

The Research Base of In2Books

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The Research Base

In2Books was created in 1997 to enhance the intellectually stimulating work available to students in low-income neighborhoods. A basic tenet of In2Books is that all children are capable of deep learning. Children cannot fully develop their learning potential without challenging learning experiences. In2Books promotes ambitious literacy learning in grades 3-5 by having students engage in authentic reading and writing experiences with adult pen pals. The pen pal experience is complemented by the classroom study of genre and genre-related literacy.

The basic design elements of In2Books are as follows: Over the course of the school year each student receives five diverse thought-provoking books to keep. The books represent different genres and domains—fiction, informational social studies, biography, folktales, and informational science. Each student is matched with an adult pen pal who reads the same books. Throughout the year, the student and his or her adult pen pal exchange letters about the important issues in the books. At the same time, students are discussing the book in the classroom as they study its genre and genre-related strategies.

As an instructional curriculum designed to improve student achievement in reading and writing, In2Books focuses on nine distinct but also interrelated elements. The individual elements and the scientific research on which they are based are described as follows:

1. Instruction in Comprehension, Vocabulary, Fluency, and Writing

Each In2Books cycle implements before-reading, during-reading, and after-reading instructional activities. During every part of each cycle, students engage in learning activities related to the books that are designed to enhance their vocabulary knowledge, reading fluency and comprehension, and writing skills.

a. *Comprehension:* In2Books provides explicit, focused, and systematic instruction in strategies that the National Reading Panel concluded were proven to promote reading comprehension, including concept mapping (graphic organizers) and other activities that build and activate background knowledge; question generating, answering, and discussion; note taking and summarizing; and story mapping.

Students learn strategies to build/activate background knowledge related to the text structure of the books for each cycle. Because the books students read are both narrative and informational texts, different background-building instructional strategies are used. Prior knowledge strategies used for narratives include question generation and discussion. Graphic organizers are especially pertinent to the two cycles in which students read and write about informational books.

Asking and responding to a variety of questions designed to promote different levels of comprehension is a hallmark of the In2Books experience. Each unit cycle begins with essential questions such as “What does it mean to be a member of a community?” with several supporting questions and other critical thinking activities. Students learn to form questions and read text to find information that will answer these questions and others they generate.

To deepen discussion (conversation), students and pen pals are coached to ask and answer open-ended questions about the books in their letters. Professional development materials and sessions for every cycle provide teachers with many inquiry-based activities and general questioning strategies, as well as a variety of discussion techniques and summarization strategies to be used in small and large group settings

Active reading that involves strategies such as note taking and summarizing are also regular parts of In2Books instruction. For example, the first time they read *Donavan’s Word Jar*, fourth graders are taught to take notes on a “think mark” and generate questions about items that interest or perplex them. Students are routinely guided to read each core book multiple times and for various purposes and in different ways.

Importantly, In2Books focuses on providing multiple opportunities to practice these various comprehension skills within and across units, thereby enabling use of the strategies repeatedly and in a wide variety of contexts to promote internalization and automaticity in skill use.

Research Citations:

Alvermann, D. E., (1981). The Compensatory Effect of Graphic Organizers in the Learning and Retention of Meaningful Verbal Material. *Journal of Educational Research*, 75, 44-48.

Merkley, D.M. & Jefferies, D. (2001). Guidelines for Implementing a Graphic Organizer. *The Reading Teacher*, 54, 350-357.

National Reading Panel (NRP). (2000). *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.

Raphael, T. E., Highfield, K., & Au, K. H. (2006). *QAR now: A powerful and practical framework that develops comprehension and higher-level thinking in all students*. New York: Scholastic.

Raphael, T. E. & Wonnacott, C. A. (1985). Heightening 4th Grade Students' Sensitivity to Sources of Information for Answering Comprehension Questions. *Reading Research Quarterly*, 20, 282-296.

Snow, C. (Chair). (2002). *Reading for Understanding: Toward an R&D Program in Reading Comprehension*. Santa Monica, CA: RAND.

b. Vocabulary: As numerous studies have shown, vocabulary is the single most important factor contributing to students' skill in comprehension and should be taught both directly and indirectly. In2Books focuses on vocabulary instruction by teaching key words (words central to understanding the books) from each of the core books in each unit. Before students read the book and as part of their during-reading and post-reading instructional activities, students experience repeated exposure to the key vocabulary words.

Research Citations:

Beck, I. L., Perfetti, C. A., & McKeown, M. G. (1982). Effects of Long-Term Vocabulary Instruction on Lexical Access and Reading Comprehension. *Journal of Educational Psychology*, 74(4), 506–521.

Beck, I.L., Beck, M., McKeown, L. (2002). *Bringing Words to Life: Robust Vocabulary Instruction*. New York: Guilford Press.

McKeown, M. G., Beck, I. L., Omanson, R. C., & Pople, M. T. (1985). Some Effects of the Nature and Frequency of Vocabulary Instruction on the Knowledge and Use of Words. *Reading Research Quarterly*, 20(5), 522–535.

National Reading Panel (NRP). (2000). *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.

Nagy, W. E., & Scott, J. A. (2003). Vocabulary Processes. In M. L. Kamil, P. Mosenthal, P. D. Pearson, & R. Barr, R. (Eds.), *Handbook of Reading Research, Volume III*. Mahwah, NJ: Erlbaum.

Stahl, S. A., & Fairbanks, M. M. (1986). The Effects of Vocabulary Instruction: A Model-Based Meta-Analysis. *Review of Educational Research*, 56(1), 72-110.

c. Fluency: Fluency instruction is systematically embedded throughout the In2Books curriculum. Research has shown that being able to read a passage or book with fluency—90% or higher word recognition; good reading rate; reading in phrases rather than as individual words; and reading with expression—enhances comprehension. By giving the books to students to keep, the students are more likely to read their books multiple times. Students also read their pen pal letters multiple times and share them with their classmates. As a complement to reading the books and letters, students complete a variety of book-related fluency activities as a part of each instructional unit—buddy reading, paired reading, rereading for different purposes, readers' theatre, tape-assisted reading. In addition, teachers

model fluent reading through the read alouds that are part of each unit. Finally, repeated reading of the books and pen pal letters are encouraged in the home component of the curriculum.

Research Citations:

Kuhn, M. (2003). How Can I Help Them Pull It All Together?: A Guide to Fluent Reading Instruction. In D. Barone & L. M. Morrow (Eds.), *Literacy and Young Children: Research-Based Practices*. New York: Guilford.

Kuhn, M. R., & Stahl, S. A. (2003). Fluency: A Review of Developmental and Remedial Practices. *Journal of Educational Psychology, 95*, 3-21.

National Reading Panel (NRP). (2000). *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.

Rasinski, T. V. (1990). Effects of Repeated Reading and Listening-While-Reading on Reading Fluency. *Journal of Educational Research, 83*, 147–150.

Snow, C. (Chair). (2002). *Reading for Understanding: Toward an R&D Program in Reading Comprehension*. Santa Monica, CA: RAND.

d. Writing: Daily writing—both formal and informal—is an essential part of the In2Books curriculum. Over the course of the school year, students repeatedly complete a 5-step writing process as they write letters to their pen pals about the books they have read and discussed. This process includes prewriting, drafting, revision, editing, and publishing, and is the paradigm generally regarded by research reviewers for writing instruction at the elementary school level. Teachers and students also engage in specific skill lessons and writing conferences targeted to the individual student’s skill needs (e.g., writing paragraphs; word choice; specific text-to-self, text-to-text, or text-to-world connections; establishing dialogue with the pen pal) as part of the letter-writing experience.

To facilitate and incorporate informal writing into their daily activities, students are given a Writer’s Notebook and write as part of their reading of each unit’s books—taking notes, completing think marks, doing quick writes. In addition to writing the pen pal letters each unit, students also compose a piece in the style of the genre they are studying.

The wide variety of writing activities in the In2Books curriculum creates the rich classroom literacy environment described by Reading First guidelines and found to be characteristic of instruction in the classrooms of highly effective literacy teachers at the fourth and fifth grades. Having an authentic purpose for writing (a real person with whom the student is communicating) strengthens student engagement in the learning process while building writing competence and independence. In2Books pen pals, guided by the on-line Pen Pal Place[®], help scaffold student writing by modeling appropriate letter writing form and content and posing open-ended questions that lead to deeper comprehension of text.

Research Citations:

- Hillocks, G. (1986). *Research on Written Composition: New Directions for Teaching*. New York, Urbana, IL: National Conference on Research in English/ERIC Clearinghouse on Reading and Communication Skills.
- MacArthur, C. A., Graham, S., & Fitzgerald, J. (2006). *Handbook of Writing Research*. New York: Guilford.
- Pressley, M., Wharton-McDonald, R., Mistretta-Hampston, J., & Echevarria, M. (1998). Literacy Instruction in 10 Fourth- and Fifth-Grade Classrooms in Upstate New York. *Scientific Studies of Reading*, 2, 159-194.
- Reading First. (2004). <http://www.ed.gov/programs/readingfirst.index/html>.
- Shanahan, T. (2006). Relationships Among Oral Language, Reading and Writing Development. In C. A. MacArthur, S, Graham, & J. Fitzgerald. (2006). *Handbook of Writing Research* (pp. 171-185). New York: Guilford.
- Shanahan, T. (1984). The Nature of Reading-Writing Relation: An Explorative Multivariant Analysis. *Journal of Educational Psychology*, 79, 466-477.
- Snow, C., Burns, M., & Griffin, P. (eds.) (1998). *Preventing Reading Difficulties in Young Children*. Washington, D.C.: National Academy Press.

2. Book Access and Ownership

During the school year, each In2Books student receives five books to keep. The books are specifically chosen to be engaging and diverse, and to create a literacy rich-environment—a goal supported by the *Reading First* criterion of providing greater access to books. In addition, because the children keep the books and can take them home, exposure to print is enhanced. The In2Books books are selected to demonstrate diversity and successful problem solving and to provide exposure to different genres. Students read or listen to multiple books related to the subject during a curriculum unit.

Research Citations:

- Anderson, R., Fielding, L., & Wilson, P. (1988). Growth in Reading and How Children Spend Their Time Outside of School. *Reading Research Quarterly*, 23, 285-303.
- Au, K. (1997). Ownership, Literacy Achievement, and Students of Diverse Cultural Backgrounds. In Guthrie, J. & Wigfield, A. (eds.) *Reading Engagement: Motivating Readers Through Integrated Instruction*. Newark, DE: International Reading Association.
- Cunningham, A., & Stanovich, K. (2003). Reading Matters: How Reading Engagement Influences Cognition. In J. Flood, D. Lapp, J. Squire & J. Jensen (eds.), *Handbook of Research on Teaching the English Language Arts (2nd ed.)* (pp. 666-675). Mahwah, NJ: Erlbaum.
- Neuman, S. B., & Celano, D. (2001). Access To Print in Low-Income and Middle-Income Communities: An Ecological Study of Four Neighborhoods. *Reading Research Quarterly*, 36, 8-26.
- Reading First. (2004). <http://www.ed.gov/programs/readingfirst.index/html>.

3. Variety of Genres and Domains

An effective literacy curriculum includes a variety of genres. In2Books students read books from five genres: fiction, informational social studies, biography, folktales, and informational science. This helps students become more familiar with a variety of information and text structures so that they read narrative and informational text with better strategies, increased

confidence, and deeper understanding, thus avoiding what has been termed the “fourth-grade slump” when many students fail to comprehend the different types of texts they have to read in different subject areas because they have not been taught how to. Each genre unit has overarching themes that are integrated with the national teaching and learning standards and cumulatively build the dispositions, understanding, and reading strategies students need to become independent learners.

Research Citations:

- Duke, N. (1999). *Diversifying genres used in early literacy instruction*. Interagency Education Research Initiative. Washington, DC: National Science Foundation.
- Leu, D., Kinzer, C. (2003). *Effective Literacy Instruction, K-8: Implementing Best Practice* (p.184). Merrill, NJ: Prentice Hall.
- National Reading Panel (NRP). (2000). *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.
- Purcell-Gates, V., Duke, N. K., & Martineau, J. A. (2007). Learning to read and write genre-specific text: Roles of authentic experience and explicit teaching. *Reading Research Quarterly*, 42, 8-45.

4. Classroom-based Assessment

In2Books teachers learn to use various informal literacy assessment techniques and a research-based rubric developed specifically for the In2Books curriculum to assess student letters. This combination of techniques helps teachers evaluate each student’s reading comprehension and writing progress, and thereby track the literacy state of individual children and the class as a whole. Such systematic evaluation of authentic student work allows teachers and school administrators to conduct valid assessment outside of a “high-stakes” test setting.

The In2Books Rubric is both an instructional guide and an assessment tool. It measures seven dimensions of reading, writing, and thinking represented in students’ letters. Each of the six score points on the scale represents increasing mastery of that dimension and helps teachers determine the next appropriate instructional step. Teachers use the rubric to “assess for teaching”—determining what is next for each student in the class (and for the class as a whole) in reading comprehension, critical thinking, and communicating through writing. This approach to the assessment-instruction unit puts into practice the theoretical notion of the zone of proximal development (the distance between where the student is and where the student has the potential to be with instructional support) that is widely used in research on educational practice.

Research Citations:

- Black, P., & William, D. (1998). Assessment and Classroom Learning. *Assessment in Education*, 7-74.
- Brookhart, S. M. (1999). *The Art and Science of Classroom Assessment: The Missing Part of Pedagogy*. ASHE-ERIC Higher Education Report (Vol. 27, No.1). Washington, DC: The George Washington University, Graduate School of Education and Human Development.

Glasswell, K., & Teale, W. H. (2007). Authentic assessment of authentic student work in urban classrooms. In J. R. Paratore & R. L. McCormack (Eds.), *Classroom literacy assessment: Making sense of what students know and do*. New York: Guilford.

Reading First. (2004). <http://www.ed.gov/programs/readingfirst/index/html>

Snow, C.E., Burns, S., & Griffin, P. (eds.) (1998). *Preventing Reading Difficulties in Young Children*. Washington, DC: National Academy Press.

5. Motivation

In2Books is designed to support students in developing both the *skill* and the *will* to become competent and motivated literacy learners. Motivation often makes the difference between superficial and shallow learning and learning that is both deep and internalized. Intrinsically motivated literacy learners find reading and writing to be rewarding and valuable activities. In2Books supports students in their literacy development by creating authentic reading and writing experiences as students and their pen pals read and exchange letters about the books they are reading. Students are more motivated to engage in reading and writing when there are real purposes and reasons for doing so. Authentic literacy events are those that occur in people's lives as opposed to reading and writing solely to learn. In2Books has designed authentic literacy activities around pen pal letter exchanges that focus on communicating ideas for shared understanding of books, rather than simply to complete classroom assignments or answer teacher-posed questions. Research suggests that children are more likely to transfer their classroom literacy learning to real life when they engage in authentic learning experiences. Clearly, if students are not motivated to engage in reading and writing they will never reach their full literacy potential. Students are thrilled to choose and own their own books and build a relationship with an adult who is not their teacher or parent. Especially an adult pen pal who really wants to know what they think about the books they read. This excitement encourages students to work harder and be more receptive to instruction. Students' receptiveness is energizing to teachers and encourages them to challenge their students to more ambitious work.

Research Citations:

Gambrell, L. B. (1996). *Creating Classroom Cultures that Foster Reading Motivation*. *The Reading Teacher*, 50(1) 14-25.

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: Volume III* (pp. 403–422). Mahwah, NJ: Erlbaum.

Newmann, F., Bryk, A., & Nagaoka, J. (2001). *Improving Chicago's Schools*. Chicago: Consortium on Chicago School Research.

Purcell-Gates, V. (2002). Authentic literacy in class yields increase in literacy practices. *Literacy Update*, 11, (1), 9.

Teale, W.H., & Gambrell, L.B. (in press). Raising urban students' literacy achievement by engaging in authentic, and challenging work. *The Reading Teacher*.

6. Choice

Motivation to read is also enhanced when students have opportunities to choose books they want to read. Research suggests that the books students find most interesting and enjoyable

are those they have selected for their own reasons and purposes. In addition, research indicates that students who are allowed and encouraged to choose their own reading material expend more effort in learning and consequently gain a greater understanding of the text. The In2Books curricula are designed to afford both students and teachers with many choices. Teachers can choose what lessons to use, how long to spend on reading, discussing and writing and what the focus of the unit will be. Students choose their own books (with the guidance of their teacher) from three books of varying difficulty.

Malloy, J.A., Gambrell, L.B., & Williams, G.S. (2006). Supporting students' motivation to read. In C. Cummins (Ed.), *Understanding and Implementing Reading First Initiatives* (pp. 116-126). Newark, DE: International Reading Association

Schiefele, U. (1991). Interest, learning, and motivation. *Educational Psychologist*, 26 (3), 299-323.

Spaulding, C.L. (1992). The motivation to read and write. In J.W. Irwin & M.A. Doyle (Eds.) *Reading/writing connections: Learning from research* (pp. 177-201). Newark, DE: International Reading Association.

7. Life Skills

In2Books pen pals activities and experiences are designed to help students learn that they are important and expected to have unique ideas and hopes. In2Books books are selected to model the development of life skills including goal setting, problem solving, and good communication. Practicing these skills is embedded into the curriculum so students have ongoing experiences with being successful, being listened to and setting and meeting goals.

Research Citations:

Anderman, E.M., & Midgley, C. (1992, August). Student self-efficacy as a function of classroom goal orientation. Paper presented at American Psychological Association, Washington, DC (ERIC Document Reproduction Service No. 375 367).

Gandura, A., Barbaranelli, C., Caprara, G., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, 67(3), 1206-1222.

Gardner, J. (1984). *Excellence*. New York: W.W. Norton.

Payne, R. (1998). *A Framework for Understanding Poverty*. Dallas: RFT Publishing.

Schunk, D.H. (1998). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, 33(3), 359-382.

8. Importance of Role Models

The adult pen pals serve as role models for In2Books students. Supportive role models can powerfully influence the course and quality of children's lives. Although students may have a number of caring adults in their lives, it never hurts to have one more. Research indicates that adult role models play an important role in the development of children's feelings of competence. In addition, there is evidence that adult role models can positively influence children's self-esteem, school performance, and mental health. Research studies suggest that both the quality and the duration of the relationship are linked to successful mentoring. In2Books provides resources to support the adult pen pals in providing high quality mentoring for their student pen pals. One of the reasons In2Books is so important to students is that it exposes them to life experiences they might not otherwise learn about. An

In2Books pen pal is a role model who provides literacy guidance and positive feedback to students, while helping the student to increase self-reflection and build his or her literacy identity.

Research Citations:

- Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York: Freeman.
- Herrera, CH., Sipe, C.L., & McClanahan, W.S., with Arbreton, A.J., & Pepper, S. (2000). Mentoring school-age children: Relationship development in community-based and school-based programs. Philadelphia, PA: Public/Private Ventures.
- Rhodes, J.E., Grossman, J.B., & Roffman, J. (2002). The rhetoric and reality of youth mentoring. In J.E. Rhodes (Ed.), *New Directions for Youth Development* (pp 9 – 20). San Francisco, CA: Jossey-Bass.
- Schunk, D.H. & Zimmerman, B.J. (1997). Social origins of self-regulating competence. *Educational Psychologist*, 32(4), 195-205.
- Scales, P.C., & Leffert, N., (1999). *Developmental assets: A synthesis of the scientific research on adolescent development*. Minneapolis, MN: Search Institute.
- Verhoeven, L., & Snow, C. (eds.). (2001). *Literacy and Motivation: Bridging Cognitive and Sociocultural Viewpoints*. Mahwah, NJ: Lawrence Erlbaum.

9. Professional Development

In2Books has designed reinforcing and authentic professional development experiences for teachers, creating a community of practice where teachers have the opportunity to learn and hone the skills necessary to teach literacy engagingly and effectively. The In2Books professional development series aligns with the standards delineated in the National Staff Development Council guidelines.

The courses develop teacher understanding of scientific literacy research and practices, and are delivered to have immediate practical application. The instructional experiences engage teachers as active learners, critical thinkers, and valued professionals. Central to the pedagogy of the professional development design and to the model of instruction intended for In2Books students is the gradual release of responsibility model (Pearson & Gallagher, 1983). This model employs teacher modeling, guided practice, supervised independent practice, and application of the strategy in real reading/writing situations as steps leading to deep understanding and independent functioning.

Readings and activities encourage immediate practice in the classroom, followed by an informal, easy-to-use assessment process that is directly linked to instruction. The number of teachers who return to In2Books year after year demonstrates how well its pedagogy aligns with the beliefs and needs of its teachers.

Research Citations:

- Darling-Hammond, L. (2000). Teacher Quality and Student Achievement: A Review of State Policy Evidence. *Educational Policy Analysis Archives*, 8(1), 1–42.

- Duffy, G. G., Roehler, L. R., Sivan, E., Rackliffe, G., Book, C., Meloth, M. S., Vavrus, L. G., Wesselman, R., Putnam, J., & Bassiri, D. (1987). Effects of Explaining the Reasoning Associated with Using Reading Strategies. *Reading Research Quarterly*, 22(3), 347–368.
- Elmore, R. F. (1999–2000). Building a New Structure for School Leadership. *American Educator*, 23(4), 6–13.
- Joyce, B., & Showers, B. (1996). Staff Development As a Comprehensive Service Organization. *Journal of Staff Development*, 17(1), 2–6.
- Lieberman, A. (1995). Practices That Support Teacher Development: Transforming Conceptions of Professional Learning. *Phi Delta Kappan*, 76, 642-4.
- National Reading Panel (NRP). (2000). *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.
- National Staff Development Council (NSDC) Standards for Staff Development. (2001). Available at: <http://www.nsd.org/standards/index.cfm>.