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ABSTRACT

The author looks at the role of the arts and sciences in inservice education, touches on delivery systems, considers the problem of how to motivate teachers to engage in inservice education, and investigates three approaches to guiding inservice programs. Two roles for arts and sciences are described: first, that of enriching teacher lives so that they may enrich others, and second, that of providing a broad background against which teachers may view their own specialties. It is argued that nontraditional means of delivering inservice education must be utilized, since many teachers would be hesitant to enroll in campus-based programs in which their progress would be rated against that of subject specialists. Motivation techniques for involving teachers in inservice courses include combining inservice with preservice education, assessment-diagnosis centers (with physical examinations, mental/emotional tests, and interviews), and integrative frameworks in which the teacher helps to determine personal development levels and needs. Three programs of inservice education are examined: (1) a counselor entry approach, describing methods for easing counselors into fully responsible counseling positions; (2) a modified counselor entry program applicable to teachers; and (3) a three-stage model of teacher growth proceeding from presentation-centered to interaction-centered, to pupil-centered activities. (HJB)

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In the time allocated to me this morning, I should like to: look at the role of the arts and sciences in in-service education, lightly touch on delivery systems, and consider the problem of how to motivate teachers to engage in in-service education, and how to guide that education wisely, examining three approaches to the problem. (So much has been written about in-service education that one wonders whether there are any new ideas to be exposed; there are, however, some to be reinforced!)

An Opportunity

One of the signs of a good problem solver is the ability to reverse what appeared as a problem and to turn it into an opportunity. Professional education, perennially beset by problems, gives us all plenty of chances to try to work that magic. Lowered enrollment is the biggest current problem facing us, but it is a problem we share with arts and sciences faculties. For years, we have worked with them to provide courses more relevant to the training of teachers. We have been told that the general education appropriate for the informed citizen is ideal for teachers as well. True! Indeed, teachers should be at least as well informed as the typical citizen. But maybe they ought to be even better informed. Out of many possible reasons, let's pick two: first, to so enrich teachers own personal lives that in their interactions with students they enrich the lives of others. Second, so that they may view whatever their own specialities may be against that broad background of knowledge which puts one's personal efforts in a larger perspective, involves one in a wider range of values, deprives one of the

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insularity of knowledge that comes with specialization and helps to keep alive the sense of wonder, mystery and awe of the world around us, that makes us interesting to those we teach.

So, there is a case for arts and sciences courses which help teachers to do a better job. But they would not be courses such as those currently aimed at recruiting students into a speciality or preparing them for advanced graduate work. While academic rewards drive faculty toward such courses under normal circumstances, we currently have a situation where there are rewards for additional credit hours from new audiences. We should take advantage of it.

#### Broader and Deeper Arts and Sciences Courses for Non-Majors

What would such courses be like? They should aim at a broader and deeper understanding of the various fields of knowledge, one's own special field included. Jerome Bruner<sup>1</sup> is supposed to have said that any subject could be honestly taught to any one of any age. Thus, courses can be true to their discipline and lay forth their structure, without the jargon and complexity one usually thinks of requiring for advanced study. Rather, they can be instructed in the logic of the discipline. As Purves notes, grammar may be employed in the school "...to insure that children employ the grammatical richness of the language in communicating.... In the university the emphasis might better be placed on the analysis of grammar and language systems as disciplined forms of inquiry."<sup>2</sup> Courses of this kind would increase the fund of knowledge of the teacher, and open the broad perspectives.

#### Non-Traditional Delivery - A Must, Not Just a Luxury

How would such courses be given? We tend to immediately think of the classroom format, and in the case of the university, since we have learned

that logistics and availability is so important, we tend to think of transporting these to teacher centers or to the schools themselves. No doubt there will be much successful instruction by this mode. But in courses that are likely to be outside what the persons perceive as their typical area of expertise they may be hesitant to enroll in courses where they may be competing with others who have more knowledge, or may even be specialists in the area, and where they would be at a disadvantage.

As an example of this, Dr. Harold Herber of our campus recently taped a course in the teaching of reading in content areas for television. This course had long been a staple of the campus program, but was largely taken by reading specialists. When offered by television, he was surprised to find that a substantially larger proportion of the students were content-area teachers, students who would have been unlikely to enroll in such a course on campus where they would have been exposed to the competition with reading specialists. Indeed, 54 of 75 enrollees queried indicated that they would not have enrolled had the course not been on television. So there are alternative delivery modes that we tend to think of as ancillary to our efforts that may have a much more basic role than we think and we should be exploring these.

#### Motivating and Enriching Teachers' In-Service Education Efforts - Three Alternatives

Our mutual tendency in considering in-service education is to assume that the paramount problem is trying to decide of what it should consist. Equally, and perhaps more important, is first the problem of how to make sure that teachers want it, and second assuring that when they do, it is so guided that it will have a positive impact on teaching. These problems are substantial and in some respects prior to that of in-service content, for if one has the motivation that is directed in accord with a sound in-service education

policy, then the question of content answers itself. I should like to briefly explore three orientations to this problem. The first is one that grows out of our experience in operating a teaching center at Syracuse University. The second seems such an obvious one that I don't understand why nobody has done anything about it. I'd like to make it more salient for your consideration. The third is theoretical, but explores a problem I consider fundamental, and so could affect the nature of the first two.

1. Combining In-Service With Pre-Service Teacher Education

The first of these options grows out of our experience with the teaching centers that we have established around the Syracuse area. We share a director of each center (there are currently three of them, one suburban, one inner city, and one half-way between) with the school district, each paying half the salary. The director is responsible for pre-service education of our students to us, and to in-service education to the district. This results in strenuous efforts to assure that the supervising teachers understand what we are trying to do with our pre-service students. That in turn raises questions about its content such as "What do you mean by a teaching strategy?" Before you know it, the agenda for in-service training has been set as a deeper penetration of the basic instruction that we are providing to pre-service students. Further, there is the motivation to learn it in order, not just to stay ahead of the students, though there is that motivation too, but mainly, to be able to intelligently help the students that they are to supervise.

Thus the combination of pre-service and in-service training in a teacher center has proven to be an excellent way of improving pre-service instruction and of providing in-service instruction in a form, like that of pre-service but at a "thicker" level. To the extent one has relevant and "cutting edge" pre-service work, it provides a very helpful model for in-service. When it



is lacking this, its use in in-service is less effective but the shortcomings are made quickly apparent by criticism of the in-service teachers, leading toward improved pre-service instruction. So combining the two seems to be one highly useful model.

## 2. The Assessment-Diagnostic Center

A second model has been envisioned by a number of people as the diagnostic model. Ted Andrews in his booklet "Manchester Interview" prepared for the AACTE, PBTE Committee, envisions an Assessment-Diagnostic Center (ADC).<sup>3</sup> These ADC's would give a physical examination, a battery of mental and emotional tests as well as interviews. Everyone would complete a number of simulation experiences of teaching as well as several micro-teaching exercises with small groups of children. Andrews saw such units as screening centers for the state, each examination taking three weeks. While such a proposal is considerably ahead of its time (the Manchester Interview was supposedly conducted in 1980--a date much too early for such extensive centers to come into being) there is considerable merit in the idea, and some version of them in reduced size could be implemented at the present time.

Whether they should include an extensive physical examination is open to question, but there is little doubt that diagnostic centers set up to assess actual teaching would undoubtedly be able to help teachers to assess their weaknesses and to help them examine how they want to change and what are the ways of getting there. Ned Flanders showed the effectiveness of successive interaction analyses in such a process.<sup>4</sup> Diagnostic centers with appropriate counseling and follow-up could be a very important extension of that work. There probably is useful psychological testing which could give helpful self-insight to the teacher and provide a basis for counseling

discussions. Such centers, once entered, would provide not only the motivation to further in-service education but also sound direction to pursue.

It is surprising that no institution has taken the lead in establishing such centers, together with the requisite counseling to make them meaningful experiences. Perhaps not many teachers would voluntarily submit to such examinations. Undoubtedly it would be some of the better ones rather than the worst who would be secure enough to pursue such a potentially threatening experience, but I think there would be enough of these to get such an effort underway. Further, I think that such an effort could get funding to support the initial difficult financial problems it would encounter. Finally, it would be a gold mine for research data. Perhaps if we cast the seeds often enough they will fall on fertile ground and some one of you will start such a center.

### 3. An Integrative Framework for Inducting Teachers and Helping Them Grow

The third alternative approach, and perhaps the most critical exploration of these three, revolves around the question of how to provide an integrative framework for in-service education. It should be one which helps teachers to determine where they are on a developmental scale and which describes how a teacher grows and matures, therefore, enabling one to plot out what next to do to further one's growth. To some extent the combination of pre-service and in-service does this where whatever integration is provided in the pre-service model becomes that which is built into the pre-service. But typically the pre-service model is not well integrated, and in any event, looks only to the early stages of development rather than to the full range of stages.

I do not know that we have the ideal model, but we should be searching for one. Let me illustrate the need with a good entry model from the counseling

field and then discuss one possible parallel scheme and its extension for teaching.

### The Counselor Entry Model

It appears that the counseling field has found a useful means of inducting the counselor to counseling. It begins with the client-centered counseling. This requires students to listen carefully to what the client says, and to reflect the client's feelings in their reply. Basically, the counselors are involved in holding up a verbal mirror so the client may see themselves. Through this they help the client to move toward a better understanding of their feelings and to a clearer and more complete expression of their problems; to objectively examine this perception; and to move toward an appropriate resolution of the situation. As the students become more sophisticated, their supervisor encourages them to move from the exclusively client-centered point of view and to begin to probe more deeply for feelings. They are helped to develop a more flexible eclectic role, still using client-centered counseling but also trying various other techniques as they learn what is appropriate to speeding client growth. These students gradually take greater and greater responsibility for the guidance of the counseling situation, not to the point where control is solely theirs, but rather to a point where they share responsibility for client progress. This is, of course, an oversimplification, but it outlines some of the essentials of the procedure.

Let's look at what this does for student counselors. First, it forces them to become aware of the client's thinking and feeling, as they make provisional tries at mirroring them for the client. Second, it sensitizes them to the clues and cues the client supplies. Third, this concentration is on the client rather than on themselves so that they are less self-conscious about themselves and their own role. Fourth, since the initiative is with

the client, the interview is less likely to go beyond the comfortable limits of what the client can handle. Fifth, it leads to an easy transition whereby considerable initiative can be assumed by the counselor as they feel they can handle it and it is appropriate.

### The Teacher Entry Model

The student counselor is a useful analogue of the student teacher. In contrast to our present student teaching situation which places the responsibility for instruction on the student teacher from the start, the counselor training model suggests that the initial placement of the student teacher should be: where the emphasis is on the classroom learner, where the student teacher concentrates on the classroom student's learning processes, and where the classroom student controls the speed and direction of learning. A learning experience in which a teacher constructs instructional materials of a programmed instruction type for students may approximate this model except that here the major initiative still lies with the teacher in creating the learning situation.

The tutorial model may also approximate the desired situation but it also puts the responsibility for control of the situation on the teacher and does so in a less structured situation than programmed instruction.

What is needed is a learning situation in which the teacher can help the students to explore their learning process. Video tape or some similar record of a student's learning performance might provide the basis for such a situation. Through replaying, stopping and discussing it, both teacher and student work on the common problem of understanding the nature of that student's own learning process and the location of difficulties in a problem area which could be of the student's own choosing. Gradually, the student teacher might take more of the initiative for providing remedial learning, and then for

developing the initial learning experience. Such a procedure might lend itself easily to a smooth transition from the examination of an individual's learning experience to those of a group. Thus, one could video tape or similarly record a small group, then examine with them their common and their unique problems. Again, this could progress to developing remediation and to determining how best to structure the initial learning experience. In additional stages, the size of the group might be expanded to normal class size and the analysis of learning protocols reduced in scope and frequency.

I don't know whether or not this model will be a better model for inducting students into teaching than our present one. Like the counseling model, it seems to have those same values that we previously explored in the counseling situation, but they are translated in teaching and still appear to make logical sense: (1) the student teacher's initial attention is on the classroom students in attempting to understand their learning process rather than on the student teacher's adequacies or inadequacies and manipulation of the instruction; (2) the responsibility for structuring the situation lies outside the student teacher in some instructional material chosen by the student which student and teacher explored jointly; (3) the nature of the exploration is such that the teacher's skills of observation and interpretation are sharpened as the process proceeds and as the teacher acquires greater understanding of the learning process; (4) the process leads naturally into a transition to the real teaching situation.

#### Stages of Teacher Growth

This possible sequence for student teaching instruction grew out of research using video tape that I was involved in with Drs. Kagan, Farquhar, and Hervey.<sup>5</sup> We were video taping teachers, in the act of teaching, then immediately replaying the tapes, stopping them at what appeared to be

pregnant points, and querying the teachers about their thoughts. This introspection proved very helpful in understanding their thought processes and led us to construct a sequence a teacher follows in developing the skills of teaching.

We projected three stages: first, the teacher is presentation-centered; second, interaction-centered; and third, pupil-centered. Good teachers may move successively through all three stages as they gain both familiarity with what they are teaching and experience. They may start closer to the second stage if their pre-classroom preparation is very good. Other less adequate teachers may never escape the first or second stages.

In the first stage, teachers are not sufficiently familiar with the content and how to present it so that it flows. They occasionally "tune out" the students and attend primarily to what they are saying, and how they are saying it. They are planning ahead to what they will say next, and how they will get there from where they are now. This stage is the least permeable of the three to modification by student feedback, for the teachers are primarily concerned with their own presentation, or, if interacting with students, with directing their discussion. Instructional problem-solving in this stage is done primarily in the context of preliminary lesson planning.

At the second stage, teachers are more comfortable about teaching the content and are more concerned with student feedback. They respond to the class as a group, however, judging the quality of the lesson by group feedback and general student reaction.

Both of these stages we found documented in our protocols from teacher introspection. A third stage is an extrapolation hinted at by these data. In the third stage, the teachers are comfortable enough to coast through instructional situations without so much conscious guidance, their control

of the direction of the class is more subject to student feedback. At this stage, teachers may also "tune out" what is going on momentarily and their behavior "coasts" mechanically. But here they will do so to make use of specific student reaction; for example, to devise ways of modifying the lesson, to include particular individuals who are not paying attention, or who do not appear to understand. Teachers at this stage are actively searching for clues regarding individual progress and revising the lesson accordingly.

It would be interesting to see whether students who use the proposed teacher entry approach would go through the three stages of content-centered, class-centered, and pupil-centered teaching, or whether they would graduate to the class-centered teaching approach immediately and more quickly attain the pupil-centered level. Be that as it may, the intent here is to suggest that some thinking about such a developmental approach may be helpful in in-service education by providing an understanding of the different stages of teacher growth. These would permit more informed judgments about both the content and the proper approach for in-service education.

#### One Last Word

I am tempted to end this exploration with a paragraph beginning "In summary..." but because of the breadth of what I have tried to cover in such a short time, it defies easy summary. Rather than try to recount the content, let me just express the hope that you may have found somewhere herein something that moves you to action in this complex area. If so, the paper will have achieved its purpose.

## Footnotes

- <sup>1</sup>Jerome Bruner, The Process of Education. Cambridge, Massachusetts: Harvard University Press, 1960.
- <sup>2</sup>Allan C. Purves, "Do In-Service Programs Teach Anything" p.224 in Louis Rubin The In-Service Education of Teachers, Boston: Allyn and Bacon, Inc., 1973.
- <sup>3</sup>Theodore E. Andrews Manchester Interview: Competency-Based Teacher Education-Certification Washington, D.C.: American Association of Colleges of Teacher Education, 1972.
- <sup>4</sup>Ned A. Flanders Helping Teachers Change Their Behavior ERIC No.ED003505 April, 1963, University of Michigan School of Education, Ann Arbor, Michigan, 173p.
- <sup>5</sup>Norman Kagan, David Krathwohl, William W. Farquhar, and Saul Hervey IPR Interpersonal Process Recall: Stimulated Recall by Videotape in Exploration Studies of Counseling and Teaching Learning, Section IV Using IPR to Study Teaching Learning Processes - ERIC No.ED017946, East Lansing, Michigan, Bureau of Educational Research, College of Education, Michigan State University, March, 1965.