Individually Prescribed Instruction (IPI), like other reading programs, does work, but only for certain teachers and with certain youngsters. On the positive side, IPI sets up a series of steps that allow the teacher to know where the child is and in what direction he is going. It enables the teacher to know his subject matter well, and enables the child to move at his own rate. However, there are negative aspects of the program. (1) There is the possibility of rote prescription on the part of the teacher. (2) The individual rate of learning, as emphasized by IPI, is only one of the factors that account for learning differences. (Some others include motivation, cultural environment, genetic endowment.) (3) Although IPI places the emphasis on student self-learning, effective learning seems to be a result of effective teaching. A good teacher can make almost any reading program work in the classroom, as long as he teaches diagnostically and as long as he believes in his material and knows it well. References are included. (AI)
Topic of Meeting: INDIVIDUALLY PRESCRIBED INSTRUCTION--WILL IT WORK?

Speaker's Topic: Individually Prescribed Instruction:
Evaluation, Conclusions and Implications

Time: 10:30--12:00 noon Date: Friday, April 23, 1971

In the April 1971 issue of The Elementary School Journal, Ernest Hilton writes that the decade just ended was clearly a period of sweeping curriculum review and innovation. "It was inevitably a time of considerable confusion about ends and means in education." He is compelled to add that while the decade has undoubtedly ended,
the educational field appears to be still in a bubbling state of lively ferment and change. For the conscientious teacher and administrator the fight to retread or, at least, to keep up with what's new requires so much time and effort over and beyond the regular working day that the evaluation of any innovation's effectiveness must too frequently become the sole domain of the project's researchers. Furthermore, it is often naively assumed that all such research is definitive in its findings, total in its application, and scientifically unbiased. If for reading teachers one of the important points to be made with students is the fact that what's printed isn't automatically and by virtue of its appearance, necessarily true, then for both teacher and administrator it is equally urgent that the limitations of research be clearly understood.

In an article meant to amuse, White and Duker (2) list eight fictitious models of errors of design or analysis in research that should cause readers a certain amount of intellectual trepidation especially those in positions requiring them to make decisions regarding curriculum change.

These comments are not intended to indicate inflexible reservations regarding IPL or other innovations in the area of reading instruction. It is the writer's personal opinion that:

1. Many varied approaches need to be tried in teaching youngsters to read since no one method, to date, has solved all problems.
2. Teachers who understand the basic structure of the subject or the skill they teach do a more effective job of instruction.

3. Diagnostic teaching of reading by the regular classroom teacher is the number one priority in teaching all youngsters to read. It has not been the general practice because of lack of teacher know-how.

IPI is an individualized approach that has a built-in requirement for diagnostic teaching and which sequentially outlines steps in reading instruction. Who would question that teachers who begin by finding out where a pupil is in terms of his reading skill development and then base instruction on moving from this point do teaching that is more purposeful and, consequently, more effective in terms of pupil accomplishment? It might be facetiously commented that too often in the past for some schools the real answer to where the pupil is, has been the number of his instructional section or the room number of his classroom door. This is not quite so superficial a statement as it might appear on first examination since some teachers have established set curricula that they teach between September opening and June closing year in and year out without significant change. A youngster in Miss X's second grade, therefore, might have his WHERE HE STARTS to WHERE HE GOES designated as accurately by Miss X's name or classroom door number as by any other more scientific means.

If you are inclined to suspect from the example used that only elementary levels could be so stratified or teacher-limited, the erroneous impression can be corrected by recalling some secondary teachers one has
met along the way whose particular courses have utilized the same
tests and outside assignments for several years without any more
alternations than Miss X's lesson plans reveal.

There is no doubt that we are and have been in need of a more
searching and informed look at what we are doing in educating children--
in teaching them to read particularly--because despite all our efforts,
the fact that we are not so successful as we NEED to be, is a crushing,
indisputable fact. From the teacher in the suburban school who strug-
gles each year with a small but constant number of puzzling non and re-
tarded readers to the urban areas where more than half a school's total
population has reading scores below national norms and scores that grow
progressively worse as the years of schooling increase, the case is
graphically made that remedies are desperately needed if the decade of
the 70's is to fulfill its soaring promise that all may read.

From the classroom teacher faced with the problem there has come
over the years one persistent request for practical help. Now when
teachers use the word practical they generally mean something they can
do that is different from what they are doing and which isn't succeed-
ing, and some materials that they can use that are different from the
materials they are using and which are not succeeding. One might go
on to say that a teacher's evaluation of how practical the offered
solution is can only be described as thoroughly pragmatic -- did it
work within a day or two? Time seems to lie at the heart of the
teacher's educational frustration. Where a clinician may visualize a
therapy relationship that runs over a number of years, the average
teacher assumes that he must improve the pupil's learning behavior within a ten-month span and in a group situation. Beset as he is by parent pressure, pupil need, and harried by the swift passage of time, is it any wonder that the teacher fairly often develops what might be referred to as the "Greyhound Complex"...i.e., "Let someone else devise the changes you think are needed and leave the teaching to us."

The division has serious consequences in terms of how the teacher perceives his role and how he acts it. It has significant results also in whether he can or will accept changes in his teaching behavior and what kind of innovation he can implement.

Interestingly enough very few of the proposed innovations in curriculum material and method come from the front line troops of teaching practitioners. They may well be what they claim--the experts in education--but they work most often in implementing the ideas and changes they have received from somewhere or someone else. This is not necessarily a bad state of affairs. One does not expect the construction crew, for example, to design the bridge, but simply to put someone else's planning expertise into concrete form. And excellent as the engineering theory may be, it is the workmanship of the crew that will determine whether the bridge stands for years or collapses under stress.

This is a more realistic, although perhaps for many a deflating view of the teacher's role in the whole area of curriculum building. It can be observed in actual practice in numerous classrooms where the designers of the basal reader teach the class through a teacher medium. One of the virtues of the IPI's reading program is that it sets up a series of sequential reading instructional objectives that hopefully should give the teacher an understanding of the structure of the reading process.
and thereby free him to utilize any materials to teach skills as he sees the pupil has need of them. These steps themselves can, however, become limiting in that a teacher using them methodically teaches the IPI reading program which probably took its sequence originally from the general order in which a particular basal has set up instruction. (The reading materials most heavily used in the Oakleaf School when this speaker observed were the Sullivan Programmed Materials.) To this observer the most fruitful outcome of having teachers learn to chart their teaching in terms of sequential behavioral objectives is that they would become the masters of the materials provided, choosing and selecting what is needed and ordering or devising additional ones as they find they suit their instructional program. This is what can happen when the process of teaching a child to read is understood by the teacher, assimilated or integrated into his own conceptual schema so that he is able to accommodate—to improvise and to build new ways of helping a youngster over a difficult spot.

One has no doubt that the developers of the IPI model -- the Learning Research and Development Center of the University of Pittsburgh -- strive for the improvement of teaching procedures and consider this a major necessity for the success of their program. The 1967 statement on teacher training in IPI indicated three phases were needed: Pre-service, Retraining, and Continuous Training. One might almost infer that teachers can be slow learners in the area of individualization of instruction!
Unless one is a hopeless optimist in educational matters, he does not expect any single innovation to be a panacea. This has become the stock disclaimer—a sort of familiar hedging on the bright promises, but its note of caution is often rendered superfluous after the statistics of the research done show "significant gains" accomplished by the E group. The supporting evidence available to this writer from Dr. DeRenzis' paper leaves some unanswered questions. Although mean grade equivalent scores from experimental and control classes grades three through six in rural-suburban and a similar pattern of urban schools and scores are presented, there is no way of knowing what variables are operating that may affect the scores as much as the IPI. On using mean scores the writer has found the same differences of two to four months appearing in vocabulary and comprehension scores between schools using the same basal reader approach. One reading test administered in May 1970 gave a slight advantage in comprehension to the third grades of one school; a different reading test administered to the same groups in October 1970 moved one of the other schools into first place in comprehension by a three month margin. On the face of the limited statistical evidence here presented, this reader would find it difficult to assume that IPI would necessarily prove itself a superior way of teaching reading to all youngsters. In fact, Dr. DeRenzis in the section of his paper which is devoted to additional studies states with refreshing candor that some of these studies have shown a significant difference in favor of control groups in terms of achievement data and that these studies do not indicate whether this difference is a result of the IPI system or the materials that are used in the other group. No mention is made of
the possibility of a variation in the quality of teacher each class had. The speaker's experience includes a year when as reading supervisor she had the cooperation of two first grade teachers in teaching their pupils to read by entirely different experimental methods rather than the basal reader. At the end of the year all nine first grades in the town were administered a standardized reading test. While the two experimental classes did well, the highest average and median equivalent grade scores were made by the children taught by the basal in Mrs. Y's class. Mrs. Y taught in the school that was not in the highest quartile socially but ranged second to third from bottom in a town that was primarily lower to middle class on the socio-economic scale. Mrs. Y was - and is - a teacher with imagination and verve. There was never any question but that her teaching was skillfully planned to achieve definite objectives. Most of the materials that she employed were self-created. She taught the whole group when she felt it was a good day to do something together, and she constantly mixed up the groups so that no one ever appeared to have an uneasy feeling that he was a lowly member of the reading out-group today, tomorrow and forever. Some of the days the reading lesson consisted of a series of messages and instructions she printed on the board while the class watched attentively. Comprehension was checked immediately by one's response and behavior. One should not stray too far afield at this point, but the fact remains that if the statistics alone were examined, the difference that Mrs. Y made could easily be overlooked.
The evidence that this speaker would find of most promise for IPI or any innovation would be that it improves the quality of the classroom teacher. One would hope that as the classroom teacher works with the structured IPI reading program he would demonstrate increasingly more accurate diagnostic skills and that his prescriptions would reveal a growing ability to select appropriate alternatives in methods and materials for effective remediation. This appears to be a most needed ingredient in current reading instruction and the theoretical IPI model offers a possible way to make teachers more competent in this respect.

**BASIC ASSUMPTIONS**

In rationalizing the need for IPI and the form it should take as an instructional system, Linwall and Blovin according to Dr. DeRenzis developed the model on the basis of eight assumptions. While this speaker has no reservations regarding the need for new and creative changes in instructing youngsters, she does admit to having questions about some of these assumptions.

For example--there can be no quarrel with the first statement that one obvious way in which pupils differ is the amount of time and practice that it takes each to master given instructional objectives. The teaching point to be made, however, is that an obvious difference may not be a highly significant one. It is the reason for this difference that is important since diagnostic teaching whether it be in reading or any other area must concern itself with this aspect not provide remedies...
solely in terms of time and quantity of practice afforded. If I am not equipped with wings, it is highly probable that with all the time and practice in the world I will not fly like a bird. Nor will staying in bed and drinking plenty of fluids necessarily be best for what ails me if my appendix is ruptured. The prognosis for recovery might be a more optimistic one with a different remedy—one that took rational cognizance of what was the specific cause of my physical malfunctioning. (The listener must forgive the lapse into a medical analogy, but with Individually Prescribed Instruction, diagnosis, prescription writing, reading disabilities, etc., one is apt to develop a certain mind-set.)

The second assumption reiterates the same idea of providing for individual differences by permitting a student to proceed at his own pace and with the amount of practice that he needs. . . . The truth is that rate of learning seems to be only one of many factors that teachers have noted over the years as learning differences. Other include variations in motivation, genetic endowment, cultural environment, learning styles, preferences for subject areas and interests, reactions to others, and sensitivity levels. One must continue to hope that teachers will be aware or made aware that a flexible rate of progress and continued practice are not the sole answers to improved reading ability. It is, also, important that teachers of reading do not get so caught up with the idea of practice on each small step for mastery that the broader goals of reading instruction are completely lost for both pupil and instructor. The writer is not sure that the best way to teach a child
to master addition, subtraction and the facts of science is necessarily the best way to teach him to read.

The third assumption is that if a school has the proper types of study materials available, elementary children working in a tutorial environment which emphasizes self-learning can achieve with a minimum amount of direct teacher instruction. The adjective proper is, of course, the key term in this assumption, but it is a general word. Without explicit statements to indicate proper to what and by what criteria so evaluated, it becomes a catch-all label -- loose enough to make the assumption difficult to disprove. One assumes, moreover, that the teacher will be actively involved in diagnosing the individual pupil's needs so as to prescribe accurately for him. Such assessing of each child's performance and planning material and activities for his developmental progress strikes this writer as the finest kind of "direct instruction" by the teacher, and she questions the point of view that seemingly defines this term more narrowly. One of the real concerns felt in two personal observations of schools where the IPI program was in effect was the fact that prescriptions had or might become routine in terms of "having a problem at this point, Johnny? Your next assignment then is pages 62, 65-69 of the B Level - Word Attack Skills -." In one school an aide marked the completed papers and put ones with a specified number of errors at right angles to the rest of the pack. The teacher, saved this clerical chore, was then able to look only at the papers of those who had made too many errors on
certain items and to list practice items that were now required. While agreeing that it is wasteful for the teacher to spend his time on mechanical routines that can be assigned to others, the speaker wonders how often the writing of a prescription may or has become for some teachers an equally mechanical response. Bolvin (1) in *Evaluating Teacher Functions*, Feb., 1967, a review of teachers' math prescriptions as to length and type, noted:

1. Prescription practices seemed to be limited by the curriculum materials and student information readily available to the teacher.

2. Certain teachers tend to develop a few set patterns of prescription writing which fail to take actual pupil performance into account.

One is inclined to infer that educational technology can be only as effective as the teacher's skill in employing it despite the emphasis IPI places on pupil self-learning.

The problem of teaching children to read remains of paramount concern in education. While many worthwhile advancements have been made in both the methods and materials of reading instruction, there is still need for new theories and further experimentation. Proposed innovative approaches should be given careful study and skilled professional implementation rather than rejected out of hand, hailed as the ultimate answer, or mis-applied. On the basis of experience to date, however, it should be clear that no one innovation or method can meet the needs of all pupils and should not, therefore, be adopted as the sole
curriculum or instructional method.

The question then of whether or not IPI will work becomes a less pressing one -- more academic than demanding -- for the answer must be "Yes - it will work for certain teachers and with certain youngsters and as one method, used judiciously but not exclusively."
References


2. White, Mary Alice and Jan Duker.