A decision to change Indiana teacher certification requirements to include 6 semester hours of preparation in teaching reading produced a need for increased reading courses in all of the state's teacher education programs. This conference paper reports the means used to develop such a program. Initially all 23 Indiana colleges with teacher education programs were to take part, but gradually the project centered around Indiana University and Ball State University reading and instructional development faculties. It was hoped that planners of the program could view the task from the points of view of the learner's needs and the teacher's task in directing learning. Six design teams were established to consider learner characteristics, overview of the program, behavioral objectives, word study, comprehension, and approaches to instruction. Although the project did not follow exactly the original plans, it will produce a program by the fall semester, 1971. (MS)
The Indiana Plan for Reformulating
The Education of Reading Teachers

Leo Fay
Indiana University

September's dreams are not always April's realities. When Don Cleland called in September asking me to present this paper the planning and aspirations for the year ahead appeared clear enough. Indiana had accomplished a major goal in certification requirements and now the task of developing a statewide program to reformulate the education of reading teachers was, indeed, awesome, a bit cloud nineish, but it all appeared possible. It is now April. Much has been accomplished but the reality is not as rosy as the expectations. Effecting change is, it appears, a matter of successfully effecting compromises when possible and of changing course when not. This paper is in effect a case history of program development.

The immediate concern for Indiana colleges and universities to reformulate their teacher education programs in reading stemmed from a 1970 decision of the State Licensing Commission that all elementary teachers certified in the state after September 1, 1972 would be required to have 6 semester hours of preparation in the teaching of reading. No institution in the state offered such a program. Most typical was a language arts course of 4 to 6 hours. Consequently all institutions were faced with program development and staff additions at a time when all were faced with financial problems.
Interestingly enough the reports of the IRA Professional Standards and Ethics Committee have served as a model for teacher certification in Indiana for the last several years. The Indiana Reading Council and the local councils have provided leadership in supporting certification of reading teachers and reading specialists. Colleges and universities also generally supported the certification of reading specialists. The IRA minimum standards for preparation in reading for all classroom teachers, however, was a different matter. Change in program to meet these standards was strongly resisted by college faculties with the result that change was finally demanded by school administrators who complained bitterly that the colleges and universities were not adequately preparing teachers to teach reading. The state commission, sensitive to the demands of the schools and with minimum reaction from the colleges and universities, passed the new six hour requirement based upon the IRA standard.

On the surface this seemed to be a reasonable move. However, when the logistics of this requirement were spelled out for an entire state the realities to be faced proved to be immensely complicated. For example, staff additions to meet this requirement on the Bloomington Campus of Indiana University cost out at $96,000 annually and for the entire University at $135,000. The estimated annual staff cost for all institutions in the state to meet the requirement was $340,000. The addition of instructional materials, library, and other support would add significantly to this sum.
The problem was clear enough and all institutions faced it in common. Time was short, resources were limited and the situation was indeed serious particularly for the smaller, private institutions. Faced with these realities, various institutions brought the problem to the agenda of the Indiana Association of Colleges of Teacher Education (IACTE). IACTE is an association of 23 Indiana colleges with teacher education programs affiliated with AACTE. Meeting during the summer of 1970 the executive committee of IACTE developed a plan for the Association to sponsor a reading project whereby the member institutions would cooperatively develop a six hour block of work to meet the certification requirement. This course was to be developed on a modular basis, was to be largely self-instructional, and was to be exportable. The Institute for Instructional Development and the Reading faculty, both of Indiana University, were asked to serve as the development agents. Enthusiasm was at a high pitch during the summer because of the possibility of developing a useful product by combining resources from the member institutions and also because of the possibilities of developing a model for inter-institutional cooperation.

This in short was September's dream. Development teams were established, work was undertaken, and progress has been made which will be described in detail shortly. Unfortunately the cold reality of April has proved the goal of statewide inter-institutional involvement for this project at least to be an impossible dream. Attempts were made periodically from September through December.
to obtain institutional support commitments in dollars or in kind. Three institutions finally made hard commitments and only one, Ball State University, is working directly with Indiana University in the development of the instructional program. In retrospect, this may be a fortunate development for the logistical problems of involving all institutions in the development even at a level of keeping communication lines open were probably beyond our resources—both human and financial.

The statewide plan is thus finished. However, the product goal of a modular designed, largely self-instructional, multi media, performance based, exportable program remains. The program goal currently consists of two parts. The 6 semester hour component concerned with the developmental and corrective reading requirement is scheduled for field testing this fall semester. It will consist of 11 modules which may be used in toto, or as user institutions see fit. After use the program will be revised and prepared for a second test run. Concurrently for the second run the program will be expanded to 9 hours to provide an integrated language arts and reading program to include approximately one third of the time in simulated experience and one third in direct experience with children. In addition, special interest and need units will be developed in such areas as: Teaching the dialectically different child, motivation in reading and the language arts; training and using of paraprofessionals. The actual topics for these modules have not been finally determined. The entire program will be recycled twice prior to the development of other than prototype materials.
The Development Procedure

Two groups of specialists are working on the project. One group consists of reading and language arts faculty and the other of faculty and doctoral fellows in the Institute for Instructional Systems Technology. A total of 22 people have been involved. The Institute provided its staff and facilities as part of a grant for training developers of instructional programs for colleges and universities. The reading project, as it is currently labeled, provided an opportunity for the Institute to apply its model for instructional program development and it provided the reading and language arts faculty an opportunity to approach instructional development in a more systematic way than would otherwise be possible.

Commitments were made by both parties and the inevitable meetings started.

During the summer the reading faculty discussed such matters as what is reading, what are society's needs in regard to literacy, what are the characteristics of effective classroom instruction. These discussions provided a forum for understanding better one another's point of view prior to actual program development. Also during the summer the Institute developed a task analysis outline which was revised in discussion with the reading faculty. The revised analysis follows:

Task Analysis - Reading Project

Major objective: Given a class of elementary children, design instruction for each one which will maximize his development of reading skill and positive affect toward reading.
How does a teacher:

Sub-objectives:

1. Determine learner characteristics and societal goals.
2. Derive from those characteristics and goals a set of objectives for each learner.
3. Select or design instrumentation for both formal and informal evaluation of cognitive and affective outcomes and processes.
4. Search and evaluate potential resources to find those with good "match" to the learner's needs.
5. Adapt resources which show fairly close match; if no suitable match is found, prepare new resources.
6. Devise strategy for use of each set of resources selected.
7. Organize students and facilities for instruction.
8. Implement resources and strategies.
10. Revise as indicated.

This then was an analysis of the teacher's task in teaching children to read. The task for the development teams was to prepare teachers to do these things. The second step toward this goal was to establish four work teams to:

I. Analyze the characteristics of teacher trainees at Indiana colleges.

II. Analyze sub-objectives 1-5 in terms of what was involved in training teachers to meet each goal.
III. Analyze the sub-objectives 6-10 to the same end.

IV. Analyze evaluation needs and strategies.

The emphasis at this stage was to develop as clear a picture as possible of the students who would be the consumers of whatever program we developed and then to analyze the tasks they would face as classroom teachers of reading. Those again were reasonable tasks but one, which proved to be more demanding than expected. In regard to learner analysis no institution had readily available, organized information about its students -- their backgrounds, their professional aspirations, commonality of professional preparations, placement. The learner analysis team also administered the ETS Reading Specialist test to a random sample of University juniors to determine the extent of their background knowledge in reading instruction, if any, prior to instruction.

Task Analysis Teams II and III also found that their activities approaching the task from the perspective of the learner and the teacher was quite divergent from the organization of the standard texts in the field and from the typical organization for reading methods classes that are based largely upon these texts. The typical structure is based upon an analysis of the reading process -- usually as a system of skills. Some attention is given to organization and instructional matters but determining learner characteristics and needs, materials and strategy analysis and evaluation are relatively neglected. The work of these four teams was completed and presented to the total faculty shortly before the Christmas holidays.
Practicalities called for a review at this point. Fall 1971 was the target date for introduction of the new program. The Bloomington Campus of Indiana University alone anticipates an annual enrollment of 550 students in the new program and the other campuses and universities are likewise faced with the necessity of providing instruction for the new requirement. It was obviously prudent at this point to order development of the instructional packages in the probable sequence of their use as production obviously would have to extend into the 1971-72 academic year. With this in mind six design teams and a developmental testing team were established. Each design team's mission was to translate the work previously done into actual instructional materials and strategies. The developmental testing team is to have evaluation instruments ready for developmental testing when each unit has been planned and produced by the design teams. Incidentally six design teams were established as a function of the number of people available and not because of the number of units to be developed. All teams will recycle to a new unit at least once. The six design teams are:

I. Learner characteristics

II. Overview unit - the total program will continue over three semesters and hence the need to present students with a means of understanding the total program scope. The scope will include units that provide for applications as part of the student teaching experience.

III. Writing behavioral objectives
IV Basic reading concepts - word study
V Basic reading concepts - comprehension
VI Approaches to reading instruction

Each design team consists of two reading-language arts faculty members and one or two instructional systems technology specialists. The faculty are responsible for each unit's objectives and content outline and the IST specialists for planning the most effective strategies for meeting the goals. In addition media development specialists are available to assist in the actual development of the instructional packages -- printed matter, programmed material, radio or video tapes, film, filmsstrips. The time chart calls for a beginning production of these materials upon returning from this conference.

Implications, Middle-Sight, and Hindsight

1. The approach used in the Indiana reading project is causing a departure from our previous practice. From an approach based primarily upon a subject matter orientation we are now thinking first of the learner and the teacher's task in directing learning.

2. This shift in emphasis could conceivably serve as a model for the total preparation of elementary teachers. Conceivably the redundancies that students complain of could be significantly reduced with the teaching-learning situation as the basis for teacher education rather than the subject areas.
3. The search for self-instructional approaches using the most effective media available should result in more effective use of student and faculty time and talents.

4. The change to new approaches - particularly in view of the economic realities facing higher education - needs to include studies of cost effectiveness. Cost analysis studies are part of this project and a favorable cost effectiveness factor is projected to begin with the 1973-74 academic year.

5. Laboratory and student teaching experiences of quite a different nature are anticipated.

6. Instructional development of the kind represented in this project is demanding of time far beyond that traditionally spent in course development. A minimum of 60 hours of development time will be spent for each contact hour of actual instruction. This does not include actual material development.

7. It appears at this point that the development activity would have proceeded more smoothly if we had freed a development team of 2 or 3 faculty to work with ITS counterparts than to have involved everyone on a part time basis.

By September a new set of realities will exist and by then we will undoubtedly add to the list of implications and hindsight. But until then this is the picture of April's realities.