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Discovering print: A process approach to initial reading and writing in West Germany

A new approach to beginning reading and writing has been developed in West Germany. This article describes some of its components.

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In the German speaking countries, there is a long tradition of teaching reading and writing by *Fibeln,* highly structured courses introducing letters, sounds, and words step-by-step. During the 1970s, these primers developed into an elaborate system including a textbook (the *Fibel),* a workbook with numerous exercises (*Arbeitsblätter*), games, etc.

After 2 decades of fierce controversy between the missionaries of the analytical *Ganzheits* 'look-and-say' method and the *synthetische* 'phonics' approach, there has emerged a general tendency for *Methoden-Integration,* a middle course that seems to be a sensible approach.

In recent years, it was noticed, however, that the educational principles behind all three approaches are much more similar than their surface differences suggest: They all assume that adults know best how to teach children to read and write, that all children learn in similar ways (so that we have to find the one best method for them all), that children learn step-by-step in a more or less mechanical way.

From the open education movement, starting very slowly in the early 1970s, a new perspective on learning (rather than teaching) to read and write was proposed that differed more fundamentally from the *Fibel* approaches (whatever their methodological orientation). The main assumptions of the new perspective can be summarized as follows (see Bergk and Meiers, 1985, and Brügelmann, 1986, as examples).

● The learning of children (as well as of adults, of course) is rooted in their personal experience of the world and in the individual concepts they develop in interaction with their personal

world. Learning to read and write, too, has to be seen as a process of cognitive and social development, gradually extending and differentiating one's reasoning about print rather than accumulating isolated skills and pieces of knowledge bit by bit.

● Children's concepts of the function and the technical structure of print develop before they start school. These individual concepts filter everything they encounter in school. Different children learn different things from the same material or activity. Because of this, the child's cognitive patterns are more significant than specific skills he or she has attained (such as letter knowledge, number of sight words, or ability to synthesize words from single letters or sounds).

● First graders differ significantly in their conceptualization of print—up to 3 years in terms of average levels. Thus, in the same class, there are children with the understanding of average 4 to 5-year-old kindergartners sitting beside others who could succeed in second grade (7 year olds). No common scheme can cater to the different needs of these children.

● All learners make mistakes. However insufficient their reading and writing attempts may appear to adults, it is very often possible to detect a logic underlying their errors that reveals an increasing understanding of certain characteristics of print. Thus, the cognitive patterns of children are not "defective" or simply a "minus" compared to the reading and writing patterns of adults. As in the acquisition of oral language, children's patterns are intermediate stages emphasizing specific (newly acquired) aspects of print, often overgeneralized. They are attempts of the child to understand the puzzle of print with the concepts and skills available at that specific level of experience and reasoning and to solve specific reading/writing tasks as economically as possible.

It is this thinking (stimulated or supported by Clay, 1975; Downing, 1979; Ferreiro and Teberosky, 1979; Graves, 1983; Mason, 1981; Temple et al., 1982; and others as well as similar work in West Germany) that has guided our project at the University of Bremen which we call *Kinder auf dem Weg zur Schrift* 'Children's routes to literacy.' Instead of publishing another *Fibel,* we have developed an alternative type of material—a primer for teachers with what we call a map of learning routes rather than a linear teaching course. Our material consists of two books.

Children's Routes to Literacy: A Primer for Teachers and Nonprofessionals (Brügelmann, 1983) summarizes the educational philosophy of the project and provides the background knowledge teachers need:

● To understand the pragmatic uses of written language, the linguistic difficulties of print, the psychic process of reading and writing.

● To become aware of the naive concepts children develop about the social functions and technical structure of print as well as the activities of reading and writing.

● To experience cognitively and emotionally some of the difficulties connected with mastering a new symbol system.

● To evaluate the strengths and weaknesses of different methodological approaches, not for finding the one best pattern, but for enriching and differentiating one's own repertoire.

Thus, *Kinder auf dem Weg zur Schrift* summarizes and illuminates what is known about reading and writing (and the difficulties of becoming literate) by exploring evidence and the theoretical models from disciplines such as linguistics, psychology, neurology, education. These bits and pieces are linked together and evaluated within a framework of practical problems using illustrative examples

Figure 1
Eight areas within which beginning reading experience can be offered to children

	Understanding different types and functions of symbols	
Analysis of oral language and distinction of phonemes	Understanding the structure of print and the technical role of its elements	Using written language in and for different contexts and purposes
Knowledge of letters in different fonts and writings	Grouping of letters and segmentation of words in frequent morphemes, syllables, etc.	Extending and automatic mastery of a personal sight word vocabulary
	Production and comprehension of different types of text	

and the language of lay people for translating research into everyday knowledge.

The basic principle emerging from this analysis is that children are active learners, reconstructing what they experience (including our teaching) within their individual cognitive frameworks. Moreover, children's learning is embedded in their social and emotional experiences. Thus, learning to read and write is dependent on the personal significance of print. Every child attempts to make sense of print by interpreting his/her individual experiences in terms of their individual cognitive and emotional relevance.

How can teachers respond productively to this diversity? Apparently, one cannot reasonably offer one common reading scheme for all children. On the other hand, you need a structure—if not for the children, then for the teachers who are responsible for responding to each individual. They need a framework within which to follow the different routes children take, grouping their individual routes within more frequent patterns as some sort of pragmatic approximation.

This is the key issue of our second book, *Discovering Print — Observation Aids and Methodical Ideas for an* *Open First Grade Curriculum* (Brügelmann, 1984). As with the children, we see our task as helping the teachers to start from where each of them is now. They should use their primer or our material as hypothoses for exploring children's attempts to read and write and for improving their own understanding through systematic experience in their individual classrooms. Formally, this handbook contains four elements:

1. an introduction of the educational principles by commenting anecdotally on early attempts of children to read and write;

2. a "map of eight learning areas" that can guide activities within a loosely but systematically structured framework of important experiences—without forcing a linear sequence of behavioral objectives on teachers and children (these eight areas within which experiences can be offered at different levels appear in Figure 1);

3. a developmental model differentiating very roughly four critical steps in the dimensions of handwriting, spelling, and reading (for convenience, we call these steps of growing understanding "stages" without assuming a clear division or even an instructional order) (see Figure 2);

Figure 2
Four critical steps in the development of handwriting, spelling, and reading

Handwriting	Spelling	Reading
From aimless to directed scribbling	From analogous drawings to arbitrary symbols	From telling stories to mock reading
From scribbling to imitating shapes and experimenting with them	From arbitrary letter combinations to a sound-oriented shorthand	From mock reading to context oriented calling or naming
From single letters to letter rows	From sound skeleton to phonetic spelling	From context guessing to deciphering text
From rows of separate letters to connected movements ("melodies")	From sound analysis to orthographic patterns and finally specific orthographies of individual words	From conscious decoding to automatic decoding and comprehension guided by context and personal experience

4. a repertoire of open activities and materials that are ordered according to the map of eight learning areas (Figure 1), that can be used as observation aids to be interpreted within the developmental model and that are selected, as far as possible, according to the educational principles that follow.

These principles for a guided discovery approach to reading and writing can be summarized as follows.

1. Infants' personal experience with print in everyday life should be respected and used in school activities. They should be encouraged to build on these naive concepts when learning to read and write.

2. Children should understand what and why they learn. They should gradually extend and differentiate their individual concepts of the social and personal functions of print as well as of its technical structure and elements. We should not additively transmit isolated skills and bits of knowledge. Exercises for automatic performance can become effective only as a second step after the acquisition of basic insights.

3. Children should be allowed to experiment actively with print, i.e., to learn from their own reading and writing attempts without being restricted to correct solutions. We should recognize

progression along intermediate stages on their routes to literacy, in spite of mistakes and the way still to go.

4. Children should work as independently as possible and increasingly control their work themselves, even when practicing skills (e.g., through selecting the type and amount of exercise such as a particular game or task).

5. As often as possible, activities should be offered where children can use print and other symbols effectively and for purposes that are significant for them personally.

6. The conditions of learning and specific tasks should be designed so that children can work together and learn from each other. They should learn to accept different approaches to the same problem and to evaluate diverse solutions.

7. Learning together does not necessarily mean doing the same thing. The type of tasks offered should allow for different ways of using print and for using individual strategies of reading and writing.

8. The material should stimulate diverse kinds of activity that activate several senses, and, in particular, involve children in hands-on manipulations of letters, of words, and of equipment for their production. Some

examples of such activities follow.

- Walk down the street and hunt for signs and words, writing them in a notebook.
- Invent symbols and secret codes.
- "Mock reading" by retelling from the book.
- Play Hangman.
- Take notes and write letters.
- Create a "jewel box" for collecting one's own words and exchanging them with other children.
- Create letter art, creating meaningful transformations based on the shapes of letters.
- Create a class newspaper.

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