ABSTRACT

This paper presents a proposed strategy for developing and utilizing a needs assessment strategy based on Competency Based Teacher Education. The three steps in the strategy are the identification of teaching skills needed in a particular situation, the development of a procedure for determining teacher needs in relation to the identified teaching skills, and a procedure for assisting teachers in acquiring and improving their teaching skills. In a discussion on the identification of needs, the approaches used by the Atlanta Public Schools and the Mentor, Ohio Exempted Village School District are described. The assessment of needs requires that some type of scheme be developed that can describe where a teacher is in terms of the school district's requirement and also provide an opportunity to chart a direction for improvement. Who should assess these needs is discussed. The author concludes with the following points: (a) teachers should make the final decision on competencies needed to perform effectively; (b) the assessment procedure should begin with the assumption that needs assessment is for the improvement of teaching; (c) a continuum of proficiency for each competency should be developed in order to allow for continuous teacher growth; (d) self assessment should be part of the needs assessment procedure; and (e) the administrative hierarchy of the school district should be involved in the assessment procedure. (PD)
INSERVICE/NEEDS ASSESSMENT/COMPETENCY BASED TEACHER EDUCATION

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by

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NOT TO BE REPRODUCED OR QUOTED WITHOUT PERMISSION OF AUTHOR
"Public schooling probably is the only large-scale enterprise in this country that does not provide for systematic updating of the skills and abilities of its employees and for payment of the costs involved. Teachers we presume, can acquire markedly different ones through some process of osmosis."1

Most persons and organizations who give serious thought to inservice education (staff development seems to be the current term) would probably agree with the above quote from John Goodlad. One of the difficulties in inservice education has been that it only provided information to teachers. Information about what someone else (usually a consultant or college professor or textbook) thought or information shared between teachers. Little or no consideration has been given to assisting teachers in developing and practicing new teaching skills in the classroom. And little attention has been given to assessing the effectiveness of what the teacher does and what the pupils learn.

Bob Bhaerman has summarized inservice education by saying that often it has been long on service and short on education. It has been too fragmented, without integrated activities based upon assessed priority needs, insufficiently supported

by budget, and too insignificant to leave a marked and continuing impact upon teachers and programs.\(^2\)

Inservice education is a term that has various interpretations. For purposes of this paper it is defined as the continuous training that a teacher needs as a result of being assigned to certain teaching situations. School districts have unique needs. Sometimes schools within school districts and classrooms within these schools also have unique needs. Few, if any, preservice teacher education programs make the claim that their graduates have all of the teaching skills necessary to function in any circumstance. Therefore, inservice education should focus first on developing those additional teaching skills needed to implement the regular program prescribed by the school district. Secondly, the inservice program should focus on providing knowledge and teaching skills that result from both curricula and pupil population change. For example, in the early 1960's teachers who were asked to teach "new math" might have needed knowledge and new methodological skills. As another example, if a school district adapts a diagnostic, prescriptive teaching strategy, then the teacher may need knowledge of diagnostic techniques as well as practice in the application of diagnostic procedures. Thirdly, inservice education aims at the need for the

\(^2\)Bob Bhaerman, A Paradigm for Accountability, American Federation of Teachers Quest Paper, (No. 12, August, 1970), 3.
continuous improvement of educational personnel.

Inservice education cannot be effective without considering what needs teachers have. The position advanced in this paper is that a viable inservice education program begins with a needs assessment procedure that requires the following:

1. The identification of teaching skills needed in a particular teaching situation.
2. The development of a procedure for determining teacher needs in relation to the identified teaching skills.
3. A procedure for assisting teachers to acquire and improve his or her teaching skills.

This paper speaks to these three points. It discusses and outlines a strategy based on Competency Based Teacher Education (CBTE).

This paper does not address itself to the knowledge teachers might need. It focuses on improving teaching skills. The paper also does not deal with the question of who is responsible for teacher growth. While this is a most crucial issue it is not within the scope of this discourse. The paper is limited to a needs assessment strategy only for classroom teachers.

WHY CBTE?

Competency Based Teacher Education is a data based system for training teachers. CBTE precisely specifies that
teachers must exhibit those competencies assumed to promote pupil learning, and/or demonstrate their ability to promote desirable pupil learning. Instruction in CBTE focuses directly on the development of those competencies thought to promote pupil learning. It is the opinion of the author that CBTE is a viable approach to needs assessment because it is a data based system. William Drummond points out that in a CBTE program data are collected and used to make adjustments and changes in what and how things are done. Data are not collected for punitive reasons. It is crucial that needs assessment be thought of as a procedure for improvement and not to "get teachers."

The basic elements in CBTE provide a way to develop a needs assessment system that addresses itself to the three requirements for such a system mentioned earlier in this paper. Stanley Elam identifies the essential elements of CBTE as:

1. Teaching competencies to be demonstrated are role-derived, specified in behavioral terms, and made public.

2. Assessment criteria are competency based, specify mastery levels, and made public.

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3. Assessment requires performance as prime evidence, takes knowledge into account.

4. Student's progress rate depends upon demonstrated competency.

5. Instructional program facilitates development and evaluation of specific competencies.5

The Elam essential characteristics are perhaps more often thought of in the preservice realm. They can however be applied to the needs determination-inservice arena. The position of this paper is that conceptually CBTE is more easily adapted to inservice education than to preservice education.

Elam's five essentials fit nicely into a needs assessment scheme. Items one and two offer the opportunity to identify teaching skills in particular situations. Items three and four provide direction for establishing a procedure to determine needs, and the final item addresses itself to the improvement of teaching skills.

The systematic data based approach utilized in CBTE provides a means to tie needs assessment and inservice together with other parts of the school program. Robert Houston and Robert Howsam point out that CBTE is planning in systemic terms, dealing simultaneously with the elements that compromise a total system.6 A systematic data based

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approach can make possible the continuous updating of teaching skills. The use of a systems approach, however, requires that specific decisions be made as to what is to be accomplished. It also requires that problems in inservice teacher education can neither be resolved nor exist in isolation from the total program of the school district. As an example of this, one might consider that if the school district is unwilling to provide released time or extra compensation for a teacher to improve a skill that the district itself says he or she must have, then there is little likelihood that the new skill will be developed.

The Politics of Assessment

The assessment of the needs of school personnel can be threatening to those who are being assessed. The threat may or may not be implied. A decision to identify teaching skills presumed to be necessary for existing and new programs can become a matter of great concern to some individuals charged with carrying out the program. Organizations representing the teachers become concerned that the assessment will be used as a device to dismiss and retain teachers, rather than as a device to improve teaching.

In addition to concern about assessment the introduction of CBTE at the inservice level can become a highly partisan issue. Unfortunately CBTE often illicits an emotional response rather than reasoned consideration. Theodore Andrews believes that teachers will demand a significant role in any
A competency based system that includes inservice education. A few of the political questions to be dealt with are: Who will determine what teaching skills are required? Who will determine which teachers need which skills? Who will determine what learning activities are appropriate to develop certain skills?

The position put forth in this paper is that the design of a needs assessment system in a CBTE framework must consider along with the conceptual strategy a corresponding political strategy. The integration of these two strategies calls for a systematic approach to planning and implementation.

A Proposed Strategy

The strategy offered in this paper is an attempt to combine the conceptual aspects of needs assessment with political considerations. Generally, the conceptual notions come from attempts to apply the essential elements of CBTE to needs assessment. The political implications come from pilot efforts to use these conceptual notions in needs assessment and inservice programs. The pilot work has been done in three school districts; a large urban district, a middle class suburban district, and a small rural district.

7Theodore E. Andrews, Atlanta or Atlantis? A publication of the Multi-State Consortium on Performance Based Teacher Education.
Generally, the strategy begins with the determination of some of the teaching skills needed in a particular school district. Once needs have been established then assessment procedures are developed to determine where teaching personnel are in relation to these needs. Finally, the needs assessment strategy leads to inservice education opportunities.

There are two assumptions that provide the foundation for this strategy.

1. Needs assessment is based on the improvement of teaching skills.
2. Those who are to be assessed should be active in the development of the assessment procedure.

Identification of Needs

The identification of needed teaching skills is the first step in the strategy. By utilizing a CBTE approach, teaching skills are identified as competencies that teachers should have in order to carry out the program of the school district. The school district has to make a decision as to how the teaching function should be analyzed (How competencies should be determined). Later we will describe two approaches used by two different school districts to determine this.

The next question to be considered is who is to analyze the teaching function? Most teachers in the field are inclined to believe that they know more about what a teacher does than anyone else.Researchers and those who attempt to
project what a teacher should be, usually feel that they know more about the role of a teacher. However, inservice teachers are not likely to be willing to have someone else analyze the teaching function and then have the administration hold them responsible for these functions. We have found that teachers are willing to listen to the advice of so called experts but they intend to reserve the final decisions for themselves.

An illustration of a role the "experts" might play would be in helping the teachers to clarify ideas. Suppose that one of the competencies needed is the skill of questioning. Here the teachers might be aided by looking at a number of alternative questioning strategies which would help to define what types of questioning skills are appropriate, how they might be assessed, and what types of training activities are available.

One approach to developing inservice competencies has been tried by the Atlanta Public Schools. A comprehensive revision of their elementary curriculum was carried out in the early 1970's. Five areas of literacy were developed for all pupils: personal, career, aesthetic, social, and intellectual. Major ideas, concepts, and objectives were identified for each of these areas. In addition to the five areas, a basic instructional strategy was developed to carry out the
curriculum. The curriculum was developed by teachers, community, professional organizations, etc.; then the curriculum was piloted in ten elementary schools. After one year of piloting one of the pilot schools was selected to develop competencies thought to be necessary to implement this curriculum.

The teaching staff of the school, university personnel, plus curriculum and supervisory personnel from the district office, began to systematically determine what competencies were needed to implement the curriculum. As an illustration, Figure 1 depicts the instructional strategy to be employed in carrying out the curriculum. The teaching staff analyzed the strategy, applied their experience in piloting the curriculum for one year and began to determine what skills a teacher needed. The strategy (see Figure 1) as you see begins with "Find what student knows." This implied diagnostic skills. The five areas of literacy referred to earlier indicate that diagnostic skills need to go beyond the intellectual into the social, aesthetic, and personal areas. There are, of course, additional competencies needed to utilize the prescribed strategy.

The Atlanta approach might be classified as a curricula approach to analyzing the teaching function. They took the

8."Atlanta's Elementary Curriculum Revision Project", Your Schools; a publication at the Atlanta Public Schools, (April, 1973), 3.
Figure 1
Instructional Strategy Utilized in Atlanta's Elementary Curriculum Revision

Find what student knows

Select content area

Decide what student is to do-how and measure if he has

Offer student several ways to learn

Student does activities

Test student if he has learned

Start next objective

Check if he remembers what he learned

Interact with learner about experience

Try again new way

Ibid.
basic curriculum with its instructional strategy and from this inferred competencies for teaching. The strategy employed in Atlanta was involvement of the teachers (among other groups) in developing the curriculum. Teachers then had the opportunity to define the teaching skills needed for implementation. While there is still, perhaps, some apprehension on the part of some teachers, this should be reduced because of the involvement of the teachers from the beginning.

Another effort to develop competencies for purposes of assessment was done by the Mentor, Ohio Exempted Village School District. The Mentor project utilized differentiated staffing within two elementary schools using open-space settings. Within these two schools professional and paraprofessional staff members were employed in a role hierarchy (i.e., Master Teacher-Instructional Strategist, Staff Teacher, Assistant to the Teacher, and Intern). The project focused attention on the need to enhance instructional opportunities for pupils by developing a systematic approach for continuous staff growth based on individual as well as differentiated staff needs. Specifically, the project focused on specifying competencies for teachers in a differentiated staffing pattern. These competencies were to be used in an assessment procedure to determine what types of staff development activities were necessary to enable the teaching staff to develop and maintain
the desired level of proficiency.\textsuperscript{10}

The strategy utilized in Mentor was initially to have the personnel involved react to an instrument developed to measure perceptions of competency levels within each school. The statements utilized in the instrument were drawn from the literature on differentiated staffing and from current operational job descriptions. Staff members were asked to react to the degree to which the statements were operational in their buildings. They were also asked to indicate the importance of each statement. One of the statements on the instrument was "Teachers in my building show evidence of successful planning of learning activities." Statements such as this provided a basis of discussion which led to the specification of competencies for a differentiated staffing pattern.\textsuperscript{11}

The Mentor approach can perhaps best be described as a speculative approach to analyzing the teaching function. The instructional staff, with some structure present in the instrument, speculated on what teachers do within a differentiated staffing pattern. The political strategy is present because those who are to be affected were making the decisions.

\textsuperscript{10}An Assessment System Utilizing Teacher Competencies for Differentiated Staffing. Developed by Mentor Ohio Exempted Village School District and The Center for Competency Based Education, University of Georgia, (Athens, Georgia: February, 1974).

\textsuperscript{11}Model Teacher Education and Differentiated Staff Assessment. Mentor Ohio Exempted Village School District, ESEA Title III Project (45-71-208-2).
There are, of course, other approaches to developing competencies for inservice teachers. The two illustrations were used because of the attempt to put together conceptual and political strategies. In both cases, once the competencies were identified they provided the baseline data that describes where the school district wants to go and what a teacher should be able to do.

It is interesting to note that in both the Atlanta and Mentor efforts, neither group identified as a teaching competence any of the strongest variables in the relationship between teacher behavior and student learning identified by Barak Rosenshine and Norma Furst. This would indicate the lack of inputs by researchers into determining competencies for teachers in the two districts. Consequently, we would suggest that part of any identification of teaching skills be preceded by opportunities for consideration of research on teaching. Most teachers have not had the opportunity to consider the theoretical and research aspects of teaching. Although the decision for determining the specific competencies should be the responsibility of teachers, they need to be exposed to the study of teaching.

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Assessing the Needs

The assessment of needs requires that some type scheme be developed that can describe where a teacher is in terms of the school district's requirements and can also provide an opportunity to chart a direction for improvement. In developing assessment procedures our experience has been that you begin with the assumption that persons who have a certificate and have been employed by a school district are competent in the opinion of those who granted the certification and those who employ. This assumption may be odious to some readers; but nevertheless, it is difficult to start with the assumption that some teachers are competent and others incompetent because competence without some data base is a relative thing. A teacher with a certificate and a job has as much claim to competence as anyone else. It also is, in our opinion, unwise to start with the proposition that assessing needs is a basis for finding out who is and who is not competent. It has been our experience in the three school districts that when we start from a base that everyone is presumed competent, there is less reluctance on the part of teachers to participate.

W. Robert Houston uses the illustration of the violin when discussing competence. He points out that the violin soloist at the symphony must be able to read music, properly handle the bow, tune the instrument, and have a stage presence. But so must the beginner in the seventh grade concert. The differences between the violin soloist and the seventh
grader being in the criteria which are acceptable for an adequate performance.\textsuperscript{13}

Houston then points out the parallel in teaching. The beginning teacher may perform adequately in asking higher order questions, establishing set, and writing criterion-referenced objectives, but might not be able to integrate those skills and employ them in given circumstances. The beginning teacher may be adequate the first year on the job but after a few years of experience she should be able to integrate the skills and employ them appropriately.\textsuperscript{14} In the Mentor model referred to earlier in this paper the Master Teacher instructional strategist certainly should be able to more effectively utilize teaching strategies than the staff teacher.

The differences in levels of competence and the reluctance by teachers to be associated with incompetence led us to utilizing a continuum of proficiency for each competency. The definition of proficiency being to advance or move forward. By utilizing the continuum we have the opportunity to allow movement through inservice education towards new levels of proficiency. Theoretically, one can always become more proficient. The idea of continuous improvement of one's

\textsuperscript{13}W. Robert Houston, Strategies and Resources for Developing, A Competency-Based Teacher Education Program. (New York State Education Department and Multi-State Consortium on Performance-Based Teacher Education) 21.

\textsuperscript{14}Ibid., 21-22.
skills is difficult for any organized profession to be against. Point one on the continuum can be the position where one enters the profession or where minimum proficiencies are exhibited. The last point of the continuum can be the ultimate in teaching or the place where a teacher uses special skills in particular situations.

At each point on the continuum a set of criteria must be developed that are acceptable at that level. A special set of criteria is needed for the violin soloist and a special set for the seventh grader. Figure II illustrates how a continuum of proficiency might look.

The criteria or indicators of proficiency help us to operationalize the competency. They provide the precise criteria and conditions under which the competency will be judged. In a needs assessment system the criteria not only help in the identification of where the teacher is, but it will aid in setting directions for improvement. For every competency, representative indicators of proficiency should be developed. It is the position of this paper that they should be developed along a proficiency continuum. We use representative indicators because in our opinion the same indicators are not necessarily acceptable in all situations.

Teachers also feel that because of variation in conditions, the same indicators are not appropriate for every situation. For example, learning outcomes being related to pupil entry behaviors may not always be possible or desirable.
Area of Competency: Planning
Statement of Competence: Teacher organizes lesson to facilitate learning.

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Representative Indicators

1. Learning outcomes stated behaviorally.
2. Conditions of each outcome stated in clear behavioral terminology.
3. Achievement variables stated in learning outcomes.
4. Affective variables included in learning outcomes.
5. Instructional materials clearly identified.
6. Summative evaluation included.

1. Learning outcomes are related to pupil entry behaviors.
2. Plan is flexible and dependent upon pupil feedback.
3. Learning outcomes can be assessed.
4. Materials are appropriate to each pupil.
5. Assessment checkpoints are noted throughout the plan.

1. Learning outcomes based on psychological, and sociological principles.
2. Individual learning outcomes for each pupil are stated.
3. Information feedback loops are included in the plan.
4. Materials are selected that are appropriate to the learning outcomes.

An Illustration of a Needs Assessment Proficiency Continuum Figure II
Available data on pupil learning behavior may be limited only to the cognitive. Or the lesson being taught may focus on experiences that someone thinks are desirable for pupils to have. If the purpose is to experience something, then pupil entry behaviors may not be important.

Chances are that the indicators of proficiency may be appropriate for some teachers in some classes, but they are certainly not appropriate for every teacher in every situation. Therefore, it is our feeling that those involved in the needs assessment should have the opportunity to negotiate additional indicators of proficiency either for purposes of assessment or for determining appropriate directions for his personal inservice education.

Negotiation becomes a critical feature of the proposed strategy. Who the teacher negotiates with will be discussed in the succeeding paragraphs. But the politics of negotiation give the teacher the opportunity to have his views plus his unique teaching situation considered. Conceptually, there are at this point in time, few people who are willing to state categorically that they can specify all of the conditions and criteria under which one can be stamped competent.

The negotiation of proficiency also allows for dialogue among the teacher and those who participate in the assessment process. The beginning teacher can be assisted in considering what are the most appropriate skills to be developed immediately while the experienced teacher can be helped to
establish some sort of priority. Moreover, it is also useful to have someone else's opinion in determining where one ranks on a proficiency continuum. Finally, negotiation makes the individual being assessed active in the entire needs assessment effort.

Who Assesses?

Negotiation implies that self-assessment be part of any needs assessment procedure. Our experience has been that most teachers express a desire to use self-assessment for one of the following reasons: (1) They hypothesize that they are not likely to change their performance unless they see a discrepancy between what they want to achieve and what they are actually achieving. (2) They feel that they know better than anyone else about their particular teaching situation.

John McNeil and James Popham point out that there is a tendency when using self-assessment for teachers to overrate themselves. Further, there are negligible relationships of self-assessment with other criteria such as student ratings and measures of student gain. McNeil and Popham also state that most teachers seem to criticize the superficial aspects of their teaching; personal mannerisms, appearance, etc., rather than the relevant aspects of their work.¹⁵

Still the political expedient remains. We believe that at this point in time self-assessment will probably have to be part of any assessment procedure that carries teacher approval. However, to be effective in self-assessment, teachers should be trained to focus on the relevant aspects of their work, especially in judging the consequences of their behavior on pupils. Furthermore, teachers must have opportunities to practice these skills. There is competence in the application of self-assessment skills just as there is in asking questions. If self-assessment skills plus proper attitudes towards needs assessment can be built, then the acceptance of a needs assessment system can be enhanced. It is our opinion that self-assessment and the political strategy are complementary.

A needs assessment system also should be related to the administrative hierarchy of the school district. There should be some type of subordinate-superordinate relationship. If the teacher is in the subordinate role, then the role of superordinate might be played by a principal, supervisor, or in a differentiated staffing pattern by a team leader. The superordinate, while perhaps posing a threat in some instances, does have some responsibility for seeing that programs are carried out. If needs assessment is to be based on improvement, then the superordinate has responsibility for this, plus being in a position to make the inservice effort more responsive to the teachers' needs. It is the position of this
paper that through the use of indicators of proficiency, with the teacher and superordinate negotiating the indicators, there is less possibility of threat to the teacher. The possibility of dialogue for improvement and understanding is also expanded.

As an illustration, suppose that a competency for a teacher is in the area of diagnosis. Teacher A has no particular skills in diagnosing pupils. Teacher A and the principal agree that the teacher should focus first on diagnosing the intellectual abilities of pupils. They agree that one of the criteria to be used in assessing intellectual abilities is the use of teacher made diagnostic tests for groups and individuals. In order to become more proficient, Teacher A is to develop a skill in building tests that can identify where pupils are on specific skill continuums in reading and mathematics. Inservice activities should then be recommended by the principal that will help Teacher A to learn how to construct and administer diagnostic tests in reading and mathematics. Once the teacher develops the skill and utilizes it in the classroom, then there would be opportunity to develop further diagnostic skills that hopefully would continue to make the teacher more proficient.

We believe that teachers and administrators can work together in identifying needs if it is for purposes of improvement. Obviously, there are the human requirements of trust and consideration that must be present in the relationship
for this or any other working relationship to succeed. We are hypothesizing that if a subordinate and a superordinate agree on an area or improvement, then precisely define what the improvement will be, there is a good possibility that improvement can be assessed by both parties. Again, it is also important to consider that the administrative hierarchy be responsive to the needs of the teacher. A hierarchy is likely to react more readily if it is represented in the process.

Summary

This paper has presented a proposed strategy for developing and utilizing a needs assessment strategy based on Competency Based Teacher Education. The strategy takes into account both conceptual and political considerations. The strategy comes from attempts to combine some of the conceptual elements of CBTE with pilot efforts to use these conceptual notions in school districts. Some of the suggested procedures are as follows:

1. Teachers should make the final decisions on needed competencies to perform effectively in a school district. However, teachers should have opportunities to consider the theoretical aspects of teaching including research findings prior to making decisions about needed competencies.

2. The assessment procedure should begin with the assumption that needs assessment is for the improvement of
teaching. Therefore, we begin with the notion that teachers are competent and that the purpose of the needs assessment is to help them become more proficient.

3. A continuum of proficiency for each competency should be developed in order to allow for continuous teacher growth. The indicators of proficiency on this continuum should be negotiated by the assessor and the teacher.

4. Self assessment should be part of the needs assessment procedure. However, self-assessment skills need to be developed in order to make this a successful venture.

5. The administrative hierarchy of the school district should be involved in the assessment procedure.