This paper examines some issues associated with emerging educational programs and training concepts and suggests some basic organizing principles for developing competency-based programs for the education of school leaders. The issues discussed include the following: (a) reliability of instructional systems in producing desired outcomes, (b) identification of relevant competencies, (c) level of specificity, (d) prespecification of outcomes, (e) the theory-practice continuum, and (f) the problem of transfer. From a program perspective, there are three phases leading to competency mastery for the educational leader. Phase one focuses on learnings at the knowledge and comprehension level. Phase two places greater stress on application-level learning, which could be realized through simulation activities, lab sessions, and school-centered projects. Phase three is the administrative internship. Eleven basic guidelines for developing a competency model conclude this paper. Program goals and a program structure are illustrated; a 15-item bibliography is included. (PD)
A RATIONALE FOR COMPETENCY-BASED PROGRAMS IN EDUCATIONAL ADMINISTRATION

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Professional programs in school administration are undergoing a critical reexamination. A recent survey indicates state level initiative has led to the implementation of program criteria forecasting major changes in educational administration training programs in some states. The professors in some of the training institutions and the practitioners are cooperating in an attempt to generate a new and, hopefully, more useful rationale as a framework for leadership education.

Some of the impetus for this introspection comes from an awareness that the traditional, hierarchical mode of leadership in education is undergoing a severe test of validity. Leadership is becoming more and more a function of the most able individual within the given situation than it is of status or station.

Peabody examined and compared perceptions of authority bases in various public service organizations. He found that teachers value authority of competence over authority of position, person or legitimacy. What is suggested here is that increasingly, leadership attaches to him who exercises competence within the stated situation.

It is apparent, however, that a second factor has also contributed significantly to the current reexamination of leadership education. This is the growing suspicion that programs for the education of school leaders have produced negligible results when the training experience has been analyzed as a predictor of job-performance.
Fiedler summarizes a number of experimental studies focusing upon leadership training in military and other organizations. He found insignificant differences in on-the-job performance between groups trained in leadership and matched groups receiving no formal training in leadership.

A report of the Committee of Professors of Secondary School Administration and Supervision, attached to the NASSP, suggests that leadership training in education is also deficient and concludes that major changes are necessary in the preparation programs for school administrators.

The University Council for Educational Administration Commission on Certification reported in 1971 that:

we do not have adequate evidence to justify particularly with reference to performance criteria, typical existing state certification requirements, university division standards, or preparatory programs in educational administration.

The apparent failure of traditional programs to demonstrate "results," coupled with increasing taxpayer reluctance to support educational programs without evidence of success, has produced a movement from theory based to performance and competency based programs. By the summer of 1973 eleven states have mandated that programs for the preparation of school administrators be based upon competency or performance criteria.

It is my purpose here to examine some of the issues and problems associated with these emerging programs and training concepts, and to suggest some organizing principles as a basis for developing more venturesome programs for the education of school leaders.

RELIABILITY OF INSTRUCTIONAL SYSTEMS IN PRODUCING DESIRED OUTCOMES

On the basis of our review of the product vs. process controversy in performance based education it would seem unwarranted to separate the terminal behavioral outcomes which are sought from any specification of learning prerequisites. We believe that the problem is not best described as the absence of any proven relationship between instructional means and learning outcomes, but rather what could better be described as a complex and somewhat obscure relationship at this point in our understanding of the teaching-learning transaction. This is due, in part, to the fact that the products of learning are several in number, our learning theory base is fragmented and incomplete and that individual learners learn best in ways that are unique to them.

For these reasons, we have endorsed an eclectic view concerning the structural and theoretical foundations of the career education curriculum. Based upon the present status of theory as a foundation for curriculum decisions, Schwab concludes:

What remains as a viable alternative is the unsystematic, uneasy, pragmatic, and uncertain unions and connections which can be effected in an eclectic. And, I must add,
anticipating our discussion of the practical, that changing connections and differing orderings at different times of these separate theories, will characterize a sound eclectic.8

With all of their imperfections, our existing theoretical bases must be maximized in order to develop some measure of reliability in our instructional systems. However, Schwab holds that even an eclectic view is not sufficient:

The stuff of theory is abstract or idealized representations of real things. Our curriculum in action treats real things: real acts, real teachers, real children, things richer and different from their theoretic representations. If, then, theory is to be used well in the determination of curricular practice, it requires a supplement. It requires arts which bring a theory to its application: first, arts which identify the disparities between real things and theoretic representations; second, arts which modify the theory in the course of its application, in the light of the discrepancies; and, third, arts which devise ways of taking account of the many aspects of the real thing which the theory does not take into account...9

Thus, the reliability of Instructional systems in producing desired outcomes can best be described as tentative at this time. We can improve this state of reliability by adopting an eclectic view in conceptualizing the program and we can improve reliability by adopting and improving the role concept of an art which bridges the gap between theory and practice.

IDENTIFICATION OF RELEVANT COMPETENCIES

The practicality of the job analysis approach as a basis for designing learning programs, and their constituent components, depends upon some kind of consensus concerning the appropriate competencies to be stressed in the career education program. A problem that is often raised is: should the performance units in a career education program be limited to only those which have universal application or should they encompass situationally specific competencies?

An examination of competency statements in emerging programs in educational administration may lead one to conclude that statements of terminal competencies tend to be somewhat molar and, therefore, a competency, thus described, could be applied to a variety of situational settings. This characteristic allows the program to be highly individualized.

Although job analysis has been suggested as the basis for determining the appropriate competencies of the program, it is not clear which procedures should be employed. Is the "man on the job" view the most appropriate framework? What emphasis should be placed on the outside observer's perspective? Finally, what role should the theoretical literature play in determining appropriate competencies? A secondary question here is, shall we accept the current definitions of the task by the incumbent as our model or should we generate a model based upon an ideal conceptualization of the role which stresses not the "is" but rather the "ought"?
Our bias in this program design suggests that equal emphasis be placed upon what "ought" to be the role of the school administrator rather than a mere consensual determination of what is. The theoretical literature will play a big role here. This is not to suggest, however, that the "is-ought" approach implies a mutually exclusive relationship. Rather it would seem advantageous to develop some synthesis of various perceptions of the educational leader's role, the necessary tasks and the competencies.

LEVEL OF SPECIFICITY

Another issue is, how discrete should be our description of the competencies, or their components, in order to make them identifiable and measurable, on the one hand (a basic tenet of these programs), but not to detract from the assumed wholeness or organismic nature of administrative behavior, on the other hand? Some critics of CBE have advanced the argument that complex behavior cannot be analyzed into constituent parts. Thus, to assume that the sum of a set of simple competencies will result in a more complex competency is described as an invalid premise.10

This specious argument, rooted in organismic assumptions about learning, is misleading. Bloom's analysis of cognitive operations suggests that although there are qualitative breaks in the hierarchy of cognitive functions, there is also an interrelatedness.11 Higher order cognitive operations presume mastery of lower order prerequisites.

Thus, to examine complex behaviors in terms of simpler, prerequisite skills may not be sufficient to explain the process whereby complex, cognitive behaviors are learned, but it does at least appear to be a necessary component.

The final task of reducing molar statements of competencies into instructionally useful objectives calls for a high order of ingenuity. This final reduction of competency statements presents some sticky problems. The curriculum means which will lead to competency development, may be extremely difficult to prescribe for some competencies. The level of precision that we can specify, in observable and measurable behavior, presents another kind of problem for other competencies and objectives. To specify the clearly observable behavior and the acceptable performance level for a learner whose task is to "formulate an integrating solution to a conflict," implies a level of forecasting precision which is not compatible with the nature of the behavior under consideration. We can, however, specify acceptable behavior by applying criteria, or guidelines, which define the behavior sought, as a class or category.

Various models have been suggested as a framework for the task of analyzing molar statements of competencies into their constituent elements at the instructional objective level. The NASSP-PSSAS model classifies process skills into such categories as diagnosis, prescription, evaluation, etc.12 The McCleary-McIntyre model combines elements of Bloom's taxonomy and Katz's tri-dimensional classification of administrative skills in such a way as to classify Instructional objectives by skill category - technical, conceptual and human relations - and, simultaneously by cognitive level operation - familiarity, understanding and application.13

What is apparent here, is that a competency based approach to leadership education should be programmatic in nature. The program model should provide
for the sequencing and integration of discrete learning experiences toward the molar competency. All of the limitations evident from our experience with the behavioral objectives movement will be confronted and solutions and accommodations must be effected.

PRE-SPECIFICATION OF OUTCOMES

It is argued by some that, although it may be possible to specify in advance learning outcomes at the level of rote mastery of explicitly formulated knowledge, complex behaviors at the affective and higher cognitive levels cannot be judged by pre-specified criteria. Eisner argues that:

...the outcomes of instruction are far too numerous and complex for educational objectives to encompass. The amount, type and quality of learning that occurs in a classroom, especially when there is interaction among students, are only in small part predictable...the dynamic and complex process of instruction yields outcomes far too numerous to be specified in behavioral and content terms in advance.

If we cannot predict or anticipate a substantial part of the learning outcomes, then on what basis shall we make instructional decisions? Generalists do make decisions concerning the content of instruction as well as the learning activities that will be employed in the classroom, and they are made with the anticipation (out of their professional experience) that certain learning outcomes will follow.

It would seem that the point of departure is not on the pro-specification of outcomes per se, but rather on the level of pre-specificity that may judiciously be employed. The means questions in career education need not be viewed as "one shot, hit or miss" propositions. In our projected role of the career educator, steeped in the eclectic and skilled in the art of bridging, we must anticipate that certain planned learning activities will fall short of the mark or result in unanticipated outcomes. However, a fundamental purpose of instructional evaluation, in our view of curriculum, is to provide the instructor with feedback that generates cues concerning adjustments in the learning environment that will enhance eventual attainment of the objective. Thus, the eclectic, practical artist becomes enmeshed in making the "unsystematic, pragmatic and uncertain unions and connections" that are necessary to achieve the goals of the curriculum.

THE THEORY - PRACTICE CONTINUUM

A fundamental element in competency based programs is the emphasis upon application level learning. At this level, the learner will not only make use of knowledge, but, given a problem new to the learner, he will be able to select the most appropriate abstractions, without prompting, from an arsenal of possibilities and correctly apply the abstraction to the solution of the problem. Through simulation and field related experiences, the learner is expected to apply abstractions stressed in the classroom to new problems in real or simulated schools.

A competency, as defined here, represents the capacity to perform and presumes the application of appropriate knowledge and skills to a specific problem.
Thus, the fundamental knowledge base (facts, terminology, theories, etc.) and skills of interpretation, extrapolation and translation are seen as prerequisites to the attainment of application competency.

Competency-based programs have been characterized as essentially apprenticeship training because of the alleged secondary role assigned to theory and because of the prespecification of behavioral outcomes. Thus it is likened to narrow, rule-following behavior. Since application level competency as defined here means the capacity to apply appropriate knowledge and skills to new and untried tasks, we believe that this calls for more than narrow, rule following behavior.

We are led to speculate that the disaffection with traditional programs for administrators is not due to an alleged over orientation to theory but is due rather to the failure to stress learnings beyond the knowledge and comprehension level. Thus, there should be no dichotomy between theory and performance, but rather an extension of the continuum from theory to performance. We have already suggested that there is a real gap here and that the bridging of this gap constitutes the task of the practical art.

THE PROBLEM OF "TRANSFER"

Closely allied to the issue raised in the theory-practice discussion are the competing assumptions concerning the manner in which transfer of learning takes place. The emphasis upon theory as a base for training in school administration appears to be rooted in Field Theory assumptions about transfer of learning. To succeed in an unpracticed task that belongs to the same class as the practiced one, but differs in some respects, it is necessary to grasp the essential principles or generalizations, which describe the whole class of phenomenon. Thus, it may be concluded from this that the mastery of theory equips a practitioner to cope with any set of problems that fall within the purview of the theory.

Learning theorists of the Associationist persuasion, on the other hand, hold that the likelihood of transfer taking place depends upon the presence of identical elements in old and in the new learning situations. Thus practice is stressed so as to build up as wide a repertoire of S-R bonds as will facilitate competency to deal with new problems. Thus in administration programs, there would be stress upon the reconstruction of reality in the schools through gaming and simulation devices, where it is assumed that a particular learning is more likely to be acquired if, in the practice situation, we reconstruct as many elements as are likely to occur in the unpracticed, real situation. The importance of the internship, or practicum experience, is highlighted here.

We do not see these two views as incompatible or mutually exclusive. Our eclectic framework permits us to incorporate the principles of both systems into a competency oriented program for school leaders, by stressing the importance of administrative theory as a foundational base to cope with the confusing welter of tasks and problems in administration and by producing a broad range of opportunities to practice application of knowledge to both real and simulated problems. Thus the program at one point would stress lab work, practicum and internship experiences to illuminate, exemplify and utilize theory. In our earlier discussion of the "practical art" we had indicated a need to bridge the realm of theory and the world of the real.
From the program perspective, we anticipate three distinct, yet overlapping phases leading to competency mastery for the educational leader. Phase I is centered largely in the classroom and focuses upon learnings at the knowledge and comprehension level. The essential knowledge base, presumed to underly mastery of application competencies, is stressed here.

The second phase would still be centered in the university classroom but would anticipate that some of the learning activities would culminate in school centered learnings. Lab work, simulation, and clinical experiences would emerge as common activities. The individualization of competency development would be heightened here through the use of a wide array of learning modules used to support competency development. As distinguished from Phase I, there would be a much greater stress on application level learning which could be realized through simulation activities, lab sessions and school centered projects.

The final phases of the program would be centered in the school through the administrative internship. The further development of competencies primarily at the application level would be stressed here.

(See Page 10 for Program Goals (Figure I))

SUMMARY

To sum up conclusions and inferences that may be drawn from our previous discussion, we will here list guidelines and principles that may serve as a basis for developing a competency model.

1. Determination of competencies should stress a leadership role rather than a management function and should predominate in the instructional and educational aspects of administration.

2. Leadership skills should be classified into three broad areas: technical, conceptual and human relations.

3. Learning activities, leading to competency mastery should be sequenced and integrated according to three broad mastery levels: knowledge, comprehension, and application.

4. Program structure should further emphasize sequential development by the identification of three distinct and viable program phases:
   b. Lab-clinic centered, (comprehension and application development).
   c. Field centered experiences (at the application level).

5. Program structure should be flexible so that in addition to the traditional university course, significant portions of the learning will be undertaken in laboratory and clinical settings stressing independent study centering on learning modules.
The final list of competency statements should be derived by a synthesis of perceptions gained from administrators in the schools, non-professional observers and from the theoretical literature.

Competency statements should not only deal with perceptions of the role as it is now carried out, but also as it might be carried out in a more ideal conceptualization of the role.

Competency lists derived from surveys and from the literature should be screened so as to eliminate the mundane, the situation specific, those inappropriate for university concentration, etc.

With respect to the theoretical base which guides the structuring of learning activities and the choice of media, we should be eclectic in our posture, recognizing that the theoretical base for a highly reliable instructional system is very tenuous and this reliability can best be strengthened through the refinement of the practical art of bridging theory and practice.

The reliability of instructional systems can be improved by structuring systematic evaluation, or feedback loops into the curriculum as a basis for adjustments in the instructional system.

The career education program for administrators should reflect a strong dependency upon the theoretical foundations of administrative behavior. Courses, modules, lab work, simulation and field experiences should have a major orientation toward the understanding and utilization of theory.
PROGRAM GOALS (FIGURE 1)

School Principals' Expressed Needs and Interests
Theoretical and Scholarly Literature Concerning the Principal's Role

Competency Statements Validated and Screened for Significance, Teachability and Consistency

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<th>Skill Domain</th>
<th>Suprv of Instr</th>
<th>Curric Devlpt</th>
<th>Task Areas</th>
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<td>Interpersonal</td>
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PROGRAM STRUCTURE (FIGURE 2)

Objectives Expressed as Competencies

FOUNDATION CORE -
Theory Oriented
Traditional Courses
Research Admin Learning
Philosophy Curric. Supervision

LAB-CLINIC - Individualized -
Simul. & Lab Sessions - Reality Centered
Flex. Course Structure - Perform. Products
with Field Applications - Learning Modules
Class and Field Centered

FIELD EXPERIENCE - Field
Experiences Planned Around
Mastery of Competencies at
Application Level (Product Oriented)
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7. Curtis and Wilson, op. cit.


