbaar is de lezer?* (pp. 59-78). Stichting Lezen: Eburon. *shared first authorship

Koornneef, A. W., Kraal, A., & Danel, M. (2018). Beginning readers might benefit from digital texts presented in a sentence-by-sentence fashion. But why? *Computers in Human Behavior*, 9(2), 328–343. doi:10.1016/j.chb.2018.10.024

Kraal, A. (2016). De zin of onzin van snelleesapps. In E. Olijkan (Ed.), *Voor u gelezen: Een praktische toelichting op vier wetenschappelijke artikelen over begrijpend lezen* (p. 13-20). Rotterdam: Kenniscentrum Begrijpend Lezen.

Kraal, A. & Hoeven van der, J. (2018). *Welke leesinterventies beïnvloeden/stimuleren de leesontwikkeling van goede technische lezers in groep 3-5?* Den Haag: Kennisrotonde (KR.355). Geraadpleegd op 18-12-2018 op: <https://www.nro.nl/kennisrotondevragenopeenrij/oefenmethodes-verbetering-leesvaardigheid-groep-3/>

Kraal, A. & Hoeven van der, J. (2018). *Welke leesinterventies stimuleren de technische leesontwikkeling van zwakke lezers in groep 3?* Den Haag: Kennisrotonde (KR.365). Geraadpleegd op 18-12-2018 op: <https://www.nro.nl/kennisrotondevragenopeenrij/oefenmethodes-verbetering-leesvaardigheid-groep-3/>

Kraal, A., Koornneef, A. W., Saab, N., & van den Broek, P. W. (2018). Processing of expository and narrative texts by low-and high-comprehending children. *Reading and writing*, 31(9), 2017-2040. doi:10.1007/s11145-017-9789-2

Kraal, A., & Saab, N. (2013). Begrijpend lezen: interactie tussen lezer en tekst. In M. Boonstra (Ed.), *Voor u gelezen: Een praktische toelichting op vier wetenschappelijke artikelen over begrijpend lezen* (p. 15-20). Rotterdam: Kenniscentrum Begrijpend Lezen.

- Kraal, A., van den Broek, P. W., Koornneef, A. W., Ganushchak, L. Y., & Saab, N. (2019). Differences in text processing by low- and high-comprehending beginning readers of expository and narrative texts: Evidence from eye movements. *Learning and Individual Differences: Journal of Psychology and Education*, 74. doi:10.1016/j.lindif2019.101752
- Van den Broek, P., Mouw, J., & Kraal, A. (2016). Individual differences in reading comprehension. In P. Afflerbach (Ed.), *Handbook of individual differences in reading: Reader, text, and context* (pp. 138-150). New York: Routledge.

Other:

- Alons, A., Bienfait, N., Kraal, A., Kuiken, F., Molendijk, M. (1998; 1999; 2000; 2001). *Zebra, Nederlands als tweede taal voor anderstaligen in het voortgezet onderwijs. Deel 1, Deel 2, Deel 3, Deel 4*. Utrecht/Zutphen: ThiemeMeulenhoff.
- Greven, J. & Kraal, A. (2002). *Storyline approach: leren (lezen) door verhalen. Hoe storyline leerlingen stimuleert om bij wereldoriëntatie teksten te lezen*. Enschede: SLO.
- Kraal, A. (1996). *Taal op School. Oefenen met schooltaalwoorden*. Groningen: Wolters-Noordhoff.
- Kraal, A. (2003). Alarmklok luidt voor begrijpend lezen. *Klasse*, nr. 2.
- Kraal, A., van Dijk, A., Tuinder, M., & Menger, P. (1996). *Taal op School. Oefenen met vragen en schrijfopdrachten*. Groningen: Wolters-Noordhoff.
- Kraal, A., Kruidenier, S., Mathijssen, C. & Molendijk, M. (1998). *Thema's met toekomst*. Amsterdam: Meulenhoff Educatief.
- Kraal, A., Mathijssen, C., Greven, J. & van der Veer, M. (2004). *Vakken vol Verhalen: brengt begrijpend lezen en zaakvakonderwijs bij elkaar*. Groep 5: Op Reis naar een Middeleeuws Dorp; Plannen voor de Buurt; Botten en Breuken. Groep 6: Rondje Nederland, Het Leven van de Romeinen, De Sportclub. Groep 7: Naar het Zonnige Zuiden; Op Avontuur met de VOC; Actie in het Bos. Groep 8: Kinderarbeid in Beeld; Zuivere Koffie; Op Expeditie in de Woestijn. Rotterdam: Uitgeverij Partners

List of Publications

- Kraal, A., Mathijssen, C., Klomps, S., Schilperoord, A., & van den Bemt, H. (2009). *Gave Haven. Lesmateriaal voor groep 5 t/m 8 van het basisonderwijs over alle sectoren van de maritieme wereld.* Stichting Nederland Maritiem Land.
- Kraal, A. & Molendijk, M. (1999). Functioneel Taalonderwijs. In Van de Laarschot, M. & G. Lemmens (Eds.), *Nederlands als tweede taal in het voortgezet onderwijs. Handboek voor docenten in de eerste opvang.* Amsterdam: Meulenhoff Educatief.
- Kraal, A. & M. Veen (1993). *Zestien plus Administratie. Een programma Nederlands als tweede taal Woordenschat- en spellingsoefeningen.* Houten: Wolters-Noordhoff bv.
- Kraal, A., Veer, van der, M., & Tomassen, P. (2008). *Begrijpend lezen in een waaier.* Rotterdam: CED-Groep.
- Molendijk. M. & A. Kraal (2010). Nieuwsbegrip, begrijpend lezen met het nieuws van de dag. In *Bundel 24, Vierentwintigste conferentie Het Schoolvak Nederlands.* Nederlandse Taalunie.

Published web recourses

- www.nieuwbegrip.nl Begrijpend lezen met het nieuws van de dag [Reading comprehension based on topical matters] (2005-2012; 2017-present)
- www.nieuwsbegrip.be [Reading comprehension based on topical matters, Flemish edition] (2011-2012; 2017-present)
- www.newswise.eu [Reading comprehension based on topical matters, English edition] (2017-present)

