This paper details the development and implementation of a feedback system designed to provide information to various strata of decision makers. Data were collected in each of eight city districts in the following areas of reading achievement: mastery of upper and lower case letters, mastery of phonic skills, level of sight vocabulary and comprehension, and degree of structural analysis knowledge and skills. A form designed to collect mid-year and end-of-year data on reading achievement was used in each of 27 schools. The form consisted of four key categories—decoding, comprehension, study skills, and literature—and included 14 levels of pupil growth in each of the four areas. A section of the form was planned to record the highest level of pupil growth in each of the four categories. The mid-year data were used to assess overall class progress and to report to the parents about their child's reading achievement. End-of-year data were used to evaluate the impact of the program and to provide levels of pupil attainment not normally available at the grade, school, or district levels. (WR)
AN INFORMATION FEEDBACK SYSTEM FOR EDUCATIONAL DECISION MAKERS IN A LARGE CITY READING PROGRAM

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An Information Feedback System For Educational Decision Makers in a Large City Reading Program

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This paper details the development and implementation of a feedback system designed to provide information to various strata of decision makers. Included in this group of decision makers are classroom teachers, the school reading teacher, the principal, district reading specialists, the reading project manager, and the district superintendent. The data provided by the system was planned to be useful for each group.

In 1970 The Philadelphia Board of Education mandated a five year "Right to Read" program with the goal of raising the average reading level of children. In response, each of the eight city districts formed committees and eventually developed district reading programs unique to their needs.

One of the first tasks of researchers assigned to the districts was to get consensus on those facts or bits of information decision makers were concerned about, and those that were measures of growth. It was discovered that the consideration of specific variables, attributes, decision points, or quantifiable measures of achievement were not part of the operational repertoire of these persons.

After much discussion it was agreed that data would be collected in the following areas of reading achievement:

1. mastery of upper and lower case letters of the alphabet
2. level of sight vocabulary and comprehension indicated by reading inventories based on the reading series used
3. phonics skill mastery measured by phonics inventories
4. degree of structural analysis knowledge and skills
There was also the need to have information related to the nature of the program such as:

1. organization of the class, i.e., self-contained, cycled within, or among grades
2. services provided by tutors, aides, reading specialists, etc.
3. materials or program used by each child such as basal reader or programmed text
4. the child's attendance for the year

The first critical question involved data collection. In prior years, tallies of reading levels of children were collected from each school based on the administration of Informal Reading Inventories. Since an individualized reading approach was being urged, a form based on the performance of each child was developed. A machine scored, mark sense form, filled in by teachers, converted to cards, and programmed into a printout was conceived to be the most efficient way to handle data from 20,000 pupils.

Teachers were trained to give the appropriate tests and to fill in the Digitek forms. This first form was distributed to teachers in approximately 15 schools for trial use. The results were disastrous. A very serious problem was the attitude of teachers toward what they considered "more clerical work," filling out the forms. A second problem was the accurate transcription of the student number on to each form. Inaccuracies were found on more than twenty percent of the forms.

These pilot findings were invaluable in the refinement of the form into its second version affectionally called "son of Digitek" by the teachers. We gave it the official title of the R.E.A.D. Form, Reading, Evaluation, Achievement, and Diagnostic Form.
We purchased the new forms as continuous forms (with the perforated edges) so that they could be slugged by computer printers with student information directly from the pupil files and avoid the clerical efforts of teachers and aides at a cost of one cent. Where possible, the individual sub-skills on the first form were grouped into larger categories to reduce the number of marking positions. The form was designed for use three times a year.

This second form was used in each of the 27 elementary schools in the district during year two. It was distributed and collected at mid-year and at the end of the year. Data were formatted onto computer pages from the IBM cards that were produced by the Scanner. Data from each class were printed on two pages. Page 1 consisted of each child's set of scores or measures, page 2 summarized the data for each class and provided summary statistics for each variable. If children in a class were in different reading programs, then a two page report was also generated according to the program utilized for those children.

A list of reading skills based on four key categories, decoding, comprehension, study skills, and literature were compiled into levels of objectives. This compilation was called the Reading Competencies and included 14 levels of pupil growth in each of the four areas. A section of the form was planned to record the highest level of pupil growth in each of the four categories.

After the initial symbol and format shock, most teachers and administrators were able to read the printouts and understand the contents. Principals, reading teachers, and teachers used the second checkpoint information to help them write the revised reading program for the third year. The data allowed these decision makers to set more realistic objectives for mastery of skills.
based on actual pupil achievement. Teachers were able to use the mid-point data to assess their class progress. The forms were also found to be very useful when children were transferred from one class to another, or when parents wanted information regarding their child's reading achievement.

At the end of the year data were used to evaluate the impact of the program and to provide levels of pupil attainment not normally available at the grade, school, or district levels. Teachers were able to assess pupil growth for the year; reading teachers were able to compare classes within grades and school achievement; principals were provided the information they needed as instructional managers. District personnel could compare across grades in comparable schools, clusters, or across all district schools. The District Reading Manager could make plans for teacher education needs, pupil needs, and thrusts for improvement during the next year.

See the report "Systems Design and Programming for a Flexible, Multi-Purpose Feedback System" by Pierson and West for copies of the form, the printout format, and the flow chart of events.
The image contains a page from a test or assessment tool, possibly a basal evaluation and monitoring data sheet. The page includes instructions, tables, and checklists. The instructions are printed at the top and center of the page, while the tables and checklists are arranged in a grid format. The text is in English, and the page appears to be part of a reading series or inventory.
The expectation that teachers could or would keep records of each child's sub-skill attainment was found to be unreasonable.

### Decoding

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<th>3</th>
<th>4</th>
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### Comprehension

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<td>Skills</td>
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### Study Skills

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### Literature

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<td>Skills</td>
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### Special Conditions

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<th>Speech</th>
<th>Attendance</th>
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<th>Eye and Hand Coordination</th>
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