A collegial model for inservice education developed by Michigan State University (MSU) is built on two assumptions: (1) Teachers should be involved in every phase of teaching, dissemination, and curriculum development; and (2) Teacher educators have much to gain from the study of the impact of various theoretical conceptions of classroom teaching on actual practice. One important consideration in the model is that released time should be available for teachers participating in inservice programs. Preservice teacher education at MSU emphasizes field experience. Teaching interns in their junior and senior year work with cooperating teachers as a team. The availability of an experienced intern makes released time possible for teachers during the school day. The collegial relationship between teachers and teacher educators is seen as an aid to teacher educators in becoming familiar with the reality of the classroom and its problems. The conceptual basis for development of preservice and inservice education at MSU progresses through three stages: (1) "Learning About" in a real-world context; (2) directed practice and reflection in a real-world setting; and (3) integrated decision making and action in the real-world classroom. (JD)
PROFESSIONAL DEVELOPMENT THROUGH
RECIPROCITY AND REFLECTION

by
Henrietta Barnes and Joyce Putnam
Michigan State University

Paper presented at National AACTE Conference February 1981, Detroit, MI.
Like it or not, inservice education often has a bad name. And changing the name to professional development won't make a difference. What might make a difference would be to change what is done in the name of inservice so that it can be the catalyst for improving teaching and learning in schools that teachers, teacher educators and public officials expect it to be.

Let us take a hard look at what inservice has become. First of all, where do requests for inservice originate and what is the usual response? The following outline illustrates the typical requests and the usual responses that the requests yield.

<table>
<thead>
<tr>
<th>INSERVICE REQUESTS AND RESPONSES</th>
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<tbody>
<tr>
<td><strong>Origin of Request</strong></td>
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<tr>
<td>Federal or state mandates require new knowledge and/or skills for compliance</td>
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<tr>
<td>District principal or supervisor wants to initiate new program or approach to teaching/learning for which new knowledge and/or skills are needed</td>
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<tr>
<td>Supervisor identifies a problem or difficulty a particular teacher is having, e.g., management of pupil behavior</td>
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<tr>
<td>Teacher recognizes lack of knowledge or skill needed to do something he/she wants or needs to do</td>
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A quick analysis of this simple outline reveals some interesting insights. First, inservice tends to be remedial in nature. Because the
request often stems from a need or problem, an assumption is made that the teacher is deficient, needs help, or is incapable. Second, responses tend to be short term, brief encounters which stimulate awareness and suggest possibilities. Third, responses are often external in design since they take place outside the work setting, often in district wide groups of 50-100, removed from the realities of the work place. Fourth, the external response often abstracts teaching so that questions and solutions become generalized and treatment is described in universal terms.

Regardless of the place, size of group or length of session, in-service characteristically consists of someone "telling" teachers what to do. It is hypodermic in that, at best, it is a "shot in the arm" (might even sting for awhile) but such short term effects quickly disappear. It is generalized in its recommendations - like the doctor saying, "Take two aspirin and call me in the morning." Only most teachers can't call their inservice consultant in the morning to truly begin to diagnose the problems and consider alternative ways to respond.

Such inservice is frustrating and disappointing to say the least, and this may be the major reason for the bad name. Teachers really do hope, although many have stopped expecting, that they will get some help for the very real problems they face daily. They are disappointed because they think someone has some answers. Yet, the answers they are given are often seen as irrelevant, or impossible to implement. When inservice content is exciting and meaningful, it is almost as frustrating, because teachers often can not see how the ideas and suggestions can be translated into classroom activities. That takes time. It may require restructuring of the instructional environment, a new sequence of
activities, or completely new ways of planning and carrying out instruction. Then the frustration and disappointment set in as teachers ask themselves, "When will I have time? Where will I get help to do this rethinking and planning?" Once again, teachers may feel helpless to change, only now they also feel guilty because they have been told this "new way" would be better for a variety of reasons.

The teacher's response to this set of circumstances is usually a plea for ready-made materials that can be used immediately. Teacher educators often respond to these requests without thinking of the cost both to the teacher and to themselves. A brief illustration may clarify this point. If one chooses to take selected research findings which establish a relationship between specific teaching behaviors and student achievement and train teachers to perform those behaviors, that implies an assumption that teachers are passive consumers of disseminated products of research. The assumption that findings from research can be transformed into curricular packages for students or teachers, in turn, leads to outcomes which we believe are detrimental to the improvement of inservice teacher education. First, such an approach continues to view persons external to the classroom as the "experts" on teaching. Traditionally, textbook publishers, university or school district consultants (even other teachers) are often seen as better equipped to recommend teaching practice than are classroom teachers. Second, paradoxically, this view tends to perpetuate stereotypes of university professors since teachers are quick to discern the lack of relevance that many such materials have for their own classroom situations and the unsuitability of some university professors to provide direction for the improvement of classroom practice. Third,
since individual teachers, students, communities, and schools vary considerably, such instructional packages tend not to be responsive to unique teaching situations. This approach tends to communicate to teachers that packaged strategies are, in fact, going to solve classroom problems.

We contend that what teachers need is not simplistic answers questions they have not asked, or solutions to problems they have not defined, but rather an enhancement, through inservice, of the capacity to think about teaching, to define their own problems, and to determine the validity of different instructional strategies for their own classroom practices. Teachers need not be technicians implementing someone else's ideas but thoughtful decision-makers who have multiple ways of reflecting on their own teaching practice.

In order for their decisions to be productive in terms of desirable pupil outcomes in affective, cognitive, and physical domains, the teacher must have broad conceptual schemes for action. These schemes need to embody both the theoretical knowledge of the researcher and theoretician and the teacher's own practical wisdom. In short, the teacher must be a student of teaching and learning, committed to continuous professional development. Concurrently, teacher educators must be committed to studying teaching and learning in ways that allow them to learn from and with teachers about classroom realities.

If one assumes that the primary goal of inservice education is to engage teachers and teacher educators in a process of mutual professional development, then one approaches that task in a collegial way. This mode must provide both teachers and teacher educators with opportunities to learn from one another, and to discover that learning together may encourage new ways of thinking about teaching and teacher education. It
must also be intrinsically rewarding for both teachers and teacher educators if they are to value such collaboration as a viable inservice model for professional development.

Faculty at Michigan State University have developed such a collegial model for inservice education. It has as its goal professional development for all participants through an emphasis on reciprocity and reflection. This model is built on several assumptions. First, teachers should be involved in every phase of teaching, dissemination, and curriculum development. Second, both teachers and teacher educators have much to gain from the study of the impact of various theoretical conceptions of classroom teaching on practice. They can both learn from studying ideas together. Third, teachers and teacher educators both have specialized, but different, expertise which can illuminate the practical study and research of teaching and learning. Finally, teachers and teacher educators can learn more productively together than they can separately since their collective efforts create a synergistic effect.

Professional growth, then, is the goal, and inservice education the means through which continuing expertise in teaching is developed. This paper describes the necessary criteria for the establishment of a collegial model and a released time system for accomplishing professional growth. The conceptual basis of the model is outlined. The remaining bulk of this paper outlines the various phases of the model giving appropriate attention to the critical attributes of an inservice "delivery system," designed to improve teacher effectiveness and satisfaction.

Establishment of Collegial Relationship

A major premise of this model is that teachers and teacher educators must establish collegial relationships. This belief is based on a recogni-
tion that substantive change is rarely accomplished by an outsider telling a teacher what he/she ought to be doing. Teachers need to receive support for their daily struggles, and encouragement from someone they trust if they are to be expected to try new responses to teaching demands. We believe support and encouragement can be provided by teacher educators committed to establishing collegial relationships with teachers.

Historically, teachers and teacher educators have not enjoyed such collegial relationships. At least four factors contribute to this state of affairs. First, both groups tend to have negative stereotypes about each other, such as, the "ivory towered" professor and the "mindless" teacher. Second, neither group is seen as credible in the eyes of the other group. Third, there is a lack of reciprocity in relationships between the two groups. Teacher educators tend to be perceived as the helpers (givers, tellers) and teachers as the ones in need of help (takers, learners). Seldom are requests initiated in the opposite direction. The notion that teacher educators gain from the relationship has had little credibility with teachers or teacher educators. Finally, both groups hold assumptions about each other that do not facilitate the establishment of collegial relationships. Modifying non-facilitative assumptions and stereotypes through the establishment of mutual credibility and reciprocity is essential to productive working together. The strengthening of facilitative, or alteration of non-facilitative assumptions, is a continuing process affecting both strategies and outcomes.

Assumptions of both teachers and teacher educators must be carefully examined. The belief that both are capable professionals concerned about improving their teaching effectiveness should be encouraged. Other assumptions about teachers and teacher educators that should be fostered
include: (1) individuals need to feel respected and appreciated as contributing members of a team, (2) individuals have diverse strengths to contribute to a joint enterprise and (3) earned membership in a group project fosters intrinsic valuing of cooperative endeavors.

The development of mutual credibility is essential to this model. Credibility of teacher educator with teachers can be initially established through their willingness to "hang around" in classroom, getting to know teachers' and students' behaviors and needs, and providing another pair of hands for any tasks that need doing. The presence of the teacher educator being there and working with teachers in their classrooms establishes a kind of credibility that is critical. Being able to offer and demonstrate alternative teaching actions is also important. Empathy for the teacher's daily demands probably cannot be built in a more productive manner. Teachers can establish their credibility with teacher educators as well through the sharing of their reflections of teaching situations, their concern for students' needs, and desire to learn new ways of thinking and doing.

As both groups learn more about each other, negative stereotypes tend to disappear. The perception that teachers are technicians and teacher educators are "experts" is one stereotype, however, which may require continued dialogue. This stereotype is perpetuated by both groups. Teachers typically defer to teacher educators, and teacher educators, in turn, are often willing to be seen as "experts." In reality, both groups have expertise in differing but important areas of teaching.

Establishment of Released Time System

One of the most important organizational structures required for any inservice teacher education effort is related to the challenge of making inservice activities available at a time when teachers are fresh and re-
Teachers and teacher educators alike lament the typical "after-school workshop" which reaches teachers when they are already at a point of overload. Both groups generally indicate that the fatigue and stress levels of teachers at that time of day are such that even the most motivating content presented by the most dynamic of teacher educators is less than effective.

Teachers are anxious to have "prime time" inservice teacher education; that is, inservice during teachers' regular work hours. On the other hand, many teachers will not participate in released time inservice unless there is some assurance that they will not return to a chaotic classroom created by "substitutes." Thus, teachers need to be not only physically released from their normal duties, but mentally released from the worry that their classrooms will not proceed productively without them. Finally, they need to know that they are not having to work twice as hard to get the released time. Most teachers will say that if they have to do all the planning, prepare all the materials, and have everything ready for someone else to use with their classes while they are gone, they would rather stay in their classrooms and do the teaching themselves. The extra work it takes to prepare for a substitute is usually not seen as worth the released time it produces. The primary challenge of any delivery system, therefore, is the development of an organizational system which makes qualitative released time a reality.

Michigan State University has utilized a unique procedure for providing for the mental as well as the physical released time teachers require for inservice teacher education. By combining a preservice elementary education program with the inservice teacher education program, the educational opportunities of both groups can be optimized. Some background may be useful at this point to clarify the MSU arrangement. A preservice
elementary education program has been developed through a six-year co-
operative effort involving current teachers and administrators, MSU under-
graduate students in elementary education, and MSU faculty. This program,
which is largely field-centered, features unified content-methods and
practice, and foundational principles which are systematically integrated
throughout the students' course work and field experience. Students are
admitted into the program as sophomore pre-interns after participating
in a detailed selection process. During their sophomore year, pre-interns
spend two to three half-days per week in schools performing general in-
structional tasks and instructing small groups of students in content
related to the campus content and methods courses. During their junior
year, the pre-intern field experience increases in amount of time spent
and complexity of tasks performed as well as responsibilities assumed.
By the third term of their junior year, pre-interns and large groups in
all content areas under teacher or university supervision. By the fall
term of their senior year, students who are now in their formal internship
experience are ready to assume full responsibility for at least two half-
days of complete instruction. When they begin a "normal" full day student
teaching experience, usually during the second or third term of their
senior year, interns are ready to assume complete instructional responsibility
for planning and actual instruction for the entire day for the minimum
ten week internship experience.

The high level of expertise exhibited by these undergraduate students
is due in large part to the assignment of a field instructor to each student.
This MSU supported staff member performs a number of valuable services
for interns, teachers, and the program. Critical among the tasks performed
is the supervision of planned instruction, classroom management, and
personal interactions with immediate constructive feedback and life-long
Learning skills. The field instructor provides necessary linkages between the university and the public schools and between theory and classroom practices. Because interns have demonstrated their ability to participate as full team members with their cooperating teachers, many of the problems usually associated with released time for inservice teacher education are eliminated. Because the undergraduate intern begins teaming with the children, parents, and other staff as a regular teacher. Inservice schedules are coordinated so that field instructors can be in the building and available in classrooms to assist their interns if problems should arise. Because inservice sessions are held within the school building, teachers are always available to return to their classrooms if serious problems come up.

While both teachers and interns benefit from this team teaching arrangement, others profit as well. The presence of the intern provides unique opportunities for analysis and evaluation of teaching practices. Through the negotiation of objectives and strategies, both teachers and interns are encouraged to examine their assumptions and procedures in terms of desired pupil outcomes. Children also benefit from this arrangement since there is another concerned individual to help provide educational experiences for them. Children are not only exposed to different and sometimes new ways of teaching and learning, but they are generally able to receive more individual assistance with particular learning problems. (A more complete description of this program—Toward Excellence in Elementary Education, is available through the College of Education at Michigan State University.)

Conceptual Basis of the Collegial Model Delivery System

Inasmuch as the vehicles one uses and the structures one creates de-
pend largely on the outcomes one has in mind, it is important to describe those goals which motivated the development of this released time delivery system. First, we wanted both pre- and inservice teachers to be autonomous decision makers regarding their curricula. It is our firm belief that teachers are the best judges of what to teach and how to teach it to their particular set of learners. Second, we wanted teachers to become life-long learners who had a sense of professional competence and the feelings of pride that accrue from that knowledge. Third, we wanted an opportunity for teacher educators and beginning teachers to gain a reality base for their conceptions of professional teaching.

If one assumes that a professional teacher is a person who has a special knowledge, then one must ask not only what that knowledge is but how one comes to know. What does it mean to "know" something or act on the basis of information one has (Furth, 1970). Further, one comes to know and be able to do as a result of the experiences one has. The more concrete, relevant, and similar initial learning experiences are to the real world setting in which that knowledge can be used, the more likely it is that the knowledge will be useful to the learner. Knowledge which is useful for developing professional teaching competence, then, would be information accumulated from experiences designed to help teachers translate relevant concepts into internalized action schemes. Figure 1 illustrates critical phases involved in this process of development.

**FIGURE 1**

<table>
<thead>
<tr>
<th>Phase One</th>
<th>Phase Two</th>
<th>Phase Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Learning About&quot; in Real World Context</td>
<td>Directed Practice and Reflection in Real World Setting</td>
<td>Integrated Decision Making and Action in the Real World Classroom</td>
</tr>
</tbody>
</table>

Our pursuit of the goals stated earlier has led to an elaboration of these phases into a professional development model for initial and continuing teacher education. The delivery systems utilized have emerged from
the need to provide experiences designed to promote teacher development through these phases. The model encompasses professional development for preservice teachers, inservice teachers, and teacher educators. Figure 2 illustrates this professional development model for teacher education.

**Explanation of Phases in the Model and Related Delivery Systems**

Our goal of educating professionals to become more autonomous decision-makers who act in thoughtful and considerate ways as they plan for and enact their professional roles is achieved through a carefully sequenced set of educational experiences. For preservice teachers these experiences are designed on the assumption that abstract theoretical explanations can be transferred to the complex environment of most public school classrooms when they are presented initially in and related to a real world context through opportunities for practice. Such an instructional approach presents not only relevant content but also methods for teaching and opportunities for practice in a unified sequence. For example, teachers might study fractions (content), check to be sure they could work with them themselves, plan lessons to teach fractions to a group of children in their classrooms, teach the planned lesson, receive feedback from others and reflect on the experience in a continuous learning model. This unified content/methods and practice sequence is quite the opposite of many college course sequences which typically teach all the content (usually done by a department or college outside of Education) with methods taught by yet another instructor at a later time, and practice waiting until the final term of student teaching (in the case of inservice or graduate work it is usually not provided at all) when all content must be simultaneously taught to an entire class.

We have found that an instructional sequence which gradually introduces a teacher to a content area, or sets of related content areas such as
FIGURE 2
A Professional Development Model for Teacher Education

Preservice [Diagram of model]

Phase One: "Learning About" in Real World Context

Phase Two: Directed Practice and Reflection in Real World Setting

Phase Three: Integrated Decision Making and Action in the Real World of the Classroom

Inservice [Diagram of model]

Phase One: "Learning About" in Real World Context

Phase Two: Directed Practice and Reflection in Real World Setting

Phase Three: Integrated Decision Making and Action in the Real World of the Classroom

instructional design, mathematics, or classroom management, and allows for sequential accommodation of that content through gradually intensified field experiences is effective for both pre- and inservice teachers. If we want teachers to adopt new ways of thinking and doing, we must facilitate initial learning about these ideas and provide ample opportunities for suitable practice and feedback.

The experiences are intended to be additive. Thus, it is the task of the teacher education program to sequence instruction and experiences so that each set of experiences can cumulatively enrich the teacher's professional abilities. Nothing is taught in isolation. Rather, teachers are expected to apply knowledge learned and internalize patterns of action. What begins as separate content gradually becomes autonomous behavior grounded in theory and a conscious rationale.

Phase One: "Learning About" in Real World Context

Regardless of the content being taught, certain conditions must be present if the "Learning About" step is to accomplish its purpose. These conditions are:
1. Clear content definitions (facts, concepts, principles, ideas, and skills) must be presented.

2. Real world exemplars and non-exemplars must be available. These should be as concrete as possible; however, films, pictures, and models can be used initially, if necessary.

3. Discrimination practice should be provided. Here the learner is choosing between exemplars and non-exemplars to demonstrate concept acquisition. Again, if real world examples are not accessible, role plays and simulations are useful in increasing the likelihood of transfer.

4. Opportunities to socialize about the new learning are essential for concept acquisition. Sharing perceptions and clarifying points of disagreement are important as teachers fit new content into existing conceptions of teaching.

In Figure 3, the various formats and activities involved in phase one ("learning about" the content and process of teaching in a real world context) are illustrated in a matrix scheme. The activities can occur in large groups, subsets of a large group, small groups, dyads, triads, or on an individual basis. Possible instructional activities include: discussions, readings, speakers, lectures, films, role playing, simulations, observation, writing, sharing, demonstrations, interviews, and teaching others. Since it is important that theoretical work be tied to classroom practice, both teacher educators and pre- and inservice teachers need opportunities for common classroom observation. Thus, some sessions must be held in

![FIGURE 3]

<table>
<thead>
<tr>
<th>Group Types</th>
<th>Discussion</th>
<th>Readings</th>
<th>Speakers</th>
<th>Lectures</th>
<th>Films</th>
<th>Role Plays</th>
<th>Simulation</th>
<th>Observation</th>
<th>Writing</th>
<th>Sharing</th>
<th>Demonstration</th>
<th>Interviews</th>
<th>Teach Others</th>
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schools where access to classrooms is available to teachers, teacher educators, and preservice teachers. Appropriate space for feedback on these classroom experiences must also be available.

A variety of strategies are planned employing various combinations of group types and instructional activities which promote learning of theoretical constructs and their practical applications. For example, role playing done in small groups, triads, and dyads are helpful in learning procedures (e.g., responding constructively to participants' comments), and understanding the effects of a strategy as a participant. Classroom demonstrations observed by small groups, triads, dyads, help teachers by providing concrete examples of theoretical constructs being studied. Abstract ideas such as Piaget's descriptions of how children think when they are at various developmental stages are much easier to comprehend when a teacher is able to actually question children who are at different stages. Having concrete experiences with different levels of thinking, the teachers are then better able to transfer Piaget's ideas to the selection of content and activities for children.

Phase Two: Directed Practice and Reflection

As new knowledge and skill are acquired, it is important that teachers have opportunities to apply this knowledge and skill in real world settings. It should be kept in mind, however, that the teachers tend to move back and forth between the "learning about" phase and the "directed practice and reflection" phase as they become more sophisticated about their practice.

The necessary conditions for the directed practice and reflection phase include initial practice and reflection.

1. Initial practice is directed and carefully planned for a "simplified" real world setting. That is lessons are taught to small groups of students and teachers are responsible
for less of the total situation than would normally be their concern. As applications of the content become more familiar, the size and complexity of the teaching situation is gradually increased.

2. Through opportunities for reflection, teachers can consider alternative applications of the newly acquired knowledge and skill and weigh the potential outcomes that might be expected for each. Initial classroom trials are accompanied by opportunities for corrective feedback. Teachers need to know what they are doing well, and what they are doing not so well. Whether lessons are successful or not, reflection helps teachers see both intended and unintended consequences of instruction. Opportunities for feedback and reflection are essential to the development of the self-evaluation that is prerequisite to autonomous decision making.

The importance of directed practice and reflection to the ultimate goal of autonomous decision making and action must not be overlooked. Practice as used here means the implementation in a school setting of a particular concept, principle, theory, or skill which was the focus of instruction during phase one—"learning about." Implementation activities include: instructing students, role playing, demonstration, simulations, and on-site planning which allows for assessment and evaluation of curriculum, environment, materials, and discussion.

Instructing students as a practice activity is necessary for teacher educators as well as pre/in-service teachers. Instructing students allows teacher educators as well as pre/in-service teachers to have the opportunity to 1) increase skill levels and self confidence; 2) reality test theoretical ideas, 3) note unintended outcomes and/or necessary prerequisites, and 4) have a concrete experience as a basis for reflection.

In addition to the pupils and pre/in-service teachers who participate in these practice activities, teacher educators and one or two other pre/in-service teachers are frequently included. According to interview and questionnaire data, teacher educators, preservice and inservice teachers report that having another adult formally involved in team teaching or observing a practice lesson contributes significantly to an individual's growth.
The dyad and triad formats for directed practice activities are also beneficial to children. For example, when a field instructor, inservice teacher, and preservice teacher collaboratively plan, teach, and reflect on learning outcomes, all three participants grow professionally. In addition, the pupils benefit from participating in experiences which are the result of the collaborative work of professionals.

Reflection as used here means thinking about intended and unintended lesson outcomes of practice activities which are directly related to the content studied in phase one. While most teachers or teacher educators engage in reflection by themselves, (often in nonschool settings e.g., driving to school, doing the dishes, waiting to get a car repaired), such reflection frequently is not tied to specific theoretical constructs. Thus improvement of teaching practice is less systematic than it might be. Reflection on one's practice is seen as an important contributor to the achievement of the goal of autonomous decision-making and action.

Phase two activities are designed to provide opportunities for structured reflection. These reflection activities include discussions, stimulated recall, role play, writing, and sharing.

As can be seen in Figure 4, reflective activities usually occur in dyadic, triadic, or small group formats. It is in these settings that the teamed practice experience actually pays off. One member of the discussion group can act as the reflection stimulator for another member of the team. The reflection stimulator can ask clarifying questions, take part in a role play, share feelings and perceptions, and assist with tying the real world experience to theoretical constructs. Pre- and inservice teachers report that role plays done with a person who is knowledgeable about the content being studied and who was present during a practice session are helpful in learning alternative teacher behaviors, understanding a student's point of view, and increasing teacher skillfulness.
FIGURE 4

Instructional Activities

<table>
<thead>
<tr>
<th>Group Types</th>
<th>Instructing Children</th>
<th>Discussion</th>
<th>Role Plays</th>
<th>Simulation</th>
<th>Writing</th>
<th>Sharing About Practice Experience</th>
<th>Demonstration</th>
<th>On Site Planning</th>
<th>Listening/Viewing audio or visual tapes</th>
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</table>

**Phase Three: Integration into Decision Making and Action**

The goal of phases one and two is a teacher who has integrated relevant content into a body of professional knowledge which can be represented as integrated decision-making and action. Persons who have achieved this level are characterized as flexible and articulate about the lessons they teach. They have a body of knowledge at an operative level. They can make efficient and accurate decisions about when and under what circumstances various alternatives are most appropriate. They are intentional in their behavior and objective in their problem identification and solution. They can indicate their professional needs and use resources efficiently and well.
As content is integrated at this level, teacher education relationships assume a somewhat different character. Interactions function on a level of reciprocity, not entirely possible before. Participants now have varying levels of expertise and can better provide mutual support and reinforcement for each other. Positive reinforcement of particular behaviors on an intermittent schedule may be suitable; however, personal satisfaction and spontaneous sharing will generally maintain desired behaviors.

Figure 5, Integrated Decision Making and Action in the Real World, is an illustration of the activities which need to occur to support the transition to and maintenance of this phase. These activities include: 1) self-evaluation, sometimes making use of another adult to help sort information; 2) problem identification and solutions; 3) sharing practical experiences; 4) initiating requests for feedback; 5) demonstrations of teaching for dissemination to other teachers and teacher educators; and 6) teaching others.

FIGURE 5
Delivery Systems for Integrated Decision Making and Action in Real World

<table>
<thead>
<tr>
<th>Group Types</th>
<th>Self-Evaluation</th>
<th>Problem Identification and Solutions</th>
<th>Development of Support Systems</th>
<th>Intermittent Reinforcement</th>
<th>Sharing About Practical Experience</th>
<th>Initiating Request for Feedback</th>
<th>Demonstration</th>
<th>Teach Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Group</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsets of Large Group</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyads</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triads</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Development of Professional Competence

Inasmuch as teaching others has proved to be especially effective as an instructional delivery system, it warrants further elaboration. As individuals integrate new knowledge into their existing conceptual schemas for teaching, we see the initial level of integrative decision-making in operation. Through their concrete experiences of "learning about" and "directed practice and reflection," teachers can apply the knowledge acquired to their classroom teaching situations. They tend, however, to limit their use of this new knowledge to lessons and uses practiced during the "directed practice" stage. They are limited in their ability to articulate a rationale that goes much beyond their initial insights as it relates directly to their own teaching situation. That is, they have not acquired a sense of professional competence that allows them to state with assurance the advantages, disadvantages, intended outcomes, and reasons for choosing to teach as they do. They tend to be tentative in their recommendations, limited in their ability to encourage others to try similar approaches, and uncertain about how various ideas would work for others. Bound by their past experience, their autonomy may be restricted to the areas of success they have personally achieved.

The process of teaching others has the potential of providing an expanded knowledge and sense of professional competence not otherwise possible. The demand to teach others what one knows requires the teacher to reconsider the knowledge she or he has and to organize it conceptually so that it can be translated for others. Having to fit knowledge into reasonable applications for new and different situations, different from one's own, forces a level of conceptual understanding not achieved through personal experiences alone. The flexibility one develops through such a process encourages a level of sophistication in knowledge and use that can only be characterized as professional. The teacher, thus, knows not only what works for him or her, but how and under what circumstances it might work for a variety of others.
## Levels of Professional Competence

<table>
<thead>
<tr>
<th>Level One: Initial Learning</th>
<th>Level Two: Internalized Learning for Self</th>
<th>Level Three: Ability to Teach Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial “Learning About” in real world context</td>
<td>“Learning About” more elaborate conceptual schemes</td>
<td>“Learning About” how to adapt knowledge to fit new and different teaching situations</td>
</tr>
<tr>
<td>Initial directed practice and reflection in real world setting</td>
<td>Practice and reflection for self is more complex and sophisticated</td>
<td>Practice and reflection on teaching others forces expansions of possibilities and greater flexibility</td>
</tr>
<tr>
<td>Integration with decision making and use in real world classroom</td>
<td>Integration is more autonomous, activities are more complex, elaborate, and better integrated and reflection is self-initiated</td>
<td>Autonomous decision making reflects ability to use content in many different ways to meet needs of others</td>
</tr>
</tbody>
</table>

In summary, we have presented a view of a professional development model for teacher education which is built on the assumption that the activities selected, the way in which teacher education plans are made and carried out, whether for pre- or inservice teachers or teacher educators, must reflect the outcomes one hopes to achieve. In the case described, that outcome is increased feelings of professional competence, belonging and worth for all participants, prospective and practicing teachers as well as prospective and practicing teacher educators. A collegial model which emphasized reciprocity and reflection has been designed to achieve this outcome.
References