A one-year qualitative study examined the ways in which two at-risk beginning readers and writers developed in a classroom where teaching strategies most commonly identified with whole language were used. The students, 6-year-old "Josh" and 7-year-old "Jenny," were enrolled in a transitional class composed of students who had completed their kindergarten year but who were judged not to be prepared for first grade. The school site was located in one of the poorer areas of a largely middle-class midwestern city. All but two of the writing samples were taken from the daily journals the students wrote. The final two samples are from a first-grade student, "Joseph," in a regular classroom for purposes of comparison. Results indicated that: (1) the writing samples showed an increasing number of words over time; (2) Josh and Jenny gained an increasing control over handwriting and letter forms; (3) spelling began to catch up with meaning; and (4) the students' grasp of phoneme–grapheme correspondence and bank of sight words grew throughout the year. Results also indicated that Joseph worked through many of the same writing strategies as did Josh and Jenny. The most striking difference was that Joseph's writing was longer and more complex. Findings suggest that the writing of young children develops across all language sub-systems, parallel to the development of oral language, and in somewhat predictable but idiosyncratic and recursive ways. Teachers can use knowledge of the subsystems described by socio-linguistics in assessing the writing development of their students. (Contains 16 references and 12 samples of students' writing.)
Socio-psycholinguistic Assessment of Early Writing Development

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SOCIO-PSYCHOLINGUISTIC ASSESSMENT OF EARLY WRITING

Abstract: The writing of young children develops across all language sub-systems, parallel to the development of oral language, and in somewhat predictable but idiosyncratic and recursive ways. Teachers can use knowledge of the sub-systems described by socio-psycholinguistics in assessing the writing development of their students.

The 9:00 bell rang, and six-year old Josh plopped down in his desk and fumed. Jo, his teacher, called the class to order and began writing her journal entry for this late April day on the overhead projector. As she wrote, the students talked with her about various aspects of the writing -- what to write about, how certain words could be spelled, which details to include -- but still Josh sat and mulled, refusing to join in. When she finished her entry, Jo turned over the rest of writing time to her students. Josh pulled out his journal and hurriedly scrawled "UP SARS THa. hv no papTISS AnD no SOPe." (Upstairs, they have no paper towels and no soap.) Josh, it turned out, was miffed at the sad state of accommodations in one of the boys' restroom.

That Josh was able to command the act of writing with such relative ease in order to express an important meaning was nothing less than remarkable. When compared with earlier writings from Josh's journal, this piece demonstrated development across all four of the language sub-systems described in socio-psycholinguistic theory. Growth in graphophonics, in syntactic and semantic complexity, and in a pragmatic awareness of the uses to which language can be put (we might envision a budding letter-to-the-editor writer here) are all in evidence. In addition, the piece demonstrates that Josh is becoming aware of writing as a separate language system with its own characteristics as opposed to a simple mapping of oral language onto print.
In the past two decades we have learned a great deal about assessment and teaching practices for early reading by viewing it through the lens of socio-psycholinguistic theory; miscue inventories and running records are both based on this view of language, as are the use of predictable meaning-centered texts and other innovative practices. It is the thesis here that we can use this same knowledge base to help us better understand language growth as it occurs in early writing.

Over the last decade or so, one socio-psycholinguistic aspect of early writing development has received the lion's share of attention — invented spelling has been dominant in the literature. This is especially true in terms of how theory has made its way into the classroom. One major publisher of emergent literacy materials, for example, includes in its teacher's guide a "Continuum of Written Language Development" assessment checklist which includes 27 items; 21 of these indicators refer to spelling or other form-related aspects of early writing, while only six deal with meaning. No indicators of syntactic development are included (Davidson, 1990).

It is not the thesis here that invented spelling is unimportant. Clearly, it is. Many early childhood and primary grade teachers are now very conversant with the ways in which children re-invent the spelling system for themselves and how this type of active learning is manifested in early writing. They also understand that various changes in a child's theories about spelling are critical indicators of growth. By following development in spelling from its inception in drawing, scribbles, and invented letter forms through such levels as one-letter-per-word strategies, phonetic spelling, and movement toward conventional spelling, one can gain great insights into how children learn language (Harste, Woodward, & Burke, 1984; Temple, Nathan, Temple, & Burris, 1993; Wilde, 1992).
However, we have tended not to examine as thoroughly the developments in children's early syntactic or semantic structures, in their growing knowledge of the pragmatic aspects of writing, or in the relationship of their oral language development to their writing development. This may well be because such growth is often not as immediately apparent. Spelling growth is more easily discernible; it is usually the most striking feature of early text. When studied in a more holistic fashion, though, writing development manifests itself not only in spelling, but in interrelated growth processes across all language sub-systems. Based on research conducted with a class of 15 developmentally delayed first-graders, this paper sets out a framework teachers can use in arriving at a more complete assessment of early writing.

The analysis of growth across language sub-systems described here focuses on the writing samples of Josh, introduced in the opening paragraph, and one of his classmates, seven-year-old Jenny. Samples of Josh and Jenny’s writing were gathered during a one-year qualitative study, the purpose of which was to learn about the ways in which these beginning readers and writers, already labeled as being at risk, developed in a classroom whose teacher expressed an holistic theory of literacy learning and who made use of teaching strategies most commonly identified with whole language: shared reading of predictable meaning-centered texts, the language experience approach, multiple and ongoing demonstrations of reading and writing, open-ended process writing, and sustained individual and paired reading in books of student choice.

The school site was located in one of the poorer areas of a largely middle-class midwestern city of 100,00. The class, a transitional one composed of students who had completed their kindergarten year but who were judged not to be prepared for first grade, included fifteen students who varied in age from six to eight. All of the students in the class qualified for free or
reduced lunch on the basis of their caretaker's income. Their incoming literacy knowledge and processes as determined by interviews and observation correlated strongly with those typically identified with lower socioeconomic backgrounds. That is, in comparison with more economically advantaged age-mates, they had experienced relatively fewer encounters with storybook reading or with personal or story writing. Taylor (1991), for instance, found that children from poorer homes, while acquainted with such day-to-day literacy events as shopping lists and notes, had few experiences with children's literature or expressive writing. All the students in this study had met the district's criteria for entry into the transitional program, scoring at or below the third stanine on the Metropolitan Readiness Test (Nurss and McGauvran, 1974) and being rated generally low on the Pupil Behavior Rating Scale (Learning Disabilities Center, 1965) by their kindergarten teachers.

All but two of the writing samples in this article were taken from the daily journals the students wrote. These journals were typically completed early in the school day, immediately following opening routines. Jo would first model journal writing, demonstrating various aspects of writing such as topic selection, sound-symbol correspondence, revision, editing, punctuation, word choice, and detail selection. Then students would select their own topics and write about them as Jo circulated throughout the room. The journal writing period lasted approximately twenty minutes each day.

The final two samples are from Joseph, a first-grade student in a regular classroom. Joseph's samples reveal considerably more advanced development than either Josh's or Jenny's and are included here for purposes of comparison. They will demonstrate that the writing of students
at different developmental levels is not so much qualitatively different as it is different in its relative degrees of complexity.

A Concept for Assessment:

Writing Development Replicates Oral Language Acquisition

The process of oral language acquisition is well known. Children begin by using language forms which are far from conventional in terms of phonological articulation, syntactic structure, and semantic expression, but which nevertheless are intended to communicate authentic meaning. Over time, these meanings come to be expressed in forms which increasingly approximate conventional oral language.

This development towards fluency is recursive and idiosyncratic, occurring across the various sub-systems in ways which are predictable only in the most general terms (Cambourne, 1988; Preece, 1992; Wells, 1986). For instance, we cannot predict exactly when a child will learn a particular syntactic principle such as how to form plural nouns, or in what order such principles will be learned, or exactly which language event(s) will evoke such learning. We can only state that through observation and hypothesis-making and testing, the vast majority of children who are immersed in an environment overlaid with oral language do learn the basics of such principles during their pre-school years. The writing development of the children in this study followed the exact same path as oral language development; growth towards writing fluency was observed as occurring across sub-systems in recursive, idiosyncratic, non-sequential and unpredictable ways. Despite its apparent randomness, growth did, in fact, occur.

Writing development, then, like oral language acquisition, can be viewed as growth in the direction of fluency as manifested by a steady movement from more immature forms toward more
conventional forms, by the writer needing to give ever decreasing attention to form and able to
give ever increasing attention to meaning, and by an accompanying shift in one's ability to express
increasingly complex meanings in increasingly complex ways. Development in specific sub-
systems may appear to be recursive; specific advances in one sub-system may be found in tandem
with seeming regressions in others. For example, more highly developed spelling may be found in
pieces which are shorter and less complex than the writer had previously been producing.
Nevertheless, the general trend over time is unmistakably toward growing control across sub-
systems.

Growth in writing fluency is manifested in textual features such as an increasing number of
words and growing awareness of print conventions such as directionality, letter forms, and word
awareness. Semantically, agents, actions and objects are more specifically identified and
described, and abstractions begin to appear. Temporal and spatial relationships are specified, and
figurative language may be used. Syntactically, a wider variety of types of clauses, phrases, and
verb forms appear. Orthographic growth is seen in the gradual appearance of, first, the matching
of phonemes with appropriate graphemes, and then, the appearance of sight words and
experimentation with non-phonetic conventional spelling structures such as digraphs, silent letters,
and common spelling patterns. Pragmatically, the writer may write for a growing number of
purposes and a wider variety of audiences; the influence of language encountered in a wider
variety of contexts may be noted. Finally, children's oral language begins as being far more
complex than their written language; as the subtleties of print are mastered, written language
tends to match oral language in its level of complexity and forms of expression and then gradually
to grow away from oral language, developing the characteristics which mark it as being literary in nature and delineate it from spoken forms.

In considering these characteristics of increasing fluency, it is possible to generate a list of items which teachers can use to map the path of development in their students. The following list may be too long and detailed for some functions such as reporting to parents (though it can be summarized for such purposes), but nevertheless, as teachers consider growth over time, these are considerations they will need to be cognizant of. A wide variety of sources was consulted in constructing this list in addition to the observations made by the researcher. The most important sources include Ferreiro (1990), Sulzby (1985), Temple et al (1993), Weaver (1988), and Wells (1986).

**Early Writing Development Indicators**

**Semantics**

1. Increasing specification of agents, actions, and objects through use of increasingly specific vocabulary.

2. Temporal and spatial relationships between agents, actions, and objects are specified.

3. Descriptors and qualifiers appear (adjectives and adverbs).


5. Figurative language may be used.


**Syntax**
1. Increasing number of words are used.

2. Increasing number and types of clauses are used.

3. Subordination of clauses appears.

4. Increasing number of phrases and types of phrases -- prepositions and verbals -- are used.

6. Complex verb forms appear -- various tenses, irregular forms, inclusion of auxiliary verbs.

Spelling/Orthography

1. Drawing and/or scribbling are used to represent writing.

2. Directionality and word awareness are addressed.

3. Non-phonetic random letter strings and/or invented letter forms may be used.

4. Influence of environmental print is apparent.

5. One letter, usually the initial consonant, is used per word or syllable.

6. Increasing phoneme-grapheme correspondence appears, often in the order of beginning, end, and medial elements; knowledge of consonants often appears before knowledge of vowels.

7. Conventional non-phonetic structures begin to appear (i.e., digraphs such as /ch/ or final silent "e").

8. Bank of sight words increases, composed of both high
frequency and highly significant words.

9. Increasing control over handwriting is apparent.

Pragmatics

1. Most early writing is used to catalog day-to-day personal experiences in diary-like fashion.

2. Gradually, experimentation with various purposes, genres, audiences, and forms begin to take place.

3. Influence of language from varied oral and print contexts is demonstrated.

Oral Language/Print Language Relationship

1. The writer is capable of producing more complex oral language than written language.

2. The writer's oral language and written language are of approximately equal complexity and form.

3. The writer's written language begins to diverge from oral language, taking on such characteristics as story language, dialogue tags, and vocabulary which is not typically used in oral language.

The position of the sub-systems on this list is not intended to indicate sequence of development: that is, the semantic indicators do not appear before the syntactic, or the syntactic before the spelling/orthographic, etc.; recall the central thesis here that these sub-systems undergo simultaneous development. In contrast, the separate indicators within each sub-system do
indicate at least a rough approximation of the sequence which many children go through, especially for the spelling, pragmatic, and oral/print sections. However, in all likelihood, no single child will demonstrate all of these indicators or experience the same sequence. Again, development appears to be idiosyncratic and recursive. Sometimes a child may go through a recognizable and, to the adult mind, logical sequence of development for a given construct, but with any given child or construct, some of the indicators may appear to be skipped over while others may appear full-blown without any prior hint of development. Sometimes children will demonstrate understanding of a given principle for awhile and then appear to regress before finally reaching the point of automaticity.

Given the list of indicators, we can now illustrate development by examining the writing of Josh and Jenny over the course of the year. In the samples which follow, Jo's writing often accompanies the child's work. In some cases Jo scripted what the conventional text would look like, and in others she responded to the content. For the reader's convenience, all samples are accompanied by conventional renderings of the texts.

**Jenny's Writing**

Five of Jenny's journal entries are arranged chronologically in the following display. Jenny produced the first of these on September 15, just two weeks into the school year. The last of the samples was written on May 10. A sweeping glance across the display makes one of the basic aspects of early development apparent -- Jenny's writing samples show an increasing number of words over time. Equally apparent is an increasing control over handwriting and letter forms.

[INSERT FIGURES 1-5 HERE]
Some characteristics of the very earliest forms of writing -- scribbles and drawing without text -- are not present in these samples. In kindergarten these children had taken part in units on the alphabet and had done some writing. Not surprisingly, then, in Jo's room we found no instances of drawing unaccompanied by text when the children were asked to write, though pictures often accompanied text. Neither were there instances of confused directionality outside of one piece written in September, when a child reached the end of a line and continued writing down and then right to left in serpentine fashion. Only one instance of scribble writing occurred, again in early September, when a student imitated cursive writing in his journal. While these very earliest of characteristics were not noted with any frequency in this study, others have established beyond question that they are typical (Bissex, 1980; Sulzby, 1985; Temple, 1993). Consequently, they are included on the list of indicators.

While some of the early behaviors were not noted, the copying of environmental print was one which was profoundly present in the early months of the school year. Figure 1 shows Jenny copying "mirror" from a classroom label; we cannot tell here whether Jenny yet understands the orthographic principle that print symbols correspond to oral language (Ferreiro, 1990), but Jo's scripting of Jenny's oral language that went with the writing (an example of oral language being well more advanced than written language) shows us Jenny's true semantic intent. This tendency to copy a word with the intent not only of signifying its referent but also of associated ideas and feelings is reminiscent of early oral language in which single-word utterances such as "milk" signify not only the drink but also many other meanings which accompany it: the desire for milk and the demand that a parent bring it, for instance, are as much a meaning for the simple one-word utterance of "milk" as the object itself. (Wells, 1986).
Another aspect of early writing which manifested itself in this study was word awareness. For several months, Jenny represented most words with only one or two letters, leaving no space between them; throughout the fall and winter a multitude of entries from all the children in the class were composed of similar letter strings. Figure 2 is an example, with the phrase "my friend's birthday party" being represented by "MFBP." A vestige of inaccurate word awareness is seen in Figure 3, where "ILU" is used to represent "I love you." As Figures 3 and 4 indicate, Jenny learned more about the discreteness of words in print as the year progressed. Every student in the class went through this same process, demonstrating little or no written word awareness at the beginning of the year but ending it with firm control.

Spelling development over time is also evident in these samples. They show Jenny progressing in ways which have been noted by other researchers (Temple et al, 1993; Weaver, 1988). Her writing is always meaning-centered; over time, spelling begins to catch up with meaning, ever more closely approximating the conventional. Figure 1 is a struggling copy of environmental print, with no knowledge of the alphabetic principle manifested. Through the rest of the samples, though, we see Jenny's spelling progress to include initial and final consonants and medial detail, especially vowels.

We also note an increasing store of sight words which Jenny can spell conventionally without consulting outside sources or sounding out. In addition to the sight words evidenced here ("I," "my," "mom," "me,"), other samples of Jenny's writing included sight words such as "like," "fruits," "grapes," "love," "God," "he," "is," "and," "books," "home," "we," "not," "for" "bees," "in," and "friend." This list indicates that, as with reading, a child's growing bank of writing sight words is composed not only of high frequency words but also of words of high
impact or significance. As noted by other researchers (Clay, 1991; Temple et al, 1993; Weaver, 1988), it is not simply sheer repetition of high frequency words but also manipulation of those words which carry the thrust of significant meanings which results in automatic word recognition.

Other conventionally spelled words in the samples tell us other things about Jenny's development. Jenny's response of "blue" in Figure 3, for instance, was spelled correctly because Jenny knew where to find the word in the classroom; Jo had posted a color-coded poster of color words on the wall. This response also shows us that Jenny understands writing as a real communicative act; Jo did not verbally ask Jenny to respond to her question and came upon the response only later in the month when she collected the journals for review.

A more complex example of Jenny's "living off the land" (Graves, 1983), occurred in April, when she independently consulted first a bulletin board on the topic of safety which included the word "poison" and then a Weekly Reader which included the phrase "boys and girls" in order to produce "Poison is not good for little girls and boys." This shows Jenny becoming comfortable with the linguistic landscape in which she was functioning and able to use it as a tool to express her meanings. In so doing, she was expanding both her repertoire of writing strategies and her writing vocabulary. A final point to be made here is that writing is contextually bound, especially the writing of young children. Unless one was there to witness Jenny's entire writing event, one's conclusions about her writing and the hypotheses she used in creating it could only be conjectural.

Though her grasp of phoneme/grapheme correspondence and bank of sight words grew throughout the year, one aspect of invented spelling only rarely made it into Jenny's writing. The influence of conventional non-phonetic structures appears only in Figure 3 (the digraph /sh/ in
"shoes") and Figure 4 (the "-ing" suffix in "riding"). As will be demonstrated in Josh's writing, other children experimented more freely with conventional structures. Examples of conventional non-phonetic structures with which some students experimented included the consonant digraph /ck/ in "prck" ("park"), vowel digraphs such as /oo/ in "aroo" ("arrow") and /ae/ in "aegs" ("eggs"), and the digraph /ch/ in "techer" (teacher).

As Jenny became increasingly comfortable with form, she was able to express more complex meanings using more complex structures. Her first entries were typically single sentences which were grammatically simple. Figure 2 is an example. Note here that she does not include the auxiliary "am" or the "ing" suffix in "going." These more complex forms were simply not attended to, though a major semantic element -- the verb "go" -- is represented. This again is reminiscent of oral language. The major syntactic and semantic elements tend to appear first, while the more obscure aspects such as affixes, irregular forms, and tense indicators come later. One need only imagine a three-year old saying "I going" to grasp this point.

The recursive nature of development is illustrated by a comparison of Figures 2 through 4. Early in the year, when she was satisfied with copying environmental print and using a one-letter-per-word strategy, the semantic and syntactic complexity of Jenny's writing tended to echo her oral language. Figure 2 illustrates this, though it is technically a simple sentence consisting of one independent clause, the oral utterance it represents is somewhat sophisticated, including a complex verb phrase as well as a prepositional phrase composed of adjectives and object. As Jenny became more occupied with a fuller and more conventional representation of a word's spelling, the complexity of her discourse decreased, as shown in Figure 3. For several weeks, Jenny was satisfied with single sentence entries composed of the stems "I love \_\_\_\_\_\_\_\_," or "I
like ______" and a word for the blanks. During this time, she focused on her spelling of "love," "like," and whatever words she chose to fit into the blank. Gradually, these words took on more detail. As she grew comfortable with her growing store of sight words and representation of multiple phonemes in a word, her syntactic and semantic complexity returned, as shown in Figures 4 and 5.

The use of the past tense "bought" (as opposed to the more immature "buyed") in Figure 4 is evidence of a growing sense of writing syntax. Semantically and syntactically, Figure 5 is noteworthy for its use of the verbal "riding," indicating an ability to conceive of an action as a thing -- grammatically, as a gerund -- as opposed to being limited to using it as a verb. It is not proposed here that the appearance of more complex semantic and syntactic forms such as those mentioned above is completely dependent on the prior development of a certain level of spelling proficiency; rather, the proposal is that there is a tendency for young writers to produce less mature syntactic and semantic structures when their focus is on developing more complex spelling forms.

**Josh's Writing**

In order to demonstrate that Jenny's development was not unique, we now to turn to Josh. Six of his samples are displayed here, again in chronological order.

[INSERT FIGURES 6-11 HERE]

Figure 6 is composed of a random letter string, random in the sense that only the first of the letters ("F") is related to the sound it represents (the /f/ in "family"). The rest of the letters were selected because they are the ones Josh was most comfortable writing, coming as they do
from his own name. The tendency to use letters from one's own name as non-phonetic placeholders for meaning has been documented elsewhere (Ferreiro, 1990).

The second sample is much like Jenny's first sample in its use of environmental print. "Popingo" was a local video rental store, and a picture of its storefront sign was posted on one of the bulletin boards. "Ghost," as one might surmise from the sample's date, was one of many Halloween words which was present in the room. Taken together, the first two samples show Josh operating at pre-phonetic levels, although he sometimes wrote one-letter-per-word entries during the first few weeks as well.

By February (Figure 8), we see that Josh is well into invented spelling, having developed beyond the one-letter-per-word or one-letter-per-syllable stage to include some representation of individual phonemes -- "f," "r," and "d" for "friend" and "J" (the crossed out attempt to sound out "d"), "r," and "v" for "drove." The other words are sight words.

In terms of the syntactic system, "My friend drove the car" is a basic subject + verb + object independent clause, with the possessive pronoun "my" modifying the subject and the article "the" pointing to the object. In terms of semantics, the sentence can be classified as agent + action + object. This is one of the most basic and common semantic/syntactic sentence structures in our language and is mentioned here only because of what it infers about Josh's later development.

Figure 9 shows development across all three sub-systems of language. For spelling, nearly all of the phonemes are represented. The only exception to this is the "l" in "motorcycle," a function of Josh's oral language which, like many young children's, does not yet include the voicing of a final /l/. Based on Josh's oral language, he had represented every sound contained in
the utterance. Also, note that ending punctuation has been added -- assertively so -- to the conventional appearance of print.

Syntactically, development has also occurred in the verb portion of the sentence. While the basic structure of the clause is the same as in the previous sample -- subject + verb + object -- the addition of the auxiliary "might" is significant because of what it means for the semantic system. Josh expresses a more refined temporal relationship between agent and action than he had earlier in the year, that of the conditional or possible carrying out of an action. The first use of such refinements did not occur in Josh's writing until the latter half of March when he included the adverb "almost" in a sample. Until then, his verbs had all been simple and unmodified.

In Figure 10, representation of all phonemes is again present. This is true even of Josh's original statement, which apparently began "A pit bull tore . . . ." He decided to abandon this structure, possibly because the implied following text ("my dog's cheek") demanded more from his writing syntax than he was comfortable with. The point, however, is that in both original and revised forms, all phonemes are represented. We even see him correcting the medial vowel sound in the first "bit" from /e/ to /i/. Again, both word awareness and directionality are present, though ending punctuation has dropped out. Elements of conventional spelling appear, including the /ch/ digraph in "cheek" and the "ss" in "his." While the latter structure is not the conventional spelling for this particular word, it is a structure that Josh has learned from immersion in conventional print.

Syntactically, the sample makes use of the same basic subject + verb + object structure as seen in the previous two. However, the verb is now compound; semantically, the sentence can be represented as agent + action + object + action. Ongoing development may, in time, produce
greater cohesiveness ("A pit bull bit my dog on the cheek."), but the inclusion of a compound verb in a sentence at this point in Josh's writing was definitely an advance. Also, the syntactic use of a prepositional phrase ("on the cheek") in the second clause semantically signifies a spatial relationship between action and object, another sign of growing complexity.

The final sample in this series is semantically and syntactically the most complex and adds the most new elements. Perhaps because of this greater complexity, the spelling is not as complete or conventional as in the previous sample. Josh split "upstairs" into two words; this is understandable, since the word is composed of two discrete semantic units. A second instance involving compound words occurs when Josh decides "paper" and "towels" should be a single word. When to make such adjective/noun pairs single words and when to leave them separate is certainly an issue of higher complexity than the ones Josh had dealt with earlier in the year.

Ongoing experience with print will help him continue to sort out terms such as "upstairs" from ones such as "paper towels."

Representation of phonemes in this sample is less complete than in the previous two samples, with "t" missing from "stairs," a medial vowel from "have," the final syllable from "paper," and the medial vowel from "towels." Ending punctuation is present, but Josh has also added a period after "they," indicating, perhaps, a juncture between syntactic sub-units (subject/verb) of the clause.

Non-phonetic conventional forms which appear in this sample include Josh's characteristic "ss" at the end of "towels" and the final "e" on "soap," which Josh added after he had completed the piece and returned to it for review. The "ss," also present in Figure 10, became a favorite of Josh's after he discovered the conventional spelling of a favorite word, "princess." The "ss"
would go on to appear in many of his entries. The final "e" on "soap" is, of course, incorrect in this instance. However, like the "ss," it is an example of Josh noticing conventional patterns in print and experimenting with them in his own writing. Josh's use of the cvce pattern ("sope"), at least as common as the cvvc pattern (the conventional one in the case of "soap"), illustrates that he is sampling from conventional print and incorporating non-phonetic elements of it into his own writing. His experimenting is based on his observations of print and the generalizations he has made about the way print works. He is becoming a conventional speller.

Josh's attention to the meaning of what he had to say in the last sample and the way he needed to put the words together in order to say it -- the semantics and syntax of the piece -- may have diverted his attention away from the spelling to a certain extent. He begins the piece with the adverb "upstairs," showing a growing sensitivity to the variety of patterns found in written language and how it may depart from oral language; this structure resembles language Josh has heard in stories much more than it does his own speech. The other texts all began with the more common and structurally fundamental subject of the clause. Here, we see him varying that pattern.

The subject of the sentence is the somewhat nebulous "they," indicating a generic and unknown agent -- "Who is responsible for this?" Josh might be wondering. The verb "have" is also important because we see Josh expressing an abstract temporal state of being, an ongoing condition of his world (although Josh probably hopes the condition is not too ongoing), rather than the more concrete actions expressed in other writings. This movement towards the more abstract recalls Piagetian stages of development in which children "de-center" themselves from the world, viewing it in more abstract terms not concretely or explicitly tied to themselves.
The compound complement, "no paper towels and no soap," is another rather sophisticated phrasing. The use of "no" as an adjective is a striking development over its more common use as a simple declarative of refusal. Also, the compound complement is transformed into parallel structure through the double use of this adjective. Semantically and syntactically, "Upstairs, they have no paper towels and no soap" profoundly demonstrates Josh's writing development when compared to earlier samples.

Josh's writing during the spring included still other more complex syntactical, semantic, and pragmatic elements than had appeared earlier. For instance, he wrote on April 12 that the Easter bunny was coming "to give us candy," using an infinitive as an adverb. A rather remarkable entry from April 27 reads "a logtm a go Me AnDmy Bor AnD my FRIFND WiT FiShing AnD he Fall DowN he Fal DowN in the WODr (Conventional text: "A long time ago me and my brother and my friend went fishing and he fall down he fall down in the water."). In this sample, we see the influence of story language ("A long time ago . . ."), a compound subject, a verbal, and a prepositional phrase. In addition, "WODr" is a rather elegant invented spelling for "water," demonstrating complete mastery of phoneme/grapheme relationships. Additionally, Josh shows us a growing complement of sight words and still developing notions of word awareness and alphabetic upper and lower case usage.

Like Jenny, Josh's development is especially striking when one returns to his first two samples, the first composed of a string of random letters with nearly no relationship to the words they are intended to represent, and the second made up of mere one word items copied from environmental print. While spelling is one of the aspects which has undergone undeniable development, so have all other sub-systems.
The Question of Delayed Development

Because this study was undertaken with students who were developmentally delayed, it is legitimate to ask whether the trends and characteristics noted here pertain to more normally developing students. My observations of regular first-grade classrooms indicate that the findings reported here are generalizable. The differences which do exist are ones relating to greater degrees of complexity rather than with any qualitatively different characteristics. Student writing in regular primary classrooms typically contains more conventionally spelled words, more syntactic complexity, greater length, a wider variety of vocabulary, and the rest of the characteristics of growth as listed in this article. Such characteristics are not different from the elements of writing that Jo’s students were working through; there are simply more of them, and they are more complexly rendered. This indicates that all beginning writers are working at the same developmental tasks in similar ways. It is simply the pace of growth which differs. As an example of the greater complexity in the writing of more normally progressing students, one writing sample from Joseph, a first-grader in a regular classroom which made use of a writing workshop approach, is included here.

Throughout Joseph’s kindergarten year, he worked through many of the same writing strategies that the Junior First graders worked on a year further into their education. Joseph’s kindergarten writing journal included numerous examples of random letter strings and, as the year drew to a close, some one-letter-per word entries, usually representing the first consonant sound of significant words. During the first part of first grade, Joseph's writing continued along the same lines of development as those seen in the Junior First graders but, again, at a more advanced stage. His early first grade writings resembled those of Josh and Jenny’s at the end of their year.
Joseph wrote the text which appears below in mid-April, influenced both by the arrival of Easter and the NCAA basketball tournament. He was one of the more fluent readers and writers in his class, but the piece was by no means out of the ordinary for this group. An examination of this sample reveals all of the same characteristics noted for Jenny and Josh but to a relatively higher degree.

[INSERT FIGURE 12 HERE]

Perhaps the most striking difference between Joseph's story and Jenny and Josh's entries is its length. It also includes many examples of complex syntax: multiple instances of compound sentence parts, the use of irregular verb forms such as "won" and "slept," the infinitive "to get," and descriptors, including prepositional phrases such as "at bunny basketball." The semantic elements include a logically sequenced series of related events, a fairly sophisticated vocabulary specific to its topic ("scored," "points"), and a good deal of influence from story language and story grammar. The exclamatory "Oh!" at the end of the first sentence is an example of literary language which would not be heard in normal oral language, and the rather elegant parallel reasoning of more points scored meriting more layers of ice cream adds a texture to the story that goes beyond the simple recounting of events. The surprise ending is also part of the more sophisticated narrative structure.

Spelling in this piece includes the same kind of experimentation with phonetic and non-phonetic conventional structures that was present in Josh and Jenny's writing. Phonetic spelling is evident in efforts such as "evry" for "every," "baskitball" for "basketball," "crem" for "cream," and "mest" for "missed." "Scod" for "scored" is a product of Joseph's immature oral articulation; he was not pronouncing /r/ in most of his words and, thus, for this word he wrote what he heard.
The influence of non-phonetic conventions is evident in the large number of non-phonetic words which are spelled correctly ("once," "ice," "points," "game," etc.) and in his experimentation with the cvce pattern ("wone"); "large" for "layers" and "buney" for "bunny" include elements both of phonetic spelling and experimentation with non-phonetic structures.

The sophisticated use of story language and story grammar displayed in this sample is very different from the rather pedestrian descriptions of immediate past experiences which made up the lion's share of the Junior First writing. Moving away from the simple mapping of oral conversation onto print and toward more literary forms of expression should be viewed as one more developmental step, one which Joseph had reached and the other children were still approaching. It should be noted that Joseph came from a home in which both oral and written language were valued. His parents read to him regularly from his infancy and both demonstrated their own reading and writing to him constantly, encouraging him to become involved with literacy as well. It is not unusual, then, that Joseph should feel comfortable writing in this story genre to a degree not exhibited by Josh and Jenny.

As one compares Joseph's writing to the other samples here, it becomes obvious that all three students were engaged in the same kinds of developmental tasks. Again, the difference lies in the degree of complexity, not in the basic nature of the writing act. Thus, the kinds of indicators discussed in this article would seem to be useful for young children at all levels of development. Another corollary is that students who exhibit a slower pace of development do not necessarily need qualitatively different forms of instruction than other students but simply more time and help. Joseph, Josh, and Jenny all grew as writers in an environment which emphasized
student choice of topic, experimentation with written forms, and consistent significant amounts of
time devoted to writing.

**Conclusion**

This extended analysis of writing development serves as an example of the general trends
noted for all students in the study. The same kind of analysis could have been performed for any
of them. In early writing, language sub-systems tend to develop simultaneously and in an
interactive manner. While spelling is perhaps the most striking area of development, this is due to
its more obvious nature and the focus researchers and teachers have placed on it rather than to
any intrinsic primacy. A fuller examination of early writing reveals development across all
language-sub-systems. The ability to express more complex meanings increases in concert with
increasing syntactic complexity, and these are both accompanied by increasingly more
conventional forms. It is impossible to ascribe to any one of the language sub-systems the status
of being prerequisite to the others, though one may fall in or out of a child's favor with any given
writing event. Writing begins as being less developed than oral language, gradually tends to
match oral language, and then diverges from speech, taking on those forms and purposes specific
to print language. Finally, these principles appear to be true regardless of the developmental level
of the child.

Teachers who gather writing samples over time in order to assess the development of their
students may well profit by considering all of the written language sub-systems, as well as their
counterparts in a child's oral language. Such holistic assessments should help them feel a great
deal of confidence in the validity of their judgments.
References


Jenny likes to look in the mirror.
Jenny sees a pretty face.
Jenny is wearing a beautiful new sweater.

Figure 1: Jenny, Sept. 15
Text: Mirror
Teacher added explanatory text.

I go to MFBP

I'm going to my friend's birthday party

My mom bought me new shoes.
Teacher response: What color are your new shoes?
Jenny's response: blue

Figure 2: Jenny, Sept. 20
Text: I'm going to my friend's birthday party

Figure 3: Jenny, Dec. 18
Text: I love you, Red

Figure 4: Jenny, Feb. 6
Text: My mom bought me new shoes
Teacher response: What color are your new shoes?
Jenny's response: blue
Figure 5: Jenny, May 10
Text: I went bike riding with my cousin. My mom went bike riding.
Teacher’s response included here.

Figure 6: Josh, Sept. 15
Text: My family

Figure 7: Josh, Oct. 25
Text: popingo ghost
Teacher added explanatory text.
Figure 8: Josh, Feb. 22
Text: My friend drove the car

Figure 9: Josh, April 2
Text: I might see the motorcycle.

Figure 10: Josh, April 22
Text: A pit bull bit my dog and bit him on his cheek

Figure 11: Josh, April 24
Text: Upstairs they have no paper towels and no soap.
My bunny likes everything and everybody and ice cream, oh! Once one day at bunny basketball he scored 15 points and won the game so we went to get some ice cream. The next day he scored 20 and won the game, and we went to get two layers of ice cream. The next day he slept in and missed basketball.