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ABSTRACT

Several projects at the University of Georgia's College of Education provide information for program planning and design. The Diagnostic Teaching Cycle (DTC), which is being used to evaluate the undergraduate program of the Division of Elementary Education, has five components: identify, hypothesize, formulate goals and objectives, instruct and remediate, and provide formative and summative evaluation. Use of DTC determined program strengths and weaknesses for students, division faculty, department faculty, resources, and public school cooperation. In addition to the DTC evaluation, the university has a contract with the Georgia State Department of Education to develop performance-based teacher assessment instruments for beginning teachers. These instruments, called Teacher Performance Assessment Instruments, measure: (1) teaching plans and materials; (2) classroom procedures; (3) interpersonal skills; (4) professional standards; and (5) student perceptions. The first three tests are required for certification renewal, and all are administered at 17 regional assessment centers. A computer-based application of the Teacher Performance Assessment Instruments is being planned to provide preservice teachers with diagnostic profiles of strengths and weaknesses in academic content, pedagogy, and curriculum. This formative evaluation will also be used to refine and improve the undergraduate program. (FG)

Reflections Upon a Teacher Education Program - Diagnosing Where We've Been, Where We Are, and Where We're Going

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Symposium Issues Related to and Systems for the Evaluation of Teachers. AERA Annual Meeting, March 19-23, 1982 New York City.

When invited to participate in this symposium we were asked to reflect upon our "CBTE" undergraduate teacher education program. I suggested that another in our Division might better address CBTE as we're not particular advocates of Competency-based Teacher Education (CBTE). However, it was pointed out that the emphasis of our presentation was to be *reflections* upon our pedagogical program and that evaluative analysis would indeed be appropriate.

Diagnosing Where We've Been

The Division of Elementary Education was created as a separate administrative unit in the College of Education in 1969. Several faculty who had been housed in the Department of Curriculum and Supervision chose to transfer to the new division. At about the same time, the U.S. Office of Education funded a second round of teacher training proposals that emphasized objectives-based teacher training and accountability -- not unlike the Winnetka Plan of 1925, where they specified performance goals or competencies and assessed whether or not these goals were attained. Other threads embedded in the funded Georgia Education Model (GEM) were Maria Montessori's approach which specified learning tasks designed to facilitate continuous progress, Walbesser's (1966) specification of goals in curriculum development, Bloom's (1968) mastery learning, Popham's (1969) instructional objectives, and Gagne's (1962) task analyses and learning hierarchies.

About five years after the field-oriented GEM model was implemented, CBTE came into vogue. While additional faculty were hired, some faculty moved out of the undergraduate program to other assignments. These faculty who could not support this new direction believed that CBTE was a bandwagon with no theoretical foundation and little empirical evidence to support it (Heath and Nielson, 1974). In the mid-seventies, there were two CBTE teams within the undergraduate program, but these were phased out a couple of years ago -- mainly due to personnel changes both faculty and administrative. It is interesting that some of our colleagues within colleges as well as in public schools still refer to the Georgia program as CBTE -- more from ignorance of what is happening in the program than from habit.

Diagnosing Where We Are

As we began to collect our thoughts for this presentation we felt a pang of embarrassment as we became aware that the program has not as yet been systematically evaluated in the broad sense that Bronfenbrenner (1979) suggests. Early this year a core research team was selected to design and implement a program evaluation process. The first task was to delineate what our program is. A reasonable description of the present undergraduate Division of Elementary Education pedagogy program, to use Smith's (1980) terminology, is as follows. Courses are sequenced developmentally to provide interns with prerequisite knowledge and skills before they are assigned teaching tasks In addition there is a series of clinical experiences that accompany coursework

The underlying structure of the newly embarked upon evaluation is a diagnostic teaching model that is cyclical in function (Reisman, 1972,

977, 1978, 1982; Peterson and McBrayer, 1976). The Diagnostic Teaching Cycle (DTC) has five process components: Identify, Hypothesize, Formulate goals and objectives, Instruct and/or remediate, and Evaluate -- both formative and summative. In the paper strengths and weaknesses of the present undergraduate program will be *identified*, possible reasons for these strengths and weaknesses will be *hypothesized, goals and objectives* for improvement will be formulated, descriptions of instructional [illegible] will be presented, and proposed formative and summative *evaluation* activities will be described.

Reflections Based on Diagnostic Teaching Cycle

Identification

The present University of Georgia (UGA) undergraduate program services almost 600 students with a yearly graduation of approximately 170. Of these 87 percent major in early childhood education; the others in middle school education. The majority of students in the program are Georgians who plan to teach in Georgia. Table 1 summarizes student characteristics sampled for two years (Pool, Elmore, Hawn, 1977). Scores on the California Test of Mental maturity (1963 S-Form, Level 5) obtained in these same two years indicated strengths in verbal skills and weaknesses in both logical and numerical reasoning skills. In terms of personality profiles, the Sixteen Personality Factor Questionnaire (Cattell, Eber, and Tatsuoka, 1970) was administered

Table 1

Summary of Student Characteristics
at Entry to Elementary Education*

1974-75 n = 137	Characteristic	1975-76 n = 106
95%	White single female	96%
54%; 19%	Born in Ga.; out of Ga.	54%; 25%
Excellent	Health	Excellent
84% Middle class	SES	80% Middle class
52%	Transfer to UGA	48%
2.68	Entry GPA to College of Education	2.8
2.9	High GPA	3.0
441; 462	SAT Verbal, Math	434;458
70%; 25%, 5%	Elem. Educ., ECE, Middle School	61%, 33%; 5%
96%; 50%; 35%	Prior work with children	98%; 76%; 37%
40%	College leadership	28%

*adapted from Pool, Elmore, Hawn (1977, p.3)

Additional instruments tapped personal and educational beliefs (Brown, 1968), provided measures of dogmatism (Rokeach, 1960), surveyed values (Rokeach, 1973), and included semantic differentials (Osgood, Suci, and Tannenbaum, 1957) for the purpose of assessing attitudes.

Teacher education at UGA has several strengths and weaknesses. These include the following:

Students. UGA students are representative of pre-service teachers in general. The number of early childhood students to middle grades students is out of balance in relation to the state need for 300 middle grades teachers. Also, the wide range of ability, motivation, commitment to teaching, personality, appearance, socio-economic level, willingness to learn, professional conduct, family interest in education, etc. make program evaluation difficult due to all of these variables.

Division faculty. By the end of the next year one-fifth of the faculty of 20 will have been replaced with permanent staff due to retirement, resignation, and termination. Morale of faculty has gone from the pits to a cohesive, productive, happy group In line with the UGA mission, emphasis is on scholarly and exemplary teaching, research, and service. Senior faculty are extremely supportive of junior staff and actively involve them in endeavors that lead to promotion and tenure. Relations with other departments are excellent. On the minus side, as with any group, there are the one or two who do not do their job and who cling to the role of obstructionist.

Department faculty The College of Education is organized by divisions and departments. The departments that service the Division of Elementary Education are among the most respected in the nation -- especially mathematics education, language education, science education, and reading education. There is an esprit de corps among both faculty and administrators. Departments are extremely cooperative and supportive of the Division program.

Resources. A reevaluation of expenditures has taken place at the direction of the new Dean. The resulting reallocation of personnel and resources has provided benefits to the teacher education program at a fraction of the previous cost. Salaries are competetive with a proposed average pay raise of 4-3/4% for 1982-83. Secretarial support has been increased and upgraded,

additional office space has been obtained, the number of graduate assistants has been doubled and there has been a 10% increase in the O and E budget. On the weakness side, however, there is still inequity across departments.

Cooperation of public schools. The surrounding school districts are extremely receptive to placement of interns in classroom experiences. However the locus of authority for the Division program had shifted to the local school district due to lack of Division leadership.

Hypothesizing. The difference between the identification and hypothesizing components of the Diagnostic Teaching Cycle is the distinction between observing and inferring. Thus, this part of the DTC will posit inferences for the strengths and weaknesses listed previously

Students. Research on teachers is virtually non-existent on cognitive characteristics, basic literacy, creative or artistic characteristics, knowledge of academic major, knowledge of teaching field, professional conduct, attitude toward learners, and attitude toward self-development There were no major long-term longitudinal, ethnographic, nor ecological studies reported in regard to teachers Studies are short-term longitudinal or cross-section design involving comparative descriptions and instrument development Most research is related to upper division students and beginning and experienced teachers. There is little on pre-college students and on graduate pedagogy students. No studies were found on teachers in the family of teachers, or on assessing perceptions and attitudes of non-professionals relative to characteristics of teachers (Johnson, Ellett, and Segal, 1980). It therefore appears that there is no systematically determined base for evaluating relationships among pedagogical programs and performance of Georgia teachers.

Given the state need for middle grades teachers the overbalance of students in the early childhood program may be due to the lack of career counseling procedures within the Division, poor advisement, problems inherent in the middle grades course of study, or fear of teaching pre-adolescent students.

Division faculty Promotion and tenure at UGA is awarded for excellence in two of the following categories: teaching, research, or service. Annual faculty assignments in the Division of Elementary Education are typically .67 instruction and .33 research Prior to this year most of the faculty assignments were 100% instruction Faculty assigned to the undergraduate field oriented program were spending from 100 to 300 hours in the field observing students The present administration encourages a realistic view of what activities and products are

necessary for professional advancement at UGA and supports a more reasonable balance between campus and field activities Six of the eight faculty who had been hired to staff the two CBTE teams are no longer in the division due primarily to not meeting promotion and tenure requirements. If faculty are to survive then the mission of the Division should be isomorphic with the mission of the College of Education and should be in line with the university mission of scholarship and creative productivity. The chair needs to assume a leadership role for facilitating professional development of Division faculty

Department faculty. There is every indication that the cooperative relationship will continue.

Resources. The present national economic and energy situation call for reevaluation and reallocation of resources for better payoffs to the Division. The large amount of money paid to the local school district (around $89,000) for placement of interns has been unnecessary College priorities must be realigned to meet today's needs of the state, the College, and the Division.

Cooperation of public schools The locus of program control must be regained by the Division. Areas of responsibilities as well as tasks amenable to cooperative planning must be spelled out in written policy.

The field component of the program should be expended to neighboring districts in order to not overload the local schools and also, to broaden the school base for placement of interns.

Goals and Objectives

Goals form the structure for program evaluation. One must know where they are headed. The goals that are the basis for planning our program evaluation are classified according to the sections listed under Identifying and Hypothesizing. We have not as yet translated broad goals into specific objectives.

Students Goal 1 Identify how to bring the number of students in the two Division programs (early childhood and middle grades) into balance.

Goal 2. Evaluate present admission requirements for the following purposes (a) screen those students who do not intend to teach and therefore might better be served in another major and (b) reduce undergraduate student numbers to a more manageable size in relation to number of faculty and faculty assignments.

Goal 3: Design field experiences to keep students on assigned tasks rather than spending too much time as aids.

Division faculty. Goal 1: Continue to recruit faculty who are scholar teachers.
Goal 2: Reduce faculty turnover.
Goal 3: Continue to provide for morale and security of faculty.
Goal 4: Engage faculty in systematic plan for professional growth.

Department faculty. Goal 1: Continue positive relationships.
Goal 2: Support department needs in regard to College priorities.

Resources. Goal 1: Implement a computerized advisement system (See Powell, 1981).
Goal 2: Implement a computerized assessment procedure to diagnose students' knowledge base at specified steps in their program. (See Powell, 1981)
Goal 3: Reallocate funds previously paid local school district to better benefit students, teachers in field settings, Division faculty, and College priorities
Goal 4 Implement faculty evaluation and merit pay procedures.
Goal 5 Ensure that faculty has ample secretarial support.
Goal 6 Provide research time for all faculty who want it
Goal 7. Maintain graduate assistant support.

Cooperation of public schools Goal 1: Place interns in districts where administrators are receptive, reasonable and cooperative.
Goal 2: Expand placement of student teachers to districts where they may be hired
Goal 3: Set parameters for "cooperative" planning and regain locus of control for program content and sequence of experiences
Goal 4: Obtain commitment from schools to place interns with exemplary models only -- not with poor teachers so that pupils in such classrooms will "get a break"
Goal 5: Provide inservice education for cooperating teachers who request same.
Goal 6: Work toward getting legislative support to compensate cooperating teachers either through free tuition for selected courses or by honoraria.

Instructional plans.

Implementation of goals are at various stages Goals may be modified as we get further into our plans for program evaluation However, we are willing to share our progress to date

Students Goal 1 In order to move early childhood majors into the middle grades program the following activities have been launched.

(a) Initiate career decision counseling to help students examine reasons for selecting their major,
(b) Recruit high school seniors and lower division college students to the middle grades program rather than waiting until they are already into the early childhood program,
(c) Raise the required grade point average for early childhood majors, and request their reasons for applying to the program,
(d) Enlist aid of state and district personnel officers to communicate the state need for middle grades teachers.

Goal 2: Specify to students what is expected of them in field experiences and facilitate completion of their assignments.

Division faculty. Goal 1: A search for four assistant professors will occur during 1982.

Goal 2: Hire people who appear to be able to meet UGA promotions and tenure requirements.

Goal 3: Promote cooperative endeavors that involve junior faculty such as the broad program evaluation plan.

Goal 4: Let prospective faculty know what is expected in terms of scholarship and productivity and provide for staff development to facilitate professional advancement of faculty.

Department faculty Goal 1: Three display terminals and one printer will soon be installed. A faculty person with necessary skills has been reassigned to the Division to help computerize advisement and registration procedures.

Goal 2: The assignment last year of a Division Coordinator of Computer Activities was a first step. He obtained the hardware listed under Goal 1 above and is designing diagnostic uses for the terminals.

Goal 3: Approximately $89,000 paid the local school district, of which almost $60,000 was for three teachers who performed the same duties as three doctoral students receiving a total of $19,000 was turned back to the College budget. More effective uses of this money are being considered.

Goal 4: Division committees consisting of junior and senior faculty have designed evaluation and merit pay criteria, and procedures for implementation. Evaluation conferences occurred during this Fall Quarter.

Goal 5. An additional senior secretary is being hired this quarter bringing the faculty - secretary ratio to 6 1. In addition, we have three work study students who help with copying, collating and answering the phone.

Goal 6: All faculty who so desire have been budgeted and assigned one-third research time for those with nine-month contracts and one-fourth time for fiscal contracts.

Goal 7. The number of graduate assistantships was doubled last year (from five to ten).

Cooperation of public schools. Goal 1. We are presently in negotiations with surrounding school districts who desire to serve as field centers.

Goal 2: Under the present policy all student teachers must be placed in the local school district. Due to financial hardships on students and minimal hiring of our graduates this policy is being terminated.

Goal 3: Written policy is under negotiation spelling out program responsibilities and authority of the Division, of the schools, and the overlap where cooperative decision making will occur.

Goal 4: Plans are under way to establish cooperative placement of interns with exemplary models. The TPAI may be used as an initial screening.

Goal 5: Field center coordinators as well as faculty in other departments may serve as consultants for teachers who work with Division students. If inservice courses are requested by schools, the college will work to provide this support

Goal 6: Obtaining legislative support for tuition vouchers for teachers who supervise our field experience students has been a long-term goal that we are now pursuing.

Evaluation

Formative evaluation filters throughout the entire Diagnostic Teaching Cycle A broad view of program evaluation has been undertaken. Both long-term and short-term assessment of the Division undergraduate program will occur. In addition, the graduate program will be evaluated including inservice offerings, graduate residence centers where UGA students may complete a masters degree, and newly initiated joint doctoral programs with Valdosta and West Georgia Colleges. The impact of program demands will include evaluation in terms of faculty energy to ensure that faculty time for research and publication is preserved. Summative evaluation plans are not as yet finalized

Next, in terms of diagnosing where we are, we will address the impact of performance-based teacher certification in Georgia on our teacher preparation program as well as the Teacher Assessment Performance Instruments (TPAI) developed by faculty within the Division under a State of Georgia contract.

Teacher Performance Assessment Instruments (TPAI) -- Where Are We?

The Georgia State Department of Education contracted with the College of Education at the University of Georgia to develop performance based beginning teacher assessment instruments. The rationale for these instruments included attention to the following aspects of teaching:

Demonstrate scholarship in subjects taught
Demonstrate knowledge of effective teaching
Know one's subject broadly and be aware of societal implications
Demonstrate effective teaching

Subsequent to a literature search on professional competencies of teachers in 1976, conceptual developments of the TPAI began with a survey form administered to a stratified sample of 4,668 subjects (Johnson, Ellett and Capie, 1980). Responses from the sample, including college/university professors, administrators and classroom teachers throughout the State of Georgia, led to the construction of a five-part instrument intended to assess generic teaching competencies. The instruments comprising the TPAI are:

1. Teaching Plans and Materials (TPM)
2. Classroom Procedures (CP)
3. Interpersonal Skills (IS)
4. Professional Standards (PS)
5. Student Perceptions (SP)

The TPM consists of five competencies and fifteen indicators, CP is composed of six competencies and twenty indicators. IS has three competencies and ten indicators; PS has two and six respectively; and SP contains two forms -- one for pupils in grades 3-5 with 30 statements,

and one for grades 6-adult with 30 statements. For each statement, the student checks the appropriate "face" which denotes feeling behavior toward what the teacher is doing as instruction is being carried out. For further illustration, a paradigm of TPAI is presented in Figure 1.

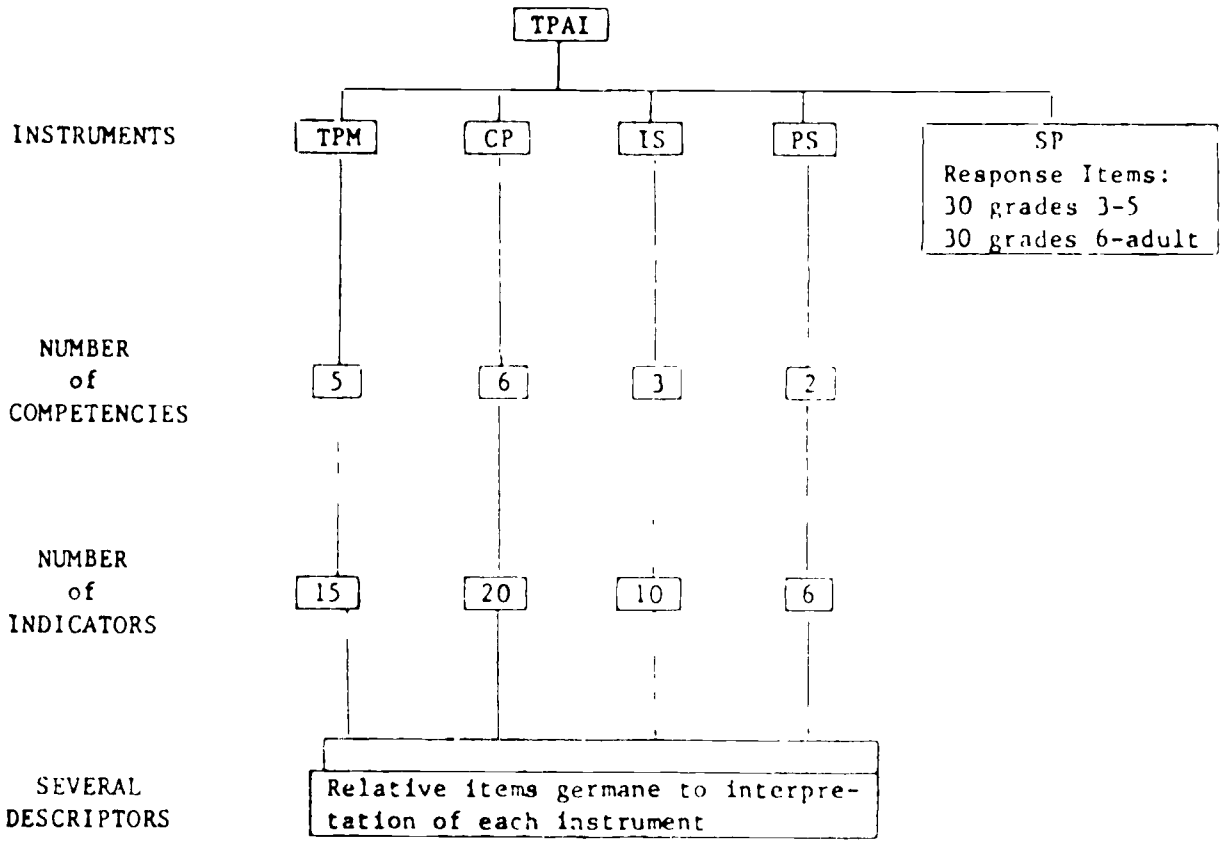
By decision of the Georgia State Department of Education, "on the job" assessment of beginning teachers became effective on May 1, 1980. These teachers must demonstrate minimum level performance on two consecutive administrations (within three years) of TPM, CP and IS before a renewable certificate is awarded The other two instruments may be administered upon request by any classroom teacher eligible for assessments, and results are not used in relationship to professional certification.

Toward meeting this statewide goal on assessment of beginning teachers in 1979 the state department of education funded the establishment and operation of seventeen regional assessment centers located throughout the state. Each center has a director and staff given the responsibility of providing coordination, assessment and feedback conferences for all beginning teachers employed with non-renewable certification in assigned geographical areas.

As regards administration of TPAI, ratings on Indicators 1-5 on TPM are primarily based on a portfolio prepared by the teacher, whereas responses to Indicators 6-15 are made subsequent to an interview involving trained data collectors (regional assessment center representatives, principal and peer teacher) and the teacher being assessed. Ratings for indicators on CP and IS are given over a 7-10 day period as each data collector visits the teacher during a scheduled time to score the instruments.

Figure 1

TPAI Paradigm



Special response forms have been printed on which data is coded for each teacher observed. These forms are collected, checked under the supervision of a Regional Assessment Center Coordinator, and then mailed to the University of Georgia for computer processing. Summary profiles are then provided for teacher feedback and the State Department of Education.

Since the initial development of TPAI as referenced above, several studies relating to factor analysis, validity and reliability have been conducted, a list of which is available Also, the following studies dealing specifically with TPAI are presently under investigation

1. 1981-82 Factor Analysis Study of TPAI
2. 1981-82 Study of Interrater Reliability of TPAI
3. 1981-82 Generalizability Analysis Study
4. Teacher Made Test Validity Test Study

Diagnosing Where We Are Going

Amid state-wide utilization of the TPAI for professional licensure of beginning teachers, the University of Georgia uses it to diagnose "strengths and weaknesses" of preservice teachers during the professional phase of their program. As observed in Figure 2, a developmental field-based program follows the core of basic requirements. The field-based component is developmentally sequenced in that conscious attention has been given to matching course content to skills and experiences of interns as they grow professionally while progressing through the levels. Nature and extent of in-field requirements, whether tutoring, small group or large group instruction are an extension of course requirements and are sequenced in accordance with readiness of students.

Figure 2 - Recommended Program

The University of Georgia
College of Education
September, 1982

Date_____

Student's Name

Advisor

Program of Study for Early Childhood Education (K-4) B.S. Ed. Program for Entering Students Fall 1982.

CE CURRICULUM	HRS. REQ.		PROFESSIONAL CURRICULUM	HRS REQ.
mmities	20		*Pre-Level I*	
English 101, Grammar & Comp	5		September Practicum	0
English 102, Composition	5		ART 305, Art and the Child	5
Music 303, Elem. Music Fund	3		EEN 300, Child Literature	3
Music 305, Music for ECE	3		EXC 500, Int. to Except. Child	3
Lit. Elective	5		PED 447, Move. for Yg. Child	5
			HED 344, Prob. Health Ed	3
cial Science	20		CFD/PSY 395, Ind. to Child Dev.	5
			LIN 303, Intro. to Education	5
History 251 or 252, Amer. Hist.	5		TAV 401, Basic Media Comp	3
Political Science 101	5			34
Psychology 101, Elem. Psychology	5			
Elective	5		***Level I*	
thematics & Natural Science	20		ECI/CFD 343, Observ. & Analysis of Child Behavior	5
			ESC 442, Science Methods	5
Mathematics (205 & 206 Math Elem. Tch)	10		EPY 304, Learning & Motivation	5
Science (10-hr. sequence)	10		LIN 404, Oral Lang. Arts	3
				18
OFESSIONAL CURRICULUM			***Level II*	
jor Area	30		ECE 302, Practicum Methods of Teaching	5
*Concentrations			ERD 342, Tch. of Reading to ECE	5
I. Early Childhood Education			EMI 442, Math Methods	5
II. Mathematics			EEN 405, Written Lang. Arts	3
III. Science				18
IV. Language/Reading				
V. Exceptional Children			***Level III*	
VI. Social Studies				
VII. Educational Foundations			ECI 333, Prog. Curr. Dev.	5
VIII. Physical/Health Education			ERD 343, Cor. Read.	5
IX. Fine Arts or Liberal Arts			EMI 441, Math Learning	3
Field (Required for transfer students)			ESS 342, Social Science Methods	5
				18
			Level IV	
sical Education	5		ECI 546	15
	96		TOTAL HOURS	199

other side for suggested courses
(10-10-10 concentration)
10 hours in I required. 10 hrs. in either II or III required
hours in any of the other concentrations
ld component

In addition to using the TPAI as a diagnostic technique, plans are also in progress for using on-line computer based evaluation of content taught and related pedagogy. An initial step will be the development of a test-item bank from numerous objectives representing course content of the professional program. From this data base, appropriate pre-post test items will be selected and programmed for a particular level. A diagnostic comprehensive examination via computer will also precede full-time student teaching. Test item files at each level will be ample in number so that an alternate (pre or post) form can be generated for students not meeting minimum criteria.

The idea of computer applications to teacher education is not new. Seven years ago, the idea was conceived which resulted into a published article on computer assisted instruction in 1976. A Computerized Student Advisement System (CSAS) is also on the verge of implementation. Figure 3 presents an organizational chart of completed and predicted computer-based developments intended for the Division of Elementary Education at the University of Georgia.

Figure 3
Organizational Chart for Computerized Developments

	Activity	Year									Quarter				Status			
		1976	1977	1978	1979	1980	1981	1982	1983	1984	F	W	Sp	S	Completed	In progress	Collaborative stage	Continuous development
1	Published article on Computer Assisted Instruction (CAI)	X										X			X			
2	Published survey of literature on computers in education	X												X	X			
3	Proposal developed for initial application of CAI				X									X	X			
4	Development of knowledge-based test items for Early Childhood Methods Course (ECE 302)		X								X				X			X
5	Development of BASIC computer program for interactive evaluation (116 items)					X								X	X			X
6	Trial Runs of program						X					X						
7	Test-item 'bank' generated by instructors of level courses						X				X						X	
8	Test items analyzed for scope and/or sequence						X										X	
9	Alternate forms of test determined input at terminal						X				X						X	
10	Trial Runs						X				X							
11	Scheduled Computerized Evaluation begins							X				X				X		
12	CSAS implemented at undergraduate level							X				X				X	X	
13	CSAS implemented at graduate level							X					X			X	X	
14	Computerized evaluation at graduate level								X		X						X	
15	Research on computer applications in teacher education							X				X						X
16	Development of Course/Faculty Orientation								X		X							
17	Acquisition of additional hardware							X	X	X	X			X				X

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Summary

This paper has described an approach to teacher education in the context of Reisman's *Diagnostic Teaching Cycle*. Reference has been made to "where we have been, where we are, and where we are going." Each component in the *Diagnostic Teaching Cycle* has been related to students, division faculty, department faculty, resources and cooperation of public schools.

Integral to where we are and where we are going is use of the TPAI not only for state-wide assessment of beginning teachers but also as a diagnostic strategy in undergraduate teacher education. As teacher education increasingly utilizes computers, Georgia is at the forefront of applying this technology diagnostically. On-line contact provides students with skills they will need while instructing their pupils -- many of whom already have access to electronic technology. Diagnostic profiles of strengths and weaknesses in academic content as well as pedagogy and curriculum will serve as corrective feedback for students. This formative evaluation will be used to refine and improve the program.

It is anticipated that the direction in which we are going in teacher education will contribute to the effectiveness of instruction, but we must rely on research to provide more concrete guidance in directing educational programs for prospective public school teachers.

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