A Cooperative Venture in the Improvement of Teacher Education.

In describing parts of a Higher Education Act Title III "Cooperative Project for Strengthening of Developing Institutions," I wish to emphasize the development of organic cooperation among the institutions. Not only the three small state colleges, but also the developed institution (West Virginia University) has profited from the project. Vehicles which have promoted true cooperative involvement have been (1) summer writing groups (to design instructional packages) composed of institutional representatives with the ability to cooperate and with enough power to make commitments; and (2) written commitments by each institution's full-time program coordinator to such responsibilities as the development of specific instructional modules and the field testing of others. The joint production and sharing of video tape recordings and techniques was a successful entry point to building organic cooperation. Future sharing of major purchases and services will include a project using the tele-lecture system, the wire-blackboard device, and computer-assisted instruction. Data, after two years, from student tests and from laboratory and programmed instruction experiments are promising. Comparison of old and new syllabuses indicate that instructors are attending better to behavioral objectives, evaluation procedures, sequence, and scope, and are building in procedures for active student involvement and corrective feedback. The project has been the organizing center for constructive change. (JS)
A COOPERATIVE VENTURE IN THE IMPROVEMENT OF

TEACHER EDUCATION

Harry D. Scott

Speech presented at the North Central Association meeting,
February 1969, Chicago, Illinois
A COOPERATIVE VENTURE IN THE IMPROVEMENT OF TEACHER EDUCATION

I. "Cooperation" Defined.

In addressing myself to the topic which has been given me, "A Cooperative Venture in the Improvement of Teacher Education," I will describe some of the work done in a project funded under Title III of the Higher Education Act, COOPERATIVE PROJECTS FOR STRENGTHENING OF DEVELOPING INSTITUTIONS. This inter-institutional cooperative "adventure" is the only one of our college's cooperative projects that I will discuss today. We also have, as you probably do, cooperative ventures with public school systems, with poverty groups, and with other agencies, but I will not speak of those today, and I hope you are not disappointed. I see this as a case example for us and wonder how other cases could be made known to us. Maybe NCA has a job here.

In this cooperative adventure in the improvement of teacher education I want to emphasize only two of the words, "cooperative" and "improvement." I would like to start by clarifying some meanings of the word "cooperation." I will talk of an attempt to build organic cooperation among institutions. I want to oppose that to some of the other Title III Projects of which I have knowledge that do not operate in an organic manner, but seem to operate on something such as "plarition psychology." This is the case when the developed or cooperating institution makes its resources available to poor little brother, the developing institution. I would also oppose organic cooperation to another notion commonly placed under the rubric of cooperation which I call "proximity."

Proximity is a phase that we had to go through before we could move toward organic cooperation. Just being together, being accessible by letter, or phone, or in meeting—though these represent
an improvement over isolation, I have no doubt—do not constitute organic cooperation.

As for "plantation psychology," that is partly a function of the attitude of the developed institution and partly a function of the project design. With the best will in the world, a poorly designed Title III Project will have difficulty getting away from plantation psychology. Our cooperating institution is West Virginia University. West Virginia University has profited immensely from this project. They are working out their own scope and sequence in teacher education, or reworking it, while having us join in on this adventure, realizing that the three state colleges in the project will benefit in different amounts and in different areas. The main point is that the University is not being good to us poor little children. They are in fact getting more out of it than anyone else, and it behooves us as developing institutions to take as much as we can from the project since the University has gladly made use of our talents.

Vehicles for Cooperation.

I would like to describe some of the vehicles we developed for cooperation on the route to "organicity." This project is nearly two years old at this time. It began in the summer of '67 with a writing session held on the University campus. Each institution sent four faculty members to cooperate in the development and writing of instructional materials and packages. Partly by design but more because of the nature of the project, we found ourselves working in groups in areas of interest with individuals from the other three institutions. The initial work of designing the objectives, evaluation instruments and the instructional packages was begun at this time. There were some hard feelings in these summer sessions, and a few unproductive groups, mainly because some of the faculty members engaged had interests and personalities that
didn't lend to the emphasis or the mystique of the project. A few poorly selected people can cause a hell of a lot of trouble in a cooperative group writing session.

When we returned to our institutions in the fall, we assigned one representative from each college to the University campus as a full-time project member. These full-time members represented the focus for the whole project, and they were situated in the right place. It was they to whom we assigned functions; it was they to whom the University assigned the developmental work begun in the summer time. They have continued to be the focus of development, and a rather large portion of the products developed in this project can be attributed to the work of the full-time members.

As for the summer working groups, we had some hopes that they would continue to function in some manner or other during the academic year. Now after two summers of this sort of thing, we have come to the conclusion that there is a disappearing tendency involved in summer work groups, and that unless considerable resources are pumped into these groups, they will not function effectively or organically during the academic years. On the other hand the individual colleges made considerable contributions to the total project by the work done by project teams back home. This again was a function of the pre-planning done for the college year by the college teams.

Perhaps the only decent means of communication that we had during the academic year were several meetings of the project teams. These were in part for sharing of experiences, but in a large part for the bringing of new ideas and new materials and equipment to the attention of the project as a whole. I developed the procedure of sending memoranda to the various colleges, mentioning the kinds of things my people were doing and making suggestions for and evaluations of the kinds of materials that we had bought or previewed.
I found during the second summer that this work was very much appreciated. But I would put these memos and meetings under the proximity sense of cooperation rather than in the organic sense. One suggestion: In any such project you need at least one compulsive writer--preferably a memo writer. (Deans are compulsive memo writers.)

We were rather displeased with the early lack of organic cooperation. During the second summer when we again conducted four-member writing sessions at the University, we made some changes. First, each of the colleges made sure that it sent people who had the ability to get something done, and who at the same time had enough power back home to make sure that the changes were more than just paper changes. This extra commitment on the part of the colleges, I believe, was the critical element in making the second year of the project so much more successful than the first year.

Secondly, the project coordinators from the four institutions developed a document in which we pledged ourselves to some organic means of cooperation. This commitment included such things as requiring each of us to develop during the academic year no fewer than four complete modules of instruction. These could be videotapes, slide-tape presentations, illustrated taped lectures or whatever. Each of us was to develop four modules and circulate them to the other institutions--no fewer than four of these. That helped in setting our targets. Clearly we have exceeded this minimum. We also committed ourselves to using in our instructional programs at least one of the modules from each of the other institutions.

There were other commitments such as sending a memorandum and materials, describing activities of the project team, etc. It will not surprise you that several of the team members had a hard time convincing themselves that they wanted to sign their names to any.
sort of a formal commitment paper that affected instruction. I believe that that was a key move in making cooperation organic, in getting away from the talk level. There were the summer writing groups, the full-time project people, written commitments—now it is time to move to the materials themselves.

**Materials—Cooperation in Concrete form.**

Obviously materials represent the most concrete form of cooperation. The cooperation becomes real when commitment is made on the part of each institution to preview and use materials developed at other institutions. Each of us has agreed for example to field test one of the big projects developed on the University campus. My college, for example, has met this commitment in several ways. One way was by bringing our full-time member down once a week to teach a course in "Tests and Measurements," the various segments of which had been developed or acquired through the project. A considerable section of this course is self-instruct. It is our plan to have the requisite competencies in this area of evaluation wholly on a self-instruct basis before the project ends.

I have mentioned that we developed other packages of instruction—objectives, instructional materials, evaluation instruments, and the media backup, the paperwork backup, etc. These packages of instruction are another common focus, another source of organic cooperation. In developing instructional units we have not attempted to identify the curriculum sequence nor make a determination as to where and how the units or material will be used in anyone's program. This aspect of development has permitted the recognition of institutional autonomy in the development of its own program. Some schools have used the packages on objectives and learning in the pre-student teaching phase, others have found them more useful in student teaching.

One more, and this will be no surprise
to you, our videotape recording systems have been the simplest and most successful of the cooperative efforts. We developed the specs together and ordered all of the systems in one package. We find ourselves willing to share videotape recordings and procedures and techniques perhaps more readily than we share anything else. Possibly the newness of these elaborate toys reduces hesitancy in sharing. I think that sharing videotapes and audiotapes, and joint production of both of these, represent perhaps the best entry points that institutions can take to build organic cooperation.

**Cooperation in the Future.**

Along this same line we have found other ways to cooperate in purchasing. We've begun to share our major purchases and services. We are planning to buy big package deals that are now coming from publishing houses and electronic houses with the thought that we will share them among the institutions. We have started this in a small way and find it very successful. There are more and more of these package deals and educational services coming out all the time, so the notion of sharing becomes an important idea. Most of these large items and services you simply do not need to have all the time. I anticipate that this shared buying practice among institutions will grow in our state. I am hopeful of bringing other institutions in for collaborative purchasing.

Let me mention one other area in which I see a future for organic cooperation. We will be meeting as a whole project group later this week at the University. We will take our first steps toward building a cooperative project using the telement system, the wire-blackboard device. These obviously are naturals because universities have equipment and resources that we simply do not have. We will begin very simply by exploring the dimensions of these systems. It will take us some time to develop objectives
which we can achieve using these means and even longer to get some experimental production underway. I anticipate that, should we be refunded for the third year, this will represent our major area of new development as cooperators. Each institution has directions that it will take on its own, but we will share developments with each other. The key point is that we plan to keep organic relations rather than slipping back to proximity relations.

I hope what I have said so far does not indicate that West Virginians are unusual in this matter of cooperation. I think cooperation among institutions at an organic level is not the norm, even though there is a need to develop it much as institutions are now developing student teaching centers as organic ventures with public school systems or as they are developing teacher aide training programs cooperatively with public schools and poverty agencies. So must we learn to cooperate among ourselves where the relationship is a peer relationship.

"Improvement" in Teacher Education?

Now I'm going to switch from the concept of "cooperation" to "improvement." We have attempted where we could to run studies and to gather other forms of descriptive information. I will try to highlight these more rigorous attempts as I go along, but I will also mention under this rubric of improvements some changes which, prescriptively speaking, I consider to be improvements.

First, I would like to mention some of the more nearly quantitative things that have been done. We are interested in student reactions to self-instructional materials, laboratory settings, etc. The bulk of the attitude survey work is being done by the University but each college is doing something by way of attitude survey. We are quite interested, not only in initial attitudes of students coming into lab settings and programmed instructional settings, but in any
changes over time. This will be a continuing area for sampling
student opinion. In general our early data show that students
overwhelmingly approve of these notions: (1) having criterion levels
at which they can aim ("I can shoot for either an A or a C whenever
I wish."); (2) being allowed to progress at a pace which they select
(an inherent notion in programmed instruction); (3) being allowed
to repeat a block of work in the reach for a higher level of com-
petence and a higher grade. Students do miss having a teacher in
the lab setting, perhaps a short-term effect.

The bulk of the research on academic achievement has been done
by the educational psychology and measurement people at the University,
naturally. As with the attitude surveys, achievement data, though
not yet plentiful, are very promising indeed. For example, we have
discovered that given the self-pacing mechanisms and necessary re-
mediation students can reach our criterion levels irrespective of
ability. (Obviously there are some motivation variables involved.)
We are also finding that a laboratory plus programming combination
can get better achievement than lecture over a range of competencies.
But, we find that teacher plus programming is better than either
one taken separately in getting achievement. We also have found that
the structure of the non-laboratory sessions doesn't make any real
difference in course achievement (lecture vs sensitivity groups vs
independent study). Some very promising and intriguing leads!

Another evaluation instrument that will interest us is the National
Teacher Examination. Since it is required of all teacher education
graduates in West Virginia, it represents a common basis for standard
evaluation. In two years we will have the first full group at the
various colleges who have been subjected to a large extent to project
materials and emphases taking NTE. We look forward with appreciable
interest to see whether the scores on the professional portions of
the exam rise. It will be quite easy to measure improvement, if any, at significant levels on the NTE, though no single causation would be inferred. If we do not get significant increases I do not think we can necessarily damn the project, but will have cause for being rather unhappy.

### Syllabi as Measures of Change

In addition to these measures I must mention course syllabi. We collected syllabi from each course at each institution before the start of the project. Already it is interesting to compare the old syllabi with those produced this year. My department has had always the tradition of writing a moderately detailed syllabi. Personally I have always written small "books" for my students as syllabi. It is interesting to note that even those who have always done careful work on syllabi have changed them dramatically. And for those who never gave the work of syllabus-writing very much attention, the results are even more striking.

For example, attention to objectives stated in behavioral terms in remarkable. Before the project began only a few of the project members had any competence in writing objectives. Attention to evaluation procedures and to sequence and scope have shown equally dramatic changes. In so far as a syllabus represents attention to planning, there isn't any question that instructors who have been in the project have given much more attention to their course planning.

One of the notions clearly reflected on the syllabi and in everyday interaction is the influence of the principles of programmed instruction. We find as we examine the films and filmstrips and other media which we are building into our teacher education sequence that instructors now routinely build in procedures for active student involvement and corrective feedback. This careful attention to involvement and feedback have represented the important contributions
of programmed instruction to general instructional improvement. These changes are obvious and clear in project members, and as far as I am concerned, in the right direction.

In addition to the tests and syllabi we have developed sets of competencies for the whole professional education sequence. We have been sharing these with non-project institutions, influencing their programs. It is obvious that our scope and our sense of sequence have changed, have become better integrated. I would go further and say that, in my opinion as a curriculum theorist, our scope and sequence have improved if for no other reason than that we now conceptualize them more functionally. Some of these data are not very good, are they, but at least they are measures of change and possible improvement.

Most of us want to move in certain directions in teacher education these days. The question is how you gear up for it. How can you establish a functional focus for change? For us this project has been the organizing point. It has had, among other influences, some financial reinforcers in the way of summer salaries, trips, and purchases of materials. These reinforcers are important to keep the momentum of change, and it is through the project that we have been able to build in these reinforcers. It has also represented the source of funds for hiring and developing new faculty members to implement project activities.

I would like to conclude by mentioning the brightest prospect for long range improvement in teacher preparation at my institution. The project represented for us a species of reverse learning-by-doing. We wonder, as you do, how we can prepare teachers for the future who will use programmed instruction, technology, team teaching, behavioral objectives, and the like. Obviously we give direct instruction in student teaching. But there has always been a dimension missing in teacher education, it seems to me, and we are getting at
it in this reverse "learning by doing." What it comes to, essentially, is practicing what we preach. We have programmed blocks of instruction for each of our courses. We have built media functionally into each course; we are now redesigning our freshman course for team teaching, instructional television, and other media. We no longer just show films, we program them into sequence. It is the plan to build for our students certain kinds of expectations because of our way of operating. We are practicing what we preach. We are not just telling them to use programming, feedback techniques, and team teaching. We are using these so that they will become accustomed to considering such approaches a simple part of an educator's working procedure—theirs as well as ours. This inter-institutional cooperative venture has been the organizing center for these changes. Thank you.