

*The Reading Framework for the National Assessment of Educational Progress:*

**Challenges and Opportunities Moving Forward**

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While I continue to have profound concerns for the negative impact of high stakes testing on teaching and learning across the United States, I see the efforts of NAEP in assessment as a welcome alternative that provides information to stakeholders on the progress of education in our country and serves as a leading force for change. I believe the current work of reenvisioning the model for reading comprehension that underlies NAEP as extremely important to everyone. Over the years, NAEP has served as more than just a report card on progress. We, as a profession, have come to trust NAEP as a model for how we should think with theories as regards learning and assessment in schools on a large scale. NAEP has always risen above the technical to profoundly consider what it means to read and write in today's world. Today's world is changing rapidly as regards literacy. NAEP has the power to lead in transforming practices through the kind of thoughtful deliberations that are now taking place around the framework for reading comprehension.

I have organized this brief paper around a set of questions leading to a set of recommendations for the panel to consider in moving forward. Given the limits we were given in writing this paper (that I may have exceeded), I have not gone into great detail on the background theories and research. However, the ideas I present here are well-grounded in the work of many literacy scholars and I am more than happy to expand on any section as needed.

## **What is current in research in reading comprehension?**

In preparing for this discussion, I informally reviewed articles published in the major research journals in the field of literacy since the last major revision of the framework (7 years ago). I searched in the *Reading Research Quarterly*, *The Journal of Literacy Research*, *Research in the Teaching of English*, and *The Elementary School Journal*. While the *Elementary School Journal* is not a literacy journal it often publishes research reports on reading. I was searching, in particular, for any themes that could inform the work of the Assessment Development Committee (ADC) moving forward. I located just over 40 articles (appendix A). I did not locate any articles focused on reading comprehension in *Research in the Teaching of English*. About half of the articles I read from the other journals examined reading comprehension as an outcome variable in an intervention study, or explored correlates to reading comprehension (e.g., vocabulary). For the most part, these studies used fairly traditional measures of reading comprehension. Beyond attention to basic processes, there are interesting patterns in these studies related to a focus on: multilingual learners and settings; vocabulary; and, text complexity. We, as a profession, continue to build an understanding of the complex factors influencing comprehension and how educators can translate these new discoveries into more effective instruction. I see no evidence that a “simple view” of comprehension (Hoffman, 2009, 2014) has received significant attention in the literacy education community. Rather, comprehension continues to be regarded as complex and multi-faceted. As the panel continues to explore the research literature, I would encourage you to consider the work represented in the *Second Handbook on Reading Comprehension* (Israel, 2014) and the forthcoming editions of *Theoretical Models in Reading* (Seventh Edition) and the *Handbook of Reading Research*.

## **What are the new directions in comprehension research?**

There are at least two areas explored in many of the studies I reviewed that are deserving of the ADC's attention. The first area relates to reading and writing practices across disciplinary areas with a focus on argument. The second area relates to new literacy studies and multimodal texts.

### **Disciplinary Literacies**

Perhaps this area of disciplinary studies stood out to me because my current research focus is on preservice teachers supporting elementary students in inquiry and cross-disciplinary thinking (Hoffman, 2017a; Hoffman, et. al., 2017b; Payne, Hoffman & DeJulio, 2017). This work focuses on the movement of students from stances of interests to inquiry to advocacy and the associated literacy teaching activity. We are working to support elementary students as they take up the identities of scientists, take up the tools of research, and engage audiences in what they have discovered as significant and worthy of action. My preservice teachers immerse their students in the ways scientists use evidence and warrants to support claims that are compelling to authentic audiences. For our elementary students, this can mean advocating for certain foods based on health considerations; or for life style changes out of concern for the environment; or advocating against eating 'shark fin soup' based on the detrimental harvesting techniques used; or this can mean convincing community members to donate to support the work of a local dog shelter.

Conceptual work and research into interdisciplinary literacies has replaced traditional notions of content area reading in the field of literacy (Moje, 2008; Shanahan & Shanahan, 2008). The new focus is on questions such as: How is literacy used in different ways in different domains and what understandings are important for those engaging in these domains. I, along with many others, see convergence across disciplinary boundaries around the composition of argument (and the deconstruction of arguments) as fundamental to literacy practices in both the physical and

social sciences. All texts, as Hillary Janks (2009) asserts, have designs on us as the reader. A text we label as informational/expository is not neutral. Understanding what these designs are and how to recognize them is essential to critical literacy. You might want to consider something like the four resources model (Freebody & Luke, 1990) or even more recent work by Serafini that extends the model into multimodal and digital texts (Serafini, 2010; 2012).

**Moving Forward with Disciplinary Literacies and Argument.** I would argue (there is that word again) that the current structure of the NAEP comprehension model outside of literary texts should be reexamined to more clearly center on argument in texts rather than simply using different text structures and questioning from a traditional comprehension perspective. The current NAEP model describes informational texts in three types: exposition, argument/persuasion, and procedural texts and documents. The NAEP framework states “Argumentation seeks to influence through appeals that direct readers to specific goals or try to win them to specific beliefs” (p. 10). The framework states: “Authors of persuasive writing must establish their credibility and authority if their writing is to be successful” (p. 10). This section ends with the statement “Examples of persuasive text are political speeches, editorials, and advertisements” (p. 10).

Argument and persuasion are related but not the same. The current bias in NAEP seems to be toward persuasion and not argument. I would suggest that this model be reconsidered to focus more directly on argument as a central element in the logical thinking so necessary for cross-disciplinary social and scientific processes. What are the claims, evidence, and warrants offered in texts? How are these being used and with what intentions?

Argument/persuasion texts, even in their current form, are not part of the 2017 framework for the fourth grade based on the lack of available authentic texts to draw on. How ironic that the lack of

texts leads to the lack of assessment. Could it work in reverse, that attention to argument in the NAEP structure could cause an increase not just in the quantity of texts but the preparation of teachers in how to use these texts in classrooms. Nell Duke, a member of the Panel to discuss *NAEP Assessment of Reading Comprehension*, has been documenting for almost two decades the absence of these texts and the narrative bias in teaching literacy at the elementary levels (e.g., Duke, Zhang & Morsink, 2015). It's time to change and NAEP can help lead the way by revisions in the framework.

### **Multimodal Texts and Comprehension**

The second area of innovation in comprehension research has focused on multimodality as well as New Literacies (Coiro, Knobel, Lankshear & Leu, 2014). There has been an explosion of attention to multimodal texts in literacy (see Albers, Harste & Vasquez, 2015; Serafini, 2010; 2012). While this work is most evident in the study of comprehension with digital texts, the attention has also expanded into new ways of thinking about studying comprehension processes — as in Harste's (2009) transmediational perspective. Readers are increasingly moving back and forth across forms of representation (different sign systems) as they construct meaning.

What "counts" as a text is becoming more and more inclusive as the lines between traditional written texts and other modes of representation are interwoven and not just options to select from. The text world we interact with today requires flexibility in the uses of various forms of representation to achieve understanding. Multimodal representations are connected to the previous position related to argument and the structure of informational texts.

**Moving forward with multimodal texts:** There may be some constraints operating in how to represent these multimodal texts in a testing context, but NAEP could begin to explore possibilities here. For example, the current use of multiple text sources and thinking across these could easily be

expanded to include various modes of representation as part of the text sources. Cross passages (following the work of Guthrie, Wigfield & VonSecker [2000] in the Construct-Oriented Reading Instruction [CORI] assessment tasks) is something that NAEP is already exploring. I would also suggest, as one possibility, the use of scenarios (often used in teaching assessments) where a context is created that involves the building of an argument and the reader is asked to critically examine the elements of argument regarding claims, evidence, warrants, and consequences. There could be more combined work with multimodal texts and design in argument (e.g., the use of infographics as a structure). Sound/audio and video may be difficult at this time, but innovations in visual design are possible.

### **What is NAEP doing well?**

In my view, the current framework for reading comprehension is working well with respect to assessment with literary texts and literary purposes. Given the concerns over continuity in assessment (i.e., keeping track of trends), this could be a place where minimal changes are made.

### **Sticking with the old? or Moving on to the new? A decision for NAEP**

The March 2018 panel at the ADC meeting, discussed *NAEP Assessment of Reading Comprehension* regarding the depth and degree of changes that should be made with the NAEP comprehension framework: Should we tinker, or should we transform? Let me comment on what I see as the options and my own recommendations.

**Tinkering.** I really don't see this as an option if NAEP is to maintain its place as a significant leader and force in schooling and literacy. The world of literacy is changing too rapidly for NAEP to stay relevant with minimal changes.

**Substantial Change.** I see the need for major change in the framework for the comprehension of nonfiction texts. Two major changes most needed are: (a) toward disciplinary literacy practices and the structure of argument (together); and, (b) toward multimodal/digital texts and accessing meaning drawing across different forms of representation. I recommend change for 4th grade and expansion at 8th and 12th grades. To follow this path, with multiple texts, may require expanding to longer blocks (i.e., more than 30 minutes).

**Transformative Change.** NAEP could, as have curriculum frameworks just about everywhere, move to restructure from the current reading/writing division to consider assessment in: Composing and Comprehending Literary Texts (Area 1) and Composing and Comprehending Informational Texts (Area 2). Such changes would require some terminology work (e.g., Can procedural texts be located inside of informational texts? I think, yes). I use the term *composing* intentionally to emphasize multimodal forms. I would even argue for the use of *engaging* in place of “*comprehending*” as the term reflects a more inclusive view of meaning-making beyond the cognitive.

### **Closing: Challenges and Opportunities**

The transformative choice above is a challenge that involves risks and costs. The alternative, trying to hold on to the present with the world changing rapidly around us, has its own set of challenges, risks, and costs. The reformer and the optimist in me says the time is right for change. If we are going to take risks then let’s take them in the direction of a vision for the future and the opportunity to lead the field into moving forward.

## References

- Albers, P., Harste, J. C., & Vasquez, V. M. (2015). Critical and Multimodal Literacy Curricula. In M. Hamilton, R. Heydon, K. Hibbert, & R. Stooke (Eds.), *Negotiating spaces for literacy learning: Multimodality and governmentality* (pp. 115-130). New York, NY: Bloomsbury.
- Coiro, J., Knobel, M., Lankshear, C., & Leu, D. J. (Eds.). (2014). *Handbook of research on new literacies*. New York, NY: Routledge.
- Duke, N. K., Zhang, S., & Morsink, P. M. (2015). Neglected areas of instruction: Bad for print, worse for the internet. In R. Spiro, M. DeSchryver, M. Hagerman, P. Morsink, & P. Thompson (Eds.), *Reading at a crossroads? Disjunctures and continuities in current conceptions and practices* (pp. 249-274). New York, NY: Routledge.
- Freebody, P. & Luke, A. (1990) Literacies programs: Debates and demands in cultural context. *Prospect: An Australian journal of TESOL*, 5(3), 7–16.
- Retrieved from: <https://eprints.qut.edu.au/49099/>
- Guthrie, J. T., Wigfield, A., & VonSecker, C. (2000). Effects of integrated instruction on motivation and strategy use in reading. *Journal of educational psychology*, 92(2), 331-341.
- Harste, J. C. (2009). Multimodality in perspective. In J. Hoffman & Y. Goodman, (Eds.), *Changing literacies for changing times: An historical perspective on the future of reading research, public policy, and classroom practices*. New York, NY: Routledge, 34.



- Hoffman, J. V. (2009). In search of the “simple view” of reading comprehension. In S. E. Israel & G. G. Duffy (Eds.) *Handbook of research on reading comprehension*, 54-66.
- Hoffman, J. V. (2014). In search of the “simple view” of reading comprehension. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension*. New York, NY: Routledge.
- Hoffman, J. V. (2017a). What if “just right” is just wrong. The unintended consequences of leveling readers. *The Reading Teacher*, 71(3), 265-273.
- Hoffman, J.V., Lammert, C., Daly, A., Tily, S., & Svrcek, N. (2017b, December). Interests, inquiry and advocacy in literacy teaching: Preservice teachers engaging with elementary students in informational texts. Paper presented at the annual conference of the Literacy Research Association, Tampa, FL.
- Janks, H. (2009). *Literacy and power*. New York, NY: Routledge.
- Moje, E. B. (2008). Foregrounding the disciplines in secondary literacy teaching and learning: A call for change. *Journal of Adolescent & Adult Literacy*, 52(2), 96-107.
- Payne, K. A., Hoffman, J. V., & DeJulio, S. (2017). Doing democracy through simulation, deliberation, and inquiry with elementary students. *Social Studies Research and Practice*, 12(1), 56-69.
- Serafini, F. (2010). Reading multimodal texts: Perceptual, structural and ideological perspectives. *Children's Literature in Education*, 41(2), 85-104.
- Serafini, F. (2012). Expanding the four resources model: Reading visual and multi-modal texts. *Pedagogies: An International Journal*, 7(2), 150-164.

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, 78(1), 40-59.

**Appendix A. Recent Research Reports Related to Reading Comprehension**

Journal	Reference	Areas
<i>Journal of Literacy Research</i>	Coiro, J. (2011). Predicting reading comprehension on the Internet: Contributions of offline reading skills, online reading skills, and prior knowledge. <i>Journal of Literacy Research</i> , 43(4), 352-392.	Online reading comprehension. Predicting performance.
	Lubliner, S., & Smetana, L. (2005). The effects of comprehensive vocabulary instruction on Title I students' metacognitive word-learning skills and reading comprehension. <i>Journal of Literacy Research</i> , 37(2), 163-200.	Vocabulary Intervention study with effects on comprehension.
	Bigot, L. L., & Rouet, J. F. (2007). The impact of presentation format, task assignment, and prior knowledge on students' comprehension of multiple online documents. <i>Journal of Literacy Research</i> , 39(4), 445-470.	Online reading comprehension and text features.
	Guo, Y., Roehrig, A. D., & Williams, R. S. (2011). The relation of morphological awareness and syntactic awareness to adults' reading comprehension: Is vocabulary knowledge a mediating variable? <i>Journal of Literacy Research</i> , 43(2), 159-183.	Vocabulary and comprehension.
<i>Reading</i>	<b>Leu, D. J., Forzani, E., Rhoads, C., Maykel, C.,</b>	Online and New

Journal	Reference	Areas
<i>Research Quarterly</i>	<b>Kennedy, C., &amp; Timbrell, N. (2015). The new literacies of online research and comprehension: Rethinking the reading achievement gap. <i>Reading Research Quarterly, 50(1), 37-59.</i></b>	Literacy Studies.
	Vaughn, S., Swanson, E. A., Roberts, G., Wanzek, J., Stillman-Spisak, S. J., Solis, M., & Simmons, D. (2013). Improving reading comprehension and social studies knowledge in middle school. <i>Reading Research Quarterly, 48(1), 77-93.</i>	Intervention study. Social studies as a discipline.
	Sinatra, G. M., & Broughton, S. H. (2011). Bridging reading comprehension and conceptual change in science education: The promise of refutation text. <i>Reading Research Quarterly, 46(4), 374-393.</i>	Science, argument, text structure as related to comprehension.
	Connor, C. M., Morrison, F. J., Fishman, B., Giuliani, S., Luck, M., Underwood, P. S.,... & Schatschneider, C. (2011). Testing the impact of child characteristics x instruction interactions on third graders' reading comprehension by differentiating literacy instruction. <i>Reading Research Quarterly, 46(3), 189-221.</i>	Instructional intervention study.
	Guthrie, J. T., & Klauda, S. L. (2014). Effects of classroom practices on reading comprehension, engagement, and motivations for adolescents. <i>Reading</i>	Adolescents and comprehension.

Journal	Reference	Areas
	<i>Research Quarterly</i> , 49(4), 387-416.	
	Lepola, J., Lynch, J., Laakkonen, E., Silven, M., & Niemi, P. (2012). The role of inference making and other language skills in the development of narrative listening comprehension in 4-6-year-old children. <i>Reading Research Quarterly</i> , 47(3), 259-282.	Listening and reading comprehension: relationships.
	Diakidoy, I. A. N., Mouskounti, T., & Ioannides, C. (2011). Comprehension and learning from refutation and expository texts. <i>Reading Research Quarterly</i> , 46(1), 22-38.	Text structures and comprehension and learning.
	Kieffer, M. J., Vukovic, R. K., & Berry, D. (2013). Roles of attention shifting and inhibitory control in fourth-grade reading comprehension. <i>Reading Research Quarterly</i> , 48(4), 333-348.	Attention in reading comprehension.
	Schaffner, E., Schiefele, U., & Ulferts, H. (2013). Reading amount as a mediator of the effects of intrinsic and extrinsic reading motivation on reading comprehension. <i>Reading Research Quarterly</i> , 48(4), 369-385.	Motivation and comprehension.
	Hannon, B. (2012). Understanding the relative contributions of lower-level word processes, higher-level processes, and working memory to reading	Word level processes and comprehension.

Journal	Reference	Areas
	comprehension performance in proficient adult readers. <i>Reading Research Quarterly</i> , 47(2), 125-152.	
	Garcia-Madruga, J.A., Elosua, M.R., Gil, L., Gomez-Veiga, I., Vila, J., Orjales, I.,... & Duque, G. (2013). Reading comprehension and working memory's executive processes: An intervention study in primary school students. <i>Reading Research Quarterly</i> , 48(2), 155-174.	Intervention study into comprehension.
	Uccelli, P., Galloway, E. P., Barr, C. D., Meneses, A., & Dobbs, C. L. (2015). Beyond vocabulary: Exploring cross-disciplinary academic-language proficiency and its association with reading comprehension. <i>Reading Research Quarterly</i> , 50(3), 337-356.	Disciplinary literacy and academic language in comprehension.
	Strasser, K., & del Rio, F. (2014). The role of comprehension monitoring, theory of mind, and vocabulary depth in predicting story comprehension and recall of kindergarten children. <i>Reading Research Quarterly</i> , 49(2), 169-187.	Vocabulary, and self-monitoring in predicting reading comprehension.
	Kim, Y. S., & Phillips, B. (2014). Cognitive correlates of listening comprehension. <i>Reading Research Quarterly</i> , 49(3), 269-281.	Correlates of listening comprehension.
	Silverman, R. D., Proctor, C. P., Haring, J. R., Doyle,	Multi-lingual learners

Journal	Reference	Areas
	<p>B., Mitchell, M. A., &amp; Meyer, A. G. (2013). Teachers' instruction and students' vocabulary and comprehension: An exploratory study with English monolingual and Spanish-English bilingual students in grades 3-5. <i>Reading Research Quarterly</i>, 49(1), 31-60.</p>	<p>and comprehension.</p>
	<p>Lai, M. K., Wilson, A., McNaughton, S., &amp; Hsiao, S. (2014). Improving achievement in secondary schools: Impact of a literacy project on reading comprehension and secondary school qualifications. <i>Reading Research Quarterly</i>, 49(3), 305-334.</p>	<p>Intervention study effects on comprehension – secondary.</p>
	<p>Heppt, B., Haag, N., Bohme, K., &amp; Stanat (2015). The Role of academic features for reading comprehension of language-minority students and students from low-SES families. <i>Reading Research Quarterly</i>, 50(1), 61-82.</p>	<p>Multi-lingual learners and comprehension.</p>
	<p>Wright, T. S., &amp; Cervetti, G. N. (2017). A systematic review of the research on vocabulary instruction that impacts text comprehension. <i>Reading Research Quarterly</i>, 52(2), 203-226.</p>	<p>Review: Vocabulary instruction and comprehension.</p>
	<p>Spichtig, A. N., Hiebert, E. H., Vorstius, C., Pascoe, J. P., David Pearson, P., &amp; Radach, R. (2016). The decline of comprehension-based silent reading efficiency in the United States: A comparison of current data with</p>	<p>Historical analysis of reading efficiency (comprehension).</p>

Journal	Reference	Areas
	performance in 1960. <i>Reading Research Quarterly</i> , 51(2), 239-259.	
	Liebfreund, M. D. (2015). Success with informational text comprehension: An examination of underlying factors. <i>Reading Research Quarterly</i> , 50(4), 387-392.	Informational text and comprehension.
	Lepola, J., Lynch, J., Kiuru, N., Laakkonen, E., & Niemi, P. (2016). Early oral language comprehension, task orientation, and foundational reading skills as predictors of grade 3 reading comprehension. <i>Reading Research Quarterly</i> , 51(4), 373-390.	Basic processes and comprehension (correlation, prediction).
	Suk, N. (2017). The effects of extensive reading on reading comprehension, reading rate, and vocabulary acquisition. <i>Reading Research Quarterly</i> , 52(1), 73-89.	Impact study on comprehension for extensive reading.
	Siu, C. T. S., & Ho, C. S. H. (2015). Cross-language transfer of syntactic skills and reading comprehension among young Cantonese-English bilingual students. <i>Reading Research Quarterly</i> , 50(3), 313-336.	Multi-lingual readers and comprehension.
	Veenendaal, N. J., Groen, M. A., & Verhoeven, L. (2016). The contribution of segmental and suprasegmental phonology to reading comprehension. <i>Reading research quarterly</i> , 51(1), 55-66.	Basic processes and comprehension.
	Reynolds, D., & Daniel, S. (2017, August). Toward	Instruction and



Journal	Reference	Areas
	contingency in scaffolding reading comprehension: Next steps for research. <i>Reading Research Quarterly</i> . <a href="https://doi.org/10.1002/rrq.200">https://doi.org/10.1002/rrq.200</a>	comprehension.
	Collins, J. L., Lee, J., Fox, J. D., & Madigan, T. P. (2017). Bringing together reading and writing: An experimental study of writing intensive reading comprehension in low-performing urban elementary schools. <i>Reading Research Quarterly</i> , 52(3), 311-332.	Reading/writing intervention with a focus on comprehension outcomes.
	Cheng, Y., Zhang, J., Li, H., Wu, X., Liu, H., Dong, Q., ... & Sun, P. (2017). Growth of compounding awareness predicts reading comprehension in young Chinese students: A longitudinal study from grade 1 to grade 2. <i>Reading Research Quarterly</i> , 52(1), 91-104.	Basic processes as predicting comprehension.
	Davis, D. S., Huang, B., & Yi, T. (2017). Making sense of science texts: A mixed-methods examination of predictors and processes of multiple-text comprehension. <i>Reading Research Quarterly</i> , 52(2), 227-252.	Science texts and comprehension.
	Meneses, A., Uccelli, P., Santelices, M. V., Ruiz, M., Acevedo, D., & Figueroa, J. (2018). Academic language as a predictor of reading comprehension in monolingual Spanish-speaking readers: Evidence from Chilean early	Monolingual Spanish speakers and comprehension.

Journal	Reference	Areas
	adolescents. <i>Reading Research Quarterly</i> , 53(2), 223-247. <a href="https://doi.org/10.1002rrq.192">https://doi.org/10.1002rrq.192</a>	
	Caplan, D., Waters, G., Bertram, J., Ostrowski, A., & Michaud, J. (2016). Effects of written and auditory language-processing skills on written passage comprehension in middle and high school students. <i>Reading Research Quarterly</i> , 51(1), 67-92.	Basic processes impact on comprehension.
	Gámez, P. B., González, D., & Urbin, L. M. (2017). Shared book reading and English learners' narrative production and comprehension. <i>Reading Research Quarterly</i> , 52(3), 275-290.	Instruction. Multi-lingual learners.
	Pyle, N., Vasquez, A. C., Gillam, S. L., Reutzell, D., Olszewski, A., Segura, H., ... & Pyle, D. (2017). Effects of expository text structure interventions on comprehension: A meta-analysis. <i>Reading Research Quarterly</i> , 52(4), 469-501.	Instruction. Informational text structure and comprehension.
<i>Elementary School Journal</i>	Valencia, S. W., Wixson, K. K., & Pearson, P. D. (2014). Putting text complexity in context: Refocusing on comprehension of complex text. <i>The Elementary School Journal</i> , 115(2), 270-289.	Text complexity and comprehension.
	Kucan, L., Hapgood, S., & Sullivan Palincsar, A. (2011). Teachers' specialized knowledge for supporting student comprehension in text-based discussions. <i>The</i>	Teachers guiding text-based discussions and comprehension.

Journal	Reference	Areas
	<i>Elementary School Journal</i> , 112(1), 61-82.	
	Greenwood, C. R., Carta, J. J., Guerrero, G., Atwater, J., Kelley, E. S., Kong, N. Y., & Goldstein, H. (2016). Systematic replication of the effects of a supplementary, technology-assisted, storybook intervention for preschool children with weak vocabulary and comprehension skills. <i>The Elementary School Journal</i> , 116(4), 574-599.	Instructional intervention, young children, technology assisted.
	Silverman, R. D., Martin-Beltran, M., Percy, M. M., Hartranft, A. M., McNeish, D. M., Artzi, L., & Nunn, S. (2017). Effects of a cross-age peer learning program on the vocabulary and comprehension of English learners and non-English learners in elementary school. <i>The Elementary School Journal</i> , 117(3), 485-512.	Multi-lingual learners, intervention study with cross-age, peer learning.
	Language and Reading Research Consortium. (2016). Use of the Curriculum Research Framework (CRF) for developing a reading-comprehension curricular supplement for the primary grades. <i>The Elementary School Journal</i> , 116(3), 459-486.	Developing curriculum framework for promoting reading comprehension (elementary).
	Jiang, H., & Davis, D. (2017). Let's know! Proximal impacts on Prekindergarten through grade 3 students' comprehension-related skills. <i>The Elementary School Journal</i> , 118(2), 177-206.	Impact on comprehension with a project-based learning-type approach.