Essential Elements of Reading
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INTRODUCTION

In February of 1998, the New York State Education Department sponsored the New York State Reading Symposium. This forum, chaired by Dr. P. David Pearson from the College of Education at Michigan State University, brought together eight distinguished scholars to present current research on early reading acquisition. Each was selected for his or her expertise on a particular aspect of early reading instruction. The Symposium came about in response to both national and statewide concerns related to the reading performance of young children and strategies for teaching reading as well as data from the recent reading scores on the National Assessment of Educational Progress (NAEP) that:

*indicate that in the United States four out of ten fourth graders cannot read proficiently, thus preventing them from reaching high academic standards.*

Based on these data, the Symposium focused on those students who have difficulty in learning to read.

One of the significant research questions addressed by the panel for the New York State Reading Symposium was:

*What are the main features of effective primary-grade reading programs?*
In the document prepared to summarize the Symposium, Dr. Pearson identifies the following research-based features most commonly revealed in effective reading programs:

- Effective programs provide instruction that allows students to develop skills and strategies that support reading and writing including:
  - Word identification
  - Fluency
  - Comprehension
  - Writing and spelling
  - Monitoring for understanding.

- Effective programs provide many opportunities to read and write.

The most important feature of a good literacy curriculum is that it promotes a strong link between these two fundamental features.

Nationally, educators have been challenged to ensure that every child will be a good, independent reader by the end of third grade. In March of 1998, the National Research Council published a landmark study entitled *Preventing Reading Difficulties in Young Children*. (All references from this document are reprinted with permission from *Preventing Reading Difficulties in Young Children*. Copyright, 1998 by the National Academy of Sciences. Courtesy of the National Academy Press. Washington, D.C.) This report, commissioned by the U.S. Departments of Education and Health, states that:

...effective reading instruction is built on a foundation that recognizes that reading ability is determined by multiple factors...adequate initial reading instruction requires that children:

- use reading to obtain meaning from print;
- have frequent and intensive opportunities to read;
- are exposed to frequent, regular spelling-sound relationships;
- learn about the alphabetic writing system; and
- understand the structure of spoken words.
The Research Council also addressed the issue of how reading develops and how reading instruction should proceed. They state that:

- Reading should be defined as a process of getting meaning from print.
- Reading requires using knowledge about the written alphabet.
- Reading assumes knowledge about the sound structure of oral language for purposes of achieving understanding.
- Reading instruction should include direct teaching of information about sound-symbol relationships to students who do not know about them.
- Reading instruction must maintain a focus on the communicative purposes and personal value of reading.4

Also in the spring of 1998, the International Reading Association and the National Association for the Education of Young Children adopted a policy statement on literacy. Learning to Read and Write: Developmentally Appropriate Practices for Young Children states that:

one of the best predictors of whether a child will function competently in school and go on to contribute actively to society is the level to which the child progresses in reading and writing.5
The New York State Reading Initiative

The goal of the Reading Initiative is to improve the collective and individual reading achievement of New York’s students, especially those in pre-kindergarten through grade three where early success can make a difference in shaping children’s subsequent academic careers. The purpose of this Essential Elements document is:

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to identify elements of a sound early literacy program to guide schools in planning programs, instruction, resources, and services to improve reading achievement in the early years.
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What can teachers do to help all students read? Excellent instruction is the best intervention for children who demonstrate problems learning to read. Teachers can develop instructional strategies that include those elements that are the foundations of literacy. The New York State English Language Arts Learning Standards and the Core Curriculum documents will provide a base for helping teachers look at their instructional practices. This *Essential Elements* document will also serve as a resource for teachers.

While this document is intended primarily to help schools prepare programs to meet the needs of those students who have difficulty in learning to read, the elements of reading presented here are essential for all readers. These essential elements must be integral components of instructional programs for all students. The document has two components. The first section identifies those elements that research cites as the *foundations of literacy* and includes some specific examples. The second section, taken from the work of the National Research Council, defines a series of *developmental accomplishments of literacy acquisition* for children from birth to grade 3.
Foundations of Literacy

**Concepts About Print**

Teachers help children learn the overall structure of book reading and conventions of the printed word. Through repeated reading of storybooks, big book activities and various types of print, young children learn that reading is done from the front to the back of a book, that individual letters are different from single words, and that there is a one-to-one correspondence between what is read and what is written on a page.

**Phonemic Awareness:**

Phonemic awareness is the ability to recognize that our speech can be broken into small sounds. Teachers provide instruction that helps children learn the connections between the 44 sounds of English language (phonemes) and the 26 letters of the alphabet. Phonemic awareness is developed through frequent interaction with nursery rhymes, jingles, poetry, and books that contain words with rhymes and alliteration. The two most powerful predictors of later reading achievement in grade one and beyond are knowledge of the letter names and phonemic awareness.

**Alphabetic Principle:**

In order for a beginning reader to learn how to connect or translate printed symbols (letters and letter patterns) into sound, the reader must be taught that speech can be segmented into small sounds (phonemic awareness) and that the segmented units of speech
can be represented by printed forms (phonics). An understanding of this alphabetic principle is essential for the development of accurate and rapid word reading skills.

<table>
<thead>
<tr>
<th><strong>Word Identification</strong></th>
<th>Children are taught to use a variety of processes to identify words and to develop vocabulary. These include: decoding or word attack—converting letters into sounds and blending the sounds to form pronunciations of recognizable words; decoding words by analogy with known words—recognizing how the spelling of an unknown word is similar to a word already known; sight word reading—students read a word enough times so that the sight of the word activates its spelling, pronunciation and meaning in memory without the intervention of other forms of word identification.</th>
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<tr>
<th><strong>Frequency</strong></th>
<th>Teachers provide children with sufficient practice experiences in reading to achieve fluency with different types of well written and engaging texts at a comfortable reading level texts. Gains in fluency (automaticity) come with increased experience.</th>
</tr>
</thead>
</table>

| **Comprehension** | Children are taught to use a variety of higher-order thinking processes in order for comprehension to occur out of word recognition. Some of these skills include using prior knowledge to construct meaning, summarizing, sequencing, predicting outcomes, and drawing inferences about ideas or char- |
acters in the text. Students also learn to monitor for understanding as they read to make sure that they are making sense of the text being read by asking questions to clarify.

**Wide Range of Language and Literacy Experiences**

Teachers provide children with many opportunities to read, write, and speak. Students consistently read on their own, listen to their teachers read, discuss their reading with the teacher and write frequently for their peers and others. Once students can write letters, they should write their own words, sentences and stories on a daily basis. Children are taught to use the writing process—pre-writing, drafting, revising, and proofreading. This includes instruction in the conventions of language: grammar, spelling and punctuation. Recognizing that oral language is the foundation for reading/writing, teachers provide many opportunities for students to enhance oral language development.

**Literature**

Teachers provide opportunities for children to interact with many types of literature that offer information and enjoyment and that reflect diverse perspectives and experiences. A variety of literary genres are used in the classroom including picture books, poems, articles and stories from children’s magazines, fables, myths and legends, songs, plays and media productions, and works of fiction and nonfiction. Significant literary elements are identified (i.e., setting, character, plot, theme, point of view). Reading a wide variety of literature helps children develop rich vocabularies.
**Classroom Environment**  The classroom environment is print rich. Children are immersed in many different types of printed material. Teachers make available a wide range of books, magazines, multimedia software, newspapers, and other types of reading materials. Materials are available for students to express themselves in writing, both independently and in group work. Many opportunities are provided for students to listen to stories, poems, or musical pieces and to discuss what was heard.

**Habits and Attitudes**  Students have access to a substantial supply of books that are appropriate in complexity and interest — books that they can read accurately, fluently and with comprehension. They have frequent opportunities to write and share their writing with others. Teachers help students develop a sense of efficacy, motivation and interest in reading; they learn to read for the sheer pleasure of reading.

**Home/School Connections**  Parents are encouraged to be actively involved in their children’s literacy. Joint book reading with family members helps children develop a wide range of knowledge that supports them in school-based reading. Parents are also encouraged to model good reading habits, to take their children to the library, to provide time and space for homework to be completed, to limit television viewing, to participate in literacy programs for families, and to discuss what students are reading and learning.
Developmental Accomplishments of Literacy Acquisition

In Preventing Reading Difficulties in Young Children the authors define the development of these accomplishments in reading starting from birth and moving developmentally through Grade 3.

<table>
<thead>
<tr>
<th>Birth to Three Year Old Accomplishments</th>
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<tbody>
<tr>
<td>❖ Recognizes specific books by cover.</td>
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<tr>
<td>❖ Pretends to read books.</td>
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<tr>
<td>❖ Understands that books are handled in particular ways.</td>
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<tr>
<td>❖ Enters into a book sharing routine with primary caregivers.</td>
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<tr>
<td>❖ Vocalization play in crib gives way to enjoyment of rhyming language, nonsense word play, etc.</td>
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<tr>
<td>❖ Labels objects in books.</td>
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<tr>
<td>❖ Comments on characters in books.</td>
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<tr>
<td>❖ Looks at picture in book and realizes it is a symbol for a real object.</td>
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<tr>
<td>❖ Listens to stories.</td>
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<tr>
<td>❖ Requests/commands adult to read or write.</td>
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<tr>
<td>❖ May begin attending to specific print such as letters in names.</td>
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<tr>
<td>❖ Uses increasingly purposive scribbling.</td>
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<tr>
<td>❖ Occasionally seems to distinguish between drawing and writing.</td>
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<tr>
<td>❖ Produces some letter-like forms and scribbles with some features of English writing.</td>
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</tbody>
</table>
Three to Four Year Old Accomplishments

- Knows that alphabet letters are a special category of visual graphics that can be individually named.
- Recognizes local environmental print.
- Knows that it is the print that is read in stories.
- Understands that different text forms are used for different functions of print (e.g., list for groceries).
- Pays attention to separable and repeating sounds in language (e.g., Peter, Peter, Pumpkin Eater).
- Uses new vocabulary and grammatical constructions in own speech.
- Understands and follows oral directions.
- Is sensitive to some sequences of events in stories.
- Shows an interest in books and reading.
- When being read a story, connects information and events to life experiences.
- Questions and comments demonstrate understanding of literal meaning of story being told.
- Displays reading and writing attempts, calling attention to self: Look at my story.
- Can identify 10 alphabet letters, especially those from own name.
- Writes (scribbles) message as part of playful activity.
- May begin to attend to beginning or rhyming sounds words.
Accomplishments a successful learner is likely to exhibit during the early school years

Kindergarten Accomplishments

- Knows the parts of a book and their functions.
- Begins to track print when listening to a familiar text being read or when rereading own writing.
- *Reads* familiar texts emergently, i.e., not necessarily verbatim from the print alone.
- Recognizes and can name all uppercase and lowercase letters.
- Understands that the sequence of letters in a written word represents the sequence of sounds (phonemes) in a spoken word (alphabetic principle).
- Learns many, though not all, one-to-one letter sound correspondences.
- Recognizes some words by sight, including a few very common ones (a, the, I my, you, is are).
- Uses new vocabulary and grammatical construction in own speech.
- Makes appropriate switches from oral to written language situations.
- Notices when simple sentences fail to make sense.
- Connects information and events in texts to live and to text experiences.
- Retells, reenacts, or dramatizes stories or parts of stories.
- Listens attentively to books teacher reads to class.
- Can name some book titles and authors.
- Demonstrates familiarity with a number of types of text (e.g., storybooks, expository texts, poems, newspapers, and everyday print such as signs, notices, labels).
- Correctly answers questions about stories read aloud.
- Makes predictions based on illustrations or portions of stories.
- Demonstrates understanding that spoken words consist of a sequence of phonemes.
- Given spoken sets like dan, dan den can identify the first two as the same and the third as different.
- Given a spoken word, can produce another word that rhymes with it.
- Independently writes many uppercase and lowercase letters.
- Uses phonemic awareness and letter knowledge to spell independently (invented or temporary spelling).
- Writes (unconventionally) to express own meaning.
- Builds a repertoire of some conventionally spelled words.
- Shows awareness of distinction between temporary spelling and conventional spelling.
- Writes own name (first and last) and the first names of some friends or classmates.
- Can write most letters and some words when they are dictated.
First Grade Accomplishments

- Makes a transition from emergent to real reading.
- Reads aloud with accuracy and comprehension any text that is appropriately designed for the first half of grade one.
- Uses letter-sound correspondence knowledge to sound out unknown words when reading text.
- Recognizes common, irregularly spelled words by sight (have, said, where, two).
- Has a reading vocabulary of 300 to 500 words, sight words, and easily sounded out words.
- Monitors own reading and self-corrects when an incorrectly identified word does not fit with cues provided by the letters in the word or the context surrounding the word.
- Reads and comprehends both fiction and nonfiction that is appropriately designed for grade level.
- Creates own written texts for others to read.
- Notices when difficulties are encountered in understanding text.
- Reads and understands simple written instructions.
- Predicts and justifies what will happen next in stories.
- Discusses prior knowledge of topics in expository texts.
- Discusses how, why and what-if questions in sharing nonfiction texts.
- Describes new information gained from texts in own words.
- Distinguishes whether simple sentences are incomplete or fail to make sense; notices when simple texts fail to make sense.
- Can answer simple written comprehension questions based on material read.
- Can count the number of syllables in a word.
- Can blend or segment the phonemes of most one-syllable words.
- Spells correctly three and four letter short vowel sounds.
- Composes fairly readable first drafts using appropriate parts of the writing process (some attention to planning, drafting, rereading for meaning and some self-correction).
- Uses invented spelling/phonics-based knowledge to spell independently, when necessary.
- Shows spelling consciousness or sensitivity to conventional spelling.
- Uses basic punctuation and capitalization.
- Produces a variety of types of compositions (e.g., stories, descriptions, journal entries) showing appropriate relationships between printed text, illustrations and other graphics.
- Engages in a variety of literary activities voluntarily (e.g., choosing books and stories to read, writing a friendly note to a friend).
Second Grade Accomplishments

- Accurately decodes orthographically regular, multisyllable words, and nonsense words.
- Uses knowledge of print-sound mappings to sound out unknown words.
- Accurately reads many irregularly spelled words and such spelling patterns as diphthongs, special vowel spellings, and common word endings.
- Reads and comprehends both fiction and nonfiction that is appropriately designed for the grade.
- Shows evidence of expanding language repertory, including increasing use of more formal language registers.
- Reads voluntarily for interest and own purposes.
- Rereads sentences when meaning is not clear.
- Interprets information from diagrams, charts, and graphs.
- Recalls facts and details of texts.
- Reads nonfiction materials for answers to specific questions or for specific purposes.
- Takes part in creative responses to texts such as dramatizations, oral presentations, fantasy play, etc.
• Discusses similarities in characters and events across stories.
• Connects and compares information across nonfiction selections.
• Poses possible answers to how, why and what if questions.
• Correctly spells previously studied words and spelling patterns in own writing.
• Shows sensitivity to using formal language patterns in place of oral language patterns at appropriate spots in own writing (e.g., decontextualizing sentences, conventions for quoted speech, literary language forms, proper verb forms).
• Makes reasonable judgments about what to include in written products.
• Productively discusses ways to clarify and refine their own writing and others.
• With assistance, adds use of conferencing, revision, and editing processes to clarify and refine own writing.
Third Grade Accomplishments

- Reads aloud with fluency and comprehension any text that is appropriately designed for grade level.
- Uses letter-sound correspondence knowledge and structural analysis to decode words.
- Reads and comprehends both fiction and nonfiction that is appropriately designed for grade level.
- Reads longer fictional selections and chapter books independently.
- Takes part in creative responses to texts such as dramatizations, oral presentations, fantasy play, etc.
- Can point to or clearly identify specific words or wordings that are causing comprehension difficulties.
- Summarizes major points from fiction and nonfiction texts.
- In interpreting fiction, discusses underlying theme or message.
- Asks how, why, and what-if questions in interpreting nonfiction texts.
In interpreting nonfiction, distinguishes cause and effect, fact and opinion, main idea and supporting details.

Uses information and reasoning to examine bases of hypotheses and opinions.

Infers word meaning from taught roots, prefixes, and suffixes.

Correctly spells previously studied words and spelling patterns in own writing.

With some guidance, uses all aspects of the writing process in producing own compositions and reports.

Presents and discusses own writing with other students and responds helpfully to other students’ compositions.

Independently reviews work for spelling, mechanics, and presentation.

Produces a variety of written work (e.g., literature response, reports, published books, semantic maps) in a variety of formats including multimedia forms.
READING INSTRUCTION IN KINDERGARTEN THROUGH THIRD GRADE

Recommendations on the mechanics of reading:

Kindergarten instruction should be designed to provide practice with the sound structure of words, the recognition and production of letters, knowledge about print concepts, and familiarity with the basic purposes and mechanisms of reading and writing.

First grade instruction should be designed to provide explicit instruction and practice with sound structures that lead to phonemic awareness, familiarity with spelling-sound correspondence and common spelling conventions and their use in identifying printed words, “sight” recognition of frequent words, and independent reading, including reading aloud. A wide variety of well-written and engaging texts that are below the children’s frustration level should be provided.

Instruction for children who have started to read independently, typically second graders and above, should be designed to encourage children to sound out and confirm the identities of visually unfamiliar words they encounter in the course of reading meaningful text, recognizing words primarily through attention to their letter-sound relationships. Although context and pictures can be used as a tool to monitor word recognition, children should not be taught to use them to substitute for information provided by the letters in the word.

Because the ability to obtain meaning from print depends so strongly on the development of accuracy in word recognition and
reading fluency, both of the latter should be regularly assessed in the classroom, permitting timely and effective instructional response when difficulty or delay is apparent.

Recommendations on comprehension:

Kindergarten instruction should be designed to stimulate verbal interaction, to instruct vocabulary, and to encourage talk about books.

Beginning in the earliest grades, instruction should promote comprehension by actively building linguistic and conceptual knowledge in a rich variety of domains.

Throughout the early grades, reading curricula should include explicit instruction on strategies such as summarizing the main idea, predicting events and outcomes in upcoming text, drawing inferences, and monitoring for coherence and misunderstandings. This instruction can take place while adults read to students or when students read themselves.

Conceptual knowledge and comprehension strategies should be regularly assessed in the classroom, permitting timely and effective instructional response when difficulty or delay is apparent.

Recommendations on writing:

Once children learn to write letters, they should be encouraged to write them, use them to begin writing words or parts of words, and to use words to begin writing sentences. Instruction should be designed with the understanding that the use of invented spelling is not in conflict with teaching correct spelling. Beginning writing with invented spelling can be helpful for developing understanding of phoneme identity, phoneme segmentation, and sound-spelling relationships. Conventionally correct spelling should be developed through focused instruction and practice. Primary grade children should be expected to spell previously studied words and spelling
patterns correctly in their final writing products. Writing should take place on a daily basis to encourage children to become more comfortable and familiar with it.

Recommendation on reading practices and motivation:

Throughout the early grades, time, materials, and resources should be provided (a) to support daily independent reading of texts selected to be of particular interest for the individual student, and also beneath the individual student's frustration level, in order to consolidate the student's capacity for independent reading and (b) to support daily assisted or supported rereading of texts that are slightly more difficult in wording or in linguistic, rhetorical, or conceptual structure in order to promote advances in the student's capacities.

Throughout the early grades, schools should promote independent reading outside of school by such means as daily at-home reading assignments and expectations, summer reading lists, encouraging parental involvement, and by working with community groups, including public libraries, who share this same goal.7

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CRITERIA FOR SELECTING EARLY LITERACY ASSESSMENTS

The National Education Goals Panel issued a report in February of 1998 entitled Principles and Recommendations for Early Childhood Assessment, developed under the leadership of Lorrie Shepard, University of Colorado, and Sharon Lynn Kagan, Yale University. This report states that:

. . . assessment of young children is important both to support the learning of each individual child and to provide data— at the district, state and national level—for improving services and educational programs. . . . Finding out, on an ongoing basis, what a child knows and can do, helps parents and teachers decide how to pose new challenges and provide help with what the child has not mastered. Teachers also use a combination of observation and formal assessments to evaluate their own teaching and make improvements. At the policy level, data are needed about the preconditions of learning—such as the adequacy of health care, child care and preschool services.6
Assessment of young children up to the age of 8 is challenging

because this is the period when young children’s rates of physical, motor, and linguistic growth outpace growth rates at all other stages. Growth is rapid, episodic and highly influenced by environmental supports: nurturing parents, quality caregiving and the learning setting.

The selection of an appropriate assessment instrument for young children must begin with a very clear definition of the purpose of the assessment.

The intended use of an assessment—its purpose—determines every other aspect of how the assessment is conducted. Purpose determines the content of the assessment, methods of data collection, technical requirements of the assessment, and, finally, the stakes or consequences of the assessment, which in turn determine the kinds of safeguards necessary to protect against potential harm from fallible assessment-based decisions.
Three specific assessment purposes were identified that include recommendations for educators and policymakers. These purposes, adapted for inclusion in this document, are:

Assessing to promote children’s learning and development

The most important reason for assessing young children is to help them learn. Assessments should be closely tied to preschool and early-grades curriculum and should be a natural part of instructional activities. Policymakers should support the development or provision of assessment materials, to be used instructionally, that exemplify important and age-appropriate learning goals. States should also support professional development to help teachers learn to use benchmark information to extend children’s thinking. Assessments of early literacy should include information about:

- phonemic awareness
- alphabetic principle
- concepts about print
- range of language and literacy experiences
- word identification
- comprehension.

Assessing to monitor trends and evaluate programs and services.

Beginning at age 5, it is possible to develop large-scale assessment systems to report on trends in early learning, but care must be taken to ensure technical accuracy and protect individual children from test misuse.

Assessing academic achievement to hold individual students, teachers, and schools accountable.

There should be no high-stakes accountability testing of individual children before the end of third grade. Instructionally relevant assessments designed to support student learning should reflect a clear continuum of progress in Grades K, 1, and 2 that leads to expected standards of performance for the third and fourth grades.
The National Goals Panel Report identifies several general principles that should guide both policies and practices for the assessment of young children. These principles, adapted for inclusion in this document, include:

**Assessment should bring about benefits for children.** Gathering accurate information from young children is difficult and potentially stressful. Formal assessments may also be costly and take resources that could otherwise be spent directly on programs and services for young children. To warrant conducting an assessment, there must be a clear benefit—either in direct services to the child or in improved quality of educational programs.

**Assessments should be tailored to a specific purpose and should be reliable, valid, and fair for that purpose.** Assessments designed for one purpose are not necessarily valid if used for other purposes. In the past, many of the abuses of testing with young children have occurred because of misuse.

**Assessment policies should be designed recognizing that reliability and validity of assessments increase with children’s age.** The younger the child, the more difficult it is to obtain reliable and valid assessment data. It is particularly difficult to assess children’s cognitive abilities accurately before age 6.
Assessments should be linguistically appropriate, recognizing that to some extent all assessments are measures of language. Assessment results are easily confounded by language proficiency, especially for children who come from home backgrounds with limited exposure to English. Each child’s first and second language development should be taken into account when determining appropriate assessment methods and in interpreting the meaning of assessment results.

Parents should be a valued source of assessment information, as well as an audience for assessment results. Assessments should include multiple sources of evidence, especially reports from parents and teachers. Assessment results should be shared with parents as part of an ongoing process that involves parents in their child’s education.

The how and the what of assessing young children are determined by the age of the child. More formal assessment activities become more frequent as age increases. Across this early childhood age span, children should be introduced to and become comfortable with the idea that adults ask questions and check on understanding as a natural part of the learning process.
CONCLUSION

It is critical that schools in New York State provide excellent reading instruction to all students, including those with disabilities. *Essential Elements of Early Reading Programs* has been developed to provide concise information for school administrators and teachers on the elements of early literacy programs. It is our hope the document will be used to enhance existing reading programs, to provide guidance in the selection of instructional programs and materials and to inform parents and members of the wider community.
Other Symposium participants include: Dr. Richard Allington and Dr. Frank Vellutino, State University of New York at Albany; Dr. Linnea Ehri, City University of New York; Dr. Barbara Wasik, Johns Hopkins University; Dr. Karen Wixson, University of Michigan; Dr. Peter Afflerbach, University of Maryland at College Park; Dr. Douglas Carnine, University of Oregon; and Dr. Dorothy Strickland, Rutgers University.


3 Preventing Reading Difficulties in Young Children, National Research Council, 1998, p.3.


6 Preventing Reading Difficulties in Young Children, National Research Council, 1998, p.61, 80-83.


9 Ibid, p.6

10 Ibid, p.5-6