Graded Schools and Textbooks: The Deep Structure of American Schools

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During the past two decades the term "restructure" has become a call-to-action verb synonymous with virtually any school reform effort (Shanker, 1990; Tyack, 1990). Despite the visibility and variety of change efforts, and the numbers of schools and classrooms involved, it is difficult to identify reforms that will revitalize teaching and learning on a broad perspective. As Elmore (1990) observed ironically, restructured schools "...have been everywhere and nowhere at the same time. Public schools have had little difficulty deflecting or co-opting the best efforts of school reformers" (p. 4).

The difficulty arises at least in part because the term "restructure" implies that the reform efforts will change the structure of schools. And, at least superficially, they do: a school adapts "cooperative learning groups;" a school system begins to use "site-based management;" an elementary school staff begins to follow the "whole-language" philosophy; a state begins to use grade level "competency tests;" a congress of a nation calls for universal "standards of excellence" for schools.

The breadth of these efforts may, however, mask their shallowness to the extent they fail to affect the "deep structure" of schools: organizational aspects of schools so commonplace they are unquestioned even as they moderate how school administrators think, define the parameters of how teachers teach, and determine which students learn.

The present paper examines one aspect of deep structure: the use of "graded" textbooks to teach reading in elementary schools, and the interaction of this characteristic with reform efforts.

Graded textbooks have been used since shortly after the Civil War. The difficulty of restructuring schools cannot be understood without understanding the consequences of ignoring this deeper structure, this "traditional" structure, that remains in place in schools.

Deep Structure: Graded Textbooks

Prior to the early Nineteenth Century textbooks used for reading instruction were ungraded: a single volume contained material for students just beginning to read as well as advanced readers. The most popular schoolbook in the Eighteenth Century - estimated to have sold three million copies - was *The New England Primer*, published in Boston by Benjamin Harris late in 1690 (Johnson, 1917, p. 71). The level of difficulty of the material from the beginning to the end of the *The New England Primer* increased rapidly. A page listing the upper and lower case letters of the alphabet was followed by two pages of consonant- vowel combinations, which was in turn followed by lists of words which began with one syllable words and ended with a-bo-mi-na-ti-on. These lists of isolated words were followed by a picture alphabet and illustrative picture followed by a two or three line jingle:

> In Adam's fall
> We sinned all.

A section entitled "Lessons for Youth" included passages such as the following:

> Foolishness is bound up in the heart of a child,
> but the rod of correction shall drive it from him.

The Apostles Creed, Lord's Prayer, and other religious writings completed the book (Johnson, 1917, pp. 76-82).

From an Eighteenth Century perspective *The New England Primer* was a complete curriculum for reading: it contained material appropriate for a beginning reader as well as more advanced readers. In that respect *The New England Primer* was similar to the "spellers" which began to appear in the latter decades of the Eighteenth Century, such as those written by Dilworth or Webster (Dexter, 1906, pp. 214-215). Using such books a teacher could teach students with the range of reading abilities found in the typical one-room school in Eighteenth Century America. Older students just learning to read could be drilled on the alphabet; more advanced students could be called to a recitation at the teachers desk to read sentences or short passages. And, when students had mastered the material in *The New England Primer* they were prepared to read the Bible, a standard for literacy in the Eighteenth Century.

Separate books written in a series, with each book intended for a student at a certain level of achievement, began to appear once schools began to sort students into younger and older groups - for example, primary, grammar, and high school - in the early decades of the Nineteenth Century. During that time the nature of textbooks changed:

> . . . there was a marked increase in the number and variety of the schoolbooks, and in these the nature of the child, his inclinations,

> tastes, and desires became more and more dominant factors in the choice and arrangement of the subject-matter. Instead of demanding that the child adjust himself entirely to the course of study, efforts were made to adjust the course of study to the requirements of the child.
>
> (Johnson, 1906, p. 265).

The primary way this was done was through grading the books. "The disposition to adapt the content of school readers to the needs and capacities of children," according to Reeder, "naturally led to a more careful grading of the subject-matter, and very soon to the production of books in the form of series" (Reeder, 1900, p.43).

Lyman Cobb is credited with writing the first graded series of readers in 1830 in the form of three readers (Nietz, 1961, p.68; Carpenter, 1962, p. 75). Cobb found that his first reader was too difficult for the youngest classes in a school. Consequently, a few years later he added a speller to precede the readers: *Cobb's New Spelling Book in Six Parts* (Cobb, 1849). The speller included the alphabet and easy words of one to four syllables, vowels, dipthongs, tripthongs, consonants and consonant combinations, words spelled alike, names of towns, countries, rivers of the United States, proper names in the New Testament, and rules of the English Language. A student would first complete this book, and then proceed to the first Juvenile Reader. Cobb added the following comment in his preface to the speller:

> . . . the Author of this work has completed and published a series of Juvenile Readers, Nos. I, II, and III, to succeed the *Spelling Book*, in which the Reading Lessons are graduated according to the number of syllables in each word, so as to lead the scholar on gradually from words of one syllable, to words of a greater number of syllables, No.I being entirely composed of words of one or two syllables; No. II, words of one, two, and three syllables, and so on.
>
> (Cobb, 1849, p. 16)

Cobb's reading series was radically different that the texts utilized in the previous century. Rather than including a complete curriculum for reading, such as *The New England Primer*, each book in the series contained material written at approximately the same level of difficulty, written for a student of a certain age and level of ability. A student was to complete each book before continuing on to the next in the series. In short, the books were graded.

The Cobb texts changed forever the characteristics of textbooks utilized for reading instruction. "After Cobb, most compilers designed their texts to assist pupils to progress gradually from the primer level to more difficult reading. By 1840 schools practically everywhere were adopting series of readers...." (Carpenter, 1962, p. 76). The most famous of all readers, and the ones that irreversibly fixed the structure of reading texts appeared at about this time. These were the McGuffey Readers.

One of McGuffey's biographers, Henry Vail, claimed that McGuffey gathered a group of children in his home, arranged them in age groups, and tried to determine interests, reading ability, comprehension, etc., in order to know what to put in the separate readers (Westerhoff, 1978, p. 54). In any case, the product of McGuffey's efforts in 1836 was *The Eclectic First Reader for Young Children, Progressive Lessons in Reading and Spelling, Mostly in Easy words of One and Two Syllables*, and *The Eclectic Second Reader; Consisting of Progressive Lessons in Reading and Spelling for the Younger Classes in Schools.* In 1837, the Third and Fourth Readers in the series were published. In 1841, a Fifth Reader was added; in 1851, a Sixth. The final series thus contained six readers.

They were immediately, almost startlingly, successful. By 1838 the staff of Truman and Smith had been expanded to thirty persons, had issued between two and three hundred thousand schoolbooks, and had orders for twenty five thousand more. Power presses were installed to keep up with the demand. By 1841 Truman and Smith were advertising that seven hundred thousand books had been sold. Soon, the output passed one million copies and continued to grow. In 1847, one order, from St. Louis, requested twelve hundred dozen of the Eclectic Series. By 1859 two million copies were published annually. By that time Truman and Smith, known by then as W. B. Smith & Co., occupied three buildings, where it did its own printing and binding. The entire Eclectic series by that time had been electrotyped to ensure accurate reproduction of each page of the series, whose sales continued to expand: in 1865, three million copies a year were sold. Fifteen power presses ran constantly, but stayed three hundred thousand copies behind orders (Sutton, 1961, pp. 180-187). Ultimately, 120,000,000 copies of the readers were to be sold (Cubberly, 1934, p. 294). By 1890, the McGuffey Readers were the basic readers in thirty-seven states.

The material in the McGuffey Readers, as had been the material in the Cobb Readers before them, was graded. In 1881 a revised *Eclectic Primer* was published because of the demand "...for more primary reading matter to be used in the first year of school work..., and the greatest possible care has been taken to insure a gradation suited to the youngest children" (1881, p. iii). Lesson one, on page 7, included the introduction of selected letters, and ended with:

A cat and a rat.
A rat and a cat.

(1881, p.7)

The review for lesson XLV, near the end of the book, included the following paragraph:

All you do, and all you say,
He can see and hear;
When you walk and when you play,
Think the Lord is near.

(1881, p. 60)

In the Second Eclectic Reader a student would read the following in Lesson V:

> The name of James's Scotch terrier is Dodger. He is called Dodger because he jumps about so friskily. He is up on a chair, under the table, behind the door, down cellar, and out in the yard, - all in a minute.
>
> (1879, p. 18)

Lesson LXV of the same reader included the following passage:

> It was recess time at the village school. The bell had rung, and the children had run out into the bright sunshine, wild with laughter and fun.
>
> (1879, p. 144).

Thus, rather than beginning with the simplest material and moving to difficult material in a single book, the separate books in a series contained material approximately at the same level of difficulty. A student was to remain in the single book until it was completed, then move on to the next book, which contained graded material at a higher level of difficulty.

Deep Structure: Graded Schools

During approximately the same decades that McGuffey was writing his readers, schools systems continued to sort students by their ages, beginning the process that became, by the end of the Nineteenth Century, the familiar, for the late Twentieth century ear, "first grade," "second grade," "third grade," etc (White, 1891, p. 10). The McGuffey Readers, as well as other reading series, were written for, and reflected, this new way of structuring schools. That structure involved sorting students in a school by their ages, and teaching the homogeneously grouped students in separate classes. Unlike the ungraded schools in the Eighteenth and early Nineteenth Centuries, a teacher in what became known as a graded school would be faced with a class of students approximately the same age, all of whom would be taught with the text assigned to that class. Thus, a primer, and other readers in a series would not contain selections ranging in level of difficulty from the letters of the alphabet to selections from the Bible, but would include selections approximating the age and presumed level of achievement of students being taught. By the time the McGuffey Readers appeared in the third and fourth decades of the Nineteenth Century, the schools of the country were ready to accept and in fact demand books designed for classes sorted by age.

The market for the McGuffey Readers and reading series from other publishers was the newly graded schools in America. The courses of study used in two cities illustrates how these books were to be used. In 1861 the school officials of Cincinnati published the *Course of Study Pursued and Textbooks Used in the Cincinnati Common Schools* (Cincinnati Board of Education, 1861). According to this publication,

> The classification and course of study shall be equal and uniform throughout the Schools, and for that purpose every District School shall be divided into four grades, to be designated by the letters A, B, C, and D, and the Intermediate schools into two Grades, to be designated by the letters A and B.
>
> (p.91)

The six grades were intended to correspond to the first six years of school attendance. Furthermore, "The grading, course of studies and textbooks prescribed shall be strictly adhered to, and no other studies or text-books shall be introduced" (p. 91). In the case of the youngest students, who would be in Grade D, the texts would be McGuffey's First and Second Readers (p. 93).

A student would remain in a particular grade until the material for the grade had been mastered. To be transferred from grade D to C, for example, a student

> ...shall be able to read fluently lessons of the same grade as are found in McGuffey's First and Second Readers, and spell words that may be selected therefrom; to enunciate accurately and with natural voice all the elementary sounds of the language; to tell the numbers of the pages in their reading books; to copy in script the spelling columns of the First and Second Readers, or write them at dictation, and to combine the nine digits in addition to amounts not less than fifty.
>
> (p. 93).

The school system in Chicago showed similar characteristics. W.H. Wells, the Superintendent of the Chicago Schools, examined the school systems in Boston, New York, Philadelphia, Cincinnati, and St. Louis and adopted, in 1862, *A Graded Course of Instruction for Public Schools* (Wells, 1862). The Chicago Schools were divided into ten grades: six at the Primary level and four at the Grammar. The "tenth grade"

referred to the youngest students just beginning a subject; the "first grade" referred to the most advanced students.

For each grade, detailed directions were printed for the teachers, including textbooks to be used. Students in the "Tenth Grade" were to practice "Reading from blackboard and from charts, with exercises in spelling, both by letters and by sounds." Two or more lessons a day were required (Wells, 1862, p. 32). For the Ninth Grade: "A few simple, easy verses, embodying moral sentiments or useful information, will help to furnish an agreeable variety in the exercises" (Wells, 1862, p. 43). Two sources were suggested for the latter lesson: Sander's *Third Reader*, lesson 50, or Parker and Watson's *Third Reader*, lesson 30. Such directions for teachers fill 106 pages of the course of study, detailing the content at each grade, and suggesting the textbook sources for the content. Furthermore, "...all the pupils of each class attend to the same branches of study at the same time....All the pupils in any one class attend to precisely the same studies and use the same books" (Wells, 1862, p. 7).

For the 1861-1862 school year the Cleveland Public schools adopted the Eclectic Series, and required the *First Reader* for the "Seventh Division: Classes A, B, and C," the *Second Reader* for the "Sixth Division: Classes C and D," and so on up to the "First Division: A and B Classes," for which the *Sixth Reader* in the Eclectic Series was assigned (Public Schools of Cleveland, 1863, pp. 60-62).

The situation was similar in Minneapolis, which began the grading process a bit later than the Eastern cities. For the 1882-1883 school year the following was in place: In the Primary Grades: First Year, *McGuffey's First Reader*; Second Year, *McGuffey's Eclectic Second Reader*; Third Year, *McGuffey's Eclectic Third Reader*, on up through the Eighth Year which used *McGuffey's Revised Sixth Reader* (Minneapolis Board of Education, pp. 78-85).

In the decades immediately after the Civil War a symbiotic relationship between graded textbooks and graded schools developed. Readers, and textbooks in other areas such as mathematics, were written in a series; the different levels of readers were to be used by students who had been placed in grades according to their ages. Individual teachers, faced with a group of students approximately the same age, utilized the text assigned to that grade, requiring completion of that text before moving on to the next.

The latter decades of the Nineteenth Century resolved issues that arose out of the use of graded texts. For example, frequent "reclassifications" gradually gave way, by the turn of the century, to the present-day system of annual promotion. By and large, however, by the end of the Nineteenth Century graded textbooks were used in a way that remains familiar today. Books are written in a series which gradually increase in level of difficulty. The separate books in the series are assigned to a "grade level" containing students homogeneously grouped by age. A teacher assigned to that grade uses the book assigned to that grade as the basis for instruction.

The Twentieth Century

The development of graded texts and their use in elementary schools was largely a phenomenon of the Nineteenth Century, and the changes that have taken place in the Twentieth Century have been refinements of what had become accepted practice by the turn of the century. For example, in 1911 the Department of Superintendence of the National Education Association appointed a Committee On Economy of Time, which was to

> ...investigate the waste in elementary schools and to make definite proposals for eliminating the archaic and least useful materials in the course of study and to propose more economical methods of teaching.
>
> (Wilson, 1915, p. 11)

Subject matter would be eliminated if it was too difficult or not essential for the majority of normal children. The committee could not rely on external measures to make these decisions: few tests existed, for example, to determine whether material was too difficult for children. In the absence of external devices to make their judgments, the committee decided to study what was happening in the schools, and determine through common use what should be done. In the words of the committee,

> ... we are driven to the method of determining minimum essentials on the basis of the best current practices and experimentation which give satisfactory results.
>
> (Wilson, 1915, p. 16).

In short, the committee intended to examine what presently existed in the schools in order to decide what ought to exist. Not surprisingly, the pervasiveness of the graded school structure and grade level textbooks, and their acceptance, was evident throughout the reports of the committee: to determine the vocabulary thought to be necessary in childhood, the vocabulary words in ten primers in common use were examined (37-43); an arithmetic survey of 764 superintendents found that the majority of the superintendents introduced the textbook in the third grade, and recommended that all superintendent's adopt this policy (pp. 124-125). These examples are typical of the reports: readers were analyzed to determine what was being taught to second grade students;

eighth grade history texts were studied to determine what was being taught to students in the eighth grade. The unquestioned acceptance of grade level books confirmed their validity.

There have been few changes in grade level texts since their refinement during the scientific movement early in this century, and that movement built on the McGuffey Readers, and before them the Cobb readers. Some examples from one publishing company is illustrative. Book 1, entitled *More Fun With Our Friends*, published by Scott, Foresman and Company in 1962, (Robinson, Monroe, and Utley, 1962), begins with the following passages:

"Tom said, Mother, where is Susan?
It is time for school.
Dick and I want to go now."
"You boys go on," said Mother.
"Susan and Jane will come soon."

(p.7)

and ends with:

At last Dark Pony came to a stop.
At last he was in sleepy town.
So were the kitten and the puppy.
So were the boy and the girl.
At last all five were in Sleepy Town.

(p. 187)

In 1988 Scott, Foresman published *Focus: Reading for Success* (Allington, et al, 1988). The reader intended for the first grade, *Hop, Skip, and Jump*, includes the following passage
early in the book:

Rosa said, "I'll help you get the puppy out.
Socks will want to come out and play with the mouse.

(p.13)

And, near the end of the book:

Tom and Dad went into the zoo for baby animals.
Tom looked at the animals in zoo for baby animals.

(pp. 136-137)

The examples from the Scott Foresman readers are typical of the reading series' published by many other publishers in the latter decades of the Twentieth Century. Each book in the series contains material at approximately the same level of difficulty its beginning and end. It is the same throughout all the books in the series: each contains material at approximately the same level of difficulty; each separate book contains material that gradually increases in difficulty. That is, they are graded, and designed to be used by teachers with classes homogeneously grouped by age.

Deep Structure and the Teaching of Reading

It is important to note how long schools and teachers in them have relied on grade level texts as the source for what is taught. Using 1875 as a conservative estimate of the development of the modern structure of graded texts and schools, this aspect of schooling has been in place for more than 125 years. Thus, when there is a movement to "get rid of basal readers" the sentiment runs head-on against a "traditional teacher" whose professional forebears were teaching that way soon after the Civil War. From this perspective, when a teacher resists changing the way he or she teaches it is not necessarily idiosyncratic behavior; using the readers is part of the history of teaching, albeit dimly understood by the teacher.

It is also notable that the structure of the texts used to teach reading have changed relatively little in more than a century. Ever since Cobb wrote the first graded series in the 1830's, and certainly since the McGuffey Readers inundated the country in the last half of the Nineteenth Century, the familiar way of teaching is to use one of a graded series of books as the standard for what is taught. As a result, a reasonably competent teacher from an urban school district in 1875 could enter many if not most elementary schools in urban districts in 1994 and feel comfortable with the material. Or, the 1879 edition of the McGuffey Readers could be adopted as the reading series for a district and the teachers would be able to use in comfortably. In fact, the McGuffey Readers continue to be a best seller of the Van Nostrand-Reinhold Publishing Company, the fourth largest publishing company in the world.

Using grade level texts as the basis for the content of reading instruction has affected the way elementary school teachers think about teaching. An elementary school teacher, when he says "I teach second grade," has an image of students of a certain age in mind, but also and more important he means "I teach second grade material." That is, the material included in a "second grade book" and the accompanying material supplied by the book publisher or school district. Unlike a teacher in an Eighteenth Century school, who utilized a book which included beginning as well as advanced material, such as *The New England Primer*, a typical second grade teacher uses a book that has the same level of difficulty of material throughout. The "readability" is the same at the beginning and the end of the book.

Thus, rather than thinking of teaching students at all levels of ability in reading, and having a sense of the total sequence of reading skills from beginning skills to advanced comprehension skills, a teacher thinks horizontally, using as a frame of reference the level of difficulty of the reading book assigned to his or her

grade level. Students whose achievement differs from this standard are a cause for concern in direct proportion to how much they differ. Thus, a student in the fourth grade who can read at the level of material in the first grade book is cause for worry and special help; a first grade student who can read the fifth grade book gets little help but is also a cause for concern.

In short, because of the use of grade level texts, teachers don't teach students how to read, they "teach reading," and that means that they present the material included in the text assigned to their grade, and judge students against this standard.

It is unsettling for a traditional teacher when this standard is threatened. For example, from time to time during the past century, and during the present turmoil about the "whole language" philosophy of teaching reading, there have been movements to do away with basal readers, that is, grade level texts for reading in the elementary schools. These efforts have consistently failed because they could not provide a structure for reading equal to the grade level texts. Without these texts many teachers would not know what to do: they cannot take any student, achievement, and improve the student's achievement level.
In the late Twentieth century that is the job of a "reading specialist." In short, in many classrooms teachers don't teach a child to read, they teach reading. That is, they cover the material in the text assigned to their grade level and "grade" the students on their progress in mastering the pre-determined material.

Reliance on textbooks for the source of what is taught at a specific grade level has reinforced the idea of "teaching to the average student" at specific grade levels. What is expected for the average student, of course, is what is included in the assigned text for a grade level. Without this stability of the grade level text a typical elementary school teacher does not have the diagnostic/ prescriptive skills to take *any* child whose characteristics are unknown and figure out how to teach him to read or to improve his reading skills. As an example, if a child wakes in the middle of the night with a severe pain in his side and goes into the emergency room in any hospital, chances are that the reason for the pain will be diagnosed and remediated. If, however, a child wakes in the middle of the night with a severe reading difficulty and randomly selects an elementary school teacher for help, chances are that the teacher will not have the knowledge to provide appropriate assistance. It seems logical that if the teacher has difficulty doing this with one student there would be comparable difficulty doing it with a group of students.

When graded texts arranged in an ascending order of difficulty are tied to "grade levels," whether in Minneapolis in 1883 or Cleveland in 1994, there is a press for the teacher assigned to that grade to "cover the material:" to get through the material so the student will be "ready" for the next grade level, whose level of difficulty is defined by the book used.

Deep Structure and School Reform

In March, 1994 the Congress of the United States passed an act known as "Goals 2000: Educate America Act." By setting "standards" for schools the act hopes to reform them. In light of that goal, a project entitled "National Assessment of Educational Progress" was mandated by congress (Alexander, 1991). One of the responsibilities of the Governing Board of the project, among others, is "...identifying appropriate achievement goals for each age and grade" (p.5). This goal complements state level efforts to establish "competency" standards for different grades in schools: in Ohio, for example, a student must pass a "Ninth Grade" competency test in order to graduate from high school.

These attempts at reform will interact with the deep structure of schools in predictable ways. In the first place, as the researchers attempt to determine "appropriate achievement goals" they will turn to the existing grade levels, test students in those grades, and through some sort of statistical averaging determine the level that should be expected for all students. In short, what ought to be will be determined from what is.

Once these standards are determined and turned into grade level objectives, textbooks will begin to reflect the objectives, and teachers will begin to stress those objectives in their lessons. This process, of course, rather than reforming schools will simply reinforce teaching to grade level material and teaching to the average student, which gave rise to the difficulty in the first place. Standardization will result, and standardization around grade level textbooks teaching has been the norm for a century. It hasn't worked yet.

Standardization also results from another reform: busing to effect desegregation of schools. Busing assumes that a student can be sent from a school in one area of a city to another area and receive comparable instruction. The deep structure of schools affects busing by creating pressure for all teachers to do comparable things in classrooms. In the Cleveland Public Schools, this pressure resulted in the adoption of the same textbook for all schools in the district. Among the arguments for the adoption was that many students change schools during the year, and if everyone used the same text the transfers would be easier (Rutti, April 25, 1989, 2-B). The inevitable result is that students most in need of materials adjusted to individual differences are

taught with graded materials tuned to the graded system.

A final reform movement has to do with the attempt to replace basal reading teaching with the "whole language" approach to teaching reading. This battle often rages on the level of whether one should utilizing direct teaching of phonics or a teaching method more attuned to holistic or humanistic perspectives (Goodman, 1989). At the present time there is no definitive data to support one or the other approaches. The history of such reforms as whole language, however, suggests that the approach will not survive unscathed, simply because it strikes directly at the deep structure of schools: the use of grade level readers. From that sense the discussions of "phonics" is simply a marker for the use of grade level readers and the systematic and direct teaching of phonics in schools. Indeed, the Ohio Legislature passed, late in 1993, a law mandating the teaching of phonics in kindergarten through grade two.

Perhaps more important is the role of the teacher using the whole language philosophy. Without the structure of a graded book, a teacher is left uncomfortably on his own in making decisions about reading instruction. The whole language "philosophy" does not mandate method in the way teachers have grown used to in the past century or so. Quite likely, within the next decade whole language will be absorbed into the deep structure of schools and become another "teaching strategy," such as the "project method" or "language experience."

Curiously enough, aspects of the present day argument were prevalent a century ago. In the preface to the 1881 edition of McGuffey's *Eclectic Reader*, the author states: "The plan of the book enables the teacher to pursue the Phonic Method, the Word Method, the Alphabet Method, or any combination of these methods" (p. iii). The word method was a way to teach sight words. Perhaps the whole language approach is in the process of being absorbed into traditional graded texts, such as a modern-day McGuffey, and a teacher will soon be instructed to use either a phonics or whole language approach. Both of which, of course, would come from a graded textbook.

Deep Structure and Research

In a recent book (1994) Driscoll summarized curriculum projects designed to implement the theory of Piaget into classrooms. Her summary is a summary of the influence research when confronted with the deep structure. "Because of the breadth and generality of Piagetian guidelines for education," Driscoll writes, "it is difficult to determine just how they should be implemented and evaluated.....It's not easy to convince school boards that established curricula should be altered to test new, experimental ones. At the preschool level, however, curricular goals are not so well defined, and experimental curricula are more readily accepted" (p. 198).

In fact, it is likely that virtually any research efforts that challenge the deep structure will be utilized. The information is there. As an example, Cronbach and Snow (1977) defined the relationship between aptitudes of students and instructional methods. ATI, aptitude treatment interaction, was a promising direction in which to explore ways to provide appropriate instruction for students having varieties of learning characteristics. The authors expected that teachers in schools would enter into a search for variety in teaching methods that could systematically reach educational goals in students with varying characteristics. This line of research, though still important, has not been able to fulfill its promise.

Deep Structure and Curriculum Development

The use of graded texts tied to grade levels has been amenable to curriculum development models throughout this century that have relied on the statement of an objective as the beginning of effective instruction. The most influential model in this century was the "Tyler rationale" explicated by Ralph Tyler in 1950 (Tyler, 1950). Objectives and graded texts are compatible because the objectives are already in place in the graded textbooks; all that is necessary is to make the objectives clear and more or less specific.

Curriculum models that do not begin with objectives appear from time to time but rapidly disappear. Weinstein and Fantini (1970), as one example, defined a curriculum model that began with the concerns of the learners as the point of beginning curriculum development, and only ended with "outcomes." In other words, they stressed an aspect of curriculum development -the needs and concerns of students- that the Tyler rationale addressed in passing. To decide which approach was most related to continuing the development of the deep structure one only has to look in the lesson plan books of classroom teachers, which always begin with objectives, or experience the national movement toward "standards," which are loosely translated as objectives.

Conclusion

The deep structure in the form of graded textbooks tied to grade levels continues to moderate education in the United states in 1994. When this deep structure began to lock into place in the middle of the Nineteenth Century the teaching population was untrained and often

transient. In a situation wherein anyone might teach materials were developed that stabilized schools: grade level texts were adopted and their use was mandated. In the late Twentieth Century, where teachers are trained very well, the need for graded texts has gone away, while the structure has remained.

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