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ABSTRACT

The Collaboration for the Improvement of Teacher Education (CITE) project brought teachers and administrators from four public school districts together with Eastern Michigan University professors to design and implement a research-based pre-student teaching program. The major goal of the program was to develop reflective pedagogical thinking in third-year education students. The program is one semester in length and during its course the following objectives are focused upon: (1) students use research-based course concepts and principles to analyze and interpret what they see and do in the field (beginning stages of reflection); (2) teachers help students learn from research-based assignments through coaching and see their collaborative role as important to teacher preparation; and (3) professors help students apply research-based concepts and principles to make meaning of their field experiences and see this as an important role. This report describes the development and implementation of the CITE program, the pilot testing effort, and expanding the program over a 3-year period. A project assessment report includes program component descriptions, results and findings on major questions about the program, a discussion of future directions, and implications for teacher education. A practice profile is included. (JD)

COLLABORATION
FOR THE
IMPROVEMENT OF
TEACHER EDUCATION

PROJECT PORTRAYAL

"I want to be the best teacher I can be, and it's not going to happen overnight. You just have to be open minded, willing to make changes. Until you work with children and try things, you don't know what things might work. It's just like writing. You have to revise. We had to think about our experiences in CITE. That made what we were learning about teaching meaningful."

-- CITE Student

COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION (CITE)

TEDD Project

OERI Contract Number

400-85-1052

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PROJECT PORTRAYAL
COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION: CITE
EASTERN MICHIGAN UNIVERSITY

I. PROJECT DESCRIPTION AND EVOLUTION

The CITE project brought teachers and administrators from four public school districts together with university professors to design and implement a research-based pre-student teaching program. The major goal of the 3-year CITE program was to develop reflective pedagogical thinking in third-year education students. During the year of planning (1985-86) and two years of implementation (1986-88), we have learned much about program development, collaboration, organizational change, and the use of research to develop reflective student thinking about classroom practice.

Year 1: Planning

In October, 1985, we recruited participants by providing an informational meeting for principals from four local districts. We sought two teachers and an administrator from each of three or four buildings in each district. We also included five district and county administrators involved with instruction or staff development.

In November, 1985 we held a half-day orientation meeting with the 70 participants from the four districts and EMU. Then teachers and administrators were interviewed to find out what research concepts and ideas should be included in the assigned pre-student teaching activities. In January, February, and March we had three half-day meetings where teachers and professors presented research to the whole group for consideration. The topics, based on the interviews, included unit and lesson planning, teacher expectations, classroom management, and reading comprehension.

In April, participants formed small groups to design pre-student teaching activities that would illuminate research on the topics above and other topics: cooperative learning, inquiry lessons, learning and development, social issues, and special-needs students. The professors then selected activities to pilot test with their courses.

Formative data collected during the first year indicated that teachers were pleased to be given an active role in determining the pre-student teaching program. They liked the personal interviews and felt their input was valued. They appreciated the opportunity to provide leadership through presenting information, leading discussions, and chairing design teams. Professors also valued the opportunity to learn about recent research along

with teachers and other professors.

Year 2: Pilot Testing

In 1986-87 we pilot tested the CITE pre-student teaching program. We began with one elementary and one secondary section of the blocked courses: Curriculum and Methods, Social Aspects of Education, and Measurement and Evaluation. Students registered to attend the block of CITE classes two days a week with Friday reserved for their half-day field experience. Approximately 50 teachers served as Classroom Teacher Educators.

Each week of the semester, students went to the same project teacher's classroom for 2 1/2 to 3 hours to observe, record activities, collect test data, teach all or part of a lesson, work with a small group, conduct interviews, and so on. For example, Curriculum and Methods students recorded on a seating chart who the teacher called on and the level of question. They then analyzed the findings in light of the research on teacher expectations. Other assignments were based on research on classroom management, direct teaching, and higher level thinking. Social Foundations assignments required students to attend a school board meeting, study the ethnicity of the community, or examine special student needs. Measurement assignments dealt mostly with test data interpretation and test development.

Since the assigned activities had been collaboratively developed, both professors and teachers felt ownership and commitment to CITE. Thus, they were very willing to help students make CITE a good learning experience. Professors led students through reflective discussions and writing activities to encourage application and analysis of course ideas. The teachers assisted students in the completion of the assigned activities.

The culminating event of the semester was the Teaching Week, where students went to the classroom for a half day for an entire week to teach a mini-unit. The teachers and professors had helped the student design the lessons to be taught during the Teaching Week. To reinforce the importance of this week, students were asked to keep guided Reflection Journals.

At the end of the week, students, teachers, and professors were invited to EMU for a "Celebration." Attendance at this event was impressive--over two-thirds of the participants. The enthusiasm of the students was clearly evident, even to our Dean, who rushed to his office to get a notepad to record some of the students' comments.

At the beginning of each semester, CITE teachers and administrators came to a meeting at EMU to meet the professors and to discuss their role as mentors. We also offered four voluntary workshops during the year on direct lesson design, classroom management, cooperative learning, and reading comprehension. EMU paid for the teachers' substitutes. The workshops were attended by teachers who felt they had not had sufficient opportunity to learn about the research-based topics in their local staff development programs--approximately 20 at each workshop.

To provide a personal link between EMU and the schools, we assigned a quarter-time faculty member to each of the four districts--a "CITE liaison"--to visit each teacher several times each semester. The liaison's job was to identify problems, answer questions, provide moral support, and to maintain contact with principals and district administrators. Teachers appreciated the liaisons' visits and the opportunity to share concerns and suggestions in a personal manner.

To continue collaboration and interaction, participants met in various groups. CITE Professors and liaisons met five times during the semester to discuss implementation ideas, to provide suggestions for scheduling or program changes, and to discuss the evaluation design. The CITE Advisory Board (20 representative members) also met to make program decisions, to provide input, and to discuss evaluation. Finally, a Dignitaries Dinner was held which included a State senator, superintendents from the participating districts, and EMU professors and administrators. A teacher and a student shared their experiences in CITE at this April dinner.

Extensive formative evaluation data were collected during Year 2 which helped us refine the program and plan instruments for the final year. In general, students were very satisfied with the opportunity to work in meaningful ways in classrooms. However, they indicated a need for more integration of content across courses--a constant challenge in college teaching.

The pilot-testing of the "think aloud journal" helped us refine our understanding of students' thinking. This work also highlighted the need for professors to teach students explicitly to use course concepts and principles to interpret their field experiences.

Year 3: Expansion and Evaluation

We doubled the size of the program during Year 3 to include two sections of the elementary and two sections of the secondary blocked courses. The field experience structure remained essentially the same with a few exceptions (e.g., refinement of assignments and visitations on days other than Friday). Even with 120 students participating each semester, this expansion allowed CITE to serve less than one-third of all EMU teacher education students.

To increase attendance at the beginning-of-the-semester meetings, we held the meetings at each district in the Fall. In Winter semester, the university liaisons scheduled a meeting in each building to discuss ways to encourage reflection, and to help orient teachers who were new to the program.

Meetings for the Advisory Board and professors continued throughout the two semesters. The liaisons also met with teachers regularly. An evaluation team of three teachers and four CITE faculty worked extensively on the evaluation during Year 3.

During Winter 1988, questionnaire and interview data were collected from all participants to assess program implementation and outcomes. The

implementation questions included:

(1) How do professors and teachers use research to build student reflection?

(2) How is the field experience used to develop reflection?

(3) How were the collaborative structures implemented?

(4) How was institutional support for the innovation created?

II. MAJOR ISSUES ADDRESSED DURING IMPLEMENTATION

This section is organized around the four implementation evaluation questions listed above.

Use of Research

Our understanding of how to integrate research on teaching and learning into a teacher education program has grown by leaps and bounds during the past 2 years of implementation. We have learned that although part of the job is creating a common language using research-based content, there is a more intriguing issue--how to use the research-based concepts to develop teachers' reflective interpretations and decisions. While we had stated this latter outcome in our 1985 proposal, we had little idea of what this kind of thinking looked like in pre-student teachers, nor did we know how to measure it.

During the planning year, we brought teachers and professors together to identify and learn about research-based practices (mostly from research on effective teaching). As we designed and pilot-tested field activities to develop students' ability to understand and apply these concepts, we found that the Social Foundations (SFD) and Measurement (MSMT) professors felt "frozen out," i.e., that only the Curriculum (CUR) content fit into the CITE project's research base.

By the end of the second year, our reading of the literature on reflection and our attempts to design a measure of student thinking helped us see how these two courses fit into CITE. These insights also helped us clarify how research can be integrated into a teacher education program. The SFD course focussed on the social context of teaching, i.e. the conditions that have to be considered when making a teaching/learning decision. The MSMT course provided the diagnostic and assessment tools used by teachers to consider the learner's readiness for a particular strategy or content. Thus, the CUR course's strategies, concepts, and principles could be best applied in a reflective manner when the social conditions of learning and assessment of the learner's readiness were considered.

This integration of the three courses for reflective decision-making was a

major insight. As we discussed these ideas with CITE professors and teachers during Year 3, we gradually came to see how a "crossover field activity" (involving factors from all three courses) would help students see how decisions are based on conditions, not merely prescriptions. We are now at work on such an activity to be implemented in Year 4.

As we developed the coding scheme for our "critical incident" student interviews (see Simmons, Sparks, Starko, Pasch, & Colton, Appendix A), we refined our understanding further. Clearly, it was more desirable for a student to refer to a research-based principle of teaching to interpret a teaching event (e.g., Wait time helps because more students get correct and thoughtful answers) than to just label the event (e.g., "She used wait time because research shows it works.") But the thinking that would show more reflective integration of the courses would be conditional (e.g, "These Hispanic kids are quiet and shy because of their awkwardness with English. So we used wait time to give them a chance to prepare an answer ahead of time.)

Again, we had made a leap in our understanding of the desired outcomes of our innovation. At the end of Year 3, however, only three of the seven core CITE professors shared this understanding of the use of research to develop "conditional reflective pedagogical thinking." Each semester, two or three professors have moved in or out of the project due to scheduling demands. With such personnel changes, full implementation is challenging. We plan to conduct meetings, data analysis sessions, and extensive discussions with the nine CITE professors during Year 4. Redesign of the assigned field activities and the development of a crossover assignment to more directly meet our vision of student thinking are now underway.

As we examined data and refined our conception of reflective thinking, we were struck by another important insight. First, professors seem to be most comfortable discussing theory- or research-based ideas and least comfortable with the conditions or contextual factors that impact learning. Second, teachers seem to be most comfortable with discussing the conditions of learning and less comfortable with the research- and theory- bases of teaching and learning. Thus a major goal in university-school partnerships that seek to use research-based knowledge is to bring these two groups' perceptions of teaching closer together. Our coding framework (now called A Taxonomy of Reflective Pedagogical Thought) holds great promise for meeting this goal because it respects the teacher's concern for conditions and at the same time emphasizes the importance of research-based pedagogical concepts and principles.

Now that we have a deeper understanding of reflective thinking, it remains to "spread the word." Already, we have involved the Advisory Board in applying our framework to student interview data. They were intellectually stimulated by the task and approved our idea to offer participant seminars on reflection during Year 4. In October all teachers and professors will attend a half-day Symposium where the framework will be presented and applied to student interview transcripts. We will invite 20 participants to return to the spirit of collaborative planning by participating in six CITE Seminars during 1988-89. EMU will pay half of the tuition for this 2-credit course.

The seminars will focus on the refinement of the framework and the development of coaching strategies to promote student reflection. The research-based curriculum content, the social factors, and the measurement tools from the three CITE courses will be examined as they relate to teaching decisions.

The Use of Field Experiences

During our two years of implementation, our participants have convinced us of the value of a highly structured pre-student teaching field experience such as CITE. We believe low-structure field experiences that involve observation only are less powerful. The structure of CITE included three to five written assignments per course that were turned in, discussed, and checked by the professors. We found that the Teaching Week mini-unit provided a structure that every professor implemented. The lower-structure field experiences used before at EMU were implemented much more loosely, with some professors hardly emphasizing the field component at all.

The students, teachers, and professors all commented on how the CITE field activities promoted students' ability to apply and make sense of course concepts. The assignments made the course content easier to teach because students saw concrete examples in the field. It also became easier to bring students to a higher level of thinking about course concepts and principles when they had a place to experiment with various strategies.

As we gained more experience with the pre-student teaching component of CITE, we came to appreciate the crucial role of the teacher in implementing the field experience. The teacher needs to understand not only the research on teaching, but also how to coach students' thinking and practice. The majority of our teachers have had prior training in effective teaching in their district workshops and/or through our planning year. But only a fourth of them have had any training in coaching. We have a long way to go before all CITE teachers are capable of coaching students for reflection.

Now that we have a better idea of what reflective thought looks like, however, we can begin to move more directly toward this goal. During Year 4 we will work with a group of 20 teachers during the CITE Seminars to develop coaching strategies that will help us meet the goals of CITE--students' reflective pedagogical thinking. These teachers will then work with other CITE teachers.

Collaboration

Through our experience with CITE we have come to a new understanding of university-school collaboration. At first, we saw it as collaborative planning and governance. Now, we have expanded this view to include the crucial aspect of learning together. By the end of Year 3, we had spent two years on the "nuts and bolts" of implementation. New learning was shared mainly by the project staff, the Advisory Board, and the evaluation team. Many teachers fondly recalled the excitement of the planning year when we had joined together to learn about research on teaching. The Advisory Board has

suggested that we provide more large meetings at EMU with all participants learning about the new research on teacher reflection. The Symposium and Seminars address this need.

Another insight is that "using research" probably isn't powerful enough to sustain long-term collaboration. Much research on teaching has been presented as a set of "findings" with little theoretical underpinning. Such "cut and dried" research is less provocative than a theory or conception of teaching such as reflection. The lack of precision in the term "reflection" leaves room for participants to develop frameworks and theories and test them out. We find the notion of developing reflective thinking to be an exciting rallying point for further collaboration.

We have also come to appreciate the structures that serve to maintain collaboration. The-20 member Advisory Board has met two or three times each year. It has been useful in making program decisions and in refining the CITE evaluation plans. The University Liaison role has also been important in creating a sense of personal contact between the schools and and university. The Liaison met with teachers, discussed program directions, invited suggestions, and let teachers and administrators know they were valuable to the success of CITE.

Other activities that have successfully promoted collaboration during the life of CITE include: providing tickets to an EMU play with a reception for CITE teachers and faculty; the End-of-Semester Celebrations; the yearly CITE newsletter with contributions from students, professors, and teachers; opportunities for teachers and professors to present CITE at local conferences; recognition in the media (three articles); and a national Distinguished Achievement Award from AACTE for the use of research in teacher education.

Collaboration on the Final Report has taken place through work with the Advisory Board who reviewed the outline and evaluation plans and will read the drafts of the PAR and the Portrayal. The Advisory Board also helped create the Practice Profile.

Organizational Changes to Support Institutionalization

We knew from our experience in staff development that change was going to be slow and that organizational support would be critical to program continuance. Therefore, CITE had a systematic plan for promoting institutionalization. From the beginning we acknowledged the need to win a series of political/academic victories within the university. These victories are listed below in chronological order:

1. The Department of Teacher Education supports the blocking of

three courses with an associated field experience (Winter, 1985).

2. Teaching faculty in Curriculum, Social Foundations, and Measurement agree to cooperate in supporting the Teaching Week where students are released from classes to teach their mini-units in a collaborating classroom (Winter, 1985).

3. The University Council on Teacher Education (UCTE) agrees to enter the block schedule proposal into the university input system to gain institutional approval and thus, a measure of credibility (Fall, 1985).

4. The university, after instructional committees from all colleges support the organizational change, gives its approval for the block schedule (Fall, 1986)

5. After initial criticism from students, faculty, and administrators regarding the inconvenience of the block schedule, minor adjustments are made, and support for the block schedule is reaffirmed by the UCTE (Fall, 1986).

6. Letter is sent from Project Administrator (Teacher Education Department Head) to University President requesting institutional support for CITE after federal funding ceases (Fall, 1987).

7. President responds with a request that the Provost, the Dean of the College of Education, and the Project Administrator meet with him to discuss the CITE budget request (Winter, 1988).

8. Eastern Michigan University is given the AACTE Distinguished Achievement Award for Using Research in Teacher Education in the CITE program (Winter, 1988).

9. Provost, Dean, and Project Administrator agree on a basic level of support for CITE after federal funding ceases (Spring, 1988).

10. President agrees to match Academic Affairs financial support with funds from his own program development monies to continue funding CITE at the same level ($15,000 in addition to salaries for a half-time coordinator, a half-time graduate assistant, and five quarter-time university liaisons).

This chronological listing perhaps obscures the enormity of the institutional change that took place at EMU between January, 1985 and July, 1988. Consider the environment for teacher education one year prior to writing the CITE funding proposal. Only students in elementary education had a structured field experience, limited to their reading methods course and some sections of subject-area methods. Those field experiences that did exist required little or no collaboration between university and K-12 instructors. Secondary teacher education students had no pre-student

teaching field experiences in their courses and were forced to find their own placements to fulfill the requirement. Thus, with few exceptions, field experiences were not associated with professional education courses.

The general methods course, Curriculum and Methods, was taught by a variety of faculty with little predictability as to content and approach and with little attention to contemporary research. University administrators and faculty were critical of the education program and believed it lacked coherence, academic rigor, and impact. No university support was allocated to structured pre-student teaching field experiences or to collaboration with K-12 schools.

Outside observers were not aware of any significant external professional recognition received by EMU's teacher education program, even though its tradition in the field extends back to the previous century and it ranked at the top in AACTE's productivity rating (EMU is now first in productivity). Faculty contributions to teacher education conferences and professional journals were scattered and few in number.

Factors Supporting Change

There were several organizational and institutional factors that contributed to the success of CITE. First, in 1985, EMU approved a major revision in its teacher education program that required the redesign of the core courses. The revision also recommended greater use of recent research on teaching and more structured pre-student teaching field experiences. The pre-student teaching requirement was increased from 48 to 100 hours. Thus, when the RFP came out in summer, 1985, we were ready to collaborate with local schools to work toward these goals.

A second factor involves personnel. The Project Administrator was the Department Head of Teacher Education and a Professor of Curriculum with a research interest in curriculum change and program evaluation. He had been in a similar position at a former institution and had participated in program development that had culminated in a successful field-based program. He helped conceptualize the revisions in the EMU teacher education program and was a partner in the development of the CITE project.

The Project Director, an Assistant Professor in the Department of Teacher Education, was a nationally known consultant in staff development and effective teaching. During her relatively brief time in Michigan, she became widely respected for her skills in professional development and effective instruction in the K-12 and university world.

Another factor that helped CITE succeed was the turnover of personnel. From 1983 to 1988 15 out of 42 faculty members retired. At the same time, enrollment in the teacher education program increased by 50%. Thus, we were able to hire many new faculty members who shared the vision of field-based teacher education. In fact, three of the present leaders of the CITE project have been tenure-track faculty for 3 years or less.

The changes brought about by CITE and the other factors mentioned have substantially altered the role and status of field experience in the program, increased the degree to which faculty utilize contemporary knowledge about research on teaching and learning, enhanced the role of the teacher education faculty members in the university, brought EMU faculty in direct contact with school personnel, substantially increased the spiritual and financial support for field-based teacher education, and created the conditions that have brought notoriety to the program and to selected faculty teaching in the program. Thus, the nature, status, and potential of teacher education at EMU have dramatically improved.

III. MAJOR OUTCOMES

The four outcome questions addressed by the evaluation were:

(1) How has CITE developed students' reflective pedagogical thinking?

(2) How have teachers redefined their role as teacher educators?

(3) How have professors modified their thinking and practice regarding the use of research and field experiences in teacher education?

(4) How has CITE been institutionalized?

Participants' general reactions to CITE are also reported in the outcome questions.

Question 1: Pre-Student Teacher Outcomes

Eight high, middle, and low achieving elementary and secondary pre-student teachers were interviewed immediately following the Teaching Week. Students were asked to describe one positive and one negative teaching event. Audiotapes of the interviews were transcribed and coded independently with .81 interrater agreement.

A coding scheme had been developed by the evaluation team over several meetings where data from Fall semester were coded for practice and categories were refined. The result is the Taxonomy for Reflective Pedagogical Thinking (Figure 1) which distinguishes the simple labeling of events (Level 3) from the use of principles to explain events (Level 5) from contextual (Level 6) and ethical (Level 7) decisions (See Figure 1).

Of the six low achieving students, only one was able to do more than merely describe an event with an appropriate pedagogical label (Level 2 or 3). All 18 medium or high achievers were able to describe teaching events using course principles (Level 5: "If the teacher did x, then the students were likely to do y"). Eleven of the 24 students moved beyond Level 5 to

Figure 1: PEDAGOGICAL LANGUAGE ACQUISITION & CONCEPTUAL DEVELOPMENT
TAXONOMY OF TEACHER REFLECTIVE THINKING

LEVEL 1 - no description of an instructional event

LEVEL 2 - description of an instructional event without any use of pedagogical language as concept labels for what occurred

PEDAGOGICAL LANGUAGE (CONCEPT) LABELING BEGINS:

LEVEL 3 SIMPLE - description of an instructional event with one use of pedagogical language as a concept label for what occurred
LEVEL 3 COMPLEX - same as LEVEL 3 SIMPLE but with more than one use of pedagogical language as a concept label

LEVEL 4 - same as LEVEL 3 plus whim/personal preference/tradition is used to explain an instructional event; reference is made to use of instructional rules & techniques but no explicitly stated cause - effect pedagogical principles are recognized; level of emergent principles but cause - effect connections are vaguely stated

PRINCIPLED PEDAGOGICAL THINKING BEGINS:

LEVEL 5 SIMPLE - an instructional event is explained using one cause - effect pedagogical principle ("if ... then ...")
LEVEL 5 COMPLEX - same as LEVEL 5 SIMPLE but with more than one use of cause - effect pedagogical principles

CONDITIONAL PEDAGOGICAL THINKING BEGINS:

LEVEL 6 SIMPLE - one aspect of contextual data is used along with cause - effect pedagogical principle(s) to explain an instructional event ("if ... then ... because ...")
LEVEL 6 COMPLEX - same as LEVEL 6 SIMPLE but with more than one use of contextual data along with cause - effect pedagogical principle(s)

MORAL PEDAGOGICAL THINKING BEGINS:

LEVEL 7 - same as LEVELS 5 & 6 plus reference to moral/ethical/political issues to explain an instructional event

integrate the conditions of learning into their interpretations (Level 6: "If the teacher did x, the pupil outcome is likely to be y, because of factor z"). These findings were encouraging, especially when we realize that low achieving students were overrepresented in this sample. That is, there were far fewer than one-third low achieving students in the entire CITE sample (approximately one-tenth).

Students have responded positively to CITE. Over 80% of students expressed great satisfaction with the CITE program. Typical comments are: "I learned far more than any other pre-student teaching experience." "I enjoyed the interaction of the three classes and their parallel to actual classroom experiences." While students experienced considerable anxiety regarding the Teaching Week, they came to appreciate the opportunity to "dive in." As one student said, "Everyday I thought, 'This is what it's all about.' What feels good is I know I'm not perfect, and I know I can make mistakes. But this is what I'm cut out for."

Question 2: Teacher Outcomes ⟶

Teachers definitely saw an important role for themselves as CITE Classromm Teacher Educators. Over 96% of the teachers saw a great benefit for EMU students and for themselves. More than 60% also reported many benefits to their pupils and districts. Teachers' comments indicated that they enjoyed assisting budding teachers in their careers, appreciated the collegiality, and that teachers themselves were kept "up to date" by their participation in CITE.

Teachers defined their role in CITE as a model, encourager, coach, and personal support. They reported that they appreciated the opportunity to make a valuable contribution to the preparation of teachers. As one teacher said, "I have been able to see the effort that is being exerted toward improving teacher education. I only wish my student teacher had had a program like CITE before student teaching."

Over 65% of teachers felt strongly satisfied with the collaborative nature of CITE; only 4% reported low satisfaction. Teachers indicated a need for more meaningful interaction with university faculty; brief meetings with the liaison during the hectic school day did not adequately meet this need. The Symposia and Seminars on reflection during Year 4 will provide this much-needed interaction.

A comment that illustrates many teachers' feelings about CITE is, "The teacher is more active with the CITE pre-student teacher now. We don't just observe and do paperwork (like other pre-student teaching)." Thus, teachers appear to be satisfied with the CITE collaboration and committed to their role as a Classroom Teacher Educator.

Question 3: Professor Outcomes ⟶

The 11 professors were highly satisfied with their participation in and the collaborative nature of CITE, with average ratings of 4.63 and 5.00 on a

six-point scale. They found one of the most satisfying aspects of the CITE to be the ease with which course concepts could be taken to a deeper level. As one professor put it, "Students begin to take their decision-making seriously and attempt to use principles in real life instead of memorizing for a test."

CITE professors also changed some of their practices as a result of participating in CITE. One professor said, "It has forced me into preparing more...I have a predisposition sometimes to lecture because that is my stronger more of presentation, and I think I have now integrated far more participation into the process." Three of the seven regular CITE faculty reported that they were experimenting with new ways of teaching that were more consciously structured toward enhancing student reflection and the integration of theory and practice. Rather than "business as usual," they reported experiencing new professional excitement and growth as they participated in data analysis and became more intrigued by the concept of reflection.

A major outcome of CITE concerns professors' thinking about field-based teacher education. Over the 3 years of CITE, the atmosphere of "college teaching" slowly changed. Rather than the typical norms of professor isolation and student responsibility for learning, expectations gradually shifted toward faculty collaboration and sharing of responsibility for learning among students, professors, and teachers.

All seven regular CITE professors reported a new appreciation for the field experience for enhancing and deepening student learning of course content. Interestingly, it was the congruence between the strategies taught at the university and those used in the classroom that brought professors a welcome relief from the "ivory tower" stigma. One professor expressed it this way: "There is a temptation of people in the classroom to say, 'You have been out of the classroom so long, you don't know what's happening.' But when students came back and say they are doing things their teachers think are good and the teachers are doing things (we learned about), it's a validation."

Another comment related to professors' increased comfort and interest in relating to teachers: "(This has) reinforced a stronger sense of comfort in dialoguing with teachers about what we do in the university." By the end of Year 3, CITE faculty expressed greater interest in working with teachers to further develop our thinking about reflection and teacher education.

Question 4: Institutionalization of the Innovation ⟶

There are no guarantees: the history of innovation in education provides little comfort. However, the progress toward application-based teacher education demonstrated by CITE has been nothing short of remarkable. If the status of an innovation rests on whether the leaders plan for the future rather than rest on past achievements, then the continuance of CITE is promising.

Theoretical frameworks to integrate instructional technique with social context and theory with practice are being developed by a group of CITE participants. A Seminar for Reflection for CITE teachers and professors will be implemented next year with partial scholarship support from the university. Funding for structured field experiences is secure for next year. Newly appointed faculty who are supportive of CITE and its visions of teacher education will join us next year. Finally, a new director has been appointed--a teacher who has participated since the first year of CITE. Collaboration for the Improvment of Teacher Education continues.

Summary and Discussion ⟵⟶

All participants have responded positively to their involvement in CITE, probably because of the collaborative nature and the extensive involvement of participants, especially in the planning year. Another reason for the enthusiasm is that CITE has not required participants to make huge changes in what they normally do. As we have implemented CITE and looked at evaluation data, our collaborative Advisory Board and evaluation team have suggested that deeper changes in thinking and practice need to occur among teachers and professors. Since these suggestions have come from the participants themselves, it is likely they will be implemented with the same enthusiasm we have seen so far.

The student data on reflective pedagogical thinking are encouraging. We have developed an interview technique and a framework for coding reflective thought that will help us not only analyze data, but will also be a valuable "staff development" tool as we share it with more and more participants. Now that we have a clearer vision of reflective thought, we are less confident that the CITE pre-student teaching activities are as powerful as they could be in promoting this goal. We also recognize that teachers and professors can do much more to promote the conditional decision making we see as desirable. It remains to us to collaboratively fine-tune these aspects of the program--a major task of Year 4.

EMU has authorized funding for CITE at the same level provided by OERI--a promising move toward institutionalization. Future plans also include further refinement of the Taxonomy for Reflective Pedagogical Thinking through collecting data with more experienced teachers and with non-CITE students (to be presented, we hope, at AERA, 1989).

IV. IMPLICATIONS FOR OTHERS

Our experience with CITE has brought us many understanding related to collaboration, the use of research and field experiences, teacher reflection, and change. The implications for improving teacher education are listed below. Then, feasibility and productivity of project features are presented.

~~Implications~~

Implications

1. The creation of a developmental Taxonomy of Reflective Pedagogical Thinking has great potential for program evaluation, staff development, and program revision. The exercise of collaboratively developing such a framework was an exciting activity which brought the evaluation team closer together. The taxonomy can also be used for a developmental view of teacher preparation, with different levels being stressed at different stages (e.g., pre-student teaching, student teaching, induction, certified teaching).

2. Collaborative analysis of student thinking interview data is a powerful staff development activity for both teachers and professors. The 15 to 20 hours of meetings yielded more than just a coding scheme for student interviews. This process provoked a rich dialogue concerning what students were/weren't learning, instructional strategies, student evaluation criteria, etc. This experience was unparalleled for the participants as well as extremely helpful in developing a team who have a shared view of CITE's curricular goals.

3. The view of effective teaching as contextual instructional decision making shows promise for unifying the various curricular components and philosophies which have existed as separate entities in teacher education programs. Teaching research-based practices in Curriculum courses is not enough. Social Foundations, Measurement, Human Development and Learning all provide a means for gathering data to aid in making instructional decisions.

4. When making external funding decisions, preference should be given to programs which have already initiated change from within. The impressive level of institutionalization was achieved partially because of EMU's prior moves to reform its program. Thus, the OERI funding allowed EMU to capitalize on the momentum already there to move ahead vigorously toward collaborative program design and implementation

5. Successful dissemination involves informal, cultural, and personal strategies as well as more typical formal vehicles. The CITE students became ambassadors for teacher education throughout the university as they praised their experiences in CITE. Celebrations; social events; dignitaries' dinners; local newspaper "thank you's"; and articles and presentations within the university, state, and nationally; and a national award have all served to create excitement, dignity, and dissemination of CITE.

Feasibility and Productivy of Project Features

We believe that the developmental process over the past 3 years would be useful for any teacher education program that wants to collaborate to use research in field experiences, especially pre-student teaching programs. We have gained greater understanding of how the field and courses support one another, there is a common language among teachers and professors, and there is, for the first time, a coherence among three of the core professional courses.

CITE's collaboration through interviews, meetings, common readings, and

liaisons could easily be accomplished by those involved in a pre-student teaching or student teaching program. Research can be shared and discussions of how it should be applied for decision making are valuable. Collecting and analyzing data on how students are using course content to interpret events in the field are wonderful collaborative activities because they build a common understanding of the desired outcome and a framework for understanding student thinking.

The CITE project features--the research-base, field experiences, collaboration, and institutional support are all productive (see Sections II and III above), and have been shown to be feasible even in a large program like ours (over 1200 student teachers each year).

V. INSTITUTIONALIZED FEATURES OF CITE

All aspects of CITE will continue after September 30, 1988. There will be a half-time Director (a former CITE teacher); a half-time Coordinator (Graduate Assistant); five quarter-time university liaisons; an Advisory Board ; and an Evaluation Team. EMU will fund all the staff positions and is contributing $15,000 for supplies, materials, and dissemination at conferences. We have letters from the President of the University and from the Provost (Academic Affairs) authorizing these funds. It is clear that EMU values the innovative, highly visible, and successful nature of CITE.

The reasons for such thorough support are discussed in Section II: the readiness provided by the other changes in the program, the project and department leadership, the AACTE award, changes in personnel, and prior good relations with schools.

VI. OVERALL STRENGTHS AND WEAKNESSES

Our Most Effective Endeavors

1. All first-year teambuilding, planning, and collaborative activities were successful because our group included 70 participants, we provided released-time, we gave teachers and administrators an "honored" role and listened to their ideas, and we learned together about the research with both teachers and professors presenting information.

2. The "design-team" idea worked very well because people could choose areas of research they were interested in and worked together to develop pre-student teaching field activities that would help students apply the information.

3. The organization of the "nuts and bolts" of placing 120 students in

schools, providing written assignments, and having the coordinator go the university classes to make placements, handle problems, and collect data worked well because it gave a structure to CITE and made things clear to all participants. It also relieved the professors of many of the logistical details involved in field experiences.

4. The professor meetings were vital to developing the much needed coordination and coherence among courses and to identifying and clarifying "bugs" in the innovation.

5. The University Liaison role was valuable in providing personal contact with teachers and administrators in schools. One of the first visions our planning team had was of more professors in schools and more teachers in the universities. The Liaison position has helped move us move toward this vision.

6. The Advisory Board was crucial in maintaining teacher input during Years 2 and 3. The 20 members came from all four districts and EMU and included teachers, principals, and professors. This group was helpful in reacting to evaluation plans and reports, helping make presentations, and making future plans.

7. The social activities and celebrations made CITE fun for participants. We provided free tickets to an EMU play; we had a "celebration" party at EMU at the end of each Teaching Week for students, teachers and professors; we had reporters write several articles about CITE; and we put an "ad" in the Ann Arbor paper that listed names of all CITE participants and congratulated them on the AACTE award. The CITE newsletter is also a way of honoring and celebrating the project and participants. We always brought food to our meetings at districts and schools to create a comfortable caring atmosphere. All these actions sent the message that we valued the CITE participants.

8. We wrote about and made presentations about CITE during all three years--5 articles and over 10 presentations. These activities have often involved teachers as co-presenters or co-authors. Such national and state visibility brings recognition and status to all participants; people feel like they're part of "something big."

9. The evaluation team was not only valuable for conducting the evaluation, it also served as a valuable learning experience for all six of us. It brought back the excitement of being on a research team that was breaking new ground. It gave us time to think, muse, create frameworks, share our insights, and learn together--an all-to-rare experience in a "teaching university" like EMU. We have created a Taxonomy of Reflective Pedagogical Thinking that we hope to present at AERA and that has provided us with a research agenda for the next two years. The Taxonomy is also useful as a staff development tool with teachers and professors as we examine student interviews together. It has also pointed the way to modifications in how we teach our courses and how we design the CITE assignments.

Things We Would Do Differently

1. We would set up more large-group meetings with new learning during Years 2 and 3. While we had beginning-of-the-semester meetings for teachers and professors during Year 2, attendance was poor after the first semester. Most people were busy and, because they had "done CITE" for one semester already, they thought they would gain nothing new by coming to another orientation meeting. During Year 3 we tried having the meetings at the districts in the Fall, but ran into interference with Parents' Nights at the schools. So in the Winter we tried having each liaison meet with teachers at each school--a method that was highly dependent on how committed the liaison was. Also, meetings before or after school tended to be hurried, which hindered meaningful discussions of student outcomes.

If we had it to do over, we would have budgeted for and provided for a half-day release for all CITE teachers at the beginning of each year. To do this, however, would have cost one-third of our operating budget because we had expanded to over 100 teachers. We did not want CITE to be a small "hothouse" project that could never be expanded and institutionalized, so we chose to expand even though it reduced our ability to provide intense released-time worksessions with teachers. We'll know in two more years whether our current plan of Seminars and Symposia meets our goal of preparing our teachers to know the research and be able to coach for reflection.

2. We would have budgeted for a half-time position (instead of quarter-time) for the CITE Director. The amount of time required for writing reports was not included in the original time estimate. The Director has spent at least 100 hours each March and July for three years preparing reports for OERI. This extensive expenditure of time, especially during June and July (the months usually spent off duty), was not anticipated. Other writing projects had to take a back seat to CITE during this time. We must admit, however, that the Evaluation Design Report (July, 1987) and this Final Report have stimulated us to clarify questions, measures, and outcomes.

3. We would have tried harder to convince the Department Head to keep the CITE faculty stable. As it was, we had 14 different people teaching CITE courses, with only six of them teaching every semester of implementation. This meant that we had professors (often visiting lecturers) teaching CITE sections who were new and knew little about it.

4. If, magically, we had in 1985 had a deeper understanding of reflection, we might have been able to get to where we are now a little earlier. But, then we would not have gained what we have by "learning it for ourselves" and the level of excitement about going further with our innovation might have been less.

Most Important Resources

The most important resources to capture are described under "Organizational Change" in Section II: the Dean's support, the President's support, the

UCTE's support, the professors and schools' support, the appropriate project leadership, and enthusiastic student reactions all helped ensure continuation of CITE.

Most Valuable Lessons

The most valuable lessons learned are presented in Section II. Using research in teacher education is more than just inserting findings into the curriculum; one must generate a theoretical framework for how research is used in decision making, and courses need to be integrated to emphasize contextual decision making.

Field experiences can be powerful to the extent that (a) they are highly structured (the Teaching week helped do this) and (b) professors and teachers emphasize them, discuss them, and use them to develop students' conditional reflective thinking.

Collaboration is more a matter of learning together than of planning, coordinating, or providing input to decisions. Genuine excitement occurs when folks join together to learn about something that is intellectually stimulating and holds promise for significant improvement. Research on teaching did not hold attention for long because it tends to be less theoretical and leaves less room for self-generated knowledge. Reflection holds more promise for such continued involvement.

Institutionalization is accomplished by making changes where there is already a climate and readiness for change, where the project leadership are experienced in change and staff development, and where awards, articles, and presentations are sought.

VII. PRODUCTS AND DISSEMINATION ACTIVITIES

CITE has been disseminated through presentations, papers, articles, and media attention. Each is described below.

Presentations

The presentations made about CITE are listed with audiences reached and probable impact.

1986 Presentations

October 8-10: Michigan Association of Supervision and Curriculum Development (MASCD), Boyne, MI. Project Director and teacher. 20 participants. Interested discussion and requests for materials.

October 17: Michigan Association of Teacher Educators (MATE), Kalamazoo, MI. Project Director and Coordinator. 25 participants. Many questions and requests for materials.

December 4-6: Michigan Educational Association, Institute of Professional Development, Lansing, MI. Student Teaching Coordinator and teacher. 25 participants. Questions and discussion of developmental stages of teachers.

December 14: National Staff Development Council (NSDC), Denver, CO. Project Director. 50 participants. Discussion and questions.

1987 Presentations:

February 14-18: Association of Teacher Educators (ATE), Houston, TX. Project Director and Student Teaching Director. 15 participants. Discussion, questions, requests for materials.

October 9: Reflection Conference, Houston, TX. Project Director and Evaluation Consultant. Prepared a paper which was distributed to all 40 participants. Much discussion and learning for all.

November: Michigan Education Association, Lansing, MI. Project Coordinator and Teacher. 30 participants. Discussion and requests for materials.

1988 Presentations

February 8: Association of Teacher Educators (ATE), San Diego, CA. Presented with other OERI projects. Project Director, Student Teaching Director. 150 participants. Much discussion, requests for information.

February: American Association of Colleges of Teacher Education (AACTE), New Orleans, LA. Paper presented by Project Administrator and Project Coordinator. 100 participants. Many questions and requests for papers.

April: Effective Instruction Consortium, Lansing, MI. Project Coordinator and Teacher. 10 participants.

May 11: Michigan Association of Colleges of Teacher Education (MACTE), Lansing, MI. Project Evaluation Consultant. 150 participants. Many requests for information.

Future Presentations, 1988-89

October 5-7: Michigan ASCD, Boyne, MI. Project Liaison and Teacher. (accepted)

October 21: Michigan ATE, Lansing, MI. Project professor. (proposed)

October 21-22: Reflection Conference, Orlando, FL. Project Director, Professor, Evaluation Consultant. (accepted).

December 14: NSDC, Chicago, IL. Project Director, professors, teachers. (accepted)

February 18-22. ATE, St. Louis, MO. Project Director, professors, teachers. (proposed)

March 2-5. AACTE, Anaheim, CA. Project Administrator. (proposed).

March 27-31. American Educational Research Association, San Francisco, CA. Project Director, Evaluation Consultant, Coordinator (teacher), and Professor. (two presentations proposed).

Publications

Five articles have been written for presentation or submission to journals.

Simmons, J.M. & Sparks, G.M. (1987). Judgement criteria perspectives on a new "teacher as reflective decision maker" model of teacher supervision and evaluation. Presented at reflection conference, to be published in Waxman (Ed.) in 1988, also avialable in ERIC.

Sparks, G.M. (in press). The teacher as mentor in a large pre-student teaching program. Presented at ATE and to be included in OERI's volume of papers.

Pasch, M., Sparks, G., & Colton, A. (1988). Collaborative research-based pre-student teaching. Paper presented at AACTE and published in ERIC.

Starko, A. (submitted). Reflections on teaching for reflection: True confessions.

Sparks, G., Pasch, M., & Colton, A. (submitted to Journal of Teacher Education). Using research to develop reflection in pre-student teaching.

Other Media Attention

There have been two articles on CITE in the AACTE newsletter, one announcing CITE's AACTE Distinguished Achievement Award.

The local Ann Arbor newspaper has had two articles on CITE, whereas the EMU alumni newsletter and student newpaper have contained over five articles.

Summary Statement

CITE has received national attention and recognition through the AACTE Distinguished Achievement Award for using research in teacher education. We are receiving requests for information on CITE almost daily, with over 20 requests received so far.

CITE has been successful in "spreading the word." Many people will gain from our experience by building on our strengths and avoiding our weaknesses. CITE is not, however, a packaged pre-student teaching product that can be picked up and implemented anywhere. We believe that the processes of planning, examining research, refining outcomes, and so on have brought about the great benefits from CITE. And, we still have a way to go before reaching fully satisfactory implementation.

COLLABORATION
FOR THE
IMPROVEMENT OF
TEACHER EDUCATION

PRACTICE PROFILE

COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION (CITE)

TEDU Project

OERI Contract Number

400-85-1052

Georgea M. Sparks, Project Director
Amy B. Colton, Project Coordinator
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A COOPERATIVE EFFORT OF THE EMU COLLEGE OF EDUCATION
WITH ANN ARBOR, LINCOLN, WILLOW RUN AND YPSILANTI SCHOOLS

DEPARTMENT OF TEACHER EDUCATION 234 BOONE HALL EASTERN MICHIGAN UNIVERSITY YPSILANTI, MI 48197

PRACTICE PROFILE DRAFT

I. USE OF PRE-STUDENT TEACHING FIELD EXPERIENCES IN TEACHER EDUCATION PROGRAM	Unacceptable	Acceptable	Ideal
A. Pre-student teaching activities accompany the 3 core courses.	. Vague directions irregular attendance at field placement.	. Clear directions and regular (once-a-week) attendance at field placement with a one-week mini-unit. . Field activities not routinely used as the basis for class discussion.	. Specific directions and accountability for activities and once-a-week attendance at field placement with a one-week mini-unit. . Accountability for activities, that is, field assignments done at regular times and feedback is given. . Field activities are scheduled and used as a lab for class discussion.
B. Level of reflection required by field activities.	. Only passive observation or unstructured low-level/clerical activities, i.e., grading papers for long periods.	. Active apprenticeship activities with inquiry into practices, effects, and context factors specified by structured assignments.	. Student-generated inquiry into causes and effects in classrooms and schools, e.g. "Why students did poorly on a quiz if direct instruction was used? Could context or test factors be operating?"
C. Relationship between course content and field experience activities.	. Little or no discussion of student field experiences as they relate to course concepts.	. Frequent discussion of student experiences with an explicit attempt to help students apply course content to help make meaning from their experiences (concept oriented). . Emphasis on understanding and applying each concept (Concept recognition, Application), i.e., Chart of space useage in Classroom Management; who teacher calls on, etc.	. Frequent discussions with explicit attempt to help students use course concepts for decisions and revisions regarding their teaching and student learning. . Emphasis on identifying what students saw as well as other ways it could be done, advantages and disadvantages of each (critical discussion). . Case or Problem-Oriented discussion.

II. RESEARCH CONTENT IN COURSES AND FIELD EXPERIENCES (PST)*	Unacceptable	Acceptable	Ideal
A. Use of Research by professors, students, teachers - in courses, assignments and field activities.	. Little or no reference to research as a source of information for sense-making/ decision-making about a "case" or class problem.	. Professor occasionally (1 or 2 times per week) refers to research as a source of sense-making/ decision-making. . Student activities once a week are directly tied to assignment. . Teacher helps students with assigned activity referring to research every other week.	. Frequent and explicit discussion of research as a source for sense-making and decision-making in every class. . Beyond the assigned field activity, students spontaneously use research-based concepts to interpret what they see or do in the classroom.
B. Courses, Assignments, and Field-Based Activities Reflect All Cognitive Levels	. Recall and understanding only, i.e., list research findings on teacher expectations.	. Application, analysis and synthesis levels, i.e., apply findings on teacher expectations as observer in a class, coding teacher-student interaction and analyzing codings.	. All levels plus evaluation, e.g. discuss whether it is desirable a) to treat every student equally, b) to call on boys the same amount as girls; or c) to use external reinforcers.
C. Integration of Research and Theory across Three Core University Courses: Social Aspects of Education, Curriculum and Methods, Measurement and Evaluation.	. Little or no mention of concepts from one course to the other two courses.	. Occasional mention or discussion of how 2 or more courses relate to one another, i.e., Social Foundation brings up teacher expectations and equal opportunities in the classroom in terms of equity; curriculum class brings up teacher expectations in terms of questioning strategies.	. Frequent discussion of concepts as they relate to the three courses.

* PST = prestudent teacher

III. STUDENT OUTCOMES	Unacceptable	Acceptable	Ideal
	* Students evidence no connection among courses, research-based concepts, and field experiences	* Students can use research-based language to analyze a classroom situation	* Students initate on their own inquiry into teaching and learning using research-based concepts from all 3 courses
		* Students report confidence/ self-efficacy re: teaching	* Students evidence confidence/self-efficac

IV. ORGANIZATION/COLLABORATION	Unacceptable	Acceptable	Ideal
A. Shared purpose and role redefinition. Degree to which professors and teachers believe they share responsibility for the quality of teacher preparation.	* Complete separation of university and district roles and purpose. * Attitude that University prepares teachers and schools teach kids.	* Co-existence with moderate crossover of purposes and roles in teacher education. * Individual teachers see small part of their role as helping to prepare future teachers. * University faculty begin to see teacher as a person who can be helpful in preparation of teachers. * Student goes in to classroom and individual teacher is helpful.	* High correlation of purpose and roles - both university and schools share roles and purposes. * A critical mass of teachers and administrators see one purpose of their school as preparing teachers. * School creates an environment and procedure processes that reflects their responsibility fo preparing teachers, i.e a building orientation by the administrator, ongoing topic at facult meeting, school-based teacher preparation committee, whole school talk about helping students. * University perceives an values whole school as active contributors to the preparation of teachers.
B. Mutually defined program design, redesign, and implementation of tasks among university and school participants.	* University definition of program * No mutual development of "field assignments".	* Vague but mutually determined program development tasks.	* Specific mutually defin tasks. * Teachers present in univ sity classes. * Faculty go to classroom during "teaching week" to observe.

IV. ORGANIZATION/COLLABORATION(continued)

	Unacceptable	Acceptable	Ideal
C. Teacher Role Preparation	* No meeting(s) to examine research and to design "field-based activities."	* 5 large group meetings to examine research and design field based activities. * District and University people share in presentation of research. * Research presented is based on teachers' views of the areas of research that are important to beginning teachers.	* Established process for selecting new people. * Established process for meeting with new people to train them in research. * Ongoing research updating meetings. * Developed coaching component for teachers, i.e., guidelines. * Training in how to work with pre-student teacher.
D. Program Development Design Team	* none	* Develop activities with every-three-year evaluation of research-base. and activities assigned.	* Develop activities with yearly re-design of activities and examination of research.
E. Shared decision-making among University and School Participants re: program design and implementation.	* No organizational structure(s) exists for shared decision-making, i.e., no Advisory Board. * No Liaison	*Institutional structures (Advisory Board, Participant meetings, university liaison contacts) exist and are used informally and/or less than twice a year. * 3/4 of school participants regularly attend meetings.	* Easy give and take among university and school participants. * Participation of school and university equally valued by each group. * More than 3/4 of the school participants regularly attend meeting.
F. University Liaison Role is carried out by a faculty member who maintains building level contact as well as contact with individual teachers.	* No contact with schools and/or teachers.	* Visits site 3 times per semester. * Has contact with each teacher on each visit on a one-on-one or small group basis.	* Visits site more than 3 times per semester. * Has contact with each teacher on each visit on a one-on-one or small group basis. * Holds at least two (2) building level meetings per semester to discuss operational details of the of the program * Begin to discuss teachers' "coaching" role vis-a-vis students.

V. ORGANIZATIONAL STRUCTURES REQUIRED TO CONTINUE CITE	Unacceptable	Acceptable	Ideal
A. A cadre of CITE professors and teachers is selected and prepared (8 professors and 120 teachers for every 4 sections of Core).	* No cadre exists; participants are picked at random every semester. * No preparation is provided.	* Professors meet to discuss courses. * Seminars/workshops for teachers and professors provided twice a year	* Professors and teachers meet twice a semester (on released time) to learn about new research and to refine assignments, activities, purposes
B. Institutional Support Budget, Personnel, etc.	* No line-item in the budget for personnel, materials, etc.	* Budget available for half-time coordinator, 4 liaisons, 1 GA (½ time) plus workshops, released-time, etc.	* Budget available for all plus food for meetings, brochures research on program effects.
C. Leadership	* No personnel or inexperienced uncommitted personnel.	* Committed, competent CITE participant as coordinator with well-organzied detail-oriented GA, and personable committed liaisons. * Department Head and Dean committed to program.	* Teacher-Educator or Researcher continues the project with well organized detail-oriented GA, and personable committed liaison, plus * Expansion, research and quality improvement.

COLLABORATION
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TEACHER EDUCATION

PROJECT ASSESSMENT REPORT

COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION (CITE)

TEDD Project

OERI Contract Number

400-85-1052

Georgea M. Sparks, Project Director

Amy B. Colton, Project Coordinator

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PROGRAM ASSESSMENT REPORT:
COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION
EASTERN MICHIGAN UNIVERSITY

I. MAJOR QUESTIONS

Implementation Questions

1. How has research on teaching been applied by professors and teachers who work with CITE students?

2. How have the field experiences been used to develop course concepts/principles and reflection about them?

3. How have the collaborative structures been implemented?

Outcome Questions

1. How has CITE developed students' reflective pedagogical thinking? How have students reacted to their experiences in CITE?

2. How have participating K-12 teachers redefined their role as teacher educators? How have they reacted to their experiences in CITE?

3. How have CITE professors modified their thinking and practice regarding the use of field experiences and research in teacher education?

4. How has the CITE project been institutionalized? In what form will the project continue after federal funding ends?

II. PROGRAM/COMPONENT DESCRIPTION

Level of Schooling:

Third and fourth-year college students preparing to be K-12 general education teachers.

Number of Participants:

120 Teachers
25 Administrators (including union representatives)
20 Schools (4 districts)
1 Michigan Department of Education representative
1 Washtenaw Intermediate School District representative
3 Part-time staff (Director 1/4; Coordinator 1/2; Grad. Ass't 1/4)
4 University Liaisons (1/4 time each)
100 - 120 students per semester

Time Spent in Program:

Students are in CITE for one semester
Teachers and professors are invited to participate each semester

Phase of Preparation:

Pre-student teaching (third or fourth year in college)

Components:

During the planning year (Year 1), representatives from all groups met five times to examine research and design research-based activities. Workshops and meetings were provided for participants throughout the two years of implementation (Years 2 and 3).

For implementation of CITE, students register for three courses together: Curriculum and Methods, Social Aspects of Education, and Measurement and Evaluation (8 semester credits).

Students go to a teacher's class for 3 hours once a week for 9 weeks to complete activities assigned by professors (e.g., observations, experimentation with techniques, or ethnic studies; these were designed by the collaborative planning group).

During the tenth week, students go to the classroom every day for a half day to teach a mini-unit. They keep a "think-aloud journal" for their reflections.

Guidance and support are provided by Classroom Teacher Educators (teachers), university liaisons, professors, orientation meetings, and staff.

Goals/Objectives:

Students use research-based course concepts and principles to analyze and interpret what they see and do in the field (beginning stages of reflection).

Teachers help students learn from research-based assignments through coaching and see their collaborative role as important to teacher preparation.

Professors help students apply research-based concepts and principles to make meaning of their field experiences and see this as an important role.

Collaborative structures and central features of the program remain in place, funded by EMU.

Special Features:
Eastern Michigan University has a very large Teacher Education program, with over 600 student teachers each semester. The CITE program serves approximately one-third of the pre-student teachers. Students not in CITE have a field experience in Elementary Reading; all other students find their own placements for pre-student teaching. One hundred clock hours of pre-student teaching are required before student teaching.

III. SAMPLE

--Approximately 100 undergraduate students in Fall and 90 in Winter from diverse backgrounds (10% minority) participating in a 4-year program for elementary and secondary regular education students.

--Approximately 120 experienced elementary and secondary teachers (range = 8 to 37 years teaching experience; median = 19 years), each with one or more years experience in CITE. A subgroup of 24 teachers helped examine research and design activities during the planning year.

--Ten professors with a wide range of experience in higher education. Four of the ten professors serve as quarter-time university liaisons to districts. All are in the Department of Teacher Education and have doctoral degrees.

IV. METHODOLOGY

The data reported here were collected during the Winter 1988 semester of the third year of the CITE project (the second year of program implementation). At this point, implementation was as "true" to the ideal project configuration as possible. Table 1 presents information on the instruments used for each question, who collected the data, when, and how.

V. INSTRUMENTATION

The instruments described here were developed by the project evaluation team (three professors, an evaluation consultant, and three teachers). Copies of the instruments are presented in Appendix A of this report.

Student Measures

Student Questionnaire

This instrument had 11 questions regarding interaction with the teacher and professor, value of the assigned activities, interrelation of courses, benefits, and reactions to various aspects of the program. We created the instrument during Spring, 1987, and have modified those questions that were unclear or difficult to interpret. Students completed the forms during class and at home after both Fall and Winter semesters. Over 80% (Fall) and 70% (Winter) of the forms were returned. The

TABLE 1: EVALUATION QUESTIONS AND DATA GATHERING PROCESS

IMPLEMENTATION QUESTIONS	TYPE OF DATA	FROM WHOM	WHEN
1. Use of research in CITE	Interview	All professors, 12 teachers	Spr '87, Dec '87 Apr '88
	Questionnaire	All students	Spr '87, Dec '87 Apr '88
	Course documents	Project staff	Throughout
2. Use of field experience in CITE	Interview	All professors, 12 teachers	Spr '87, Dec '87 Apr '88
	Questionnaire	All students	Spr '87, Dec '87, Apr '88
	Course documents	Project staff	Throughout
3. Maintenance of Collaborative Structures	Policy documents and interviews	Project Administrator, Director	Spr '88

OUTCOME QUESTIONS	TYPE OF DATA	FROM WHOM	WHEN
1. Students' Reflective Pedagogical Thinking	Interview (15 mins--focus on critical event)	12 students (Pilot) 24 students (Blocked on elementary/secondary level of course performance (low, medium, high)	Dec '87 (pilot) Apr '88
	Think Aloud Journal (during teaching week)	All students (24 matched to interviews)	Dec '87 (Pilot) Apr '88
2. Teachers' Role Re-Definition and Reactions	Questionnaire Interview	Teachers 12 teachers	Dec '87, Apr '88 May '88
3. Professors' Thinking Practice and Reactions	Interview Questionnaire	Professors	June, Dec '87 May '88
4. Institutionalization	Interview Department Documents	Project Administrator, Dean Director	May '88

quantitative scores were analyzed on a computer by a graduate student; the open-ended responses were summarized by a teacher using content analysis.

Think-Aloud Journal

We developed and pilot-tested this instrument during Winter and Fall of 1987 with students completing the form each night of their teaching week. Most students felt it was too long and repetitive. We simplified it greatly for Winter semester 1988 by asking students to answer four questions each night of the teaching week: What technique(s) did you try? How did it work and why? What would you do differently? and What did you learn today? The instrument assessed how students use course concepts and principles in planning, implementing, and analyzing their teaching experience. Journals were returned by all students. Preliminary analyses included counting the number of course concepts used--a measure of breadth. A more sophisticated categorical analysis scheme for examining levels of reflective pedagogical thought has been used to analyze the Winter 1988 data.

Student Interviews

The "critical event" interview assessed the depth to which a student could use course concepts and principles to analyze one successful and one unsuccessful teaching event from the CITE semester. The 15-minute interviews were pilot-tested with 12 students by the evaluator and a teacher during Fall of 1987. After the Winter 1988 teaching week, 24 students(two medium, two high, and two low achievers from each of the four secondary and elementary Curriculum courses) were interviewed. The analysis scheme focused on the use of students' contextual knowledge and course concepts/principles in the students' descriptions and interpretations of two instructional events.

The "experiential" interview was a sub-study of six students using three in-depth (90-minute) interviews with each student. These were conducted by a person outside of the study who used the data to describe what students experience as they go through the CITE program.

Teacher Measures

Teacher Questionnaire

This instrument had 11 questions regarding interaction with the student, value of the assigned activities, interrelation of courses, benefits, and reactions to various aspects of the program. We created the instrument during Spring, 1987, and have modified those questions that were unclear or difficult to interpret. The questionnaire was mailed to teachers after Fall and Winter (1987-88) semesters. We sent follow-up letters to increase the return rate after Winter semester. In the Fall, 45%

returned the questionnaires; in the Winter, 70% returned them. This instrument was scored by a graduate student and analyzed using a computer program. Responses to open-ended questions were tallied by a teacher.

Teacher Interviews

A subsample of teachers were interviewed by the project coordinator (a former CITE teacher) during May and June, 1988. The group of 12 represented a range of experience with the project--1 to 3 years. The interview focused on teachers' understanding of the project, reactions to the collaboration, use of research, and how teachers helped students think about their teaching experiences. Content analysis of interview tapes was conducted by the interviewer.

Professor and Administrator Measures

Professor Questionnaires

These were similar in purpose and analysis to the teacher and student questionnaires.

Professor and Administrator Interviews

These 45-minute interviews were conducted by the project evaluator after Fall 1987 and Winter 1988 semesters. The professors' interview focused on how the faculty used research-based information in their courses and how they attempted to get students to analyze and reflect on their experiences in the field. Key administrators in the project and in the College of Education were interviewed regarding implementation and institutionalization issues. Transcripts were analyzed by the interviewer for recurrent themes.

VI. RESULTS/FINDINGS

Rather than report the findings from each instrument separately, we will present findings as thet relate to each evaluation question and discuss the results. Tables with summaries of quantitative questionnaire data may be found in Appendix B of this report.

Implementation Question 1: How has research on teaching been applied by professors and teachers who work with CITE students?

A key element of CITE implementation was the use of research-based concepts and principles in the courses and field. Both professors and CITE teachers were responsible for implementation. During the first year. a collaborative team of 70 participants examined research and developed pre-student

teaching activities to illuminate research-based concepts and principles of teaching and learning. How professors and teachers implemented the research-based activities is examined here.

Professors' Use of Research

The professors were responsible for integrating the pre-student teaching field activities into their courses. They also explained the purposes of the assignments to students, established due dates, and graded them. Copies of the assignments and course descriptions are provided in Appendix C. The application of the research on teaching we examined during the planning year was most apparent in the Curriculum and Methods course. Research on questioning, participation, direct teaching, and classroom management were applied in these field activities.

The connection with research on teaching was less clear in the Social Aspects of Education (SFD) and Measurement and Evaluation (MSMT) courses. The SFD assignments stressed teacher expectations, equity, ethnicity, and school governance. The MSMT field activities focused on the more technical aspects of creating tests and interpreting standardized test scores. Thus, some field activities were used to develop concepts and skills that, while not directly related to the research examined during the planning year, were greatly enhanced by the field activity.

Another reason for including activities that did not focus directly on research-based concepts or principles--was the development of pedagogical reflection. Students in CITE were urged to examine measurement and social issues as contextual factors that could inform the use of the more technical research-based ideas and strategies. For example, a student might choose to use cooperative learning not just because "research shows it's effective," but rather as a result of considering diagnostic information and home background of pupils. We hoped that as EMU students progressed in the semester, they would begin to integrate the conditions of learning with the concepts and principles from the CUR course.

While this broader goal of the use of research for contextual decision making became clear to the evaluation team near the end of the second year of CITE, the professors' interviews at that time indicated little understanding of how the research on teaching and the courses all fit together. At the end of Year 2 (the first year of implementation), the SFD and MSMT professors felt that the most important part of CITE was the CUR course, and that their courses were somehow peripheral to the research emphasis. The CUR professors were integrating the research into their courses, but lacked the broader view of how the research could be use for reflection and decision-making. They tended to see it as something that gave their course content greater credibility.

The inclusion of new faculty made implementation of the research base of CITE somewhat challenging. During the two years of implementation and expansion, six professors joined the project for the first time. To orient them, the CITE director met with each new faculty to explain the structure and goals of CITE. Notebooks containing research summaries from the planning year were also given to all new faculty. The CITE professor and liaison meetings (held 4 to 5 times a semester) also provided a means for helping new faculty with implementation.

In Fall 1987 (beginning of Year 3), a half-day meeting was held to share how the course concepts fit together and how the application of research related to all courses. We also intended to present a framework for student decision making and discuss how the courses could work together to help students see how the measurement tools and social conditions can influence teaching decisions. Unfortunately, one SFD professor new to the project took much of the time up with philosophical challenges and general disruption of the meeting (he had a history of this behavior!). For this reason, the meeting was less productive than expected.

There was slow progress toward meaningful application of research in all courses. By the end of Year 3, interviews indicated that the three MSMT faculty came to view their courses as providing data gathering and analysis tools for instructional decision making. The two SFD faculty were beginning to see how their content could provide the social and conditional knowledge for flexible and sensitive teaching decisions. Project meetings and other discussions were helpful in bringing about these changes.

The three CUR professors had become intrigued with helping students apply principles and concepts to instructional decisions. One professor had students gather data on questioning patterns before sharing research on teacher expectations and gender and race differences. He hoped that "students would be more receptive to doing their own research on a daily basis when they become teachers." Two other professors shared three levels of reflection (technical, principled, and ethical) with students and led them through activities to practice conditional decision making.

Integration of Research-Based Concepts Across Courses

Another challenge in program implementation was the integration of research-based concepts across the CITE courses. During the first semester of implementation, one student said, "Why are we taking these courses together, anyway? Where's the crossover?" If we expect students to consider measurement data and social factors in making an instructional decision or interpretation, then the perception of relevance among the courses is crucial.

When asked in Fall 1987 about their satisfaction with the relationship among topics from the three CITE courses, 30% of students were highly satisfied (rating of 5 or 6) (M=3.85 SD=1.2; 1=low 6=high); 14% reported dissatisfaction. In Winter 1988, there was an increase in satisfaction: 47% of the students were highly satisfied and only 3% were dissatisfied (M=4.49 SD=.97). The questionnaire item regarding the "level of shared purpose/focus among people involved in courses and field" yielded a mean of 4.69 (SD=.95) with 60% very satisfied and 1% dissatisfied. Thus, it appears that progress has been made toward greater cross-course integration.

Approximately one-third of respondents made comments on the interrelatedness of the three CITE courses. While a few comments questioned the relevancy of SFD or MSMT, most students reported that the courses reinforced each other. As one student wrote, "By attending these courses concurrently the topics made much more sense; they presented the total picture."

Interestingly, it was the students' in-class discussions that tended to raise the professors' awareness of the crossovers among the three courses. In the interviews, professors reported that students mentioned having "already studied" topics such as levels of questioning or expectations. Soon, professors came to realize that they could build on and elaborate a concept from one of the other courses. They became more motivated to talk to each other about what was occurring in the courses and devoted more time to such discussions during meetings.

In the Year-3 interviews, professors suggested the following ideas for creating more integration among courses: a "crossover CITE activity" that would be discussed in two or more classes, a master schedule showing what topics were being taught and when, team teaching of certain complimentary topics, detailed discussion of course syllabi, stability of "core" CITE faculty, and developing course "conceptual maps."

The ethos of course independence is strong in higher education. After two years of implementation there has been progress toward the goal of cross-course integration. There is now a much greater readiness for achievement of this goal. A major task of Year 4 is to strengthen the integration of the courses through crossover assignments and more detailed discussions and scheduling of topics.

The evaluation consultant estimates that the CITE faculty is now approximately one-third of the way toward the ideal of a commonly articulated vision of how to prepare reflective college students who can use research processes and findings to make enlightened decisions about teaching. The shift away from a view of research as providing a "set of rules for effective practice" or as "scientifically-based evidence as proof" is well underway among the CITE faculty. Movement toward a view of research as conceptual tools (e.g., labels, inquiry questions, data

gathering/analysis procedures, contextual findings) is illustrated by the faculty's participation in data analysis and refinement of a scheme for coding levels of reflective thought in student interviews. Integration across course content and development of student reflective decision making skills are relatively new ideas to the CITE faculty. We now have the commitment and readiness to make further progress in these areas.

Teachers' Use of Research

Another key aspect of CITE implementation is how CITE teachers refer to research in their interactions with students in the field. If we are using research-based course concepts and principles to develop pedagogical reflection in students, then teachers need to help students reach this goal. We have selected and prepared CITE teachers with this in mind. However, we have not been 100% successful in creating a cadre of teachers who have the necessary skills to develop reflection.

We have relied on principals' recommendations to select teachers, a method that has worked moderately well. In several cases, however, we have recruited a teacher because we needed to place a secondary student in a particular subject area. While the core of 25 planning teachers gained much knowledge of research during the first year, the approximately 80 teachers added during Years 2 and 3 have had fewer opportunities for intense work with research on teaching and learning. As we have expanded, we have offered released-time workshops on research-based topics (direct teaching, classroom management, cooperative learning, thinking, and comprehension skills). These were helpful for those teachers who had few opportunities for such workshops in their districts.

Thus, not all CITE teachers have had adequate preparation to meet our goals. Approximately 75% of the pool of 100 teachers have had prior training in effective teaching (e.g., Madeline Hunter-based workshops, cooperative learning, classroom management). But "effective teaching" workshops may or may not have prepared them to coach our students for reflective thinking (as opposed to rule-based thinking). Approximately half of the CITE teachers have had training in peer observation or action research, areas more likely to equip them for this role. Plans to address this need include a Fall Symposium on Reflection and seminars for teachers and professors spread across the year. Plans for these development activities are discussed at the end of the next section.

To assess teachers' use of research-based ideas in their interactions with students, teachers were asked to list the three topics they discussed most often with their students. The 109 responses, separated by the time of discussion, were grouped into the categories presented in Table 2.

Table 2: Teacher Reports of Topics Discussed with Students

During the mini-unit teaching week

The 109 responses fell into the following categories:
Planning/feedback on units and lessons (31)
Classroom management and discipline (27)
Content/subject matter (15)
Appropriate activities for students' level/interest (11)
Variety of activities/flexibility (8)
Timing (8)
Outcomes of learning (7)
EMU student's feelings, confidence (7)
Questioning/Active Participation (4)
Tests (4)
Media/materials (3)

During the semester before teaching week

The 109 responses fell into the following categories:
Special student needs, including community and SES (28)
Preparation/planning/discussing the "why" of lessons (25)
Management/Discipline (23)
Content/Curriculum goals (11)
The "job" of a teacher (5)
School procedures and policies (5)
Materials (4)
Questions/Active Participation (3)

It is encouraging to see that topics were not limited to the technical aspects of teaching, e.g., lessons, management, content, questioning, materials, and tests. Teachers and students also discussed contextual factors such as special student needs, community/SES background, variety/flexibility, appropriateness of activities, and curriculum goals. These topics, along with discussions of the "why" of lessons, lead students a step closer to reflective thought.

In the interviews teachers were asked how educational research can be useful in teacher education. Their comments indicated that they placed a great importance on research and the way it was integrated into CITE and the field experience. As one teacher put it, "The forms used in CITE kept us all focused on certain research-based practices. I knew what to emphasize in my modeling and in our discussions." Teachers also mentioned the importance of research for them and for students as a way to "stay up to date."

Summary of Findings: Implementation Question 1

It has taken 2 years of implementation to come to a full understanding of how the research base fits into our innovation. At first, Social Foundations and Measurement professors thought their course content was peripheral to the rather technique-oriented research base of CITE. As we continued implementation we saw that the three courses functioned together to provide the social insights and diagnostic tools important for making decisions about the use of research-based techniques. The desire to integrate the courses more fully led to greater crossovers in topics and assignments. Further, the Curriculum professors have gained a greater understanding of reflective thinking through evaluation data analysis and discussions. These insights have led to more explicit teaching of reflection in the CUR courses. Progress is still needed toward greater integration of CITE courses and explicit teaching of reflection.

As implementation has progressed, we have gained a clearer understanding of the CITE teachers' role in helping to implement the research-based aspects of CITE. Knowledge of research is not enough; the ability to help students apply the research findings within the context of the classroom has become the goal. While the assigned activities lend some structure leading toward this goal, we now realize the importance of developing a cadre of CITE teachers who can coach students' reflective pedagogical thinking. Seminars and symposia designed to meet this goal are described in the next section.

Implementation Question 2: How have the field experiences been used to develop course concepts/principles and reflection about them?

To gain an understanding of how the field experiences have implemented in the CITE courses and in the field, data from students, teachers, and professors are reported.

Use of Field Experience in Courses

The documents in Appendix C illustrate the field activities that were integrated into the courses. Each week the student had an assignment from one or more of the three core courses to complete in the community, school, or classroom. Their findings and experiences were then discussed in class at EMU.

Students' perceptions of assignments. On the questionnaire, students were asked to describe the two most valuable assignments from each course. The 56 Winter semester students' comments are summarized in Table 3.

Table 3: Students' Reports of Most Valuable Field Assignments

COURSE Curriculum and Methods	NUMBER OF COMMENTS
Observation of classroom management and questioning techniques	29
Preparing and teaching the mini-unit	17
Lesson design observation/use	15
Trying a variety of methods (games, jigsaw, etc.)	12
Social Aspects of Education	
Visit school board meeting	30
Study of class multicultural/ethnic composition	23
Observing a child at risk and special needs	13
Study of community resources and social composition	13
Environmental, extra-environmental social issues, e.g., drugs, child abuse	7
Measurement and Evaluation	
Test blueprint/table of specifications	40
Writing test questions/creating tests	23
Testing terms, interpreting scores	8
Administering a test/evaluating results	5

The assignments that required observation of management and questioning, attendance at a school board meeting, development of tests, and analysis of ethnic factors and special student needs were valued most by students. The mini-unit taught during the teaching week was also highly valued.

As we progressed with implementation and as we learned more about teacher reflection, it became clear to us that merely assigning activities to be done in the field was not enough to develop students' reflective pedagogical thinking. To be most powerful, the field activities need to be: (1) made very clear to students in terms of expectations and goals, (2) integrated into the everyday coursework to develop course concepts and reflection.

Clarity of Assignments. The field experience assignment requirements and purposes were explained to students by each professor. If it was unclear what was expected, students would miss many of the intended benefits. When asked about the clarity of the field activities assigned by their professors, 47% of the Winter students reported great satisfaction (12% were dissatisfied) (M=4.33, SD=1.22; low=1; high=6). With nine professors and changing staff, this area had been challenging in the past (the Fall mean was 2.86 (SD=1.45)). Two professors had not established clear deadlines for students or only emphasized one or two of the assignments. As program refinement has progressed, implementation in this area has improved.

Integration of Field Experience into Courses. Students' responses to the question, "What is your satisfaction with the relationship between course topics and field experiences?" yielded a Winter mean of 4.54 (SD=.87) on a scale of 1 (low) to 6 (high). Over 54% were extremely satisfied (rating of 5 or 6); fewer than 2% were extremely dissatisfied (1 or 2). One student commented, "You leave the semester with a very balanced idea of what to expect and how to handle a situation." Another wrote, "Many of our assignments from class forced us to look for things we may not have noticed otherwise." Thus, students felt satisfied with how the field activities were integrated into the course work.

In the interviews, the most frequent comment was that the professors used the field experiences to reinforce the course content presented in class. This use of the field experience is consistent with the "audio-visual" view of the field experience. In other words, schools and classrooms function as a concrete, living example of course content, just as film on England helps develop the content of British culture. As one professor said, "There is no way they could have learned some of the things they did without being there (in the field). As many times as you tell them something... unless they have really experienced it they don't remember it or don't believe it." This view emphasized one important role of field experience: to provide three-dimensional and accurate learning of otherwise abstract course content.

By the end of Year 3, a different view of the field experience was emerging--one of "active inquiry". Three professors began to develop assignments that required students to become mini-researchers through observations, coding of data, and experimentation with techniques. Students were asked to write reports that used course concepts and principles to explore the "why" of their findings and experiences. This "active inquiry" use of the field was much closer to the CITE goal of developing students' reflective pedagogical thinking. In contrast, the "audio-visual" role of the field described above puts the student in a more intellectually passive apprentice-like position.

A few professors mentioned the problem of working with students placed with teachers who provided negative examples or no modeling of course content. For example, some students drew mistaken conclusions about the need for planning because their teachers seemed to spend so little time on it. They initially thought CITE courses were spending too much time on the planning phase of teaching. Another student said, "Mrs. X doesn't use frequent questioning and the students just love her..." Transforming such surface impressions into more profound consideration of instructional decisions and pupil outcomes in the face of quick loyalty to their first teacher mentor was a challenging task for some professors.

The CITE professors also used the field experiences in another way--to lend credibility to the research-based course content of CITE. For example, students were motivated to learn course concepts such as active participation when they saw it in practice in their teacher's classroom. Another purpose of the field experience was as a career-clarification exercise. The SFD professors emphasized this use of the field to help students understand the political and social lives of schools. Other professors stated that the field activities helped make students' expectations about teaching "much more realistic." A few students decided that teaching was not at all what they wanted for a career--an outcome we see as desirable so early in the student's college career.

The CITE Teacher's Role in the Field Experience

Student Views of Teachers. Students' reports of the teachers' role in CITE provide a window on how teachers implemented the field experience. One item on the questionnaire related to satisfaction with the quality of the student's CITE field placement. Over 73% of the students reported high satisfaction (rating of 5 or 6), with 7% rating low satisfaction (1 or 2) (M=4.83 SD=1.15). Another item asked students to rate the quality of instruction and guidance provided by the CITE teacher (M=4.45 SD=1.38). Over 54% were highly satisfied while 12% were dissatisfied. Thus, most but not all students were satisfied with the quality of their field experience.

A separate open-ended question asked students to comment on the quality of interaction with their CITE teachers. Twenty-seven (48%) of the respondents expressed great satisfaction with their teacher with comments such as "Very helpful, cooperative and supportive;" and "Made time to talk, advise, and give feedback." One student reported, "She even adopted new methods based on what I was learning in my courses. She would ask ME what I was learning!"

The 13 (23%) students who were dissatisfied wrote that their teacher was vague and confusing or that the teacher didn't listen and could not take time to talk. When asked if their teacher should be used in CITE next year, 3% said "no" and 14% were "not sure." Based on such feedback collected over three semesters, some teachers have not been invited to participate in CITE next year. Plans for more intensive teacher development (described at the end of this section) have also been made.

Assistance with Assigned Activities. A key role of the teacher in the implementation of the CITE field experience is to help students complete their assigned activities. It was hoped that teachers would value the assigned activities and provide assistance where needed. When teachers rated the value of the assigned activities, the highest ratings went to the CUR activities. Approximately 30% of the teachers were unacquainted with the assignments from SFD and MSMT. Another 13% were not clear what the assignments from any of the courses were.

Although all teachers received copies of the assignments and course syllabi in their CITE folders, it was up to the student to engage the teacher's assistance in completing the assignments. Some of the SFD activities (e.g., the school board meeting) and most of the MSMT activities (e.g., creating the test) did not require direct teacher involvement. It would be ideal, however, for all teachers to be aware of the assigned activities so they can share their experience and insights with students. In the interviews, two teachers mentioned the field assignment forms as helpful in getting the student to look at what was happening in the classroom.

Working with the CITE Student. A major role for the CITE teacher was to discuss teaching and learning with the CITE student. Teacher and student questionnaires (see results in Table 4) indicate that roughly half the teachers spent from 0 to 15 minutes a day talking with students during the semester. During the teaching week, the amount of time went up, with close to half of the participants reporting 16-30 minutes a day. Approximately 15% of students and 22% of teachers reported more than 30 minutes a day of interaction. The participants all reported a desire for more time for discussion, a difficult task in today's hectic schools.

The 12 teacher interviews provide more detail on how teachers worked with students in the field. Four teachers said they let the student experiment in the classroom with the

TABLE 4: MINUTES PER DAY SPENT IN DISCUSSION

	TEACHERS			STUDENTS		
The actual time spent	0-15 mins	16-30 mins	31+ mins	0-15 mins	16-30 mins	31+ mins
-during semester	45%	35%	19%	50%	35%	15%
-during teaching week	36%	40%	25%	40%	46%	14%
The time participants would have preferred to spend						
-during semester	14%	57%	29%	21%	59%	20%
-during teaching week	13%	47%	40%	17%	64%	19%

strategies students were learning on campus. Then they discussed the results together. Four teachers reported they discussed events after they happened in the classroom--why they did it a particular way and why a strategy might be modified or used differently from what the student learned at EMU. Five comments indicated that teachers talked with the student before modeling how, when, and why to use a particular strategy. These teachers' comments indicate an effort to help students think about how course methods and concepts apply to everyday classroom situations.

Changes Made to Accommodate CITE Student. Teachers were asked on the questionnaire how much they had changed their content or methods to accommodate the CITE students. Over 45% of teachers reported making moderate to large changes; over 62% were satisfied with those changes. The changes were typically in the areas of content or pacing related to the teaching week, or in emphasizing the techniques the student was observing (e.g., higher level questioning). Interestingly, 55% of teachers made few or no changes in their teaching or content. Thus, those who chose to change were cheerful about it; those who did not indicated that it was possible to have a CITE student without major changes in class routines or content. If teachers were negative about the changes or felt that major accommodations needed to be made for the CITE student, we would predict a high attrition rate among teachers and difficulty in recruiting new teachers as the word got out that "it's too much work."

In summary, the majority of students have been satisfied with the assistance, interaction, and time provided by the CITE teacher. But, for ideal program implementation, we would like to see higher levels of satisfaction among students and a greater awareness among teachers of the value of all three courses' assignments.

Future Directions for Teacher Development. There is still much progress to be made in the teacher's role in implementation. CITE teachers need to have the skills and inclination to assist students to make links between the course concepts and principles and classroom instructional actions and deliberations. The changing structure of the assigned field activities may help the teachers to move in this direction. For example, we plan to include more interview-type activities that require students to discuss specific events with teachers. The crossover assignment will also help teachers see how all three courses relate to classroom teaching decisions.

In addition to such structural changes, a major goal of CITE next year is to provide staff development activities for teachers and professors. The goal of such activities is to improve participants' abilities to link research-based concepts and principles with the conditions of classrooms and to make these ties explicit for EMU students. The kind of staff development needed for CITE participants has become clearer to us in the past 6 months as we have analyzed data and clarified our student outcomes.

In the Fall of 1988 we will have a half-day symposium for all CITE participants on coaching students for reflection. As a follow-up we will offer CITE teachers a partial scholarship for a two-credit six-session seminar on reflection. Professors and teachers will present research-based content and will discuss how the content relates to reflective instructional interpretations and actions. The group will participate in the refinement of the Reflection instrument developed for the analysis of student thinking. In one sense, we are returning to a planning phase with a collaborative team helping us study how to develop and coach for reflection. The Advisory Board has engaged in some preliminary planning activities and has shown enthusiasm for the idea. It is our hope that these efforts will improve the quality and sophistication of our cadre of teachers to promote the reflective thinking of students.

Summary: Implementation Question 2

The field experience assignments were seen by students as clearly presented, valuable, and integrated into the CITE courses. Professors reported using field activities to give credibility to and to reinforce course content, with some moving on to the more sophisticated use of the field as an arena of inquiry. This trend will be actively pursued in Year 4 through new field activities, meetings, and discussions.

Most students (75%) were highly satisfied with their field placement and the assistance received by the teacher. Teachers spent time helping students complete the assigned activities and felt they were valuable. The teacher's role with students was played out as a model, a coach, and as a support. Teachers who made changes in their class routines to accommodate CITE students were pleased to do so. The crucial role of the teacher in developing reflection in students remains to be fully described and implemented. Now that we have a clearer vision of our desired outcomes, we have created a Seminar on Reflection to collaboratively refine our framework for reflective thinking and to create ways to develop reflection.

Implementation Question 3: How Have the Collaborative Structures Been Implemented?

A final area of CITE implementation involved collaboration. The structures designed to promote collaboration are described in this section. Materials illustrating the collaborative activities are provided in Appendix D. Participants' reactions to the collaborative nature of CITE are reported with the results of the outcome questions.

Advisory Board

One of the main vehicles for collaboration has been the 20-member CITE Advisory Board, composed of representatives of all four districts and EMU. During the 2 years of CITE implementation, the Board has met six times to make decisions regarding implementation, evaluation, and future directions. At the most recent meeting, participants suggested ways to increase the involvement of all teachers. Ideas such as inviting CITE

teachers into a class to share their experience and teaching a block of CITE courses in a school will be implemented during the next 2 years.

The most exciting aspect of the May 1988 Advisory Board meeting was when we joined together to analyze the students' "critical incident" interview data. Teams examined transcripts and rated them according to the coding framework created by the evaluation team. This activity made clear our desired outcomes for CITE students and generated much enthusiasm for the Fall symposium and seminars on reflection.

University Liaisons

Another powerful collaborative device has been the role of the four university liaisons. Each professor has been released quarter-time to serve in one of the CITE districts. The liaisons visited each teacher every two or three weeks to answer questions, invite suggestions, discuss special needs, and develop a personal relationship. Often, the teachers met before or after school to share their experiences with the liaisons and each other. This steady communication has made clear to teachers that their input and participation are valued. In some instances, teachers have taken advantage of the opportunity to ask for materials or research articles on a topic of interest.

The liaison also developed a personal relationship with the principal through meetings to explain CITE, and through discussions about the principal's reaction to the program. Finally the liaisons worked with the principal in recruiting new teachers. A current emphasis of liaisons is to establish a building contact person (a teacher) in each CITE school to assist with communications, recruitment, ad coordination.

Meetings and Celebrations

Meetings and celebrations have provided a means of bringing CITE participants together. At the beginning of Fall 1987 semester we had a meeting for CITE participants in each of the districts. In Winter 1988, we relied on building-level meetings with the liaisons. At the end of each semester, we invited teachers, professors and students to an "End-of-Semester Celebration" at EMU. While we have not had 100% attendance at all meetings, participation has been enthusiastic and everyone has attended at least two of the functions each semester. The informal interactions at such gatherings create a valuable sense of ownership and participation in "something important." Such a sense of togetherness is essential to the spirit of CITE.

The meetings for CITE professors and liaisons have helped to bring a sense of common purpose to the university CITE courses and field experiences. The four or five luncheon meetings each semester have provided an opportunity for professors to share what they are doing in their courses, how they are using the field experience, and what student outcomes they are finding. Such opportunities are often rare in "teaching" universities like EMU where there is little opportunity for collaboration on research.

Media/Recognition

Communications through the media also have provided a sense of collaboration. When CITE won the AACTE Distinguished Achievement Award in February 1988, part of the monetary award was used to put a half-page "Thank you" in the Ann Arbor newspaper. We listed every school and every participants' name in the paper with a description of the award. Two articles on CITE have appeared in the EMU alumni newspaper with participants' photographs taken at meetings. One article in the local paper featured students' thoughts as they approached the teaching of their week-long unit. Such public recognition of CITE participants sends a message that "we are in this together"--the essence of collaboration.

Newsletter

Another collaborative activity is the CITE newsletter sent to participants every Fall. The newsletter includes sections written by project teachers, staff, and students. It serves as a celebration of accomplishment, a vehicle for recognition, and a means for communicating CITE's purpose and goals.

Collaborative Presentations and Publications

Presentation and publication opportunities also offer a means of collaborating. Five teachers and three professors have made presentations on CITE at local and national conferences. In the year to come, more teachers and professors have volunteered to present and to assist with writing articles for publication. To date, five professors and one teacher have submitted five final manuscripts for publication.

Summary: Implementation Question 3

Collaborative structures have been developed and implemented. These range from information dissemination through newsletters, meetings and celebrations. Of these, the "celebration" has been significant since it has led to increased recognition and support from university and school district decision-makers. Of equal significance is the role of the "university liaison", a role created by CITE that holds promise for further collaboration if school districts choose to match the university's contribution of released time with resources of their own. If that occurs, a two-person team (one professor and one teacher) can be created to develop the clinical and field dimension of teacher education from earliest observation through and including an induction-year program.

Finally, mention should be made of the prolific dissemination of the project identity, activities, and findings through presentations and papers at professional meetings (15 presented or proposed) as well as articles (5) submitted to professional journals.

Student Outcome Questions: How has CITE developed students' reflective pedagogical thinking? How have students reacted to their CITE experience?

Our thinking about the desired student outcomes of CITE has grown profoundly during the 3 years of the project. Initially, we wanted to develop students' ability to apply research-based knowledge to the analysis and interpretation of teaching events. We focused on the research on teaching and learning and gave little attention to the research on teacher thinking. During Year 2, the emphasis on teacher reflection was apparent in our (Sparks & Simmons, 1988) and others' (e.g., Schon, 1987) writing. In October of Year 3, we attended the Conference on Reflection in Houston. As we began to refine our implementation questions and design instruments to capture our desired outcomes, we came to a much deeper understanding of the development of reflective pedagogical thought.

In this section, we will present the research agenda and findings related to CITE students' reflective thinking. Then, we will present questionnaire data on students' reactions to the CITE semester. Finally, to get a more detailed view of how students experienced the CITE semester, findings from the six intense "experiential interviews" are presented.

Students' Reflective Pedagogical Thinking

Developing a Framework for Pedagogical Thinking. In contrast to the more typical focus of teacher education programs on classroom teaching behaviors, the CITE Project has placed a primary emphasis on students' pedagogical thinking. There are three reasons for this choice. First, it is consistent with the currently dominant paradigm for research on effective teaching which emphasizes a view of the classroom teacher as an instructional decision-maker working within a specific contextual setting (Brophy & Good, 1986; Clark & Peterson, 1986; Shulman, 1986).

Secondly, it emphasizes learning to recognize, describe, explain, and think reflectively about the teaching-learning process. This is a particularly appropriate goal for a student's initial semester of professional courses and field experience (Berliner 1984; Simmons & Sparks, 1987). This program goal suggests specific instructional approaches and tasks which can help students begin to "make sense" of the teaching-learning process as they, for the first time, encounter it from an occupational perspective. Modeling and guiding reflective pedagogical thinking using specific concepts and findings from educational research becomes then a way of defining one of the major roles of campus professors and classroom teacher educators toward the CITE students (Krogh, 1987; Ross, 1987; Zeichner, 1987-82; Zeichner & Liston, 1987).

Finally, it was hoped that developing strong conceptual understanding and reflective habits and skills would provide a firm foundation for students' later learning, particularly during the early survival stages when the "how" of classroom performance becomes such a high priority (Fuller, 1969; Veenman, 1984).

A significant product resulting from the CITE Project at EMU is the development and pilot-testing of the PEDAGOGICAL LANGUAGE ACQUISITION AND CONCEPTUAL DEVELOPMENT TAXONOMY OF TEACHER REFLECTIVE THINKING. It is a theory-based framework for guiding and evaluating student's pedagogical thinking (see FIGURE 1). The framework was developed during Year 3 by a team consisting of the CITE Project director, administrator, teacher/coordinator, one professor, and the evaluation consultant. During development of the framework and its categories, the team discussed ideas from the professional literature, reviewed what had been emphasized in previous CITE faculty meetings and planning sessions with the classroom teachers, and examined the CITE Project and course goals for using research concepts and principles in teaching.

Although different levels of pedagogical thinking on the taxonomy are assigned ascending numbers, the team recognizes that further data must be analyzed before it can properly be regarded as a formal, hierarchical taxonomy. At this early point in its development, the team views the framework as a categorical system for distinguishing among types of reflective thinking.

Distinctions among the categories in the framework are based on current literature in cognitive psychology, teacher thinking, schema theory, and novice-expert differences. The primary purpose of the taxonomy is to give precise structure and meaning to the process of reflective pedagogical thinking, particularly for novice teachers. Ideas for the category levels were drawn from the small but growing body of teacher education literature dealing with reflection (e.g. Goodman, 1984; Ross, 1987; Wildman & Niles, 1987; Zeichner & Liston, 1987) and the special collection of papers prepared for the October 1987 OERI Conference on Teacher Reflection (Clift, Houston, & Pugach, in press; Waxmam in press). Other current literature on reflective thinking from general psychological and philosophical perspectives (e.g. King, 1977; Kitchener, 1977; Schon, 1983, 1987; von Manen, 1977) was also helpful in this review process. The categorical structure of the taxonomy also recognizes the special roles of pedagogical language acquisition and gradually increasing cognitive complexity in the process of learning to teach (Simmons & Schuette, submitted).

Figure 1: PEDAGOGICAL LANGUAGE ACQUISITION & CONCEPTUAL DEVELOPMENT TAXONOMY OF TEACHER REFLECTIVE THINKING

LEVEL 1 - no description of an instructional event

LEVEL 2 - description of an instructional event without any use of pedagogical language as concept labels for what occurred

PEDAGOGICAL LANGUAGE (CONCEPT) LABELING BEGINS:

LEVEL 3 SIMPLE - description of an instructional event with one use of pedagogical language as a concept label for what occurred
LEVEL 3 COMPLEX - same as LEVEL 3 SIMPLE but with more than one use of pedagogical language as a concept label

LEVEL 4 - same as LEVEL 3 plus whim/personal preference/tradition is used to explain an instructional event; reference is made to use of instructional rules & techniques but no explicitly stated cause - effect pedagogical principles are recognized; level of emergent principles but cause - effect connections are vaguely stated

PRINCIPLED PEDAGOGICAL THINKING BEGINS:

LEVEL 5 SIMPLE - an instructional event is explained using one cause - effect pedagogical principle ("if ... then ...")
LEVEL 5 COMPLEX - same as LEVEL 5 SIMPLE but with more than one use of cause - effect pedagogical principles

CONDITIONAL PEDAGOGICAL THINKING BEGINS:

LEVEL 6 SIMPLE - one aspect of contextual data is used along with cause - effect pedagogical principle(s) to explain an instructional event ("if ... then ... because ...")
LEVEL 6 COMPLEX - same as LEVEL 6 SIMPLE but with more than one use of contextual data along with cause - effect pedagogical principle(s)

MORAL PEDAGOGICAL THINKING BEGINS:

LEVEL 7 - same as LEVELS 5 & 6 plus reference to moral/ethical/political issues to explain an instructional event

The resulting TAXONOMY OF TEACHER REFLECTIVE THINKING distinguishes between (a) no description of instructional actions (LEVEL 1) up through (b) instructional decisions and actions made on the basis of unexamined tradition/personal preference (LEVEL 4), (c) explicit consideration of contextual factors such as student characteristics, subject matter, community values (LEVEL 6), and (d) consideration of moral/political issues (LEVEL 7). The team tried to build in a high enough ceiling in the taxonomy to allow it to be used eventually to code critical-incident pedagogical thinking data from experienced teachers. This is one aspect of further research which the team has planned for Year 4 (Simmons, Sparks, Starko, Pasch, & Colton, in process).

Three fundamental assumptions underlie how the team distinguished categories of thinking in the framework: (1) the type of pedagogical thinking of which a person is capable can be externally recognized only to the extent that one possesses adequate explicit language with which to express those thoughts; (2) using pedagogical language is superior to using lay-person language to describe educational phenomena because of its more precise meaning and power to communicate more complex messages to others in the same occupational group; and (3) single-concept thinking precedes and is less complex than principled thinking which involves recognizing relationships among two or more concepts.

All three assumptions are derived from psychological literature on cognitive development and the relationship between thought and language (e.g. Sternberg & Smith, 1988; Vygotsky, 1962). The third assumption is one which the team intends to test empirically in future research they have planned comparing samples of "think aloud" Critical Incident Interview data for novice and more experienced teachers (Simmons, Sparks, Starko, Pasch, & Colton, in process).

During the development stage, three successive versions of the framework were drawn up, mulled over, and revised in separate meetings of the team. A pilot-test of the TAXONOMY OF TEACHER REFLECTIVE THINKING was carried out using Critical Incident Interview data from a high, average, and low performance stratified sample of 12 Fall 1987 semester students. Transcripts of their Critical Incident Interview data were practice coded, compared, and recoded while further revisions and language clarifications were made in the framework. This process continued until inter-rater reliabilities rose above .80 for the four coders. In this way, the categories within the framework were clarified and revised before coding the 24 Winter 1988 semester student interviews as Year 3 CITE Project outcome data.

Student Thinking: Data Collection and Analysis. The Fall 1987 and Winter 1988 semester student samples were selected on a stratified basis in order to obtain a full range of students'

pedagogical thinking at the conclusion of their semester in the project. During the Winter 1988 semester, each of the four Curriculum professors identified two high, two average, and two low achievers from his/her section to be interviewed immediately following the end-of-semester teaching week. Students were asked to describe and explain a critical incident of strong teaching and of poor teaching which they had observed or experienced while in the CITE Project.

This stratified sample of 24 students was used to measure Year 3 final outcomes of the CITE Project. TABLE 5 presents the demographic characteristics of the sample. Twelve students were enrolled in elementary education, and twelve were enrolled in secondary education. There were eight students each in the high, average, and low Curriculum Course Achievement Level Groups. Student ages ranged from 21 to 40 with an average age of 26.8 years. The sample included 16 females and 8 males. The grade point average for the students ranged from 2.18 to 3.91 with an average of 2.94 (A=4.00). Of the total sample, four students were enrolled on a post-B.A. degree basis to obtain teacher certification.

Two members of the team blindly and independently coded Critical Incident Interview transcripts containing the 24 reported incidents of strong teaching and the 24 reported incidents of poor teaching. Each of the 48 incidents was rated holistically using the TAXONOMY. Ten possible codes were available for use --- i.e. LEVELS 1 through 7 with simple/complex distinctions possible for LEVELS 3, 5, and 6. The coders found data which corresponded to all coding categories except LEVEL 1 --- simple description. The resulting averages and pairs of codes for each student's two critical incidents are presented in TABLE 6.

Of the 48 incidents coded, there was complete agreement between the raters in 19 incidents. In two additional cases, the raters agreed on the level but disagreed on simple/complex distinctions. In 18 other incidents, the raters' codes disagreed by only one level. When single-level disparity is considered acceptable, then the inter-rater reliability is .81 (agreement on 39/48 incidents). Disagreements of two or more levels occurred between the coders for only nine of the 48 incidents.

The overall Critical Incident Interview pedagogical thinking mean rating for the entire group of 24 students was 4.48 on the seven-point scale. Strong teaching incidents (mean = 4.50) and poor teaching incidents (mean = 4.46) were discussed in a manner which demonstrated equally complex pedagogical thinking.

Table 5: SUMMARY OF DEMOGRAPHIC CHARACTERISTICS & REFLECTIVE PEDAGOGICAL THINKING OUTCOMES FOR THE STRATIFIED SAMPLE OF CITE STUDENTS INVESTIGATED

	HIGH[a] GROUP	MID GROUP	LOW GROUP	ENTIRE GROUP
GENDER:				
female	n = 7	n = 6	n = 3	n = 16
male	n = 1	n = 2	n = 5	n = 8
TYPE TEACHER:				
elem.	n = 4	n = 4	n = 4	n = 12
second.	n = 4	n = 4	n = 4	n = 12
	mean	mean	mean	mean
AGE	30.75	26.50	23.13	26.79
GPA[b]	3.39	2.98	2.46	2.94
THINK ALOUD INTERVIEW PEDAGOGICAL THINKING LEVEL:[c]	5.16	4.91	3.38	4.48
REFLECTIVE JOURNAL PEDAGOGICAL THINKING LEVEL:	4.41	3.49	2.50	3.47

[a] CURRICULUM ACHIEVEMENT GROUPS: near the end of the semester, each CITE Project Curriculum course professor selected two so-called "typical" high, average, and low achievers from his/her section to for the stratified sample for the critical incident interviews

[b] GPA: 4.00 = A; GPAs shown are taken from university records for credits completed to-date at EMU, entering GPA for transfer students, or overall bachelor's degree GPA for graduate students

[c] INTERVIEW & JOURNAL SCORES: defined as level of pedagogical thinking demonstrated in critical incident interview and and think aloud journal entries;s score range from 1 - 7 on the Pedagogical Language Acquisition & Conceptual Development Taxonomy of Teacher Reflective Thinking developed by Simmons, Sparks, Pasch, Starko, and Colton (198)

TABLE 6: DEMOGRAPHIC CHARACTERISTICS AND REFLECTIVE PEDAGOGICAL THINKING STUDENT OUTCOMES

	GENDER		THINK ALOUD INTERVIEW			REFLECTIVE JOURNAL					
NUMBER	AGE	GPA	+ LEVEL	- LEVEL	MEAN	D1	D2	D3	D4	D5	MEAN
235	F-26	3.28	4-4[a]	5s-5s	4.50	3-3[b]	3-3	4-4	4-4	2-2	3.20
288	F-26	3.91	5c-6s	5c-5c	5.25	5-5	3-5	4-5	4-2	na	4.13
991	F-25	2.99	5c-6c	5c-3s	4.75	5-5	5-4	4-2	4-3	5-3	4.00
289	F-31	3.58	6c-6c	7-6s	6.25	6-6	6-6	6-6	6-6	6-6	6.00
615	F-40	3.54	5c-5c	5c-5c	5.00	5-5	5-6	5-6	5-6	na	5.38
175	F-34	3.14	5s-4	4-6s	4.75	4-6	5-5	5-6	2-2	na	4.38
519	F-39	3.38	6s-6c	6c-6c	6.00	4-4	5-4	5-5	2-5	na	4.25
828	M-25	3.30	5s-5s	4-5s	4.75	3-4	4-4	4-5	5-4	2-4	3.90
HIGH GROUP mean ages, GPAs, and level of pedagogical thinking scores:											
	30.75	3.39	5.19	5.13	5.16						4.41
951	F-22	2.74	5s-6c	5c-5c	5.25	4-4	2-2	4-4	4-4	2-2	3.20
829	F-31	3.24	5c-6s	6c-6c	5.75	3-3	2-2	2-2	2-2	na	2.25
733	M-35	2.29	5c-4	5c-5c	4.75	4-6	5-6	2-3	4-6	5-3	4.40
649	F-22	2.85	5s-4	5c-4	4.50	5-2	5-2	6-2	3-3	2-2	3.00
163	F-21	3.21	5c-5c	5c-5c	5.00	5-5	5-5	5-5	2-5	na	4.63
653	F-36	3.23	5s-4	5c-6s	5.00	5-5	6-6	5-5	6-6	6-6	5.60
253	F-24	2.62	3s-6s	4-6c	4.75	2-2	5-2	4-2	2-2	2-2	2.50
564	M-21	2.67	3s-5c	3c-6c	4.25	4-3	2-2	2-2	2-2	2-2	2.30
MID GROUP mean ages, GPAs, and level of pedagogical thinking scores:											
	26.50	2.98	4.75	5.06	4.91						3.49
899	F-22	2.13	4-4	2-5s	3.75	2-2	2-4	2-1	4-3	2-2	2.40
663	M-30	2.48	3c-4	2-5s	3.50	4-5	4-2	2-2	5-5	2-2	3.30
993	M-21	2.27	5s-6s	5s-5s	5.25	2-3	2-4	2-4	2-2	na	2.63
459	M-23	2.30	2-2	2-2	2.00	2-3	2-3	5-5	2-3	2-3	3.00
190	M-22	2.81	3s-4	4-4	3.75	4-4	4-3	5-5	na	na	4.17
834	F-24	2.98	3s-5c	2-2	3.00	1-1	na	na	na	na	1.00
990	F-21	2.30	2-3c	2-2	2.25	2-2	2-2	2-2	na	na	2.00
127	M-22	2.42	3s-4	3-4	3.50	1-1	1-1	2-2	2-2	na	1.50
LOW GROUP mean ages, GPAs, and level of pedagogical thinking scores:											
	23.13	2.46	3.56	3.19	3.38						2.50

[a] "+" and "-" levels refer to scores for pedagogical thinking during critical incident interviews where students discussed one positive (+) and one negative (-) event. Scores of the two coders are presented.

[b] D1, D2, etc. refer to the journals analyzed for each day of the Teaching Week. The two numbers are the coders' scores.

Thus, at the end of their initial semester of campus courses and related field experience activities, principled pedagogical thinking (LEVEL 5) was generally just beginning to emerge in these CITE students. Most of them were able to describe and correctly label instructional events using one or more examples of pedagogical language they had been taught (LEVEL 3), but many students tended to explain these events more in terms of "what a teacher generally does" or their own personal preference (LEVEL 4). Fifteen of the 24 students were able to use "if...then...", cause - effect pedagogical principles (LEVEL 5). At LEVELS 3, 5 and 6, the critical incidents reported by students demonstrate that they could think about pedagogical concepts and principles in both simple (26 incidents coded "S" in TABLE 2) and complex fashion (32 incidents coded "C" in TABLE 2). As the taxonomy in FIGURE 1 indicates, "simple" thinking at LEVELS 3, 5, and 6 means using one concept/principle while "complex" thinking means using multiple concepts/principles.

One reason for stratifying the sample according to level of Curriculum course performance was to see how well students of different abilities would be able to use pedagogical concepts and principles from their CITE courses. The average Critical Incident Interview scores of the high (5.16), mid (4.91), and low (3.38) subgroups was congruent with the status ratings of course performance made by the Curriculum course professors. Grade point averages (GPA) also related to the student subgroups' interview scores and course performance. These relationships were expected and lend some validity to the coding system framework.

Another reason for the stratified sample was to generate variability on the measure of reflective thinking so as to further test the categorical structure of the framework. Five students in the lowest subgroup had difficulty in using any pedagogical language to descriptively label instructional events, and hence, were coded as functioning at LEVEL 2. The weakest example of this involved a student (# 459) who vaguely described teaching incidents in lay-person language and then could not remember any concept/principle connections to his course content (strong teaching incident) or simply identified a topic from a course which was completely mismatched to the poor teaching incident he described.

At the opposite extreme, 11 of the 24 students were able in at least one of their reported teaching incidents to demonstrate conditional pedagogical thinking (LEVEL 6) in which contextual data (e.g. concerning pupil characteristics, subject matter, previous learning, community values) were used to explain an instructional event. This type of statement involves a logic pattern of "if the teacher chooses to do x action..., the pupil outcome is likely to be y... because of factor z." Most of the students operating at this lever were in the high and medium subgroups.

The team also attempted to use the TAXONOMY OF TEACHER REFLECTIVE THINKING to code what the students had written in their teaching-week Think Aloud Journal entries. These journal entries had been recorded by CITE students after each day of teaching their mini-unit. The journal passages were also rated holistically in a blind and independent manner by two other individuals form the team. Their pairs of ratings are also shown in TABLE 2. (Note that these two coders did not use the simple/complex subscripts on the levels when coding the data.) The inter-rater reliability for complete agreement was .60 for 61/102 cases. If 22 disagreements of one level are added in, the reliability becomes .81 for the journal data. There were 19 cases of disagreement of two or more levels by the raters.

The overall group average on the Think Aloud Journal data was 3.47 compared to the Critical Incident Interview mean rating of 4.48 discussed earlier. Despite this moderate difference on the two measures, the same high (4.41), mid (3.49), and low (2.50) descending pattern for the various Curriculum Achievement Groups was maintained for the journal data.

The team has interpreted the Think Aloud Journal data in a much more cautious manner than the Critical Incident Interview data because the directions and stimulus for what the students wrote in their journal entries were poorly focused for what the taxonomy emphasizes. The team plans to revise this form and to provide more guided practice in the higher levels of reflective pedagogical thinking.

In addition to the pedagogical thinking data results reported above, there have been several other worthwhile outcomes resulting from the development of the TAXONOMY OF TEACHER THINKING. These include ideas regarding faculty development, curriculum materials, instructional delivery strategies, and ideas for further research with CITE students, professors, and classroom teacher educators. Implementation of these ideas is already planned for year 4. We plan to:

(1) give specific attention to pedagogical language acquisition and conceptual development in CITE courses through: cognitive mapping and think-aloud exercises, professor and teacher modeling of reflective pedagogical thinking, and structured questioning frameworks to guide students in linking research-based concepts and principles with instructional events;

(2) develop new field experience activities and directions for processing these as written assignments thus bringing students to gradually higher levels of pedagogical thinking;

(3) identify cross-over concepts and principles among the three CITE courses and involve professors in seeing how this integration fits within the seven categories of the TAXONOMY OF TEACHER REFLECTIVE THINKING;

(4) develop and provide a seminar/graduate course on reflective pedagogical thinking and supervision to be offered for CITE professors and teachers during Year 4;

(5) continue to strengthen and expand the CITE faculty/research cadre who have developed a shared understanding and commitment to pedagogical thinking and reflection as a primary instructional goal of the CITE Project curriculum;

(6) continue to use and experiment with the use of collaborative data analysis of interview transcripts and journal entries as a faculty development activity; and

(7) establish a research agenda for further investigations of the TAXONOMY and the impact of CITE --- e.g. longitudinal case studies with CITE students, and novice-expert comparisons between CITE students and experienced CITE teachers.

Student Reactions to CITE

Students have responded positively to their experiences in CITE. On the questionnaire, 82% expressed great satisfaction with project, with no students expressing dissatisfaction (M=5.25 SD=.75; 1=low and 6=high). When asked to list the benefits received from CITE, 35% of the comments referred to the hands-on structured field experience that provided for application and transfer of learning. Typical comments include, "An intensive semester of interrelated topics which won't leave my memory as other coursework has;" "I learned far more than in any other pre-student teaching experience;" "I enjoyed the interaction of the three classes and their parallel to the actual classroom experiences."

Over 21% of the other comments indicated that students benefitted from CITE by becoming more self-confident and better prepared for student teaching. Fifteen percent of the comments referred to a "more realistic" view of teaching with decreased idealism. One comment elaborated this view, "I learned there is more to it than just teaching; I understand now what is involved." Twelve percent of the comments regarding benefits focused on the teaching week, with another 12% mentioning an increased interest in teaching as a career.

Student Experiences During the CITE Semester

Three in-depth open-ended interviews were conducted with six students from January to April in an effort to produce a "rich qualitative impression" of what these students experienced as they went through the CITE program. All students were invited to volunteer for selection in this component of the study. From the 15 who volunteered, six were randomly selected to be informants, three elementary and three secondary pre-student teachers. Each informant was scheduled for three tape-recorded one-hour interviews throughout the semester. A verbatim transcript for each interview was produced and analyzed for recurring themes.

Planning and Teaching. CITE was experienced by these six students as a process with several phases, climaxing in teaching week. First, informants settled into their classroom assignments. They observed the classroom teacher, sometimes worked with individual students or small groups as a helping person, and usually taught a brief lesson of some kind. Most of all, however, they got to know the pupils as individuals and as representatives of their respective grade level. As the teaching week assignment was given, students narrowed their focus to planning their units. They collected ideas, information, and activities from their university instructors, classroom teachers, other teachers and colleagues, resource centers, and libraries. They made choices about content and organization, planning to do what they believed to be compatible to the students' abilities and interests, their own preferred teaching styles and values, and their own understanding of the content. They planned things that they believed "would work."

As they approached the teaching week, planning became an on-going, pervasive, and consuming activity. The chief concern was always: "What will interest the students, get them involved, and keep them participating so they learn?" Anxiety and high hopes dominated the period just before the teaching week. They were working hard, often doing many things at once. They implemented plans they discovered were memorized, making changes as they went in response to pupil reaction and unexpected events in the classroom.

Secondary-level students went through a dramatic trial period in which pupils "tested" the students' authority. When informants became aware of "being tried," they intercepted and regained control without becoming personally threatened or angry. One said: "They had to test me and see what I was made of. They did, and I showed them I wouldn't let them walk on me." One CITE student discovered pupils leaving the room with the bathroom pass, so she simply took the pass and told students they had to stay in the room. In another incident: "One kid had a magazine.

He was quite a large kid, and he had a group of boys around him and his magazine. I decided I had to go over and get this magazine. He raised up and looked back at me, and I'm thinking to myself, 'I've got a lot of nerve, acting like I'm going to have this magazine.' I felt like he could have hit me. I said to myself, 'Now I have to stand my ground and think this kid is not going to hit me because he thinks I'm an adult, and I'm not going to let him off." He just stood there and stared at me. I finally just walked around him and took it. He went and sat down. He didn't mention the magazine any more until it was time to go."

At the end of the teaching week, informants felt drained. They refocused on other things they had to do, all the things from their other courses they had ignored during the teaching week. All were excited about what their pupils had accomplished, and learned. The earlier hopes for 100% participation and achievement were seen as unrealistic, and EMU students were satisfied that they did the best teaching they could have done given their novice role in another teacher's classroom.

Perceived Concerns. Getting students interested and participating was the chief concern in all phases of the CITE program. Informants believed that "it is easy to give students information if you have well-planned things that really interest them." Getting respect from students was another important concern, especially since the informants had arrived mid-year when routines and norms had already been established by the classroom teacher. Lack of respect was not a problem experienced, however. When the teaching week arrived, informants discovered students had already grown to respect them. Classroom teachers who treated informants as supported colleagues also helped, although during the teaching week they felt "on their own."

Several concerns that surfaced during the teaching week remain as issues for future work. When students gave wrong answers or didn't read aloud well, informants in elementary classrooms were reluctant to call on them, believing these students would suffer embarrassment. Whether or not they should call on such students and how to react with corrective instruction that supports the students are two questions elementary informants had at the end of the term. One informant found out that her students were confusing the fire in a fireplace with the fire of a torch and did not know how to correct this "misinterpretation." Another said, "I don't like to tell them they're wrong; but I don't want them to get wrong information, and I want to encourage them to answer questions."

Time and judgements about time was another area of concern. When students became involved in an activity, it usually took more time than anticipated. On the other hand, time seemed to pass quickly, and keeping classroom activity on schedule despite various kinds of interruptions came to be seen as a skill to be honed in the future. Giving precise directions, especially for student movement during transitions, was another skill identified for future work.

Feelings Experienced during the CITE Program. Feelings ran strong. Informants experienced fun, tension, excitement, challenge, success, exhaustion, and surprise. Informants in elementary classrooms were sometimes amused with their students and happy when students responded to them in a learning situation. Those in secondary classrooms had stronger feelings of identification with their students and found themselves comparing their students to themselves or others they know at that age. All felt comfortable in their classrooms. Initiating some action with students the first time was something informants had to "just do." About confronting the class while a substitute teacher was there, one informant said: "My heart beat fast the first time I did it. The second time, my heart didn't go anywhere near as fast as the first time."

With the approach of the teaching week, tension increased and feelings of anxiety were common. One informant explained: "With anything major I do in the classroom, there's a little self-doubt, a little fear inside; but it peaks and goes away. After you get in there, it's OK. It just creeps up on me to keep me working, trying my best." Another said: "Fear, anxiety, and panic. It's been up and down. Fear one minute and I'm telling myself I can handle it in the next. One minute I'm in a panic, and I feel my stomach tightening up, and then I have to say, 'Oh, I can handle it. Back down.' It's a surface panic. I really feel like I can do it."

During this period of tension, informants found themselves constantly planning. Ideas came in the middle of the night for one who felt she was in a "tizzy." One young man who had intended not to think about teaching all the time, "like a lot of teachers do," said: "I got a lot more involved than I thought I would. I thought it was something I could pick up and leave when I was done with it, but I thought about it throughout the day--in math class, in history class, watching TV, while I was eating. I'd pull the books back out, check this and check that to make sure I remember." At the beginning of the teaching week, the dominant feeling was: "Oh, boy. I hope I can do it. I hope they can do it. They can do it. We can do it."

Once the action started, feelings of nervousness faded. One represented all when she said: "Once I got going, the panic swings of up and down just sort of went away. Reality was here now, and I didn't have time to worry about what MIGHT happen. It

was happening, and I was doing it." Another added: "Once I got rid of the nervousness, it was a piece of cake. How did I get rid of the nervousness? Just live through it. Keep going. Just jump in and do it. And don't let the students know I'm nervous."

At this point, the teaching week became a challenge. Informants were stimulated by questions that kept them involved: "Will the plan work? How many students can I get involved in working on the objectives? How else can we work on the objectives? How can I get those who aren't cooperating to do something?" Teaching was fun. Informants found out: "Wow! I can do this! I always know I could, but this reinforces that I can manage. It's all going on at once, but I can do it." The week was exciting, and at the end, they found out: "Wow! They actually learned something, and they remembered it for a test!"

Informants generally agreed that "ideas about teaching are already formed, and education just fine tunes what you know." Still, throughout the semester, informants experienced some surprises: There was a lot more to teaching than students thought. It wasn't just "go in and teach." There were routines to teach and to reinforce. Teaching elementary students required helping them be responsible for themselves rather than taking care of them and doing things for them. Being firm was not being "mean." Students really were individuals and often needed to be handled in different ways from one another. Student behavior in secondary classrooms is less disciplined than "it used to be." Teachers weren't one, big, happy family. Secondary students were not adults; they didn't know everything.

Hard Work: Planning, Unexpected Events, and Changing Plans. There was consensus that the CITE program is hard work. There is "the actual planning, knowing what you want to teach, how you want to teach it, how to lay it out so it rolls along smoothly." One informant said, "My plan was good, so I didn't make any changes; but of course when you're up there, you don't follow it." Another explained: "Basically I used the plan, but I made changes all week to adjust to students and their moods." One informant used some animal skeletons from the teacher next door because the "children were fascinated with them." Questions and answers from students often raised points not included in the lesson plans.

Most of the six informants met unexpected circumstances that forced a change in plans. Several found they were going to have less time than they were originally allowed because of some interruption. One person got to the door of his room with the class and discovered another teacher using that room, and the room he ended up in had no blackboard. He was able to "go with what he could do on the spot." He found out that "if you keep

the objectives in mind, you always know where you're heading." Generally, informants felt they were overprepared, but this overplanning helped them to be ready for all the things that could happen. They also had ideas and activities to use when they needed something for extra time or extra help with individual students.

There was general agreement with one woman's conclusion: "It's more fun to go in and do it than the actual planning. But you need the planning in order to get to your goal. Without the planning, you wouldn't know what your goal is. So it wouldn't be as much fun to teach without the planning. Going in there with no plan would be like going in undressed." Another added: "The biggest thing I learned is to follow my lesson plans, but not to panic if things don't go right. Be ready to change on a moment's notice and still cover everything."

How did these students experience CITE? "I've practiced what we've learned about teaching, and I know it works." Another said: "CITE is added work, but the most satisfying part is being in the classroom. It gives meaning to what I'm learning in my university classes." Another added: "What you really learn about is your goal of becoming a teacher. Everyday I thought, 'This is what it's all bout.' What feels good is I know I'm not perfect, and I know I make mistakes. But I think this is what I'm cut out for. I'm happy that I'm becoming a teacher."

Summary: Student Outcome Questions

Undoubtedly, the student outcome data are the richest set of findings attributable to the CITE pattern of courses with an associated field experience. Quantitative and qualitative data confirm the conclusion that the CITE pattern of courses with an associated field experience was valued by students. They were highly satisfied with the field experience and the chance to collaborate with a classroom teacher educator. The teaching week, although stressful, resulted in a transformation from "teacher education student" to "student teacher". One student summarized the value of CITE as a vehicle for change by stating, "I learned there is more to being a teacher than teaching. I understand now what is involved."

Possibly, the greatest benefit of the CITE project was unanticipated at the time we wrote the grant. The development of the Taxonomy of Teacher Reflective Thinking was accomplished through a collaborative process as we searched for a coding scheme to analyze student pedagogical thinking. The taxonomy holds promise as (1) an instructional tool in pre-service teacher education to explain and emphasize the reflective quality of teaching--the importance of a common professional vocabulary, the application of sound instructional principles, and the effect of

context and other conditions on learning, (2) as a research tool to evaluate the quality of teacher thought in particular environments, and (3) as an in-service education tool to enhance teacher reflection and the utilization of educational research in teaching practices. Lastly, we have been pleasantly surprised to observe that four university faculty have become excited and involved in the taxonomy development process and plan to revise their courses as a consequence of that activity.

Coding of the "Critical incident" interviews using the taxonomy indicated that all of the average and above average CITE students were operating at level 5--using pedagogical principles to explain events. Eleven brighter students showed evidence of level 6 by tying the pedagogical principals to classroom or social conditions in explaining an event. Seven of the eight students who were rated low on classroom performance were only able to label what they saw with reference to pedagogical principles (level 3).

Teacher Outcome Questions: How have teachers redefined their role as teacher educators? How have teachers reacted to CITE?

One expected outcome of CITE was that teachers would discover a greater role for themselves as partners in teacher education. We hoped that teachers would report that their input had been solicited and taken seriously--that they felt like true collaborators. We were also interested in finding out how teachers perceived their role as a support and guide for the CITE student. Finally, we assessed teachers' reactions to and perceptions of the benefits of CITE.

Teacher's Perceptions of Their Role

CITE teachers definitely saw their role in the structured field experience as a valuable part of teacher preparation. This commitment was reflected in their rating of how much EMU students benefitted from the classroom experience of CITE. Over 96% of Winter 1988 CITE teachers reported a great benefit for EMU students and 91% reported a strong benefit for EMU's teacher education program. No teachers gave a low rating on this item.

In the interviews teachers praised the program for providing the opportunity for students to "take theory and use the classroom as a laboratory for experimentation, to try things out and to make mistakes and to think back about what went well or badly and why" (12 comments in 12 teacher interviews). Thus, teachers clearly felt that their role as a developer and implementer of CITE was of value to teacher education and to students.

Twenty comments on the questionnaires indicated that teachers appreciated the opportunity to help contribute to the preparation of teachers. Among these comments were statements

such as, "I have been able to see the effort that is being exerted toward improving teacher education. I wish my student teacher had had CITE." "Being allowed to help guide a future educator is important to me because I enjoy and believe in what I am doing and want others to feel the same."

The interviews provided the most detail on how teachers perceoved their role with CITE students. Most of the comments reflected the teacher's role as a "Coach." Five teachers mentioned modeling a particular strategy (e.g., questioning) for the student while two others reported giving students examples of methods (e.g., playing games or forming groups) to try with students. Many comments from the questionnaire and interviews indicated that teachers spent time helping students with the pre-student teaching activities assigned by their professors. Six teachers mentioned going over the mini-unit detail before the student taught it.

Another area of the teacher's role is as a support person. Six teachers showed a touching sensitivity to the pre-student teacher's uncertainty. As one teacher said, "I try to make them feel comfortable first, then I show them what to do, and give them materials." Another said, "Something I feel like I need to step in when the student is doing a lesson and having difficulty. I try to be subtle." A third teacher said, "You don't want to make them feel like they failed, so you need to be sensitive."

Teachers' Perceptions of Collaboration

When asked on the questionnaire about their perceptions of collaboration, 65% reported great satisfaction and 4% reported low satisfaction (M=4.87 SD=1.19; 1=low; 6=high). Over 43% strongly agreed that their input had been actively sought, while 9% strongly disagreed. Over 57% felt their input had been taken seriously, while 2% felt it had not. Thus, most CITE teachers appeared satisfied with the opportunities for input and with CITE's responses to their ideas, suggestions, and comments.

An area of lower satisfaction was the amount of time teachers spent communicating with university faculty (M=3.98 SD=1.5). Over 41% strongly agreed that they had had frequent opportunities to communicate with professors; 25% strongly disagreed. It is possible that the teachers did not consider their university liaisons "university faculty," and that the responses were skewed by this misunderstanding.

The teacher interviews shed light on this area. Five of the twelve teachers said that there needed to be more activities similar to the first-year meetings when all participants were learning together. Three teachers mentioned that there was too little time to have meaningful discussions with the university liaison because of the competing pressures at school. There seemed to be agreement that teachers and faculty need to meet more often away from schools. The Fall Symposium and the year-long Seminar on Reflection are attempts to respond to the desire for more meaningful interaction and collaboration.

Teachers' Perceived Benefits of CITE

Thirteen teachers reported great satisfaction in observing the students grow in confidence and skills over the semester: "I enjoy speaking the same teacher lingo with the student and seeing them become more comfortable in front of a group." "The most satisfying aspect of my CITE participation is seeing the growth in the attitudes and abilities and knowledge of the CITE students."

Another 9 comments on the questionnaires indicated that teachers also benefitted from CITE through the provision of collegiality with a young, enthusiastic, interested student. Typical comments are, "My college student and I got along very well, were able to communicate openly, gave lots of encouragement, praise, and respect to one another" and "I enjoy working with well-prepared, anxious pre-teachers who are ready and able to learn about teaching."

Five teachers mentioned on the questionnaire their own growth as a result of CITE: "It keeps me up to date." "Having another teacher in the room causes me to examine what I do and the way I do certain things." Of the 12 teachers interviewed, five echoed this idea: "The collaboration keeps us up on the recent research literature and findings through the CITE materials and the new ideas reflected in the students' pre-student teaching activities."

Finally, over 60% of the teachers' reported that their pupils, and their district had benefitted greatly from participation in CITE (M=4.75 SD=1.05; 1=low; 6=high). Fewer than 4% reported little benefit for these groups. Many comments mentioned that pupils had enjoyed and learned from the unit, and that it was good for students to be exposed to a young professional adult.

Summary: Teacher Outcome Questions

Based on these results , CITE teachers came to see themselves as partners in teacher education. They felt like valued collaborators, they took their role seriously in helping students complete assignments and the mini-unit, and they experienced satisfaction and benefits in the process. A comment that illustrates teachers' sense of involvement and commitment to their role as a teacher educators is, "The teacher is more active with the CITE pre-student teacher now. We don't just observe and do paperwork (like in other pre-student teaching)."

Professor Outcome Questions: How Have CITE professors modified their thinking and practice regarding the use of field experiences and research in teacher education?

The topic of faculty satisfaction and changes due to their participation in the CITE Project is addressed using interview and questionnaire data.

Faculty Satisfaction

The Winter 1988 semester questionnaire responses from 11 professors indicated a high level of overall satisfaction with their participation in the CITE Project (M=4.63 SD=1.11; 1 = extremely dissatisfied and 6 = extremely satisfied). When asked to rate the benefits received by various participants in the CITE Project, professors saw themselves in second place (M=4.36 SD=1.07), behind the students (M=5.18 SD=0.72) but ahead of the classroom teachers (M=4.14 SD=0.83). When asked about their relative influence on what the CITE students learned during the semester, professors indicated that they were responsible for 62.5% of the learning while the classroom teachers had 37.5% of the responsibility.

Professors' open-ended responses regarding the most satisfying aspect of their participation emphasized improved student learning due to the field experience component (7 comments), university - field collaboration (1 comment), and being involved in change processes themselves (1 comment). The following comments are typical: "being able to place students in a classroom setting and having the opportunity to prepare them for it and to have some feedback from the students about the experience;" "students are able to implement class assignments in a real setting;" "listening to (at least some) students begin to take their decision-making seriously and attempt to use principles in real life instead of memorizing for a test." Three professors identified logistical coordination as the least satisfying aspect of CITE participation while four professors commented on the need for better communication and preparation of the field experience teachers as models of what the students were studying.

According to the questionnaire data, faculty perceptions of communication and collaboration efforts by Project leadership were positive. On a six-point scale (1 = strongly disagree and 6 = strongly agree), faculty believed that their input had been actively sought (M = 4.77 SD = 1.03) and that their input had been taken seriously (M = 5.29 SD = 0.45) by the CITE Project leadership. While they recognized that opportunities to communicate with classroom teacher educators were somewhat less frequent, they nevertheless regarded such opportunities as generally satisfactory.

Changes in Practices

Individual interviews were conducted by the Project Evaluation Consultant with all regular and adjunct faculty participating during Year 3 as instructors and liaisons. These data provide rich perspectives on faculty perceptions and teaching practices.

During the 3-year time frame of the CITE Project, a staff sorting process unfolded as various regular and adjunct faculty were assigned to teach courses, serve as liaisons, participate in the CITE Advisory Board, etc. A total of 14 faculty were assigned as CITE liaisons or professors from 1985-88. Eight of these individuals can be considered "regular" Project faculty who participated during at least four of these six semesters. The majority of those with inconsistent participation in the Project were adjunct faculty who remained pleasantly supportive but only superficially aware of the actual Project goals and curriculum components. A key aspect of CITE's success is building toward a cadre of faculty who share common understandings of the research base and the reflection goals of the project. We are part way there with only one adjunct faculty teaching a CITE section this Fall. Two newly hired faculty members will also join the project during Year 4.

It is difficult to conclude that the eight regular Project faculty changed in major ways; it is more correct to say that faculty whose orientation was congruent with the Project's goals were happily challenged, experienced support for their efforts, and responded accordingly. The Year 3 interview data reveal some specific aspects of participant satisfaction and professional growth which occurred due to teaching in the Project and participating in planning sessions with other faculty and classroom teachers.

Three of the eight regular faculty reported in the interviews that they were experimenting with new ways of teaching which were more consciously structured toward enhancing student pedagogical thinking, reflection, and the integration of theory and practice. Rather than "business as usual", they reported experiencing new professional excitement and growth in facing the challenge of focusing their planning and instructional effort on these goals, discussing strategies with other Project faculty, and individually monitoring the results in their own classrooms. These same faculty were those who were more visibly involved in Project planning, liaison, and evaluation team efforts. Two other professors added moderately greater emphasis to the use of sociological and historical research to their courses, and one professor stated that the use of the field experiences to build course concepts and techniques was productive.

When asked about changes in instructional practices due to the CITE Project, one professor said, "It has forced me into preparing more, and I find that very beneficial. I have a predisposition sometimes to lecture because that is my stronger mode of presentation, and I think I have [now] integrated far more participation on the part of students into the process." Another less experienced Project professor said, "One of the most exciting things is working with other professors to share experiences and to try to share the students' experiences or connect the experiences the students have between one class and another, so that we are not all working independently of one another, but that the students are seeing real connections among the various classes that they take. I think it has made me more aware of what other people are doing and how I fit into the grand scheme of things rather than just being out there all by myself."

Changes in Thinking About Field-Based Teacher Education

Because the Project clearly emphasized collaboration and certain instructional goals and because evaluation efforts were visibly being made to assess the achievement of those goals, the atmosphere for university teaching slowly changed in the CITE Project. Rather than the typical norms of professor isolation and a high level of student responsibility for learning, expectations gradually shifted toward faculty collaboration and sharing of the responsibility for learning among the professor/classroom teacher/student.

According to Project written records and the interview data, the focus in Year 3 was on such issues as: What are CITE students actually learning? How do the three CITE classes reinforce each other? What content is being presented in the other CITE courses and how does it fit with what is being taught in this class? What is the student seeing in the field experience setting to illustrate what is presented in the university classes? How can professors and teachers help students to learn the right things rather than the wrong things as they wrestle with theory-practice connections? Such questions have gradually provided the impetus for faculty self-perceptions to begin to shift somewhat from exclusive concern with their own subject/topic expertise (e.g. measurement, social foundations, curriculum) to their role as teacher educators working in a team setting.

Compared to the typical isolated university teaching environment, concern for what and how the students were learning became a somewhat new and frequently discussed topic among faculty. This allowed most professors in the regular Project faculty group to freshly examine their own curricula and question their instructional strategies in a very professionally healthy manner by the end of Year 3. On a collegial level, many faculty read each other's course syllabi searching for concepts which

could be connected across CITE courses, but remained moderately frustrated by their lack of fuller knowledge of how and when topics and assignments were being presented by other professors and of the degree to which field experience teachers would model what was being taught that week at the university. As Year 4 begins, faculty readiness for increased dialogue and planning in these areas is high.

All eight of the regular Project faculty commented on how the use of real-life examples was very important in motivating students to learn educational theory and that it actually enhanced and deepened what they learned. According to one professor, what is taught at the university becomes subject to a "reality test" as CITE students take those concepts to their field experience classroom and bring back stories of what they had seen and done. From her perspective, however, the collaboratively developed university and field curriculum in the CITE Project resulted in generally positive "feedback" from the school environment to university professors about what they were teaching CITE students. That was a very refreshing and affirming experience when "there is a temptation of people in the classroom to say 'You have been out of the classroom so long, you don't know what's happening'. When students would come back and say that they are doing things that their teachers think are good and that the teachers are doing things they should do out there--it's a validation. I think that is definitely beneficial to professors, and I think should reinforce ... a stronger sense of comfort in dialoguing with teachers about we do in the university."

Along with this increase in professor self-confidence in relating to teachers, their interest and commitment to doing so also gradually increased. During Year 1, much professor and teacher time had been spent in collaboratively developing the CITE Project course topics and related field experience activities, but such meetings were not held during Years 2 and 3. At the end of Year 3, however, professors were expressing interest in ways to informally meet with teachers as equals to chat and work on common tasks. One professor suggested "rap sessions" with no set agenda in non-academic settings like a restaurant at which students, teachers, and professors could use case studies to focus on theory - practice connections and the complexities surrounding contextual decision-making. Professors would contribute their knowledge of research-based theory, and classroom teachers would contribute their knowledge of the subtlies of classroom contextual influences. The Reflection Seminars will provide an opportunity for such dialogue and collaboration.

Summary: Professor Outcome Questions

Professors were highly satisfied with their participation in CITE and perceived many benefits to student learning. The eight faculty who participated almost every semester of CITE found themselves experimenting with new ways to develop applications of their content to the realities of the classroom. Three faculty sought to promote student reflection through class discussions of decision making and the use of course principles in the school context. Professors also reported changes in thinking about their content as it related to CITE: the importance of cross-over concepts among courses, the focus on what students were gaining, and a new appreciation for the field as it lent credibility to course contents. Finally, collaborative planning with teachers in projects such as CITE became more highly valued.

Institutionalization Outcome Questions: How has the CITE project been institutionalized? In what form will the project continue after federal funding ends?

The following objectives for institutionalization of the key elements of the CITE Project guided project planning and development:

1. The required teacher education field experiences will be increased and taken by students in a structured pattern.

2. The University will support and affirm the importance of structured field experiences through official curriculum approval action.

3. The funding for the teacher education program at Eastern Michigan University will have increased to include:

    a. support for four (4) one-quarter time positions for university faculty who become coordinators of EMU field experiences at area school districts.

    b. support for one half time coordinator of pre-student teaching field experiences who was/is a K-12 teacher from one of the participating districts. The coordinator will be aided by a graduate assistant provided to the Department of Teacher Education as an additional allocation.

    c. funding of a new teacher education administrator whose role will be defined to a substantial degree as one involving the development and coordination of clinical and field experiences.

The following results have been achieved relevant to the institutionalization objectives (See Appendix E):

1. The required field experiences in the teacher education program have been increased substantially as a direct result of the CITE Project. Over two hundred students, approximately one-third of the eligible EMU students, participate in the blocked course pattern of Curriculum and Methods, Social Foundations and Measurement and Evaluation with an associated field experience each year as compared to no students prior to the initiation of the project. This pattern will be continued in 1988-89 and increased to 300 students, one half the eligible students, in 1989-90.

2. AS can be seen in Appendix E, the university has affirmed the principle and intent of block scheduling to facilitate the implementation of structured field experiences.

3a. The university has released four university faculty as field-experience liaisons to support the CITE Project. The Provost (Academic Vice President) has agreed to provide funding for five university liaisons beginning in the Fall of 1988.

3b. The funding of a half-time coordinator of CITE pre-student teaching field experiences as well as a graduate assistant have been approved by the Provost and Academic Vice President for 1988-89. Furthermore, the structured field experience program has been allocated $15,000 from the Provost's Development Fund to support its activities.

3c. A new position, an Associate Dean for Teacher Education, whose role will include the development and coordination of clinical and field experiences, has been requested for 1988-89 but has yet to be funded.

There is a strong likelihood that the project will continue to grow in size, scope, and quality. The institutionalization of structural elements--coordinator, liaisons and budgetary support for project activities--is a promising development. The creation of a teacher education administrator, although not yet a reality, remains a reasonable probability. The interview data with key administrators demonstrate the high level of spiritual support from that group. In addition, plans for new project activities include a seminar for teachers on reflection and decision-making, a block program for honors students, and a scheme to take an elementary and secondary education block and house it in a district school testify to the vitality of the project. Another illustration of project vitality is the creation of a research group of eight CITE faculty, K-12 teachers, student teaching supervisors, and outside consultants to investigate and develop a model of teacher reflection that can be used in research and in staff development.

Given the financial support provided by the university, the high level of administrative approval, and the vitality of the CITE program beyond federal support, the likelihood of continued development is high as is the optimism of participating personnel.

VII. SUMMARY AND DISCUSSION/FUTURE DIRECTIONS

Collaboration for the improvement of Teacher Education. (CITE) has as its purpose to improve the professional core of a large teacher education program at Eastern Michigan University, a program that recommends over 1000 initial elementary and secondary education teaching certificates each year. The CITE program consists of three key elements that together define its innovative character, (1) the integration of contemporary research into a newly revised teacher education program, specifically into three core courses (Curriculum and Methods, Measurement and Evaluation, and Social Aspects of Teaching), (2) the development of a set of collaboratively designed field experience activities that are based on the contemporary research, and (3) the creation of collaborative roles and structures that will elevate and enhance the relationships between the university and four K-12 districts--Ann Arbor, Lincoln, Ypsilanti and Willow Run. These four districts were chosen because a majority of EMU students complete their field experience in them and the districts represent a mix of ethnicity and urban and suburban environments. The CITE Program has successfully implemented these key elements over a 3-year period, (1985-1988).

Implementation Results

1. Through a collaborative process, research findings were identified and inserted into the three core courses.

2. Again through a collaborative process. research-based field experiences were developed and integrated into the course requirements of three courses.

3. New collaborative roles and structures were created:

   a. A block schedule was developed and implemented to permit students in CITE to attend a participating teacher's classroom for one morning a week and to be released for one week in the latter portion of the semester to teach a mini-unit in the participating teacher's classroom.

   b. Four university liaison faculty were chosen to act as "linking agents" to facilitate two-way communication between the university teaching faculty in the three core courses and the participating K-12 teachers.

   c. A CITE Advisory Board was created to provide input and make program decisions.

Outcome Questions and Results

Question 1: How has CITE developed students' reflective pedagogical thinking and how have students reacted to their experiences in CITE?

Prior to assessing pedagogical thought, the project staff had to design an assessment procedure and coding scheme that could measure it. A major unanticipated outcome of the project was the development of the TAXONOMY OF TEACHER REFLECTIVE THINKING that consists of ten categories, including three simple/complex sub-categorical distinctions. The taxonomy ranges from Level 1,"No description of an instructional event", to Level 3, "Description of an instructional event using pedagogical language," to Level 7, "Explanation of an instructional event using moral/ethical reasoning" at the apex of the hierarchy. Through an analysis of interviews and journal entries, it was determined that most CITE students were able to describe and correctly label instructional events using one or more examples of pedagogical language (Level 3). All but one of the 16 average or above average students were operating at Level 5 where they explained events using pedagogical principles. Six brighter students showed evidence of Level 6 by referring to conditions in their explanations.

The CITE students expressed satisfaction with the blocked pattern of classes with its associated field experience. They were highly satisfied with the field experience and their opportunity to collaborate with a participating K-12 teacher. The teaching week, although stressful for the students, was judged as important in forcing them to assume the mantle of a teacher in a realistic way.

Question 2: How have participating K-12 teachers redefined their roles as teacher educators and how have they reacted to their experiences in CITE?

The evaluation results from questionnaires and interviews involving K-12 participating teachers suggest that they came to see themselves as partners in teacher education. They took their role seriously in helping teacher education students to complete assignments with special attention to preparing and teaching a mini-unit during the teaching week. In regard to CITE, the K-12 teachers overwhelmingly believed that they benefitted from participation and that their role in the process was valued by university faculty.

Question 3: How have CITE professors modified their thinking and practice regarding the use of field experiences and research in teacher education?

Improvements over the life of the project were noted in the clarity of field activity assignments and their integration into courses. However, the evaluation results suggest there was only incremental progress by professors in viewing field experiences not only as an environment to observe and apply educational research about teaching, learning and schooling, but also as a laboratory for reflection-in-action.

In regard to the research content in the courses, greater understanding of reflective thought has led to more explicit teaching of reflection in the curriculum course. In the final semester of CITE, the three courses were functioning better to provide not only technical skills for teaching but also social and diagnostic insights for making context-based decisions. Some progress occurred in the level of collaboration among faculty teaching in the three core courses, although the goal of correlated teaching of cross-cutting concepts in the three courses was not yet a reality.

Question 4: How has the CITE project been institutionalized?

In a real sense, institutionalization of roles and structures is the most difficult outcome to realize because success requires additional resources. However, in the case of CITE, the institutionalization objectives were fully realized. University resources were secured to replace the federal funding with an extra measure included. For 1988-89, a half-time CITE coordinator and a graduate assistant position have been funded, the number of university liaisons was increased from four to five, and the project was given $15,000 for supplies, services, materials and travel expenses.

Future Developments

One of the measures of the vitality of an innovation is the level of creativity that remains after it becomes accepted in the environment. Given that standard, CITE scores well. Workable and practical plans have been made for 1988-89 in a number of outcome areas. In regard to enhancing student reflective thinking, the TAXONOMY OF TEACHER REFLECTIVE THOUGHT will be further refined and developed through the analysis of additional interviews with Fall, 1988 CITE students and with two groups of experienced teachers. A refined structured interview form will be created to improve the validity and reliability of the responses. Plans are being made to present the taxonomy at AACTE and AERA and to write on article on the theme of reflection for

submission to the Journal of Teacher Education. The instructional theory that undergirds the taxonomy will be used by three of the CITE faculty as the fundamental integrating principle of the program as they teach the Curriculum course. Social Foundations and Measurement faculty will be encouraged to explore the application of the taxonomy in their courses.

In regard to teacher development, a half-day Symposium on Reflection is planned for the Fall for both K-12 teachers and university faculty. A two-credit Seminar on Reflection will also be offered with the university awarding a partial scholarship for 20 CITE teachers. During both experiences, university and school faculty will present research-based content and discuss how the content relates to reflective decision making. The taxonomy will be examined as an instrument for the analysis of reflective thought.

In regard to university faculty development, the symposium has been mentioned. Of great importance is the plan to implement one or more cross-cutting concepts such as competency testing or mastery learning and teach it in a correlated manner in the three courses. We expect to see a greater spirit of collaboration that will communicate to students that the three-course pattern has curriculum as well as scheduling benefits.

In regard to further institutionalization, the CITE block program will be offered to honors students for the first time in the Winter, 1989 and is likely to spur additional thoughts on enhancement as the brightest students at EMU reflect on teaching from the illuminating platform that CITE provides. Finally, we have an ambitious goal to teach the three CITE courses on-site at a participating elementary or secondary school in Fall, 1989. If we are successful, it will permit us to leap forward toward a new level of collaboration between the university and the K-12 schools.

VIII. IMPLICATIONS FOR TEACHER EDUCATION

Our experience with CITE has brought us many understandings related to collaboration; the use of research, field experiences, teacher reflection, and change. The implications of our insights for improving teacher education are listed below.

1. CREATION OF A DEVELOPMENTAL TAXONOMY OF REFLECTIVE PEDAGOGICAL THINKING (Simmons, Sparks, Pasch, Starko, & Colton, 1988) HAS OCCURRED.
While concern for teacher thinking and reflection is widespread today, no one uses these terms with any precise, shared meaning, and there is little available in the literature which suggests how teacher educators might foster such goals in teacher candidates. The categorical framework developed by the CITE evaluation team is based on the language acquisition, conceptual development, and teacher thinking literature. It has been used here to assess the levels of pedagogical thinking demonstrated in student Critical Incident Interviews and Teaching Week Reflective Journals. Inter-rater reliability and the instrument's ability to discriminate among high/average/low teacher candidates were both promising. Further research is planned by the CITE team with novice and experienced teachers.

2. SPECIFIC, DIGNIFIED ROLES/AREAS OF EXPERTISE FOR EACH GROUP IN TEACHER EDUCATION COLLABORATION EFFORTS NEED TO BE CLEARLY IDENTIFIED.
Two different but valid views-- (a) university faculty's knowledge of research and theory, and (b) classroom teacher's knowledge of pupil, curricular, and community contextual influences on instruction -- have been brought together in CITE through the Taxonomy's recognition of the importance of both aspects to instructional decision making. Thus, the goal of reflection bridges the two "camps."

3. THE VIEW OF EFFECTIVE TEACHING AS CONTEXTUAL INSTRUCTIONAL DECISION-MAKING SHOWS PROMISE FOR UNIFYING THE VARIOUS CURRICULAR COMPONENTS AND PHILOSOPHIES WHICH HAVE UNTIL NOW EXISTED AS SEPARATE ENTITIES IN TEACHER EDUCATION PROGRAMS.
Teaching research-based practices in Curriculum courses is not enough. Students need to see Social Foundations as providing knowledge of contextual factors and a critical spirit for teacher reflection and Measurement and Evaluation as providing a set of technical data gathering/analysis tools for decisions about practice.

4. UNIVERSITY - SCHOOL DISTRICT COLLABORATION EFFORTS NEED TO HAVE A SHARED TASK AS A FOCUS (not just trust and shared purposes).
CITE built trust and commitment through the relatively simple tasks of creating a research-based pre-student teaching program. The more complex task of developing reflection emerged as we collaborated to refine our outcomes.

5. PREFERENCE SHOULD BE GIVEN IN EXTERNAL-FUNDING DECISIONS TO TEACHER EDUCATION PROGRAMS WHICH HAVE ALREADY INITIATED CHANGE ON AN INTERNAL BASIS.
EMU had already made a change in its program that enabled three courses to be taught in a block and had stated a need for the use of research and improved pre-student teaching. Such prior change efforts create a more promising culture and readiness for innovation and demonstrate local commitment to change before external resources are awarded.

6. SUCCESSFUL DISSEMINATION REGARDING AN INNOVATION INVOLVES INFORMAL, CULTURAL, AND PERSONAL STRATEGIES AS WELL AS MORE TYPICAL, FORMAL COMMUNICATION VEHICLES.
In the case of the CITE Project, administrator interview data revealed the unexpected way in which the enthusiasm and satisfaction of CITE students was influential in developing greater respect for the University's teacher education program. Students had praised CITE in their contacts with professors in the wider university community. (CITE students took courses in these other departments as part of their liberal arts and teaching major/minor preparation.) This greater respect for the up-to-date research base and academic integrity of teacher preparation was helpful when teacher education policies were voted on by University groups and when future internal funding decisions were made for Year 4. Similarly, attention to Project celebrations (e.g. end-of-semester parties for all participants) and acknowledging the role of public school personnel (e.g. a newspaper ad in a local paper after the 1988 AACTE Award for the Use of Research in a Teacher Education Program was won) were extremely powerful in fostering widespread awareness of the Project, its positive impact, and participant pride.

7. THE USE OF COLLABORATIVE, DATA-FOCUSED ACTION RESEARCH EXPERIENCES AS A VEHICLE FOR FACULTY DEVELOPMENT IS VERY PROMISING.
In this case, a faculty and teacher team spent 15-20 hours developing a categorical framework to distinguish levels of pedagogical thinking in teachers. A significant amount of time was spent examining transcripts of student "Critical Incident" interviews for a stratified sample (high/average/low) of students. This process provoked a rich dialogue concerning what students were/weren't learning, instructional strategies, student evaluation criteria, etc. This experience was unparalleled for the individuals participating as well as extremely helpful in developing a team of CITE participants who now have a generally shared view of curricular goals related to the Project. The same experience in a very short, one hour version was successfully used with the Project Advisory Board to build readiness for revising the field experience activities and developing ideas related to a Seminar on Reflection for Project teachers during Year 4.

8. A GREATER KNOWLEDGE-BASE AND POSITIVE ATTITUDES TOWARD THE USE OF RESEARCH IN TEACHER PREPARATION NEEDS TO BE GRADUALLY DEVELOPED IN MOST TEACHER EDUCATORS IN THIS COUNTRY.
For those teacher educators without recent preparation and who work in colleges/universities with a great emphasis on faculty teaching and service, there is little time and readiness for reading the research literature, thoughtfully and confidently using it in preparation programs, and doing their own research in teacher education or school settings. Professional organizations, individuals, and federal funding agencies all share responsibility for speedily addressing this problem in a dignified and coordinated fashion. Due to the staff development programs available in some school settings, public school teachers are much more knowledgeable regarding effective teaching research than are teacher education faculty in the region. This situation not only results in weaker teacher preparation programs but also lack of faculty confidence for collaborating outside the walls of the ivory tower.

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APPENDIX A: EVALUATION INSTRUMENTS

STUDENT MEASURES

CITE PROJECT---Year 3 & Followup Data Collection (9/87)
Student Informed Consent & Information Sheet---continued

CITE PROJECT STUDENT INFORMATION CARD---page 2

NAME:_____ STUDENT NUMBER:_____
last first m.i.
THIS YEAR: 19_____ THIS TERM (check one): Fall Winter Spring

STUDENT INFORMED CONSENT

The federally-funded CITE Project is a three-year attempt to improve and investigate teacher education at Eastern Michigan University and in the Ann Arbor, Lincoln, Willow Run, and Ypsilanti School Districts. The project focuses on: (1) strengthening the campus - field and cross course integration of the teacher education program, (2) developing collaboration between the university and classroom-based teacher educators, and (3) increasing the use of research on effective teaching/learning in the campus courses and field experience actitivies in which EMU students participate.

As such, we are interested in program evaluation data gathered from all of the CITE Project participants---EMU students, professors, classroom teacher educators, and CITE Project administrators---in order to learn more about how to improve this and other teacher education programs for the future.

Consistent with University policy, we ask that you sign this consent form to signify that we have informed you of the purposes of these CITE Project data collection activities and of the voluntary conditions of your participation.

During the semester in which you take CITE Project courses, you will be asked to complete a 20 minute conceptual levels instrument at field experience orientation, a 20 minute written questionnaire about your experiences and satisfaction at the end of the semester, and to participate in a 10 minute "think aloud" interview during the last week of classes. In addition, the Project Evaluation Staff will review the mini-unit lessons "think aloud" journal entries which you do as part of your course assignments for your CUR 304/305 course. We are also interested in obtaining permission for the CITE Project to access your university records to determine your overall GPA, etc.

THANK YOU----CITE Project Evaluation Staff

I understand why I am being asked to participate in program evaluation activities sponsored by the Eastern Michigan Department of Teacher Education. My signature indicates that I have consented to voluntarily participate under the conditions outlined above.

signature _____
date _____

COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION

STUDENT QUESTIONNAIRE

PLEASE HELP US LEARN MORE ABOUT YOUR EXPERIENCE IN THE CITE PROJECT BY THOUGHTFULLY AND HONESTLY ANSWERING THE QUESTIONS BELOW. YOUR SPECIFIC ANSWERS WILL BE KEPT CONFIDENTIAL FROM BOTH YOUR COURSE INSTRUCTORS AND CLASSROOM TEACHER EDUCATOR. THANK YOU!!

Name:_____ Semester:_____

Field experience teacher's name:_____
School District:_____ School Building:_____

****

(1) On the average, how much time did you spend talking with your field experience teacher per visit to the school? How much time did you wish that you could have talked to her/him? Check one answer in each column.

	actual time	what I would have preferred
A. average # of minutes during the mini-unit teaching week	( ) 0-15	( ) 0-15
	( ) 16-30	( ) 16-30
	( ) 31-45	( ) 31-45
	( ) 46 +	( ) 46 +
B. average # of minutes during the rest of the semester	( ) 0-15	( ) 0-15
	( ) 16-30	( ) 16-30
	( ) 31-45	( ) 31-45
	( ) 46 +	( ) 46 +

C. any comments?

(2)-A. How satisfied were you with the quality of interaction you had with your field experience teacher? Circle one number.

extremely unsatisfied ---1---2---3---4---5---6--- extremely satisfied

2-B. any comments?

③-A. Would you recommend that your field experience teacher be included in the CITE Project next semester? Circle one answer.

yes no not sure

3-B. any comments?

④ For each CITE course, identify which two assignments made by your professors were most valuable in terms of your own learning as a prospective teacher? Explain briefly what you learned from each. [do not include the mini-unit teaching week assignment]

EDP 340-Measurement & Evaluation course:

A. -name of the assignment:_____
-what I learned:

B. -name of the assignment:_____
-what I learned:

SFC 328-Social Aspects of Teaching course:

C. -name of the assignment:_____
-what I learned:

D. -name of the assignment:_____
-what I learned:

CUR 304/305-Curriculum & Methods course:

E. -name of the assignment:_____
-what I learned:

F. -name of the assignment:_____
-what I learned:

⑤-A. How well did the topics/concepts from your 3 CITE courses relate to each other? Circle one number.

extremely unrelated ---1---2---3---4---5---6--- extremely interrelated

5-B. any comments?

5-C. How well did the topics/concepts from your 3 CITE courses relate to what you saw and did in your field experience school and classroom? Circle one number.

extremely unrelated ---1---2---3---4---5---6--- extremely interrelated

5-D. any comments?

⑥ Please indicate your degree of satisfaction with the following aspects of your participation in the CITE Project. Circle one number for each item.

	extremely dissatisfied					extremely satisfied
A. overall quality of your three CITE campus courses	1	2	3	4	5	6
B. overall quality of your CITE field experience placement	1	2	3	4	5	6
C. clarity of communication from CITE staff regarding your participation in the project	1	2	3	4	5	6
D. clarity of assigned pre-student teaching activities (in pink/blue/yellow booklet)	1	2	3	4	5	6
E. quality of instruction/support/guidance from your campus professors in preparing your mini-unit lessons	1	2	3	4	5	6
F. quality of instruction/support/guidance from your classroom teacher educator (CTE) in preparing your mini-unit lessons	1	2	3	4	5	6
G. level of shared purpose and focus among people involved in your CITE campus courses and the field experience	1	2	3	4	5	6

⑦ What have been the main benefits for you personally of participating in the CITE Project? Explain briefly.

⑧ What do you see as the major strengths of the CITE Project? Explain briefly.

⑨ What do you see as the major weaknesses of the CITE Project? Explain briefly.

⑩ When you were preparing and implementing your mini-unit lesson, what topics do you wish that you had known more about? Explain briefly.

⑪ Overall, how do you feel about your participation in the CITE Project? Circle one number.

extremely dissatisfied					extremely satisfied
1	2	3	4	5	6

THANK YOU AGAIN FOR YOUR TIME & COOPERATION

IN ANSWERING THESE QUESTIONS!!

CITE PROJECT---Year 3 Data Collection
STUDENT CRITICAL INCIDENTS "THINK ALOUD" INTERVIEW
(7/87)

Directions for administering:

- -individual interviews to be conducted by project evaluation staff
- -Fall 1987 sampling to include 12 students (2 strong, average, & weak students nominated by each professor from the elementary and the secondary level curriculum courses); Winter 1988 complete (100%) sample to be used
- -interviews to be audiotaped
- -interviews to be conducted at the end of each semester after the teaching week has been completed
- -use probing questions & ask for specifics as appropriate
- -approximately 10 - 15 minutes needed to administer

Have the student read before hand & answer any questions which occur:

One way to study teaching is to focus on the teacher's thinking processes before, during, and after instruction. Analyzing what teachers think about and what the sources of these ideas are has been fruitful both for teachers themselves and for researchers.

In this case, we are interested in your thinking at the conclusion of your campus courses and field experience this semester. As we have said to you before, at this point of your pre-student teaching preparation as a teacher, we are not particularly interested in evaluating your initial teaching performances with actual pupils. Rather, we are interested in how you think about concepts, issues, and experiences related to classroom teaching.

In this case, early field experience such as occurs in the CITE Project is regarded as an opportunity for you to further understand, apply, and experiment with concepts you have learned in your campus courses and vice versa. For this reason, the types of teacher thinking processes that occur in your mind are a central focus of this CITE Student Critical Incident "Think Aloud" Interview being conducted after the end-of-semester teaching week.

Your answers will not be part of your course grades. They are being analyzed as part of the CITE research project.

****

---turn the page over & turn on the tape recorder---

TEACHER MEASURES

COLLABORATION FOR THE IMPROVEMENT OF TEACHER EDUCATION

CLASSROOM TEACHER EDUCATOR QUESTIONNAIRE

FALL, 1987

PLEASE HELP US LEARN MORE ABOUT YOUR EXPERIENCE IN THE CITE PROJECT BY THOUGHTFULLY AND HONESTLY ANSWERING THE QUESTIONS BELOW. YOUR SPECIFIC ANSWERS WILL HELP US TO IMPROVE WHAT OCCURS IN TEACHER PREPARATION PROGRAMS SUCH AS THE CITE PROJECT. AS A KEY PARTICIPANT IN THE PROJECT, YOUR PERSPECTIVES ARE VERY IMPORTANT. THANK YOU FOR RESPONDING!!

Name:_____ Semester:_____
School Building:_____ School District:_____
How many years have you been a classroom teacher (including this year)? _____

Indicate below with a check how much staff development or graduate class exposure you've had in each of the indicated topic areas:

	none	aware-ness	10 - 20 hours	more than 20 hrs.
peer observation/coaching	( )	( )	( )	( )
classroom action research	( )	( )	( )	( )
M. Hunter effective teaching	( )	( )	( )	( )
cultural aspects of educ.	( )	( )	( )	( )
classroom measurement/eval.	( )	( )	( )	( )

Semesters in which you have participated in the CITE Project (circle all that apply):

Year 1	Year 2	Year 3:
Fall 1985	Fall 1986	Fall 1987
Winter 1986	Winter 1987	Winter 1988

****

SCHOOL DISTRICT - UNIVERSITY COLLABORATION IN THE CITE TEACHER EDUCATION PROGRAM:

① To what extent do you think each of these groups listed below has benefitted from participating in the CITE Project? Circle a number for each group.

	has not benefitted 1	2	3	4	5	has benefitted enormously 6
A. EMU teacher education program	1	2	3	4	5	6
B. EMU faculty in teacher education	1	2	3	4	5	6
C. CITE Project (university) students	1	2	3	4	5	6
D. Classroom Teacher Educators (you)	1	2	3	4	5	6
E. classroom pupils in school district	1	2	3	4	5	6
F. public school districts	1	2	3	4	5	6

② Please indicate the relative influence you think you've had on your CITE Project students' learning this semester.
Divide 100% to show the relative balance of influence between you and that of the Classroom Teacher Educators.

My % of influence as Classroom Teacher Educator= _____ %
% of influence by university professors = _____ %
total = 100 %

③ Please rate the amount and quality of collaboration occurring this semester between the university faculty, the CITE Project leadership, and the Classroom Teacher Educators in the public school settings. ("We" refers to the general group of Classroom Teacher Educators from the school districts involved in the CITE Project.)

	strongly disagree 1	2	3	4	5	strongly agree 6
A. We/I frequently took initiative to provide input to the Project leadership.	1	2	3	4	5	6
B. Our/my input has been actively sought by the Project leadership.	1	2	3	4	5	6
C. I believe our/my input has been taken seriously by the Project leadership.	1	2	3	4	5	6
D. We/I had frequent opportunity to communicate with the university faculty.	1	2	3	4	5	6
E. Our/my communication with the university faculty has been very satisfactory.	1	2	3	4	5	6
F. On an overall basis, I am very satisfied with the CITE Project collaboration.	1	2	3	4	5	6

USE OF FIELD EXPERIENCE IN THE CITE TEACHER EDUCATION PROJECT:

④ Based on what your CITE student said and did during her/his field experience time in your classroom, in what ways does she/he seem to be...
A. especially well prepared by the CITE Program campus courses in the areas of curriculum/instruction, social/cultural foundations, and measurement/evaluation?

B. especially poorly prepared by the CITE Program campus courses in these same areas?

⑤A. Outside of scheduling changes, how much (if at all) did you change what or how you taught pupils in your classroom because of the presence or influence of your CITE student? Circle one response.

no changes — many changes

--------1--------2-------3--------4--------5-------6--------

5-B. If you made some changes, what specifically did you change? Briefly explain. Check here (_____) if you did not make any changes.

5-C. If you made some changes, how do/did you feel about making these changes? Circle one number. Check here (_____) if you did not make any changes.

extremely unsatisfied — extremely satisfied

--------1--------2-------3--------4--------5-------6--------

⑥ During your CITE student's field experience time, to what extend was it possible to informally chat or conference with her/him about classroom matters and CITE field experience assignments? Check one answer in each column.

	actual time	what I would have preferred
A. average # of minutes during the mini-unit teaching week	( ) 0-15	( ) 0-15
	( ) 16-30	( ) 16-30
	( ) 31-45	( ) 31-45
	( ) 46 +	( ) 46 +
B. average # of minutes during the rest of the semester	( ) 0-15	( ) 0-15
	( ) 16-30	( ) 16-30
	( ) 31-45	( ) 31-45
	( ) 46 +	( ) 46 +

C. If you and/or your CITE student wanted more time to conference, what would be a practical and acceptable way (to you) for that to be arranged?

⑦ What three topics did you talk most about during such chats or conferences...

A. During the mini-unit teaching week?
1-
2-
3-

B. During the rest of the semester?
1-
2-
3-

(8) For each CITE course, identify which two assignments made by campus professors appeared to be most valuable in terms of your CITE student's own learning as a prospective teacher? Explain briefly what you think she/he learned from each. [do not include the mini-unit teaching week assignment]

EDP 340-Measurement & Evaluation course:

A. -name of the assignment:_____
-what she/he learned:

B. -name of the assignment:_____
-what she/he learned:

SFC 328-Social Aspects of Teaching course:

C. -name of the assignment:_____
-what she/he learned:

D. -name of the assignment:_____
-what she/he learned:

CUR 304/305-Curriculum & Methods course:

E. -name of the assignment:_____
-what she/he learned:

F. -name of the assignment:_____
-what she/he learned:

GENERAL ISSUES CONCERNING THE CITE PROJECT:

(9) In your opinion, what was the most satisfying aspect of your participation in the CITE Project? Briefly explain.

(10) In your opinion, what was the least satisfying aspect of your participation in the CITE Project? Briefly explain.

(11) Overall, how do you feel about your participation in the CITE Project? Circle one number.

extremely dissatisfied					extremely satisfied
1	2	3	4	5	6

THANK YOU AGAIN FOR YOUR TIME & COOPERATION

IN ANSWERING THESE QUESTIONS!!

CITE PROJECT---Years 2 & 3 Data Collection (7/87; revised 11/87)
Structured Interview Questions for Classroom Teacher Educators (sample)

Directions for administering:
- -individual interviews to be conducted by Project Evaluation Staff
- -two groups to be selectively sampled on 100% (target) basis:
  - (1) Year 1 design team CTEs still participating in CITE Project (this group represents maximum project collaboration and ownership)
  - (2) CTEs who have received peer coaching and effective teaching training as part of their own district staff development program (this group represents maximum project content knowledge)
- -interviews to be audiotaped
- -interviews to be conducted near the end of winter 1988 semester
- -use probing questions & ask for specifics as appropriate
- -emphasize that the interview questions focus on their opinions, experiences, and perceptions of the CITE Project
- -approximately 30 - 45 minutes needed to administer

---

1. Understanding of the CITE Project Innovation
   a. How would you explain to a friend in another school what the CITE Project is all about? What are its essential features?
   b. What should be the expected student outcomes for a CITE student because of participating in the project? [compared to other teacher preparation programs]
   c. If you were involved in years 1 or 2, how would you say that the CITE Project has changed since then?

2. Perceptions & Experiences with Campus - Field TE Program Collaboration:
   a. What can the campus part of the TE program contribute most to a CITE student's learning? what can the field part of the TE program contribute most?
   b. What problems can occur in campus - field TE program collaboration?
   c. What have been the actual benefits for the university and the EMU professors due to this CITE Project collaboration? What have been the actual costs and difficulties occurring for them?
   d. What have been the actual benefits for the school districts, the classroom teacher educators, and other people there due to this CITE Project collaboration? What have been the actual costs and difficulties occurring for them?
   e. What suggestions do you have for strengthening campus - field TE program collaboration in the future?

3. Perceptions & Experiences with the Use of Research in TE Programs:
   a. How can educational research be useful to a classroom teacher? How can it be useful in a teacher education program?
   b. How can using educational research in the classroom be problematic? How can it be problematic to use it in a teacher education program?
   c. What has been the extent of your own participation in any educational research efforts other than CITE?
   d. What professional journals do you read at least semi-regularly?

4. Perceptions & Experiences with the Use of Field Experience in TE Program:
   a. What previous experience have you had in working as a classroom teacher educator? [number of years? kinds of roles?]
   b. How did the EMU student's presence in your classroom influence what or how you taught your classroom pupils?
   c. How did the CITE field experience influence your EMU student's...
      (1) pedagogical knowledge?
      (2) teaching performance?
      (3) attitudes?
      (4) reflective thinking habits?
   d. What did the EMU students seem to be learning from the CITE field experience that was problematic or negative?

5. Conceptual Integration Across TE Program
   a. What links do you see among the ideas or concepts taught in the three CITE campus courses? [ask for a few examples]
   b. What did you do in your own classroom teaching and/or discussion of field experience assignments to help your CITE student see and understand the inner-connections among the three CITE courses they were taking on campus?
   c. What did you do in your own classroom teaching and/or discussion of field experience assignments to help your CITE student see and understand the inner-connections between their campus courses and their field experience with you?
   d. As you talked with the Project liaison and other CITE Project classroom teacher educators, what special problems were occurring out in the schools regarding the conceptual integration of the CITE TE program?

6. Examples of Pegagogical Thinking by the CITE Student & the CTE
   a. Select one of the CITE field experience assignments and "think aloud" for me about how you would carry it out yourself. What would you think about as you were doing it in your school situation?
   b. What differences did you notice existing between your pedagogical thinking as a experienced teacher and that of your CITE student who is just learning to be a teacher? [ask for a few examples]
   c. Select a field experience incident in which your CITE student was floundering or puzzled. From your perspective, why was the student having difficulty? What could you say or do to help the CITE student learn from this experience?

PROFESSORS' MEASURES

CITE PROJECT---Years 2 & 3 Data Collection (3/87; revised 7/87; 11/87)
Campus Professors/Liaisons Questionnaire

Directions for administering:
- -complete (100%) sample to be used
- -questionnaires to be distributed by Project Coordinator and completed at the end of each semester
- -approximately 10 - 15 minutes needed to administer

PLEASE HELP US LEARN MORE ABOUT YOUR EXPERIENCE IN THE CITE PROJECT BY THOUGHTFULLY AND HONESTLY ANSWERING THE QUESTIONS BELOW. YOUR SPECIFIC ANSWERS WILL HELP US TO IMPROVE WHAT OCCURS IN TEACHER PREPARATION PROGRAMS SUCH AS THE CITE PROJECT. AS A KEY PARTICIPANT IN THE PROJECT, YOUR PERSPECTIVES ARE VERY IMPORTANT. THANK YOU FOR RESPONDING!!

Semester:_____ Year:_____

Are you also a liason to one of the participanting school districts? Circle one answer: yes no

Semesters in which you have participated in the CITE Project (circle all that apply):

Year 1	Year 2	Year 3:
Fall 1985	Fall 1986	Fall 1987
Winter 1986	Winter 1987	Winter 1988

****

SCHOOL DISTRICT - UNIVERSITY COLLABORATION IN THE CITE TEACHER EDUCATION PROGRAM:

① To what extent do you think each of these groups listed below has benefitted from participating in the CITE Project? Circle a number for each group.

	has not benefitted				has benefitted enormously	
	1	2	3	4	5	6
A. EMU teacher education program	1	2	3	4	5	6
B. EMU faculty in teacher education (you)	1	2	3	4	5	6
C. CITE Project (university) students	1	2	3	4	5	6
D. Classroom Teacher Educators (CTEs)	1	2	3	4	5	6
E. classroom pupils in school district	1	2	3	4	5	6
F. public school districts	1	2	3	4	5	6

② Please indicate the relative influence you think you've had on your CITE Project students' learning this semester.
Divide 100% to show the relative balance of influence between you and that of the Classroom Teacher Educators.

My % of influence as university professor = _____ %
% of influence by Classroom Teacher Educators = _____ %
total = 100 %

(3) Please rate the amount and quality of collaboration occurring this semester between the university faculty, the CITE Project leadership, and the Classroom Teacher Educators in the public school settings. ("We" refers to the EMU Teacher Education Department faculty working on the CITE Project.)

	strongly disagree 1	2	3	4	5	strongly agree 6
A. We/I frequently took initiative to provide input to the Project leadership.	1	2	3	4	5	6
B. Our/my input has been actively sought by the Project leadership.	1	2	3	4	5	6
C. I believe our/my input has been taken seriously by the Project leadership.	1	2	3	4	5	6
D. We/I had frequent opportunity to communicate with the Classroom Teacher Educators (CTEs).	1	2	3	4	5	6
E. Our/my communication with the Classroom Teacher Educators has been very satisfactory.	1	2	3	4	5	6
F. On an overall basis, I am very satisfied with the CITE Project collaboration.	1	2	3	4	5	6

GENERAL ISSUES CONCERNING THE CITE PROJECT

(4) In your opinion, what was the most satisfying aspect of your participation in the CITE Project? Briefly explain.

(5) In your opinion, what was the least satisfying aspect of your participation in the CITE Project? Briefly explain.

(6) Overall, how do you feel about your participation in the CITE Project? Circle one number.

extremely dissatisfied 1 2 3 4 5 6 extremely satisfied

THANK YOU AGAIN FOR YOUR TIME & COOPERATION
IN ANSWERING THESE QUESTIONS!!

CITE PROJECT---Years 2 & 3 Data Collection (3/87; revised 7/87;11/87)
Structured Interview Questions for Campus Professors/Liaisons

Directions for administering:
- -individual interviews to be conducted by project evaluator
- -complete (100%) sample to be used
- -interviews to be audiotaped
- -interviews to be conducted near the end of each semester
- -use probing questions & ask for specifics as appropriate
- -approximately 30 - 45 minutes needed to administer
- -skip quickly over questions (indicated as *) for which answers have not changed since previous interview with people already involved in the CITE Project during years 1 & 2

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1. Understanding of the CITE Project Innovation
   - *a. How would you explain to a friend at another university what the CITE project is all about? What are its essential features?
   - *b. What should a CITE student be like or have developed that a non-CITE student at EMU wouldn't? [expected student outcomes]
   - c. If you were involved in years 1 or 2, how would you say that the CITE Project has changed from then to this year?
   - d. How have (if at all) your own actions or beliefs about your work as a teacher educator been influenced by your participation in the CITE Project?

2. Perceptions & Experiences with Campus-Field TE Program Collaboration:
   - *a. What can the campus part of the TE program do best? what can the field part of the TE program do best?
   - *b. What problems can occur in campus-field TE program collaboration?
   - c. What have been the actual benefits for the university and the EMU professors due to this CITE Project collaboration? What have been the actual costs and difficulties occurring for them?
   - d. What have been the actual benefits for the school districts and the Classroom Teacher Educators and other people there due to this CITE Project collaboration? What have been the actual costs and difficulties occurring for them?
   - e. What suggestions do you have for strengthening campus-field TE program collaboration in the future?

3. Perceptions & Experiences with the Use of Research in Own TE Course Curriculum & Pedagogy:
   - a. In what specific ways can research be useful in teacher education programs?
   - b. What can be problematic about using research in teacher education programs?
   - c. What has been the type and extent of your own participation in any educational research efforts [other than CITE]?

5. Conceptual Integration Across TE Program
   a. What activities did you participate in this semester regarding collaborative faculty planning across multiple sections of the same CITE Project course and among the three CITE project courses?
   b. What did you notice in class discussion and/or student assignments completed for your course that indicated that CITE students were able to link what they were learning in your class with their other two CITE courses?
   c. What did you do in class presentations and/or assignments to help students see and understand the inner-connections among the three CITE Project classes they were taking?
   d. What did you notice in class discussion and/or student assignments completed for your course that indicated that CITE students were able to link what they were learning in your class with their CITE field experience?
   e. What did you do in your class presentations and/or assignments to help students see and understand the inner-connections between your campus course and their field experiences?
   f. If you served also as a liaison, what special problems did you encounter from discussions with classroom teacher educators and others out in the schools regarding the conceptual integration of the CITE TE program?

CITE PROJECT---Years 2 & 3 Data Collection (3/87; revised 7/87)
Structured Interview Questions for Project Administrators

Directions for administering:
- -individual interviews to be conducted by project evaluator
- -complete (100%) sample to be used
- -interviews to be audiotaped
- -interviews to be conducted near the end of each semester except Project Director who is to be interviewed monthly
- -use probing questions & ask for specifics as appropriate
- -approximately 30 - 45 minutes needed to administer

Project Director---Georgea M. Sparks

1. Understanding of the CITE Project Innovation
   a. How would you explain to a friend at another university what the CITE Project is all about? What are its essential features?
   b. What should a CITE student be like/have developed that a non-CITE student at EMU wouldn't?
   c. How would you say that the CITE Project has changed from years 1 & 2 compared to this year? How has it changed from last semester to this one?

2. Formative Evaluation of Progress Toward Achievement of Project Goals:
   a. What have been your particular project goals during this semester? during this month?
   b. To what extent have these goals been achieved? What compromises occurred? What problems occurred?
   c. What are your project goals for next semester? for next month? for next year?

3. Summary of What is Being Learned:
   a. Talk about what you are learning about ...
      (1) campus-field collaboration in the design and implementation of TE programs.
      (2) use of research in TE programs.
      (3) use of field experience in TE programs.
      (4) conceptual integration across TE program courses and campus-field components.
      (5) faculty development and program change efforts.
      (6) management of such a research and development project.
      (7) institutionalization of such an innovation.
   b. What new issues and questions now seem important with respect to the above topic areas? [repeat topics 1 - 7 above]

Project Administrator---Marvin Pasch

1. Understanding of the CITE Project Innovation
   a. How would you explain to a friend at another university what the CITE Project is all about? What are its essential features?
   b. What should a CITE student be like/have developed that a non-CITE student at EMU wouldn't?
   c. How would you say that the CITE Project has changed from years 1 & 2 compared to this year? How has it changed from last semester to this one?

2. Formative Evaluation of Progress Toward Achievement of Project Goals:
   a. What have been the particular project goals during this semester? during this month?
   b. To what extent have these goals been achieved? What compromises occurred? What problems occurred?
   c. What are the project goals for next semester? for next month? for next year?

3. Summary of What is Being Learned:
   a. Talk about what you are learning about ...
      (1) campus-field collaboration in the design and implementation of TE programs.
      (2) use of research in TE programs.
      (3) use of field experience in TE programs.
      (4) conceptual integration across TE program courses and campus-field components.
      (5) faculty development and TE program change efforts.
      (6) management of such a research and development project.
      (7) institutionalization of such an innovation.
   b. What new issues and questions now seem important with respect to the above topic areas? [repeat topics 1 - 7 above]

Project Coordinator---Marifran Brown (1986-87)
Amy B. Colton (1987-88)

1. Understanding of the CITE Project Innovation
   a. How would you explain to a friend at another university what the CITE Project is all about? What are its essential features?
   b. What should a CITE student be like/have developed that a non-CITE student at EMU wouldn't?
   c. How would you say that the CITE Project has changed from years 1 & 2 compared to this year? How has it changed from last semester to this one?

2. Formative Evaluation of Progress Toward Achievement of Project Goals:
   a. What have been the particular project goals during this semester? during this month?
   b. To what extent have these goals been achieved? What compromises occurred? What problems occurred?
   c. What are the project goals for next semester? for next month? for next year?

3. Summary of What is Being Learned:
   a. Talk about what you are learning about ...
      (1) campus-field collaboration in the design and implementation of TE programs.
      (2) use of research in TE programs.
      (3) use of field experience in TE programs.
      (4) conceptual integration across TE program courses and campus-field components.
      (5) faculty development and TE program change efforts.
      (6) management of such a research and development project.
      (7) institutionalization of such an innovation.
   b. What new issues and questions now seem important with respect to the above topic areas? [repeat topics 1 - 7 above]

APPENDIX B: QUESTIONNAIRE DATA (TABLES)

TABLE 1 : FALL '87 STUDENT QUESTIONNAIRE DATA

ELEMENTARY STUDENTS (N = 33)

Question	mean	S.D.	0-15 (minutes)	16-30	31-50	46+
1) Time spent talking with teacher						
A. during the teaching week (actual)	1.57	.92	22*	9	1	3
(preferred)	2.13	.72	5	18	7	1
B. during the rest of the semester (actual)	1.80	1.02	18	10	3	4
(preferred)	2.38	.91	3	20	3	6

			yes	no	not sure
3) Recommend CITE teacher be used next semester?	1.40	..77	77%	6%	17%

			1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
2) A. Satisfaction with quality of interaction.	4.09	1.70	20%	34%	46%
5) A. Relationship among topics from 3 CITE courses.	3.18	1.26	27%	61%	12%
B. Relationship between course topics and field experience.	4.03	1.22	12%	56%	32%

*frequency

Question	mean	S.D.	1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
6) Degree of satisfaction with:					
A. quality of CITE courses	3.83	1.44	17%	52%	31%
B. quality of CITE field placement	4.40	1.35	14%	29%	57%
C. clarity of communication from CITE staff	3.34.	1.30	31%	46%	23%
D. clarity of assigned pre-student teaching activities	3.31	1.64	26%	51%	23%
E. quality of instruction/guidance from your professors in preparing your mini-unit	3.69	1.63	29%	31%	40%
F. quality of instruction/guidance from your classroom teacher in preparing your mini-unit	3.86	1.27	20%	46%	34%
G. level of shared purpose and focus among people involved in courses and field	3.54	1.1[illegible]	14%	63%	23%
11) Overall, feelings about participation in the CITE Project?	4.14	1.17	6%	54%	40%

SECONDARY STUDENTS (N = 47)

Question	mean	S.D.	0-15 (minutes)	16-30	31-50	46+
1) Time spent talking with teacher						
A. during the teaching week (actual)	1.96	1.02	20	14	8	5
(preferred)	2.56	.89	5	17	16	7
B. during the rest of the semester (actual)	1.80	.91	22	13	9	2
(preferred)	2.23	.81	7	22	11	3

			yes	no	not sure
3) Recommend CITE teacher be used next semester?	---	---	77%	6%	17%

			1-2 (low satisfaction)	3 4	5-6 (high satisfaction)
2) A. Satisfaction with quality of interaction.	4.65	1.25	6%	29%	65%
5) A. Relationship among topics from 3 CITE courses.	3.53	1.14	19%	62%	19%
B. Relationship between course topics and field experience.	4.04	.99	11%	59%	30%

Question	mean	S.D.	1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
6) Degree of satisfaction with:					
A. quality of CITE courses	4.11	1.01	6%	57%	37%
B. quality of CITE field placement	4.63	1.23	8%	29%	63%
C. clarity of communication from CITE staff	3.21	1.43	37%	42%	21%
D. clarity of assigned pre-student teaching activities	2.58	1.50	52%	36%	12%
E. quality of instruction/guidance from your professors in preparing your mini-unit	3.94	1.13	15%	49%	36%
F. quality of instruction/guidance from your classroom teacher in preparing your mini-unit	4.09	1.57	17%	34%	49%
G. level of shared purpose and focus among people involved in courses and field	3.52	1.30	21%	54%	25%
11) Overall, feelings about participation in the CITE Project?	4.60	1.01	4%	35%	61%

TABLE 2: WINTER '88 STUDENT QUESTIONNAIRE RESULTS (ELEMENTARY)

ELEMENTARY (N = 33)

Question	mean	S.D.	0-15 (minutes)	16-30	31-50	46+
1) Time spent talking with teacher						
A. during the teaching week (actual)	1.87	.85	36%	46%	12%	6%
(preferred)	2.16	.77	13%	67%	10%	10%
B. during the rest of the semester (actual)	1.75	.86	46%	39%	9%	6%
(preferred)	2.03	.74	22%	56%	19%	3%

			yes	no	not sure
3) Recommend CITE teacher be used next semester?	1.15	.50	91%	3%	6%

			1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
2) A. Satisfaction with quality of interaction.	4.84	1.08	6%	22%	72%
5) A. Relationship among topics from 3 CITE courses.	4.27	1.06	6%	58%	36%
B. Relationship between course topics and field experience.	4.69	.81	--	39%	61%

Question	mean	S.D.	1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
6) Degree of satisfaction with:					
A. quality of CITE courses	4.87	.65	--	27%	73%
B. quality of CITE field placement	5.03	1.13	6%	12%	82%
C. clarity of communication from CITE staff	4.27	1.03	3%	61%	36%
D. clarity of assigned pre-student teaching activities	4.39	1.29	12%	34%	54%
E. quality of instruction/guidance from your professors in preparing your mini-unit	4.60	.99	--	46%	54%
F. quality of instruction/guidance from your classroom teacher in preparing your mini-unit	4.45	1.30	9%	45%	46%
G. level of shared purpose and focus among people involved in courses and field	4.81	.82	--	31%	69%
11) Overall, feelings about participation in the CITE Project?	5.27	.71	--	15%	85%

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TABLE 2: WINTER '88 STUDENT QUESTIONNAIRE RESULTS (SECONDARY)

SECONDARY (N = 26)

Question	mean	S.D.	0-15 (minutes)	16-30	31-50	46+
1) Time spent talking with teacher						
A. during the teaching week (actual)	1.61	.63	46%	46%	8%	--
(preferred)	2.00	.77	24%	57%	14%	5%
B. during the rest of the semester (actual)	1.68	.94	56%	28%	8%	8%
(preferred)	2.09	.83	19%	62%	10%	9%

	mean	S.D.	yes	no	not sure
3) Recommend CITE teacher be used next semester?	1.5	.86	73%	4%	23%

	mean	S.D.	1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
2) A. Satisfaction with quality of interaction.	4.96	1.11	4%	23%	73%
5) A. Relationship among topics from 3 CITE courses.	4.73	.77	--	38%	62%
B. Relationship between course topics and field experience.	4.34	.93	4%	40%	56%

Question	mean	S.D.	1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
6) Degree of satisfaction with:					
A. quality of CITE courses	4.92	1.01	4%	31%	65%
B. quality of CITE field placement	4.57	1.13	8%	31%	61%
C. clarity of communication from CITE staff	4.5	.99	--	46%	54%
D. clarity of assigned pre-student teaching activities	4.26	1.15	11%	50%	39%
E. quality of instruction/guidance from your professors in preparing your mini-unit	4.53	1.36	11%	23%	56%
F. quality of instruction/guidance from your classroom teacher in preparing your mini-unit	4.46	1.5	15%	19%	66%
G. level of shared purpose and focus among people involved in courses and field	4.53	1.1	4%	46%	50%
11) Overall, feelings about participation in the CITE Project?	5.23	.81	--	23%	77%

TABLE 2: WINTER '88 STUDENT QUESTIONNAIRE RESULTS (ENTIRE SAMPLE)

Question	ELEMENTARY (N = 33) mean	SECONDARY (N = 26) S.D.	TOTAL (N = 59) 0-15 (minutes)	16-30	31+
1) Time spent talking with teacher					
A. during the teaching week (actual)	1.76	.77	40%	46%	14%
(preferred)	2.09	.77	17%	64%	19%
B. during the rest of the semester (actual)	1.72	.89	50%	35%	5%
(preferred)	2.05	.77	21%	59%	20%

			yes	no	not sure
3) Recommend CITE teacher be used next semester?	1.3	.7	83%	3%	14%

			1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
2) A. Satisfaction with quality of interaction.	4.89	1.08	5%	22%	73%
5) A. Relationship among topics from 3 CITE courses.	4.47	.97	3%	49%	47%
B. Relationship between course topics and field experience.	4.54	.87	2%	77%	54%

Question	mean	S.D.	1-2 (low satisfaction)	3-4	5-6 (high satisfaction)
6) Degree of satisfaction with:					
A. quality of CITE courses	4.89	.82	1%	29%	70%
B. quality of CITE field placement	4.83	1.15	7%	20%	73%
C. clarity of communication from CITE staff	4.37	1.01	1%	55%	44%
D. clarity of assigned pre-student teaching activities	4.33	1.22	12%	41%	47%
E. quality of instruction/guidance from your professors in preparing your mini-unit	4.57	1.16	5%	35%	60%
F. quality of instruction/guidance from your classroom teacher in preparing your mini-unit	4.45	1.38	12%	34%	54%
G. level of shared purpose and focus among people involved in courses and field	4.69	.95	1%	39%	60%
11) Overall, feelings about participation in the CITE Project?	5.25	.75	--	18%	82%

TABLE 3 : TEACHER QUESTIONNAIRE RESULTS FALL '87

(N = 46)

Question	mean	S.D.	1-2 (little benefit)	3-4	5-6 (great benefit)
1) Who has benefitted from CITE?					
A. EMU teacher education program	5.23	.74	---	14%	86%
B. EMU faculty in teacher education	4.57	1.21	11%	27%	62%
C. CITE Project (university) students	5.51	..63	---	7%	93%
D. Classroom Teacher Educators (you)	4.57	1.17	6.5%	37%	56.5%
E. Classroom pupils in school district	4.59	1.07	4%	41%	55%
F. Public school districts	4.57	.85	---	52%	48%
2) My % of influence as Classroom Teacher Educator	49.27	18.25	---	---	---
% of influence by university facilitator	50.73	18.25	---	---	---

Question	mean	S.D.	1-2 (disagree)	3-4	5-6 (agree)
3) A. We/I frequently took initiative to provide input to the Project leadership.	3.09	1.28	31%	56%	13%
B. Our/my input has been actively sought by the Project leadership.	4.13	1.41	15.5%	40%	44.5%
C. I believe our/my input has been taken seriously by the Project leadership.	4.41	1.39	11%	37%	52%
D. We/I had frequent opportunity to communicate with the university faculty.	3.96	1.40	16%	51%	33%
E. Our/my communication with the university faculty has been very satisfactory.	4.45	1.32	7%	36%	57%
F. On an overall basis, I am very satisfied with the CTE Project collaboration.	4.66	1.27	9%	29.5%	61.5%

Question	mean	S.D.	1-2 (no changes)	3-4	5-6 (many changes)
5) A. Changes made in teaching as a result of CITE students.	2.28	1.34	59%	32%	9%
C. How felt about changes made.	3.31	2.49	---	---	---

Question	mean	S.D.	0-15 (minutes)	16-30	31-50	46+
6) Time spent talking with student						
A. during the week (actual)	2.72	1.22	21%	28%	9%	42%
(preferred)	2.97	1.01	6%	34%	17%	43%
B. during the rest of the semester (actual)	2.49	1.16	23%	35%	12%	30%
. (preferred)	2.71	1.03	9%	44%	15%	32%

Question	mean	S.D.	1-2 (dissatisfied)	3-4	5-6 (very satisfied)
11) Overall, satisfaction with participation in CITE?	5.11	.90	0%	22%	78%

TABLE 3 : TEACHER QUESTIONNAIRE RESULTS Winter 88

(N = 46)

Question	mean	S.D.	1-2 (little benefit)	3-4	5-6 (great benefit)
1) Who has benefitted from CITE?					
A. EMU teacher education program	5.53	.69	0%	9.4%	90.6%
B. EMU faculty in teacher education	4.73	1.05	0%	37.5	62.5
C. CITE Project (university) students	5.70	.54	0%	3.7	96.3
D. Classroom Teacher Educators (you)	4.72	.16	3.7	35.2	61.1
E. Classroom pupils in school district	4. 78	1.01	3.7	33.3	60.0
F. Public school districts	4.78	1.11	3.7	33.4	63.0
2) My % of influence as Classroom Teacher Educator	49.27	18.25	---	---	---
% of influence by university facilitator	50.73	18.25	---	---	---

Question	Mean	S.D.	1-2 (disagree)	3-4	5-6 (agree)
3) A. We/I frequently took initiative to provide input to the Project leadership.	3.25	1.29	30.2	54.7	15.1
B. Our/my input has been actively sought by the Project leadership.	4.30	1.32	9.4	47.2	43.4
C. I believe our/my input has been taken seriously by the Project leadership.	4.71	1.14	1.9	40.4	57.7
D. We/I had frequent opportunity to communicate with the university faculty.	3.98	1.5	22.7	35.8	41.5
E. Our/my communication with the university faculty has been very satisfactory.	4.52	1.39	9.6	34.6	56.8
F. On an overall basis, I am very satisfied with the CTE Project collaboration.	4.87	1.19	3.8	30.7	65.4

			1-2 (no changes)	3-4	5-6 (many changes)
5) A. Changes made in teaching as a result of CITE students.	2.53	1.32	54.7	35.9	9.4
C. How felt about changes made.	4.78	1.24	3.1	34.4	62.5

Question	mean	S.D.	0-15 (minutes)	16-30	31-50	46+
6) Time spent talking with student						
A. during the week (actual)	-	-	36%	40%	25%	
(preferred)	-	-	13%	47%	40%	
B. during the rest of the semester (actual)	-	-	45%	35%	19%	
(preferred)	-	-	14%	57%	29%	

			1-2 (dissatisfied)	3-4	5-6 (very satisfied)
11) Overall, satisfaction with participation in CITE?	5.11	.97	1.9	18.6	79.6

APPENDIX C: PRE-STUDENT TEACHING ASSIGNMENTS

COLLABORATION
FOR THE
IMPROVEMENT OF
TEACHER EDUCATION

Pre-student Teaching Activities

FALL 1987

A COOPERATIVE EFFORT OF THE EMU COLLEGE OF EDUCATION
WITH ANN ARBOR, LINCOLN, WILLOW RUN AND YPSILANTI SCHOOLS

DEPARTMENT OF TEACHER EDUCATION 234 BOONE HALL EASTERN MICHIGAN UNIVERSITY YPSILANTI MI 48197

ASSIGNED ACTIVITIES AND DUE DATES

COURSE	ACTIVITY #	ASSIGNED DATE	DUE DATE
CUR 304/305 Curriculum and Methods			
EDP 340 Measurement and Evaluation			
SFD 328 Social Aspects of Teaching			

COLLABORATION
FOR THE
IMPROVEMENT OF
TEACHER EDUCATION

January, 1987

Dear Colleague,

I'm so glad you've decided to take one of our CITE pre-student teachers this semester. Your willingness to guide our students through their first field activities is appreciated.

The student's experience in your class will influence many of his or her attitudes toward teaching and learning. We know you will strive to provide a model worth imitating.

I will be serving as the CITE university liaison for the Ann Arbor schools only. Drs. Weiser, Gwaltney, and Gardner will work with the Willow Run, Ypsilanti, and Lincoln districts respectively. I do, however, plan to visit your class during the week of April 6-10 when the pre-student teacher is teaching the mini-unit (preferably in social studies).

I look forward to meeting you on February 11 for hors d'oeuvres here at EMU (you should have already received an invitation, please call if you have any questions).

If you have any questions or concerns regarding your role in this project, please feel free to contact me Tuesday or Thursday, 8:30-11:00am. (487-3260). Thank you again for your participation in this important project.

Sincerely,

Georgea Sparks

Georgea Sparks

GOALS FOR CUR 304/305 - CURRICULUM AND METHODS

Students will:

1. Describe the relationship between a particular educational philosophy and (a) the school curriculum and (b) styles of teaching

2. Create instructional lessons and units using a systematic process, including:
   a. Analyzing broad content goals
   b. Writing clearly stated objectives
   c. Designing and implementing lessons that increase student success on a variety of objectives (e.g., basic skills, problem solving, affective)
   d. Evaluating the extent to which objectives have been met

3. Give examples of appropriate use of the following teaching strategies:
   a. Active student participation
   b. Open-ended discussion
   c. Lecture
   d. Demonstration
   e. Role-playing/simulation
   f. Inquiry/discovery
   g. Cooperative group learning

4. Demonstrate success in using the above strategies in simulated and real classroom settings

5. Evaluate classroom management using concepts and principles taught in class:
   a. Beginning the school year with a system to establish a positive learning climate
   b. Using time productively
   c. Preventing student misbehavior
   e. Using alternative approaches to respond to student misbehavior
   f. Recognizing a variety of causes for student misbehavior
   g. Matching management style to teaching style

6. Describe how planning, instruction, and classroom management can be adapted for children with special needs.

ACTIVITY #____1____

COURSE NAME___CUR 304/305- Curriculum and Methods_____

TYPE OF ACTIVITY:

_____Observation _____TEACHING _____Other_x content outline

TOPIC OF ACTIVITY (brief description):

Content Outline for teaching week:

Decide on content for a mini-unit to be taught by the pre-student teacher during the week of April 11-15, 1988 (approximately 30-60 mins. each day).

CLASSROOM TEACHER ROLE:

Look at your curriculum plans and decide which content or topics would fit into your plans for this week. Discuss possible content and topics with your pre-student teacher and help them find suitable resources that they can use to create a content outline for their unit.

STUDENT ROLE/ACTIVITY:

Participate with your CITE teacher in the above discussion and decisions.

ANALYSIS/REPORT REQUIRED FOR GRADE:

Turn in the content outline to your professor on the specified deadline.

ACTIVITY #____2____

COURSE NAME Curriculum and Methods CUR 304/305

TYPE OF ACTIVITY:

__X__Observation _____TEACHING _____Other_____

TOPIC OF ACTIVITY (brief description):

Observation of classroom management.

CLASSROOM TEACHER ROLE:

Teach as usual.

If time is available, discuss routines with pre-student teacher.

STUDENT ROLE/ACTIVITY:

Read Evertson, Chapter 1,2, or Emmer, Ch. 1-3, before observation.

ANALYSIS/REPORT REQUIRED FOR GRADE:

1) Completed observation sheet.

2) Map of the classroom with notations describing areas that contribute to classroom management (i.e. seating that allows for a clear view of classroom

Use this observation sheet to help you identify rules and procedures in your classroom, as well as strategies employed when disruptions occur.

Rules posted in the classroom:

Procedures for:

Getting students' attention

Distributing materials

Collecting work

Pencil sharpening

Housekeeping (i.e. plant watering, erasing boards, etc.)

Bathrooms

Moving to another location (gym, cafeteria)

Arriving in (or returning to) room

List teacher's strategies when disruptions occur.

ACTIVITY # 3

COURSE NAME CUR 304/305 Curriculum and Methods

TYPE OF ACTIVITY:

x Observation _____ TEACHING _____ Other_____

TOPIC OF ACTIVITY (brief description):

Levels and types of questions.

CLASSROOM TEACHER ROLE:

Teach as usual, any lesson that requires asking a variety of questions

STUDENT ROLE/ACTIVITY:

Complete the observation sheet.

It may be necessary to observe several lessons in order to discern trends in questioning.

ANALYSIS/REPORT REQUIRED FOR GRADE:

1) Observation sheet.

2) A 1-2 page analysis of question trends during this lesson. The analysis should address questions such as:

   a) Did you find examples of lower level and higher level questions?

   b) What kinds of questions were most common?

   c) Did you observe trends in the number, gender, or ability level of the students' responding?

Questions Observation:

Use this observation sheet to record the types of questions asked during a 30-minute period. You should also tally the number of students who respond to each question using a "B" for boy and a "G" for girl.

Questions should be written below the question that preceded it, even if that means there is a blank space on one side of the paper. Use more paper, if needed. Put a star by questions that require higher level thinking.

Example:	Convergent	Divergent
	What is the capital of Brazil? B	*What similarities do you see between the culture of Brazil and that of the U.S.? B G B B

Convergent Questions	Divergent Questions

ACTIVITY #~~3~~ 5

COURSE NAME Curriculum and Method CUR 304/305

TYPE OF ACTIVITY:

____Observation _x___TEACHING ____Other_____

TOPIC OF ACTIVITY (brief description):

Teaching Week: April 11-15

Students will go to their CITE classroom every morning or afternoon during this week. They will spend 20-60 minutes of each day teaching a "mini-unit" (guidelines attached). Much of the unit will be prepared in class at EMU, but the CITE teacher's guidance and assistance with content and materials will be necessary. In the elementary grades the unit should be, preferably a SOCIAL STUDIES mini-unit.

CLASSROOM TEACHER ROLE:

1) Before the Teaching Week, help EMU student with ideas, materials, etc.

2) During the Teaching Week, please do not hesitate to provide assistance with discipline, management, or instructional problems that arise while EMU students are teaching. This is the first teaching experience for most students; your support, guidance, and encouragement is critical to make this a successful experience. Please Do Not Leave the Room.

STUDENT ROLE/ACTIVITY:

Design mini-unit.
Get CITE teacher's feedback before April 11
Get CITE professor's feedback before April 11
Each day during the Teaching Week, make notes on your unit and daily plans as indicated below.

ANALYSIS/REPORT REQUIRED FOR GRADE:

Turn in unit and daily plans with your reflections and redesign notes written on them (or attached).

For example:
-What went well? Why?
-What didn't go well? Why?
-How did the students respond?
-What would you do differently next time? Why?
-What have you learned from this experience?.

Grade will be based on the notes and reflections you have made (in writing on your unit plans) as a result of teaching your unit. I will be looking for your ability to use concepts from the three Core courses to analyze and explain what you learned about teaching and learning during the teaching week.

GUIDELINES FOR THE TEACHING WEEK

MINI-UNIT April 11-15

Students prepare 4-5 days of 20-50 minute linked lessons to teach during April 11-15. The lessons will lead to two to four cognitive objectives, and at least one affective objective. While the CITE teacher helps the students select the content and material the CITE professors provide guidance on objectives, lesson format, and activities. The mini-unit will be graded by the professor. CITE teachers have an opportunity to comment on the lesson on the STUDENT EVALUATION FORM.

The format for the mini - unit is:

I. RATIONALE

II. CONTENT OUTLINE

III. OBJECTIVES

*2-4 cognitive (lower and higher)
*1+ affective

IV. ACTIVITIES

*Hunter's 7-step lesson design may be used to assist in planning but need not be followed at all times.

*ALL lessons should include:
-clearly stated objectives
-readiness (SET) activities
-input with modeling
-assessment throughout
-active student participation
-adequate guided practice
-a variety of methods e.g. direct teaching, role playing, cooperative learning, inquiry methods, or concept lessons (at least 2 of these should be used)
-large-group, small group, and individual activities

V. TEACHING MATERIAL (i.e. worksheets, etc.)

VI. EVALUATION METHODS (match objectives)

*Diagnosis (before teaching, if necessary)
*Checking for understanding (closure)
*Not just paper and pencil methods

VII. BIBLIOGRAPHY

Dear Colleague,

Thank you very much for opening your classroom to one of the pre-student teachers from my class, Social Aspects of Teaching (SFD 328). The students benefit a great deal from the first-hand experiences they receive while completing their field assignments, and the guidance they receive from you is very valuable.

If you have any questions regarding the assignments or the university course, please feel free to contact me at 487-3260.

Again, thank you for your assistance.

Sincerely,

Ric Samonte/mf

Dr. Ric Samonte

OBJECTIVES SPD 328: Social Aspects of Teaching

Students will:

I. Recognize the significant aspects of society's relationship to the educational system. Subsumed in this objective the additional requirements to:

A. Explain the significance of the school as a symbol of faith in democratic culture.
B. Explain the relationship of the educational system to processes of social and cultural change or maintenance of the status quo.
C. Describe the function of the school system in the process of social control.
D. Explain the relationship of the educational system to public opinion.
E. Describe the function of the school system in the process of social reform in such areas of human relations as racial, cultural and other groups.
F. Describe the relationship of the educational institution to the social structures of distributed power and status.

II. Describe, the important dimensions of the interactions between the school and the environing community. Subsumed in this objective are additional requirements to:

A. Explain how differences within and between communities make a difference in the organization of the school.
B. Describe how other social systems in any community have great influence in the educational system.
C. Describe how power and public opinion operate to influence the conduct of schooling in local schools, in neighborhoods.
D. Describe how relations of families to the schools affect the socialization and education of children and adolescents.

III. Describe what is useful to know about human relations in the schools. Subsumed in this objective are additional requirements to:

A. Describe the nature of the culture of the schools, how it differs from the culture outside the school and is it similar.
B. Describe the general picture of the social organization of the school as portrayed in roles and intergroup relations.
C. Describe the teaching-learning processes influenced by school patterns of leadership, congeniality, authority, communication, stratification and decision-making.
D. Describe how the school experience of students' parents operate to influence relationships among student, parent and teacher.

IV. Explain the impact of the school or the actions of teachers and pupils in the classroom. Subsumed in this objective are additional requirements to:

A. Explain the significance of congruence (or its lack) in the roles of teachers and learners.
B. Describe how aspects of the personal qualities and resources of teachers influence pupil learning.
C. Describe the impact upon teaching-learning processes of particular actions of pupils and teachers.
D. Describe the role of the individual classroom in the growth and adjustment or maladjustment of pupils over time.
E. Explain how the social climate of a classroom developed and on what grounds does its justification rest.

SFD328 SOCIAL ASPECTS OF TEACHING

FIELD-BASED ACTIVITY

VISIT TO A MEETING OF A LOCAL BOARD OF EDUCATION

Make arrangements to visit a regular or special meeting of the Board of Education of the district in which you are assigned for field experiences. Prior to going, discuss the issues and concerns with which the Board has been dealing with your Classroom Teacher Educator. Ask your CTE if the Board has been discussing personnel issues (contracts with employee groups, hiring, terminating, tenure decisions, etc.); curriculum issues (additions or deletions of subjects, changes in materials and/or methodology, controversies, etc.); policy issues (establishing or changing policies relative to use of buildings and facilities, modes of operating the school system, changes in the hierarchy, etc.); pupil personnel issues (student code of conduct, modes of discipline, attendance/truancy, student rights, grading, etc.).

Attend a Board of Education meeting. Remember that you are only an observer. Do not attempt to participate in discussions. If the Board President calls upon you, feel free to respond. If you feel you need to take notes, try to do so in an inobtrusive manner.

When you write your report, please include the following:

1) Your name, student number, and SFD328 Section

2) The name of the school district whose board meeting you attended.

3) A resume of the meeting, including:

   a) Who attended? Were there any identifiable groups or issue-oriented individuals?

   b) Was it a regular or a special meeting? What was the date of the meeting?

   c) What were the major items on the agenda? Were the agenda items handled completely?

   d) What was your reaction to the board meeting?

SFD328 SOCIAL ASPECTS OF TEACHING

FIELD-BASED ACTIVITY

MULTICULTURAL EDUCATION

I. The Concept or Skill in this Activity:
Developing the ability to create a resource list for multicultural/multiethnic/bilingual education.

II. Procedures:

The university student in SFD328 will research the materials holdings of the school which he/she is placed and at Eastern Michigan University in the following ways:

1. Assessment of the Eastern Michigan University Library holdings.

2. Assessment of the Library of the school in which the assigned for field-based experience.

3. Assesement of the Teacher Educator's professional files and library.

4. Evaluation and topical anlysis of newspapers, magazines, professional periodicals, and children's publications.

5. Investigation of the offerings of general bookstores and specialized teacher's bookstores and shops.

6. Topical analysis of social studies and geography textbooks appropriate to the level of the Teacher Education Student's assignment for content appropriate for multicultural education.

Roles: The Classroom Teacher Educator, University Professor, and Media Specialists/Librarians can assist the university student in locating materials and granting permission to use and evaluate them.

III. Analysis/Reporting

The student will prepare a list of materials in II., above, annotated and categorized by type and location. This report will be prepared in duplicate and shared with the Classroom Teacher Educator and the University Professor of the student's section of SFD328.

SFD328 SOCIAL ASPECTS OF TEACHING

FIELD-BASED ACTIVITY

CULTURAL PLURALISM/MULTICULTURAL EDUCATION ANALYSIS

I. The Concept or Skill highlited by this activity:

Developing an awareness hopefully leading toward sensitivity to the cultural pluralism within the school environment, with particular attention directed toward the classroom to which the Teacher Education Student is assigned.

II. Procedure:

The student will develop a checklist of criteria for observation of cultural and ethnic diversity within the school and the classroom.

The Classroom Teacher Educator, The University Professor, and other relevant personnel will assist in or provide guidance in developing the instrument.

III. Analysis/Reporting:

The Teacher Education Student will submit a completed checklist illustrating his/her understanding to the composition of the school environment.

The Teacher Education Student will submit an analytical report in duplicate to the Classroom Teacher Educator and the University Professor in whose section he/she is enrolled.

SFD328 SOCIAL ASPECTS OF TEACHING

FIELD-BASED ACTIVITY

ENVIRONMENTAL AND EXTRA-ENVIRONMENTAL SOCIAL ASPECTS

I. Concept or Skill highlighted by this activity:

Learning to analyze environmental and extra-environmental social aspects relevant to the education and welfare of the child.

II. Procedure:

1. The Teacher Education student will observe the class group and identify those characteristics which would be associated with a "child at risk".

2. The Student will interview the teacher and share information regarding the family structure of selected children in the class.

3. The Student will cooperatively investigate the avenues available to the teacher for dealing with social problems such as neglect, abuse, and truancy, among others.

4. Students will take a walking tour of the school neighborhoods and analyze residency patterns (i.e., e family, multiple family), socio-economic ors, and maturity of neighborhoods (i.e., numbers of children, mature, elderly, or retired individuals, and other factors).

III. Analysis/Reporting:

The Student will write a report of his/her experiences and findings in II. above, and submit a copy of the report to the University Professor and the Classroom Teacher Educator.

September 9, 1987

Dear Classroom Teacher,

Students in EDP 340: Introduction to Measurement and Evaluation are learning measurement and evaluation concepts. As part of the course, they will develop instructional objectives for their mini-unit, will construct a table of specifications or test blueprint for a cognitive test, will write sample items to measure those objectives, will analyze test results and will graphically display the results of a test.

Because the teaching of their mini-unit occurs at the end of the semester, the CITE students will need your help in completing the EDP 340 assignments. They may ask you for examples of test questions, classroom test results, information about student performances on standardized tests or the MEAP test, and your attitudes toward measurement and evaluation.

We at Eastern, therefore, thank you for your support in making this a successful introduction to the teaching profession. Your help is greatly appreciated. If you have any questions about the class or its assignments, please call me in the afternoon at 487-1436 or leave a message with the secretary at 487-3260. Thank you.

Sincerely,

Louise Jernigan

Louise Jernigan
Department of Teacher Education
Eastern Michigan University

(Warren Williams 487-1443)

ROBERT F. SEDRICK 487-3260

Course Pack Information for EDP 340

Course: EDP 340 Introduction to Measurement and Evaluation
Credit hours: Two semester hours
Instructor: Dr. Louise Jernigan
Office: 234 in the Teacher Education Department, Boone Hall
Phone: (313) 487-3260 for the Teacher Ed. secretary or
487-1436 for Dr. Jernigan's office phone.

Course description: General introduction to the basic principles and problems in measuring, evaluating, and reporting growth and development. Students learn how to construct teacher-made tests. Other topics include measurement of cognitive abilities, interests, attitudes, and personal and social adjustment.

General objectives: This course introduces students to the basic principles of educational and psychological measurement and to the use of these principles in evaluating student performances and in guiding instruction. This course provides students with opportunities to construct and use teacher-made and published tests, to interpret and report test results, and to explore dimensions of individual differences.

Topic areas:
1. Definition of measurement and evaluation
2. Purposes and roles of measurement and evaluation
   a. Historical background
   b. Current roles
3. Planning measurement and evaluation
   a. Identification and writing of instructional objectives
   b. Preparation of a table of specifications or test blueprint
   c. Selection of appropriate measurement techniques
   d. Criterion-referenced versus norm-referenced testing philosophies
4. Characteristics of good measuring instruments
   a. Reliability, validity, usability
   b. Use of correlational techniques
5. Principles of constructing of classroom tests
   a. Types of items and their uses for paper-and-pencil and performance measures: Multiple-choice, T-F, matching, short answer/completion, interpretive exercise, essay
   b. Advantages and limitations of different types of items
   c. Practices and suggestions for construction of items
   d. Administration and scoring of tests
   e. Improvement of items from item analysis results
6. Information-gathering techniques: published and/or standardized achievement, aptitude and special abilities tests; teacher-made achievement tests; performance measures including rating scales, observational techniques, anecdotal records, sociometric techniques, checklists and interest inventories
   a. Sources of information such as Buros's Mental Measurements Yearbooks, Tests in Print, test manuals and publishers' catalogues
   b. Creation of a standardized test
   c. Administration procedures of standardized tests
   d. Interpretation of information through central tendency measures, variability measures, standard scores, grade equivalents, other norms, profiles
7. Reporting information and providing feedback to individuals and others
   a. Marks and grades
   b. Other means
8. School-wide testing programs

ACTIVITY #1

COURSE NAME EDP 340 Introduction to Measurement and Evaluation

WEEK ACTIVITY WILL BE COMPLETED

TOPIC OF ACTIVITY (brief description)

___ Observation ___ Teaching X Other Constructing a test blueprint

Goals: A) To identify the content areas and instructional objectives for the unit that will be measured by a cognitive test.

B) To develop a test blueprint or table of specifications for an end-of-unit cognitive test.

C) To weight appropriately the cells in the test blueprint according to the time spent on particular areas and the focus given to the knowledge, understanding and application domains.

CLASSROOM TEACHER ROLE:

1. To review the extent of coverage of the cognitive test.
2. To help the student identify appropriate subareas for the major content area of the teaching unit.
3. To assure that the test will be reasonable according to the material covered and the limited available time for test administration to the class.

STUDENT ACTIVITY/ROLE:

1. To write a table of specifications or test blueprint for a unit paper-and-pencil test.
2. To include the instructional objectives formulated earlier.
3. To partition the content area covered by the unit into its subareas.
4. To label the cells by using letters and numbers to distinguish content areas from objectives.
5. To indicate the weights and number of items for the individual cells and for the total test.

ACTIVITY #2 _____

COURSE NAME EDP 340 Introduction to Measurement and Evaluation

WEEK ACTIVITY WILL BE COMPLETED _____

TOPIC OF ACTIVITY (brief description)

___ Observation ___ Teaching X Other Constructing Items

Goals: A) To plan the format for a teacher-made test.

B) To write appropriate directions for each specific item type included in the test.

C) To apply the principle of good item writing.

CLASSROOM TEACHER ROLE:

The following activities are general in nature. The classroom teacher's valuable experiences will help the student improve the general framework of the test.

1. To provide suggestions about the type of evaluation procedures chosen.
2. To suggest improvements in the test's format or directions.
3. To determine whether the reading level and difficulty level of the items is appropriate for the class members.

STUDENT ACTIVITY/ROLE:

1. To construct the best items to measure cells in the table of specifications. For early elementary students, you may plan to give thedirections orally.These te items should cover the knowledge, understanding and application domains. They should also include a variety of item types, such as true-false, multiple-choice, matching, completion, and essay.
2. To match test items to cells in the table of specificiations based on the item type's ability to measure the objective.
3. To state the cell in your table of specifications that an item measures.
4. To organize the items around their item types so that directions are succinct.
5. To write appropriate directions and tell the point value of the items.
6. To provide an answer key for the items, on a separate page.
7. To assemble the test in a form that is ready to be given to the class members.

ACTIVITY #2 |

COURSE NAME EDP 340 Introduction to Measurement and Evaluation

WEEK ACTIVITY WILL BE COMPLETED

TOPIC OF ACTIVITY (brief description)

___ Observation ___ Teaching X Other Constructing Items

Goals: A) To plan the format for a teacher-made test.

B) To write appropriate directions for each specific item type included in the test.

C) To apply the principle of good item writing.

CLASSROOM TEACHER ROLE:

The following activities are general in nature. The classroom teacher's valuable experiences will help the student improve the general framework of the test.

1. To provide suggestions about the type of evaluation procedures chosen.

2. To suggest improvements in the test's format or directions.

3. To determine whether the reading level and difficulty level of the items is appropriate for the class members.

STUDENT ACTIVITY/ROLE:

1. To construct the best items to measure cells in the table of specifications. For early elementary students, you may plan to give thedirections orally.These te. items should cover the knowledge, understanding and application domains. They should also include a variety of item types, such as true-false, multiple-choice, matching, completion, and essay.

2. To match test items to cells in the table of specificiations based on the item type's ability to measure the objective.

3. To state the cell in your table of specifications that an item measures.

4. To organize the items around their item types so that directions are succinct.

5. To write appropriate directions and tell the point value of the items.

6. To provide an answer key for the items, on a separate page.

7. To assemble the test in a form that is ready to be given to the class members.

ACTIVITY #3 _____

COURSE NAME EDP 340 Introduction to Measurement and Evaluation

WEEK ACTIVITY WILL BE COMPLETED _____

TOPIC OF ACTIVITY (brief description)

___ Observation ___ Teaching _X_ Other Appraising Items

Goals: A) Practice the principles of item analysis.

B) Judge the adequacy of test items.

C) Improve items based on the results of the item analysis.

CLASSROOM TEACHER ROLE:

The test items will be example items from a classroom teacher's test.

1. To provide the results from a teacher-given test so the EDP 340 student can rank order the class members based on those test scores. This means that the EDP 34 student will request information from you. Ideally, the items are not answered correctly by all class members and the items are multiple-choice items. You onl need to provide results from 4 items.

2. To review the testing procedures and results from the test with the student.

3. To state the general objective each item was meant to measure.

4. To discuss with the student ways to improve the total test and any specific items.

STUDENT ACTIVITY/ROLE:

The student does not have to construct these 4 items, but may analyze items provide by the classroom teacher.

1. To compute the item difficulty level and discrimination power of the 4 items.

2. To determine if the items are functioning properly for the objectives they were meant to measure.

3. To suggest changes which will improve the items.

4. To evaluate the test format and its directions.

ACTIVITY #4 _____

COURSE NAME EDP 340 Introduction to Measurement and Evaluation

WEEK ACTIVITY WILL BE COMPLETED _____

TOPIC OF ACTIVITY (brief description)

___ Observation ___ Teaching X Other Descriptive Statistics

Goals: A) Construct graphs according to the guidelines provided.

B) Apply the appropriate formulas for descriptive statistics.

C) Determine the most appropriate measures to describe the data.

CLASSROOM TEACHER ROLE:

The test results can be from a classroom teacher's test or from the total group's standardized test scores.

1. To provide the results from a teacher-given or standardized test so the EDP 340 student can describe the class members' test scores. This means that the EDP 340 student will request information from you. You need to supply the set of test scores for a class. For the student to see a copy of the actual test would be helpful.

2. To review the test administration procedures and the range of results from the test with the student.

STUDENT ACTIVITY/ROLE:

The student will describe the test results provided by the classroom teacher.

1. To compute the mean, median and mode for the set of scores.

2. To compute the range and approximate standard deviation for the data.

3. To organize the data into a frequency distribution.

4. To describe the shape of the distribution.

5. To construct a frequency polygon based on the frequency distribution.

6. To construct a histogram.

7. To describe the data with the most appropriate measure of central tendency and of variability.

ACTIVITY #5 [redacted]

COURSE NAME EDP 340 Introduction to Measurement and Evaluation

WEEK ACTIVITY WILL BE COMPLETED _____

TOPIC OF ACTIVITY (brief description)

X Observation ___ Teaching X Other Interview about Evaluation Procedures

Goals: A) To gain information about a student in the class.

B) To understand the information available in a student's file.

C) To evaluate the advantages gained from norm-referenced test results versus those gained from criterion-referenced test results.

D) To formulate a measurement and evaluation philosophy.

CLASSROOM TEACHER ROLE:

1. To help the EDP student obtain a pupil's file. The file should be for a "typical" or "average" student.
2. To help the EDP 340 student become better acquainted with the information included in students' files.
3. To discuss the use of that information, particularly with regard to the classroom teacher's initial use of that information.
4. To discuss the educational progress of a pupil in the classroom chosen by the student [illegible].
5. To discuss with the EDP 340 student the advantages gained from standardized test results on the [illegible] scores.

STUDENT ACTIVITY/ROLE:

1. To observe a pupil in the classroom and estimate his/her ability, that is, is the pupil progress at, above or below the national average.
2. To understand what is available in a student's record at the grade level of the pre-student teaching experience.
3. To determine if the information from the student's file confirms the observed opinions--do the data verify the pre-student teacher's intuitive estimates?
4. To evaluate the advantages from a norm-referenced versus criterion-referenced test.
5. To create a statement of evaluation philosophy.

APPENDIX D: COLLABORATIVE ACTIVITIES

ADVISORY COMMITTEE MEETING NOVEMBER 16, 1987

Those in attendance: Evelyn Jollimore, Teresa Mull, Verna Rollins, Chris Moody, Jerry Weiser, Suette King, Ruth Moorman, Phil MacBride, Georgea Sparks, Mary Green, Amy Colton

The Advisory Board will be small enough to be a working group and large enough to be representative of all participating groups.

CITE PROGRESS REPORT 1987-88

*There are 120 students fall 1987.

*There are two sections each of curriculum 304/305.

*The other two core courses the student takes are Testing and Measurement EDP 340 and Social Aspects of Teaching SFD 328.

*CTEs number about 100.

*A large majority of the secondary students are majoring in science and math.

*Areas presently working on:
- -Collaboration; want everyone to keep growing.
- -The establishment of an advisory board to help make future plans and decisions.
- -The refinement of goals/outcomes of CITE-need to answer: How are CITE students going to be different after the experience?

REFINING OUTCOME:

*Need to look at how beneficial CITE experience is with the prestudent teaching experience.

*Students should be better able to analyze their lessons after the semester.

*Students should be able to manage classroom behaviors more effectively.

*Need to follow a group of CITE students through college into the profession.

*See if students make it.

OTHER COMMENTS MADE BY COMMITTEE MEMBERS

*There was concern that some CTEs were picking themselves to participate in the CITE Project without approval of the principal.

*Professors need to be crystal clear with students about the teaching unit.

*CTEs should be required to do various things as a participant in CITE.

*There need to be more active participation strategies used.

FUTURE PLANS

*Georgea has released time during Winter, 1988 to write grants to do follow-up research on CITE students.

*Evaluation design in process.

*A media blitz in process.

- Ann Arbor News
- Observer
- Television
- University papers

*Next year:(recommendations and plans in the works)

- University budget not finalized.
- Budget request for ½time project coordinator, ½time graduate student, and four additional liaisons.
- No expansion of number of students.
- A glossary of common terms used in university courses.
- Offer exciting options to CTEs.
- Select students specifically to balance the program.
- Counseling to encourage the selection of CITE.
- Go after "low"/borderline students.
- Use school contact person to help recruit.

TARGET WHAT DISTRICT WORKSHOPS FIT GOALS OF CITE

*1 day concurrent sessions.

*Demonstration lessons that can be seen with real students (follow-up workshops).

*Tangible carry-away things.

*PSTs and CTEs and guests invited ~~to participate in~~ symposium.

*Invite keynote speaker.

*Topics:

- Working with pst's-How To Fit In.
- Mainstreaming/ Able Learners.
- Cooperative Learning-follow-up.
- Socia Aspects in relation to field experience.
- Reading-update of research.
- Learning styles.
- Cognitive learning strategies i.e. webbing.
- Technology.
- Publisher's Exhibition (they will pay us).

GROUP IDENTIFIED PLUSSES OF THE CITE PROJECT

1. Students are better prepared-produce more organized lessons.
2. University is more aware of what is happening in classrooms (i.e. content being taught).
3. Students have a better idea of whether they wish to continue in education-more aware of what teaching is all about.
4. Increased student confidence-as s/he goes through college and the profession.
5. Students make conscious decisions while teaching.
6. Students learn the mundane skills of teaching (nuts and bolts).
7. Involvement of teaching staff.
8. College students have more direct contact with pupils-more opportunities to build relationships with children.
9. More involvement (counseling) of classroom teacher teachers in the teacher education process.
10. Student teachers more easily placed with CTEs.
11. Direct correlation of college courses to applied education.
12. Consistent monitoring of pre-student teachers.
13. Keeps CTEs on the "ball".
14. Provides consistency for improvement.
15. Dignifies teacher input.

WISHES MADE BY THE BOARD FOR THE FUTURE OF CITE (*indicates top recommendations)

1. Lab school.*
2. University and public school personnel need to "step back" together to consider ideas and needs.*
3. Increased openness between the university and the public school teacheer.*
4. Incorporate more technology in CITE program.*
5. CITE teachers bring their class or portion of their class to EMU for modeling.*
6. Need for a CTE coordinator in each school to coordinate the CITE project.*
7. Funds for released time to continue about eight days of involvement of key CTEs and administrators throughout the school year.*
8. A budget.***
9. More training with the liaison, CTE and the students together.*
10. Group meeting between students and liaisons.*
11. Many mini-lessons instead of a unit plan.*
12. Remuneration for teachers.*
13. A core of teachers who are really good models rather than expand the numbers. Quality not quantity.*
14. Make teachers consultants to professors to work with university classes.
15. Have professors observe in CITE classrooms to see REALITY!!!***
16. Examine the other components of the teacher education program to integrate them into this collaborative approach.
17. Have a "university classroom" in the local school where teacher educatior activities can take place.
18. Continued and increased initial principal involvement in program.
19. Video taping as part of teaching week to allow college class to do some observations of student's teaching.
20. More consistency with university classes in case there are two students who have different professors.
21. Teleconferencing between CTEs and liaison and the student.
22. More visits from the liaison.
23. Students should experience a variety of grade levels/disciplines.

24. Pre-student teacher should do their student teaching with the same CTE.

25. Students should go out to schools on day other than Friday.

ADVISORY COMMITTEE MEETING FEBRUARY 3, 1988

Those in attendance: Verna Rollins, Suette King, Maude Forbes, Ruth Moorman, Chris Moody, Alane Starko, Amy Colton, Marv Pasch, Lou Jernigan, Marjorie Mastie, Helen Oltmanns, Regina Williams, Teresa Mull

After having a delicious lunch the committee discussed concerns, questions, and recommendations about the program:

1) The issue of having all students teach a mini-unit in the secondary classes instead of just teaching individual lessons. Marv shared the rationale behind the teaching week. Amy discussed the students' positive attitude about the teaching week.

2) CTE's need to see the students' unit plan well before it is taught. Professors need to keep in mind what skills students need to acquire to write a unit and plan accordingly.

3) There was a lengthy discussion about the pre-student teachers' student teaching with the same CTE. Chris said in some cases this is possible. It was suggested we look at a few students who do this to see what impact it has.

4) Marv briefly explained some of the things he is doing to see that CITE is aroun in the fall.

5) Some suggested that the university person (liaison and/or prof.) meet periodically with the student and the CTE.

6) Strong feeling that there needs to be more communication between the CTE's and the profs teaching the CITE sections, especially in regards to the teaching activities assigned. Teachers would like to see profs come to their classes, as well as, meet with them on campus- perhaps the CTE's could visit the EMU class, or come to faculty meetings.

7) It was felt that the profs could at least be expected to come out to the classrooms during the teaching week.

8) CITE should make better use of long-time CTE's for planning, demonstrating, communicating, etc.

9) Everyone--teachers, profs, need to be clear about the research that is to be taught

10) A teacher should speak at the student orientation to give the teacher's perspective of CITE.

Additional recommendations were added to the Practice Profile which is attached. The last hour was spent revising the profile.

CITE ADVISORY BOARD LUNCHEON MEETING

AGENDA

MAY 17, 1988 9:00-2:00 pm.

I. Writing and Presentation Opportunities

*Final Report

*Articles

*Conferences

*Newsletter

II. 1988-89 Staffing & Funding of CITE

III. Working with "Newer" CITE Teachers

*Building contact persons

*Liaison's Role

IV. Teacher Thinking and Reflection

*"Jigsaw" with articles' relevance to CITE

V. Work Groups

*Past pre-student-teaching activities

*Do they reflect current research?

*Do they promote reflection?

*Recommended changes?

*Crossover-concepts activity

*Symposium planning

sparks

May 17 Advisory Board Meeting

Those in attendance:

Helen Oltmanns, Maude Forbes, Verna Rollins, Evelyn Jollimore, Suette King, Marv Pasch, Thomas Gwaltney, Alane Starko, Georgea Sparks, Sally Stavros, Regina Williams, Chris Moody, Amy COlton, Ruth Moorman

*Georgea gave an overview of the research data that needs to be collected for the final report. Anyone who wishes to contribute to the report was encouraged to do so.

*Board members were asked to sign-up for any conferences they would like to be presenters for and any writing they might wish to do, for the report and/or the fall newsletter.

*Marv gave an update on the university allocations for CITE once the budget runs out in Oct. 1988. There will be a ½ time coordinator, a ½ time graduate assistant, an increase of 5 liaisons, and a 7,500 dollar budget. He has asked the president of the university to match the funding.

*Brainstorming ideas to enhance university-school collaboration was done in two small groups. Each group identified the top five on their list and shared it with the entire board. The following are the top recommendations. They are not necessarily in any particular order:

-A building-level contact person(s)- could be a team of a student and a teacher. These people should receive support and there should be group members. It was suggested that these people be included on the ADvisory Board. Perhaps each school could have a designated CITE corner or bulletin board for information.

-"Talks with Teachers" Thurs./Fri. afternoon with students, teachers, and professors.

-"Work sessions" (a la first year) with interactions across districts. Need to give the teachers more printed material.

-Seminar on coaching and research (Sat?).

-Personal appeal- re: recruiting, use contact person.

-Promotional video by teachers.

-Professors should spend more time in the classrooms. They could also chat, observe, help with students, tutor, profs come to "back to school day, " (give the invitations), go out during teaching week, informal contacts...

-Reacquaint administrators, superintendents with CITE. District meetings (teacher and students).

-Some kind of handbook with "helpful hints" for working with your CITE students. This should be continually updated. Could start with one sheet and a blank sheet for teachers to add suggestions.

-CITE block courses in a school.

*Georgea presented the group with a preliminary draft of a reflection scale .

The scale was:

0 Theory -free/thought free decision making (D-m)

1 Rule based d-m (rigid, 1 rule applied)

2 Alternative-based d-m (compare, analyze, select)

3 Alternative- and context-based d-m

a. classroom/school context considered

b. global/moral ethics considered

Each small group then read some of the student interviews and tried to determine where on the scale the student's reflective thinking fell.

As this was being done informal discussions took place regarding changes, difficulties, etc. in the use of the scale.

*The small groups reexamined the pst activities and made suggestions for encouraging higher level reflection, cross-over between courses, and appropriateness. Georgea and AMy took notes and will share the information with the CITE professors.

The same was true for the discussion on how to get the symposium to "fly"

Prospective teachers given 'bridge' to career

Ann Arbor News, Dec. 30, 1987

By CHONG W. PYEN
NEWS STAFF REPORTER

YPSILANTI – The green "troops" received their final briefing to prepare them for their first solo sorties today into such battlefields as Clague, Tappan, Willow Run or Forsythe, but it did little to dispel the butterflies and goosebumps.

About 100 Eastern Michigan University students – all prospective teachers – met one last time the day before Thanksgiving with Georgea M. Sparks for a final discussion of tactics and strategy.

"You will be nervous, but you know you're lucky that you're not teaching on the day before Thanksgiving," said Sparks, assistant professor in EMU's Department of Teacher Education.

She and her students reviewed a list of their major worries, ranging from forgetting lesson content and running out of materials too early to facing tough questions from pupils and losing electricity before using an overhead projector.

The students are part of a federally funded program designed to help better prepare those who will become student teachers. Eastern's program is one of 23 pre-student teaching programs across the country which have been set up to determine whether the nation's teacher education curriculum needs an extra step between classroom and intensive field experience.

"We see it as a necessary stage in the development of teaching (personnel) before they become student teachers," said Marvin Pasch, department head and project administrator. "We're trying to provide a bridge to give that teacher education student additional time by exposure to what it's like to be a teacher."

The program runs from today through Friday in conjunction with Ann Arbor, Ypsilanti, Lincoln and Willow Run public schools. Fifty students are assigned to elementary schools and the other fifty to secondary schools.

Pasch said the students' sudden role change causes them anxiety and even fear as they take over a class for the first time after having been students for about 15 years.

"The anxiety is high," said Sparks prior to her class. "But we don't expect them to perform perfectly. We tell them to go in well prepared, and they will be graded for their own reflective, analytical evaluations of each day rather than perfect performance."

Speaking about preparedness, nobody could beat Lisa Kaniewski, 27, a senior from Brighton. She had four different lesson plans (or "hip pocket activities") just in case something went wrong with any of them as she took charge of Clague Intermediate School's ninth grade math class.

"There is some nervousness, but if I'm not nervous, something is wrong," conceded Chris Newell, 22, a senior from Allen Park who was assigned to Forsythe.

He planned to teach about medieval knights on opening day, with pupils assigned the roles of pages and squires.

Randy Redmond, 22, a senior from Milan, did not mind spending most of the holiday weekend reading "The Rascal," a 175-page novel he will discuss with Tappan's ninth graders.

Karen Janetzke, 20, a junior from Bancroft, said, "Right now, I'm pretty nervous, kind of worried." But she figures she ought to be helped by a family tradition: Her mother and many of her relatives are teachers.

Scott Harmon, 22, had little to worry about in the attention-getter department. Standing 6-foot-4, he figured to make a visual impression on the Lincoln Junior High School students he was scheduled to visit. That's nearly a foot taller than the regular teacher.

To celebrate the week-long program, the department is throwing a reception for all participants and their host teachers on Thursday. That's when medals will be awarded, casualties counted and mildly exaggerated combat stories recounted.

Eastern Educator Feb.; 1988

Collaboration for the Improvement of Teacher Education (CITE)

The CITE pre-student teaching program is changing teacher preparation at EMU. Students in teacher education used to attend education courses with few opportunities to visit real schools and link theory with the practice. Now more than 120 students go out to schools one morning a week to apply what they are learning in their core education courses: social aspects of education, curriculum and methods, and measurement and evaluation. The semester long field experience ends with a teaching week.

Participating in a CITE seminar are, from left to right, Georgea Sparks, Dept. of Teacher Education, EMU, Christella Moody, College of Education, EMU, Lenore Bernstein, Ypsilanti Public Schools, Theresa Mull, Ypsilanti Public Schools and Amy Colton, Ann Arbor Public Schools and EMU CITE coordinator.

Michael Madison (far right) of Ann Arbor Public Schools shares an idea with Marvin Pasch (far left), Dept. of Teacher Education, EMU, and Donald Zekany (middle), Ann Arbor Public Schools.

How did this improvement come about?

In fall 1985, the federal Office of Educational Research and Improvement awarded a three-year grant to EMU's College of Education to collaborate with local schools to improve teacher education. EMU faculty worked intensely with more than 40 Ypsilanti, Willow Run, Lincoln and Ann Arbor teachers and administrators to create pre-student activities that would encourage students to apply curriculum, social issues and measurement concepts. During the 1986-87 school year, EMU students tried out those activities in project teachers' classrooms. Once a week they experimented with a particular teaching technique, examined social factors affecting student attitudes, or created and interpreted tests. Toward the end, they got their feet wet as they taught a week-long mini-unit with their classroom teacher educator's guidance.

How do participants like the CITE experience?

While a thorough program evaluation is being conducted this year, preliminary reactions are quite positive. Typical comments from participating teachers include:

"I like having the opportunity to interact regularly with EMU professors and with other teachers who are all working toward a common goal: helping to improve tomorrow's teachers."

"I love sharing my enthusiasm and special techniques with incoming teachers."

"Being involved with CITE has kept me sharp and abreast of current research and recent effective practices."

"I'm enthusiastic about the CITE program. I have been so impressed with the high caliber of students; they're so bright and cooperative."

Student comments have included the following:

"I gained confidence, and the many skills learned and applied will be remembered as I enter the teaching profession. I learned so much!"

"CITE gives us a well-rounded curriculum. I had a fantastic hands-on experience in the classroom."

"I enjoyed working with good teachers and learning through a good example."

"I think that the experience of teaching the mini-unit will make my first day of student teaching a lot nicer!"

Finally, professors find it easier to teach their courses with the schools and classrooms as laboratories where students can see concrete examples of the concepts taught. One professor noted, "I don't have to spend as much time explaining certain questioning strategies because students see the strategies in action every week. I mention a strategy, and they pipe up, 'Oh, my teacher did that last week.' Then they go on to explain what they've been seeing to the class. It's great!"

Long-term effects of CITE include more confident, competent and reflective new teachers; continued collaboration with local schools to improve teacher education; and greater coordination among courses and field experiences. It appears that we are well on our way to achieving these goals!

College Fosters Future Teacher Clubs

Program BRIEFS

Distinguished Achievement Awards

AACTE's 1987 Distinguished Achievement Awards (DAA) were bestowed during February's Annual Meeting on Eastern Michigan University and North Carolina State University.

Each year, AACTE recognizes exemplary teacher education programs that demonstrate "innovation for excellence" in the following categories:

- preparation of science and/or mathematics teachers,
- use of current research to transform the content and curriculum of the teacher education program, and
- imaginative internships and beginning teacher programs in which the teacher education program and its faculty play prominent roles.

With a grant from the GTE Corporation, AACTE awarded $2,500 to each winning institution. In 1988 no award was bestowed in the first category.

Eastern Michigan University

For its exemplary "Collaboration for the Improvement of Teacher Education Project" (CITE), a joint effort by university and school district educators, Eastern Michigan University (EMU) received the DAA for innovation in applying research to the content and curriculum of the teacher education program.

Begun in 1983, EMU's Department of Teacher Education redesigned its teacher certification and field experience programs to include recent research in existing courses, such as curriculum and methods, social aspects of teaching, and measurement and evaluation.

Incorporated into the curriculum and methods course, for example, was research on beginning teacher evaluation (Fisher, 1978), effective group methods (Bloom, 1984), and mastery learning (Guskey, 1987).

In 1985 EMU received a three-year grant from the Office of Educational Research and Improvement (OERI) to collaborate with four school districts and develop pre-student-teaching activities that included

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March Conference Examines 'Teaching For Thinking'

by Carol Smith, Director for Accreditation/Certification/Assessment

A March 5 conference on "Teaching for Thinking: The Challenge for Teachers and Teacher Educators" focused on strategies for developing K-12 students' skills in critical thinking and implications for preparing teachers.

Held in Washington, D.C., under joint sponsorship of AACTE, the Association Collaborative for Teaching Thinking, the American Federation of Teachers, the National Education Association, and the District of Columbia ACTE, the conference assembled 70 participants representing teachers, teacher educators and NCATE, staff development specialists, and school administrators.

Keynoting the conference was Arthur L. Costa, president-elect of the Association for Supervision and Curriculum Development. Presentations on inservice programs related to critical-thinking skills were given by Debbie Walsh of the American Federation of Teachers and by staff development specialist Karen Spencer. Robert Swartz of the University of Massachusetts-Boston outlined a program at his institution for preparing inservice teachers.

For preservice preparation, David Martin of Gallaudet University presented a model in use at his institution for collaboration between teacher educators and liberal arts faculty. In this model, new teachers are prepared to work systematically toward developing the cognitive abilities of their students.

AACTE representatives who served as panelists for the program included David C. Smith and Patricia Ashton of the University of Florida and William Katzenmeyer of the University of South Florida.

Organizers plan to issue a summary of the conference along with papers from related conferences held earlier. The final conference in the series, held May 5, addressed the topic, "assessing thinking skills."

Photo by Sharon Givens

David C. Smith (l) of the University of Florida and Arthur L. Costa (r) of the Association for Supervision and Curriculum Development engage in a point-counterpoint discussion of teacher education curricula that supports critical thinking. The two served on a panel summarizing the workshop on "Teaching for Thinking: The Challenge for Teachers and Teacher Educators."

Program Briefs

continued from page 5

the research accompanying EMU's core courses. In the planning phase, university and school educators and administrators learned about the new research and identified effective teaching, planning, and classroom management practices to be included in students' field experiences.

University and school educators formed "design teams" and created teaching activities for the identified concepts. One activity, for example, requires a student to design and teach from a curriculum unit.

The project's evaluation will be based on questionnaires and interviews with professors, students, and teachers; students' reflective journals; and case studies. Preliminary analysis of 1987 evaluation data indicates that 95 percent of the students were highly or moderately satisfied with the program overall.

For more information on EMU's project, please see the August 1987 issue of Briefs, *page 10, where it was profiled as one of the OERI grant recipients, or contact Georgea Sparks, assistant professor of teacher education, College of Education, Easte. Michigan University, Ypsilanti, MI 48197, phone (313) 487-1414.*

North Carolina State University

In the third DAA category, AACTE recognized North Carolina State University's program for preparing experienced teachers to become mentors for beginning teachers. This program is a collaborative effort by the university and six school districts.

As a result of legislation mandating a two-year probationary status for beginning teachers and the evaluation of their effectiveness during that time, North Carolina State University (NCSU) designed a model program for providing school-based educators with the necessary skills to supervise beginning teachers' professional growth. The model is based on research indicating that inservice teacher development requires school-based educators who have instructional supervision skills (Howey, Yarger, and Joyce, 1978).

Central to this model is the communication link between the university and the schools for which NCSU established an "extension professorship." The person in this position has substantial experience with inservice education and high credibility with school personnel.

The development of this model included (1) identification of expert teachers, (2) development of a curriculum in instructional clinical supervision transferable to school-based inservice programs, and (3) formation of instructional teams consisting of a mentor teacher and a clinical professor who would instruct other experienced teachers to become mentors for beginning teachers.

The teams completed two semesters of academic study and participated in an internship in which they taught colleagues to become mentors. The topics for the internship included effective teaching, conflict management, and different models of supervision and coaching.

More than 200 experienced teachers have enrolled in the mentor training program in the school districts. From the course evaluations, university and school personnel consider the program highly effective. They have plans to apply this approach to the supervision of student teachers.

For information, please contact Lois Thies-Sprinthall, project director and extension professor, College of Education and Psychology, North Carolina State University, Raleigh, NC 27695, phone (919) 737-2231

Program Briefs is written by Dagmar Kauffman, researcher/writer

Research Briefs

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Project staff are using qualitative methods to assess the project, Lanier said. "Throughout the project, we have collected a wealth of data that include interviews with instructors, mentors, and students," he explained. From a preliminary analysis of these data, he called the project "successful."

For information, contact Perry Lanier, professor, College of Education, 501 Erickson Hall, Michigan State University, East Lansing, MI 48824, phone (517) 355-1734.

Research Briefs is written by Dagmar Kauffman, researcher/writer.

AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION **BRIEFS**

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Washington, DC 20036

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Ann Arbor News, Mar. 7, 1988

THE DISTINGUISHED ACHIEVEMENT AWARD HONORING AN EXEMPLARY TEACHER EDUCATION PROGRAM AT EASTERN MICHIGAN UNIVERSITY

Our thanks to the professional colleagues listed below whose talents, dedication and cooperation enabled the College of Education to receive national recognition for an exemplary teacher education program. The CITE program (Collaboration for the Improvement of Teacher Education) which resulted in the Distinguished Achievement Award from the American Association of Colleges for Teacher Education is the product of their commitment to the preparation of superior classroom teachers. The honor is theirs. We are proud to be associated with them. We look forward to additional opportunities for collaboration as the program expands.

Georgea M. Sparks, Project Director
Marvin Pasch, Project Administrator
Amy Colton, Project Coordinator
W. Scott Westerman, Jr., Dean, College of Education, Eastern Michigan University

Dean's Office (EMU)

Mary Green, Associate Dean
Robbie Johnson, Director of Student Teaching
Christalla Moody, Administrative Coordinator

Department of Teacher Education (EMU)

Irene Allen
John Blair
Tom Bushey
Mark Conley (MSU)
Trevor Gardner
Thomas Gwaltney
Louise Jernigan
Ed Lederman
Perry Marker
Sally Martin
Cal Michael
Quirico Samonte
Alane Starko
Sue Terry
Jerry Weiser
Warren Williams

Project Coordinators:

Marilran Brown
Kathie Koster
Renee Pecot

University Council on Teacher Education (EMU)

Roberta Anderson-Special Education
Betty Barber-Human, Environmental and Consumer Resources
Lou Gimelli-History
Eunice Jordan-English
Don Phillips-Chemistry
Joanne Raukin-Mathematics
Mary Teal-Music

Michigan Department of Education

Dan Austin
Robert Trezise

Washtenaw Intermediate School District

[illegible], Deputy Superintendent
[illegible] Mestia, Consultant

Clague Intermediate

Robert Fatchett, Principal, 1985-86
Gary Court, Principal

Classroom Teacher Educators

Rick Bednarz
Amy Colton
Rivard Reding
Robin Wheeler
Bill Wolff

Forsythe Intermediate

Shirley Ganss, Co-Principal
Vaughn Filsinger, Co-Principal

Classroom Teacher Educators

Barbara Drubel
Dan Ezekial
Janet Kahn, 1986-87
Harold Makinen
Dan Miekstyn

Scarlett Intermediate

Basil V. Musio, Principal
Patrice Becker, Class Principal

Classroom Teacher Educators

Mary C. Anschuetz
Jane Frank
Grace Harbison
Scott Kunst
Mitchell Lawrence
Carolyn Scott

Sliaison Intermediate

Duane Peterson, Principal
Mark Ravin, House Principal

Classroom Teacher Education

Constance T. Corwin

Tappan Intermediate

Ron Williamson, Principal, 1985-86
Janet Gabrion, Principal
Dean Cole, Asst. Principal

Classroom Teacher Educators

Sandra Aquino
Margaret Collins
Anna Cullen
Lee Delcamp
Mary Dunn-Mason
Suette King
Becky Randolph
Wendy Frey Raymond
Mary Jean Sholtis
Donald Zokany

Lincoln Junior High School

Michael Bewley, Principal

Classroom Teacher Educators

Jeff Bush
Kate Morris Curtin
Robert Grosshans
Lonnie Proffitt
Carol Wahla

WILLOW RUN COMMUNITY SCHOOLS

Gilbert Dunn, Superintendent 1985-87

District Liaison

Ruth Moorman, Assistant Superintendent

Cheney Elementary

Michael Duff, Principal 1985-86
Melvin Anglin, Principal

Classroom Teacher Educators

Pat Andersen
Judy Burstein
Nancy Chapa
Sandee Dusbiber
Deborah Rowson
Mary Williams
Frances Wilson

Ford Elementary

Gregory Weatheerspoon, Principal

Classroom Teacher Educators

Andria Hood
Betty Peters

Edmonson Junior High

Norma L. Williams, Principal

Classroom Teacher Educators

Tom Blackwell
Gary Canty
Walter Collins
Mike Galinas
Chris Getty
Mike Munn
Regina Williams

Willow Run High School

Kenneth Wilson, Principal

Classroom Teacher Educators

Patricia Dickerson
[illegible] Dunlap

Marjorie Mastie, Consultant

ANN ARBOR PUBLIC SCHOOLS

Richard C. Benjamin, Superintendent

District Liaisons

Hayward Richardson, Deputy Superintendent for Instructional Services
Doreen Poupard-Tice, Assistant Superintendent for Curriculum & Instruction
Bob Galardi, President, Ann Arbor Education Association
Phil MacBride, Coordinator, Staff Development
Shelley Bruder, Consultant, Staff Development
Betty Green, Consultant, Staff Development

Abbott Elementary

Leverett Kelly, Principal, 1985-87
Jean Baker, Principal

Classroom Teacher Educator

Kathy Maurdeff

Carpenter Elementary

Clifford Weber, Principal, 1985-86
Giannine Perigo, Principal

Classroom Teacher Educators

Marilyn Daehler
John Freeman
Barbara L. Niemeyer

Eberwhite Elementary

Milton L. Riggs, Principal

Classroom Teacher Educator

Dianne Till

Haisley Elementary

Glenn Munro, Principal

Classroom Teacher Educators

Judith Marans
Lucy Spriggs
Marilyn Trautler

Lawton Elementary

Wanda Montibeller, Principal

Classroom Teacher Educators

Betty Ladd-Wallace
Aileen Schulze
Eleanor Moore
Bonnie J. Northrop
Pat Pudduck
Karen Yahr

Northside Elementary

Patricia DeYoung, Principal

Classroom Teacher Educators

Jinx Stevens Cooke
Corinne Grace
Ethel Poladofer

Pattengill Elementary

Gus Fitch, Principal

Classroom Teacher Educators

Susan Bates
Suzanna Beutler
Robert Douglas
Louise A. Hickey
Elginne Johnson
Mary Johnson
Evelyn Jollimore
Ron Ludwig
Orville Phillipp
Barbara Quinn
Mary Von Domarus
Mary Jean Sholtis
Donald Zekany

Huron High School

Joetta Mist, Principal

Classroom Teacher Educators

Elaine Brite
Thomas Burroughs
Dee Drake
Robert Hill
Joan Otis
Sheila Ryder
Doris Williams

Pioneer High School

Milo White, Principal
Jim Clark, Principal
Mike Madison, Administrator

Classroom Teacher Educators

Sam DeNicola
Barbara Edwards
Joelle Lennington
Mike Militokonis
Steve Rodriguez
Jean Saalfeld
Dottie Thorne

BELLEVILLE VAN BUREN PUBLIC SCHOOLS

Elvin F. Peets, Superintendent

Belleville High School

Larry Tabor, Principal

Classroom Teacher Educators

Janet Cooke
Doris Miree
Beverly Polcyn
Wayne Stevens
Marshal Wied

LINCOLN CONSOLIDATED SCHOOLS

Don Chalker, Superintendent

Lincoln Early Elementary

Donald Sprague, Principal

Classroom Teacher Educators

Judy Taylor
Debby Seaton
Doris Walton

Lincoln Middle Elementary

Kathryn Geddis, Principal

Classroom Teacher Educators

Nancy Cook
Fran Doe
Lynn Fouchey
Theresa Horn
Janice Glover
Jane Loup
Linda Luke
Sandy McGahey
Dorothy Mucha
Helen Oltmanns
Annette Tarnowicz

Lincoln Later Elementary

Mary Bowman, Principal
David Prunean, Assistant Principal 1985-86

Classroom Teacher Educators

Carol Crabtree
Jane Fidler
Mindy Guzzardo
Lois Jansen
Chris Riley
Cheryle Nicholls
David Williams
Jill Wysocki

Classroom Teacher Educators

Patricia Dickerson
Bev Dundon
Earl Greene
Darrel Heiner

YPSILANTI PUBLIC SCHOOLS

James Hawkins, Superintendent

District Liaisons

Judy White, Curriculum Director, 1985-86
Sally Stavros, Curriculum Director, 1986-88

Adams Elementary

Maude Forbes, Principal

Classroom Teacher Educators

Alice Boyd
Barbara Buccos
Lucretia Cregar
Judy Floyd
June Guthrie
Betty Jessee
Karen Kielwasser
Jane Raymond

Estabrook Elementary

H. Robert Peper, Principal

Classroom Teacher Educators

Charlotte Andrews
Novia Baran
Lenore Bernstein
Lois Kamoi
Joanne Latvala
Kathryn Martin
Teresa Mull

East Middle School

John Lounsberry, Principal
Dennis Goodall, Assistant Principal

Classroom Teacher Educators

Larry Connell
Pete Hill
Marcia Peters
Mary Jo Rehberg
Ronald Wiedbusch

West Middle School

Mercedies Wauddy, Principal

Classroom Teacher Educators

Pat Blevins, 1985-86
Jesse Lamdin
Verna Rollins
Mark Smith

Ypsilanti High School

George Beaudette, Principal
Deborah Clarke, Assistant Principal

Classroom Teacher Educators

Rochelle Belkam
Donald Bartolacci
Sharon Baskerville
Carol Cramer
Dale Crawford
Angelika Fanslau
Mary Gallagher-Perry
Jayne Haas
Susan Katon
Karla Knighton
Malcolm Meyer
Valerie Mills
Bill Nedela
Sharon Ongaro
Anne Ormand
Kay Otwell
Beverly Riordan
Dorothy Thomas
Antoinette Wendel

Ypsilanti RCTC

David Otwell, Principal

Classroom Teacher Educator

Artemis Alex

CITE

COLLABORATION
FOR THE
IMPROVEMENT OF
TEACHER EDUCATION

Fall 1987 Newsletter

If you are thinking a year ahead,
sow seed.
If you are thinking ten years ahead,
plant a tree.
If you are thinking 100 years ahead,
educate the people.

- Chinese poet, 500 B.C.

Project Director _____ Georgea Sparks
Project Coordinator _____ Amy Colton

Phone _____ 487-3260

A COOPERATIVE EFFORT OF THE EMU COLLEGE OF EDUCATION
WITH ANN ARBOR, LINCOLN, WILLOW RUN AND YPSILANTI SCHOOLS

DEPARTMENT OF TEACHER EDUCATION
EASTERN MICHIGAN UNIVERSITY
234 BOONE HALL
YPSILANTI, MI 48197

WELCOME BACK!

We hope you had a nice relaxing summer. As you gear up for the new year, we hope this newsletter will bring you up to date on the CITE project, and give you an overview of the coming year.

REPORT ON SPRING 1987

We want to extend a big thank you to all of the teachers who participated in the Spring (May-June) field experience. While the term was too short to provide the full CITE program (10 visits plus a teaching week), we felt that some field experience was better than none at all. Many of you felt that referring to the Spring field experience as part of the CITE model was inappropriate. We agree. We will need to examine this issue further.

NEW CITE COORDINATOR!

We are pleased to announce that Amy Colton will be joining the CITE staff in September as the new Project Coordinator. Marifran Brown, our 1986-87 Coordinator, will be teaching for Ann Arbor Schools this year. Amy was a CITE teacher at Clague Intermediate School in Ann Arbor last year. She's taking a one-year leave of absence to coordinate CITE and to teach courses at EMU. We welcome her!

YEAR TWO SUMMARY
1986-1987

Year Two was the pilot-testing year for the CITE project: the Core Teacher Education courses and pre-student teaching field experiences, which were collaboratively designed during Year One, 1985-86.

Key Events of Year Two

* Pilot-testing of program, including modifications during Winter term.
* Workshops for Classroom Teacher Educators (CTEs): Lesson Design, Classroom Management, Reading, Cooperative Learning.
* Presentations at six state and national conferences by CITE staff and CTEs.
* Monthly meetings with CITE staff, professors and liaisons.
* Dinner for superintendents and state officials.

Evaluation instruments were also pilot-tested during Year Two. Teachers, principals, liaisons, professors, and students responded to questionnaires. These aided in the identification of several positive features, as well as areas needing change.

Positive Features of CITE

* Mini-unit Teaching Week
* Pre-student teaching (PST) experience
* PST conference time with CTEs
* Liaisons' contacts with schools
* Collaboration on teacher education

Areas Needing Change

* Integration of Core course concepts and field experiences
* Continued collaboration/ involvement of CTEs new to CITE
* Communications, amount of "paperwork"
* Spring CITE does not provide for the full CITE experience

NOTE FROM THE DIRECTOR:

CITE PROMOTES TEACHER REFLECTION

As we have refined our evaluation design we have given much thought to how CITE benefits the EMU student. It is clear that our goal is not merely to have students go out to classrooms to perform teaching skills in a rote manner. Rather, we want them to experiment with certain teaching and measurement skills. We also want them to analyze teaching and learning in the light of student characteristics, the community, and society. Many refer to this on-the-spot analysis and experimentation as "teacher reflection in action."

As researchers (Schon, Berliner, Stallings, and others) have studied effective teaching, they have found that it is not just the ability to perform certain strategies that makes a "good teacher." It is the ability to know when to use a particular strategy that separates more effective from less effective teachers. How are such decisions made? There seems to be a lot of intuition and experience involved in such decision making. It is not merely a matter of applying clear-cut rules.

What does all this have to do with CITE? Our purpose in CITE is to promote teacher reflection and enlightened decision making through structured field experiences. Thus, we ask pre-student teachers to try out certain research-based strategies and to analyze their effects on students. We ask them to examine the school and home environments and to link them to what happens in classrooms. It is our hope that such experimentation and analysis will continue during student teaching and regular teaching.

If we are to have true professionals in teaching, teaching-as-decision-making will have to be emphasized over the more typical attitude of "teaching is just a series of 'effective' techniques." We are not saying that EMU students don't need a solid set of skills. They do. We think, however, that these skills ought to be presented as tools that can be experimented with as student needs and social factors are considered. There is too much intuition and artistry in teaching for it to be considered a simple set of effective behaviors or prescriptions.

YEAR THREE OVERVIEW
1987-88

September 1987, begins the third and final year of the CITE project. Approximately 100 pre-student teachers (PSTs) and Classroom Teacher Educators (CTEs) will be involved. PSTs enrolled in the Core Teacher Education block will be spending one half-day per week in CTEs' classrooms, and end their experience with a week of teaching. More time will be spent on program evaluation this year, as required by our federal funding agency.

MAIN GOALS FOR YEAR THREE
1987-1988

* Increased Collaboration

* Analytical and reflective use of research and field experience in the Teacher Education Program

* Conceptual integration of Teacher Education Core courses and related field experiences

Core Teacher Education Courses

Previously, CUR 311/314: Elem./Sec. Reading, and EDP 322: Human Development were offered as a block of Core courses. Due to a decision by the University Council on Teacher Education (UCTE) the CUR 311/314-EDP 322 block will no longer be offered and both courses will have field experiences outside of CITE.

Thus, the CITE Teacher Education Core consists only of CUR 304/305: Elem./Sec. Curriculum and Methods, SFD 328: Social Aspects of Teaching, and EDP 340: Measurement and Evaluation. While the Reading-Human Development courses will have structured field experiences, they will not be considered part of CITE during Year Three.

1987-1988 CORE TEACHER EDUCATION COURSES

with Instructors, Days and Times

CUR 304/305: Elem./Sec. Curriculum and Methods

Alane Starko	MW	10:30 - 11:45	(Elem.)
Alane Starko	MW	12:00 - 1:45	(Elem.)
Trevor Gardner	MW	10:30 - 11:45	(Sec.)
Georgea Sparks	MW	12:00 - 1:45	(Sec.)

SFD 328: Social Aspects of Teaching

Cal Michael	MW	9:00 - 10:15
Ric Samonte	MW	9:00 - 10:15
Ric Samonte	MW	1:30 - 2:45
Ric Samonte	TTh	1:30 - 2:45

EDP 340: Measurement and Evaluation

Robert Dedrick	MW	8:00 - 9:00
Robert Dedrick	T	8:00 - 10:00
Warren Williams	MW	2:00 - 3:00
Louise Jernigan	TTh	2:00 - 3:00

The CITE project makes possible the integration of the above courses and the field experience. The majority of CITE pre-student teachers enroll in all three courses. The courses are scheduled so that a block of time is reserved for the field experience.

Several of the professors teaching CITE sections this term are new to the project. We welcome them and appreciate their efforts to further the development of both the Core courses and the field experiences. The professors met once during the summer and will spend a half-day planning together in early September.

UNIVERSITY LIAISONS

Ann Arbor ——— Georgea Sparks
Lincoln ——— Perry Marker
Willow Run ——— Jerry Weiser
Ypsilanti ——— Tom Gwalmey

All liaisons can be reached at 487-3260.

The University Liaisons provide the important link between EMU and the districts. Throughout the term, they will meet individually with teachers, as well as coordinate school and district CITE meetings.

It is a pleasure to welcome Perry Marker as the new liaison for Lincoln Schools.

PROJECT EVALUATION PLAN

During Year Three, we will be conducting a formal evaluation of CITE. The evaluation focuses on project logistics and three major outcomes:

1) reflective/analytical thinking of students, modeled by campus professors and Classroom Teacher Educators (CTEs)

2) role re-definitions of professors and CTEs (i.e. Increased collaboration and use of classrooms as an integral part of teacher preparation.)

3) institutionalization of the CITE project (i.e. How it continues without federal funding.)

EVALUATION INSTRUMENTS

* Questionnaires
* Interviews
* Audio tapes, video tapes
* Think-aloud Student Journals

PARTICIPANTS

* Pre-student Teachers (PSTs)
* Classroom Teacher Educators (CTEs)
* Liaisons
* Professors
* Project Staff

PROJECT EVALUATOR

Joanne Simmons, from MSU, is the Project Evaluator and has been working with the evaluation committee since last March. Her expertise is a valuable addition to the project.

Georgea

Title: CITE SEMINAR PROMOTES TEACHER REFLECTION

2 credits CUR 680 Fall/Winter 1988-89

CITE (Collaboration for the Improvement of Teacher Education) is a 3-year federally funded project (1985-88) to bring schools together with EMU to develop and implement a research-based structured pre-student teaching field experience. The program won a national award for excellence in Feb. 1988. While federal funding ends in Sept., 1988, CITE will continue at a modest cost to EMU.

Our purpose in CITE is to promote teacher reflection and enlightened decision making. We ask pre-student teachers to try out certain research-based strategies and to analyze their effects on students. We ask them to examine the school and home environments and to link them to what happens in classrooms.

The purpose of this proposal is to request funds to pay partial tuition for CITE teachers participating in a "Seminar on Teacher Reflection" during 1988-89.

What is teacher reflection?

As researchers (Schon, Berliner, Stallings and others) have studied effective teaching, they have found that it is not just the ability to perform certain strategies that makes a " good teacher." It is the ability to know when to use a particular strategy that separates more effective from less effective teachers. How are such decisions made? There seems to be a lot of intuition and experience involved in such decision making. It is not merely a matter of applying clear-cut rules.

As we have refined our evaluation design we have given much thought to how CITE benefits the EMU student. It is clear that our goal is not merely to have students go out to classrooms to perform teaching skills in a rote manner. Rather, we want them to experiment with certain teaching and learning in the light of student characteristics, the community, and society. Many refer to this on-the-spot analysis and experimentation as " teacher reflection in action."

Why is the Seminar necessary?

The value of the structured field experience is not in question. While students praise the experience, approximately 15% have expressed dissatisfaction with their CITE teacher. To enhance the experience for both the pre-student teacher and the CITE teacher we now need to develop teacher reflection in the CITE teacher. We've been asking the CITE teachers to nurture reflection in our EMU students without giving the teachers the tools to do so.

Seminar description

The broad goal of the proposed Seminar is to develop teacher reflection and coaching skills. We will address the following objectives:

*To heighten the awareness among participants of research and reflection.

*To practice reflection in their own classroom situation.

*To promote reflective dialogue with colleagues and EMU students.

This course will focus on the following topics:

*Visions of the Teaching Profession

State of the Art:Reflection

*Experiential Learning Theory

*Skills and Techniques of Effective TEaching

*Teacher Development, Empowerment, and Self-Efficacy

*Language Acquisition and Concept Development

*Cognitive Coaching

*Action Research

The six Saturday sessions will run from 10-2:30 on Oct. 29, Nov. 19, Dec. 3, Jan. 14, Feb. 11, and March 18. Each session will include a presentation by one of the CITE professors (Sparks, Starko, Weiser, Gwaltney, Gardner, Samonte, Jernigan, Polokow, Pokay), a sample lesson from his or her course, small-group discussions, journal entries and follow-up on field experiences. The field assignments will provide the necessary additional hours to satisfy the two credit requirement. It is our intent that the participants will be working with CITE pre-student teachers, thus providing an avenue for application. An additional benefit of the seminar is that seminar participants will be better prepared to work as cooperating teachers with EMU student teachers and beginning teachers.

Need to Support Teachers' Participation

Over the past three years the CITE teachers have given much of themselves and their time to the EMU CITE project. Without their support CITE would not have been an award-winning project. By offering fellowships EMU has the opportunity to thank these people as well as to promote their continued efforts in out teacher education program.

To compensate as many individual as possible CITE would like to offer one-credit fellowships to 20 CITE teachers They would then pay for the other credit. This would cost the university approximately _____. This offer would be made on a first-come first-served basis.

We hope the Regents will be able to approve the proposed amount. CITE has been a successful project, but it needs considerable "fine-tuning," especially in the area of CITE teachers' skills.

Thank you for your consideration.

Marvin Pasch, CITE Project Administrator
1985-1988

Georgea Sparks, CITE Director, 1985-88

Amy B. Colton, CITE Director, 1988-89

APPENDIX E: DOCUMENTATION OF INSTITUTIONAL SUPPORT

TEACHER EDUCATION

Eastern Michigan University

INTER-OFFICE CORRESPONDENCE 021088

TO: Ronald W. Collins, Provost and Vice President for Academic Affairs

DATE: July 7, 1988

FROM: John W. Porter
President

SUBJECT: CITE Project and SOUTHSIDE Project

On reviewing your memorandum dated June 25, 1988, but not received until July 5, 1988, I approve of a program development commitment of $7,500 toward the South Side Project and the CITE Project. Also, I am assuming the $7,500 covers the cost of the graduate assistant that is designated in the third paragraph of Dr. Marvin Pasch's memorandum.

pc: George Johnston

7/11/88
To: Marv Pasch, Head
Teacher Education
Dr. Porter has agreed
to provide the $7,500
matching amount for CITE.
Cheers!

copies: Ron
Scott Westerman
Judie Johnson
Mike Cline

JUL 07 1988
OFFICE OF THE V. PRES.
FOR ACADEMIC AFFAIRS

RONALD W. COLLINS
Provost and Vice President for Academic Affairs
146 Pierce
487-3200

TO: Dr. John W. Porter, President

SUBJECT: (1) CITE PROJECT, and, (2) SOUTHSIDE PROJECT

___ Your action	X Please advise/~~call~~ me
___ Your approval/signature	___ Please write memo/report
X Your review/comment	___ Please draft response/respond
___ Your information/files	___ Please return to me/discard

___ In response to your inquiry/call/memo on ___

Reference(s): Memo to me from Mann Pauck, Teacher Education, dated June 3, 1988 (021105); COPY ATTACHED

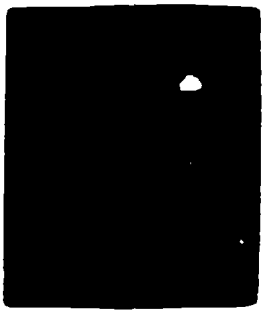
REMARKS: I have made a significant commitment of special resources (①,②,③,④) to these two projects. However, I could not manage the full $15,000 in SSGM which is needed. Would you be willing to match the $7,500 I have provided

DATE: 6/15/88 COPIES: (CONTINUED)

write another $7,500 from your Program Development Fund? The CITE Project has great promise, and deserves our support.

If you wish, I could discuss this matter with you when I return from vacation.

Thanks for your consideration and assistance.



RONALD W. COLLINS
Provost and Vice President for Academic Affairs
146 Pierce
487-3200

TO: Mary Pasch, Head
Teacher Education

SUBJECT: (1) CITE PROJECT; and
(2) SOUTHSIDE PROJECT

_____ Your action
_____ Your approval/signature
_____ Your review/comment
__X__ Your information/files
__X__ In response to your ~~inquiry/call~~ memo on June 3, 1988

_____ Please advise/call me
_____ Please write memo/report
_____ Please draft response/respond
_____ Please return to me/discard

Reference(s): Our mtg. on May 12, 1988

REMARKS:

My commitments of specific resources to these two projects are accurately summarized in your memo. Via copies of this note, I am asking Eddie Johnson, Ron Goldenberg and Mike Chiaro to take the necessary action to provide these resources.

Good luck!

DATE: 6/25/88

COPIES: (1) Eddie Johnson
(2) Ron Goldenberg
(3) Mike Chiaro

Eastern Michigan University
INTER-OFFICE CORRESPONDENCE

TO: Ronald W. Collins, **DATE:** June 3, 1988
Provost and Academic Vice President

FROM: Marvin Pasch, Head, Department of Teacher Education

SUBJECT: Follow Up After the May 12 Meeting on Planning for the CITE Structured Field Experience and the Southside Project

I have appointed a half-time visiting lecturer as CITE Coordinator and I have appointed an additional graduate assistant to aid in organizing and coordinating field experience assignments. . Also, I have asked them to plan a budget for the $7,500 of SS&M to fund the program for next year. I am hopeful that between your efforts and those of Dean Westerman, President Porter will be convinced of the worth and importance of structured field experience for education students that will convince him to match your allocation with an additional $7,500.

In regard to the Southside project, I have appointed an additional graduate assistant to be university liaison and chief recruiter. Since he will complete his studies after Fall Semester, you will be able to re-assess our commitment before continuing the allocation for winter. I will ask Dr. Pietig, my successor, to contact you in fall to determine whether the Southside G.A. position will continue in winter.

I am thankful for the support you have given to both projects. I would appreciate it if you could clear the organizational pathways so that the additional 2 GA appointments are not viewed with suspicion at the budget office and the Graduate School.

cc. Dean Westerman
Dr. Pietig

(1), (2), (3), (4) — special resource commitments by Academic Affairs

RECEIVED
JUN 07 1988
OFFICE OF THE V. PRES.
FOR ACADEMIC AFFAIRS

APPROVED
V.P. ACADEMIC AFFAIRS
DATE

Appendix E

ASSOCIATE VICE PRESIDENT
FOR ACADEMIC AFFAIRS

NOV 11 1986

A Recommendation for Scheduling Selected Group IV Courses in Order to Facilitate Pre-Student Teaching field Experiences for All Undergraduate Teacher Certification Students

The NCATE Report (March, 1983) expressed a concern about the "lack of clear structure in the pre-student teaching program" at Eastern Michigan University. This paralleled a judgment made by the UCTE that the teacher education curriculum should be a sequenced, developmental program that would include structured, collaboratively designed, appplication-based field experiences prior to student teaching. Most recently, the EMU Regents' Commission came to a similar conclusion.

The University received a three year grant (1985-88) from the National Institute for Education entitled "The Collaboration for the Improvement of Teacher Education (CITE) Project." Its primary purpose is to apply research knowledge to the improvement of teacher education. The project has brought together University and school district educators to design and implement a set of pre-student teaching field experiences which will enable students to view teaching as a systematic, deliberate activity and to base their teaching decisions on a firm body of knowledge.

This fall sixty students have volunterily enrolled in a block of classes to begin to implement the CITE recommendations. "Blocking" during school district hours is essential if students are to have access to classrooms.

The UCTE has recommended that three courses, CUR304/305 - Curriculum and Methods, SFD328 - Social Aspects of Teaching and EDP340 - Measurement and Evaluation be blocked as co-requisites for all certification students. The block would be available during both the fall and winter semesters with at least three alternative time spans scheduled i.e.; 8-11, 10-1, and 12-3. (Please see attached schedule.)

Academic departments that would like to schedule their subject matter methods courses within the blocks in order to benefit from the structured field experiences are encouraged to do so.

Appendix

Proposed Block Schedules
Fall and Winter, 1987-88

	M	I	W	IH	E
Block I	EDP 340 8:00-10:00	CUR 304/305 8:00-9:15 SFD 328 9:30-10:45		CUR 304/305 8:00-9:15 SFD 328 9:30-10:45	F I E L D
Block II	EDP 340 10:00-12:00	CUR 304/305 10:00-11:15 SFD 328 11:30-1:00		CUR 304/305 10:00-11:15 SFD 328 11:30-1:00	F I E L D
Block III	EDP 340 12:00-2:00	CUR 304/305 12:00-1:15 SFD 328 1:30-3:00		CUR 304/305 12:00-1:15 SFD 328 1:30-3:00	F I E L D