#### The Assembled Reader

In the 1960s there was a growing interest in developing detailed systems for education. This was in part fueled by research that speculated about components that might be sequenced and mastered sequentially in order for one to learn. These systems drew their rationale from theories of learning (e.g., Gagné, 1965: Bloom, 1968) that featured optimal and/or typical sequences of skill acquisition and assessments designed to measure each step along the way. Reading was not spared this approach, as developmental approaches shifted to those that reconfigured learning as more akin to an assembly line (Guthrie, 1973). This approach did not appear overnight; to the contrary, there was a long tradition of separate, decontextualized skill instruction dating back to at least the 1930s and perhaps to the founding era of the field of educational psychology in the very early years of the Twentieth Century.

### **Skills-Based Curricula**

In the early 1900s, curricula began to focus on the teaching of reading. Primarily, this shift was based upon educators' efforts to dissect reading and writing development into a presumed set of subskills needed to read. These subskills or component skills were expected to be comprehensive in scope, and learning them in sequence was viewed as being both necessary and sufficient for reading development. The skills covered several areas, including reading readiness, decoding, word recognition, comprehension, critical reading; literary understandings; and study skills. In some cases, the number of skills across these areas was in the hundreds (Otto, 1977; Otto & Chester, 1976); when differentiated further—to account for subskills sequenced for mastery—they could exceed 1,000 (see Johnson & Pearson, 1975).

The articulation of many of these skills emanated from studies that identified and measured subcomponents that were shown to correlate (even modestly) with reading achievement (typically measured by oral reading accuracy or reading comprehension performance). Such studies arose from the advent of psychology and its application to reading (see: Hartman & Davis, 2008; Huey, 1908), together with the growth of developmental studies (e.g., Gesell & Ilg, 1949). This work placed a great deal of trust in: 1) the suggestive causality of correlational relationships; 2) the viability of subjective judgments that undergirded their sequencing; and 3) the validity of measures of mastery.

Most skills were expected to be mastered in the order that they were prescribed and applied across texts of increasing difficulty. The difficulty level of a selection was determined by vocabulary and syntactic complexities, or readability formulae based upon these or other features, to suggest an approximate grade level. The expectation was that if students would engage in mastering the component skills and apply them to what they read, they would make steady, almost inevitable progress. Most reading lessons at the elementary consisted of two parts—skill instruction and story reading. Sometimes story reading would precede the skill lessons; at other times, the skills would precede the stories.

The regimentation of this standard approach to curriculum resembled an assembly line (see Guthrie, 1973)—embracing the view that the quality of reading would be assured if the sequenced skills were mastered (Side Comment II.2a.1). Skills were taught separately, then integrated into a lesson plan or into a set of guided steps for reading short selections. These selections were chosen from a compilation of leveled or graded readers. To a large extent, this approach to reading development still exists today; most reading programs adopt an extended list of skills that are sequenced and tied to a set of graded readers.

## Side Comment II.2a.1.

When David was a relatively new assistant professor at the University of Minnesota, he moved his field-based reading course to an elementary school in suburban Minneapolis. They had just adopted an assembly line curriculum system dubbed Wisconsin Design for Reading Skill Development. The curriculum consisted of (a) a set of mastery tests for each of the 50 or so skills at each grade leve and (b) extensive packets of worksheets geared to each skill in the testing system. Students took tests on all the skills in a unit. If they passed all the tests, they went on to the next unit to take another set of pre-tests. If they failed some tests, they received packs of worksheets to allow them to practice the sdills to get ready for a retest. When they passed all the tests at a pre-set level, say 80%, they went on to the next unit to take more tests and practice more skill worksheets. This is what mastery learning looked like in the 1970s. It was done in the name of individualized instruction. The truth is that it was isolated instruction. Today's version of this sort of assembly line learning might well be standards-based instruction.

Many of the elements identified in studies as being correlated to achievement were later found to contribute to improvements in reading achievement, or to have a causal connection to improving reading achievement. Troubling these findings, however, were two noteworthy exceptions: Letter-name knowledge and vocabulary. The former was related to

initial reading achievement, but did not improve reading achievement if taught. The latter was related to reading comprehension, but not in a fashion that was causal.

Other aspects of the skills-focused approach were also questionable. Many of the skills were difficult to isolate as separate skills, and therefore not teachable in a piecemeal, decontextualized, or sequenced fashion. Additionally, many of the comprehension skills identified as needing to be taught were outcomes of reading comprehension rather than prerequisites to comprehension. Perhaps for that reason, they were taught in a fashion that was definitional.

# **Implications for Readers and Teachers**

So, what did this mean for the reader? The reader intended to be manufactured through this approach represented a sum or a set of parts—assembled, in theory, by mastering each skill separately rather than in a fashion that is more nuanced, differentiated, or concurrent. Mastering a set of separate skills was viewed as a prerequisite or equivalent to learning to read. If the measure of reading was indicated by a student's performance on tests (i.e., tests of the subskills), then the student would likely perform well on such test tasks. If the measure of reading was to use the skills together, nimbly, and in a range of passages, however, the student would not have been prepared—unless they learned to do so despite the classroom emphasis upon mastery.

In terms of comprehension, the basis for the curriculum development was built upon some simple-minded notions—hierarchies that were later shown as ill-conceived. Many of the approaches to comprehension relied on set comprehension outcomes, from arbitrarily and ill-fitting sequences of literal to inferential, interpretative to critical, and questions for readers drawn from a preset skill sequence. For example, the concept of main idea and other comprehension outcomes might be defined and tested at the same time as a diet of sequenced questions or purposes for reading were provided. For better or worse, it was as if comprehension, literacy, understanding, and critical reading were merely being tested—rather than being developed via the strategies and models of meaning making that later emerged with constructivism.

In the classroom, reading instruction was largely routinized to include a mix of assigned workbook activities focused on skill development. These exercises occurred in conjunction with guided readings of selections of stories. The guided reading of selections involved a protocol of steps (i.e., preparation for reading the selection, including pre-teaching

key vocabulary and setting purposes, followed by directed reading of segments of the selection, orally or silently) and concluded with a series of questions. Follow-up activities included further questions, discussions, or targeted skill development. At times, quizzes were enlisted to assist (or assess) the mastery of skills (Pearson & Goodin, 2010; Venezky, 1984).

Management of this process by the teacher also included grouping the students in accordance with informal assessments of their reading skills. An informal sampling of a student's reading of selections was enlisted to suggest the appropriate level of graded reader that the student could read and, by extension, the best group within which to place them for directed reading. Students deemed to be reading at the instructional level usually exhibited 90 to 95% oral reading accuracy and 75% comprehension accuracy. To read independently, the student needed to have near perfect oral reading accuracy and comprehension. If the student performed poorly in terms of oral reading and comprehension, the student would likely need to be given a lower graded reader and placed in a lower graded reading group. The spread of reading levels across most classrooms spurred a tendency to group students within each class by ability, with 3 groups being commonplace.

With some exceptions (e.g., problem- or project-based approaches) the same regimen for reading development was used in most elementary schools and across all grade levels. While there were variations in the design elements and specific story selections of different reading programs, the basic protocol or framework remained the same. Variations in the design elements were largely tied to the approach to teaching initial reading skills (i.e., whether the approach involved a synthetic learning of phonemic elements or phonemic awareness was approached analytically, from worlds). These differences were related to much-debated issues around reading to learn—specifically, whether it occurs concurrently with or rather occurs after learning to read.

The assembled reader was a reader who was moved along an assembly line and required to adapt to whatever skills the curriculum dealt him at every stage. The curriculum was never asked to adapt to the student. In her review of two longitudinal studies of early readers, Dolores Durkin (1966) highlighted how curricula had become more focused on the particular reading regimen than on actually learning to read—as if the proxy of the assembly line became not only the process, but also the goal. Challenging the widely accepted yet unfounded belief that out-of-school early reading (prior to school instruction) would result in long term problems, Durkin's review suggested that help with reading at home not only benefitted early readers in the long run but also came in a range of informal styles and approaches (unlike standardized school-based materials). The notion of success in school was

therefore limited, Durkin claimed, to learning how to learn to read, in accordance with each school's approach.

#### References

- Bloom, B. S. (1968). Learning for mastery. Evaluation Comment, 1
- Durkin, D. (1966). *Children who read early: Two longitudinal studies*. New York: Teachers College Press.
- Gagné, R.M. (1965). The conditions of learning. New York: Holt, Rinehart & Winston.
- Gesell, A., & Ilg, F. L. (1949). *Child development: An introduction to the study of human growth*. New York: Harper.
- Hartman, D. K. & Davis, D. H. (2008). Edmund Burke Huey: The formative years of a scholar and field. In K. Youb, V. J. Risko, D. L. Compton, D. K. Dickinson, M. K. Hundley, R. T. Jiménez, K. M. Leander, & D.W. Rowe (Eds.), 57th Yearbook of the National Reading Conference (pp. 41–55). Oak Creek, WI: National Reading Conference.
- Huey, E. B. (1908). Psychology and pedagogy of reading: With a review of the history of reading and writing and of methods, texts, and hygiene in reading. New York: The Macmillan Company.
- Johnson, D. D., & Pearson, P. D. (1975). Skills management systems: A critique. *The Reading Teacher*, 28, 757-764.
- Otto, W. (1977). The Wisconsin design; A reading program for individually guided elementary education. In R. A. Klausmeier, R.A. Rossmiller, & M. Saily (Eds.), Individually guided elementary education: Concepts and practices. New York: Academic.
- Otto, W. R., & Chester, R. D. (1976). Objective-based reading. Reading, MA: Addison-Wesley.
- Pearson, P. D., & Goodin, S. (2010) Silent reading pedagogy: A historical perspective. In E. H. Hiebert & D. R. Reutzel (Eds.), *Revisiting silent reading: New directions for teachers and researchers* (pp. 3–23). Newark, DE: International Reading Association.
- Venezky, R. (1984). The history of reading research. In P. D. Pearson, R. Barr, M. Kamil & P. Mosenthal (Eds.), *Handbook of Reading Research* (pp. 3–38). New York: Longman.