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ABSTRACT
        No group can claim professional standing without
explicit statements about what constitutes competence in that field
and the means by which competence can be attained and assessed. The
definition of competencies is the beginning step in a total
competency based program cf administrative development. Such
definition includes (1) specification of the task or defined role;
and (2) indication of the knowledge, ability, or other identifiable
characteristics needed to perform the task or role. Competency
statements are written in molar form, including required technical,
conceptual, and human knowledge skills. These statements are then
ordered according to priority and the level of competence
(familiarity, understanding, or application) specified. A new model
for administrative development works from an agreed conceptual level
about the components needed for an integrated, quality development
program and attempts to indicate where differences of opinion lie
about implementation within each component. The primary means by
which competence is to be attained can be classified in a unified
program that extends from formal university instruction into
on-the-job education in the field. (Author/WM)

COMPETENCY BASED EDUCATIONAL ADMINISTRATION

AND APPLICATIONS TO RELATED FIELDS

Lloyd E. McCleary

In the development of the professions generally, including educational administration, competency has been a central consideration. The literature of medical, engineering, public, business, and educational administration records cycles of examination, debate, and reconceptualization of the me ning of competence for each field. No group can claim professional standing without explicit statements about what constitutes competence in that field and the means by which competence can be attained and assessed.

Background

The present movement to clarify the concept of competence is not limited to education and does not represent a drastic departure from past lines of developmental work--it has sound conceptual and experiential roots. Perhaps the most useful reference point is the Southern States Cooperative Program in Educational Administration[1] of the early 1950's and detailed by Graff and Street.[2] This effort resulted in the proposal of a three-dimensional, "competency pattern" model. The three dimensions are:

1. job analysis and identification of critical tasks,

2. categorization of tasks and identification of knowledge and skills to perform in each category of tasks, and

3. theory definition, to provide perspective and the "cognitive maps" needed to understand the tasks and select appropriate procedures and courses of action.

The SSCPEA "bench mark" is only illustrative of a productive period in the development of the field that now makes a significant, new departure possible. Some of the inventions and developments that have taken us beyond this earlier "competency pattern" model and force a reassessment and redefinition are:

1. A general system theory that permits more _precision_ and possibly more rigor.

2. Formats that permit _individualization and non-time-bound_ competency attainment.

3. Methodologies that provide _alternative routes to competence._

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[1] Southern States Cooperative Program in Educational Administration: _Better Teaching in School Administration._ Nashville, Tenn.: McGuiddy Printing Co., 1955.

[2] Orin B. Graff and Calvin Street, _Improving Competence in Educational Administration._ New York: Harper Bros., 1956.

4. Evaluation models with potential of measuring com-
   petence qualitatively rather than quantitatively.

5. Interdisciplinary cooperation--medical administration,
   management, public administration, etc.--that
   requires more specificity and clarity of training.

6. Improved linkages with the field a) makes possible
   need assessment, reality oriented experiences,
   validation of program components, etc., b) increases
   expectations for relevance, and c) increases recog-
   nition of legitimate means of continuing competency
   attainment on the job.

At this point in time, these six elements represent pressures for
accommodation into a new conception of the meaning of professional develop-
ment in educational administration. They have yet to be adequately brought
together into a total design for pre-service training and for the established
administrator so that each individual can determine what he needs to accom-
plish in order to be competent and how he can attain competencies he needs.
Further, this needs to be brought about so that those who are in a position
to judge administrative effectiveness can do so in as rational a manner as
possible.

Definition of Competency

Before proceeding to an examination of competency based administration,
it is appropriate to define the meaning of the term competence as it relates
to job qualification. Competency is the presence of characteristics or the
absence of disabilities which render a person fit, or qualified, to perform
a specified task or to assume a defined role. To be competent is to possess
sufficient knowledge and ability to meet specified requirements in the sense
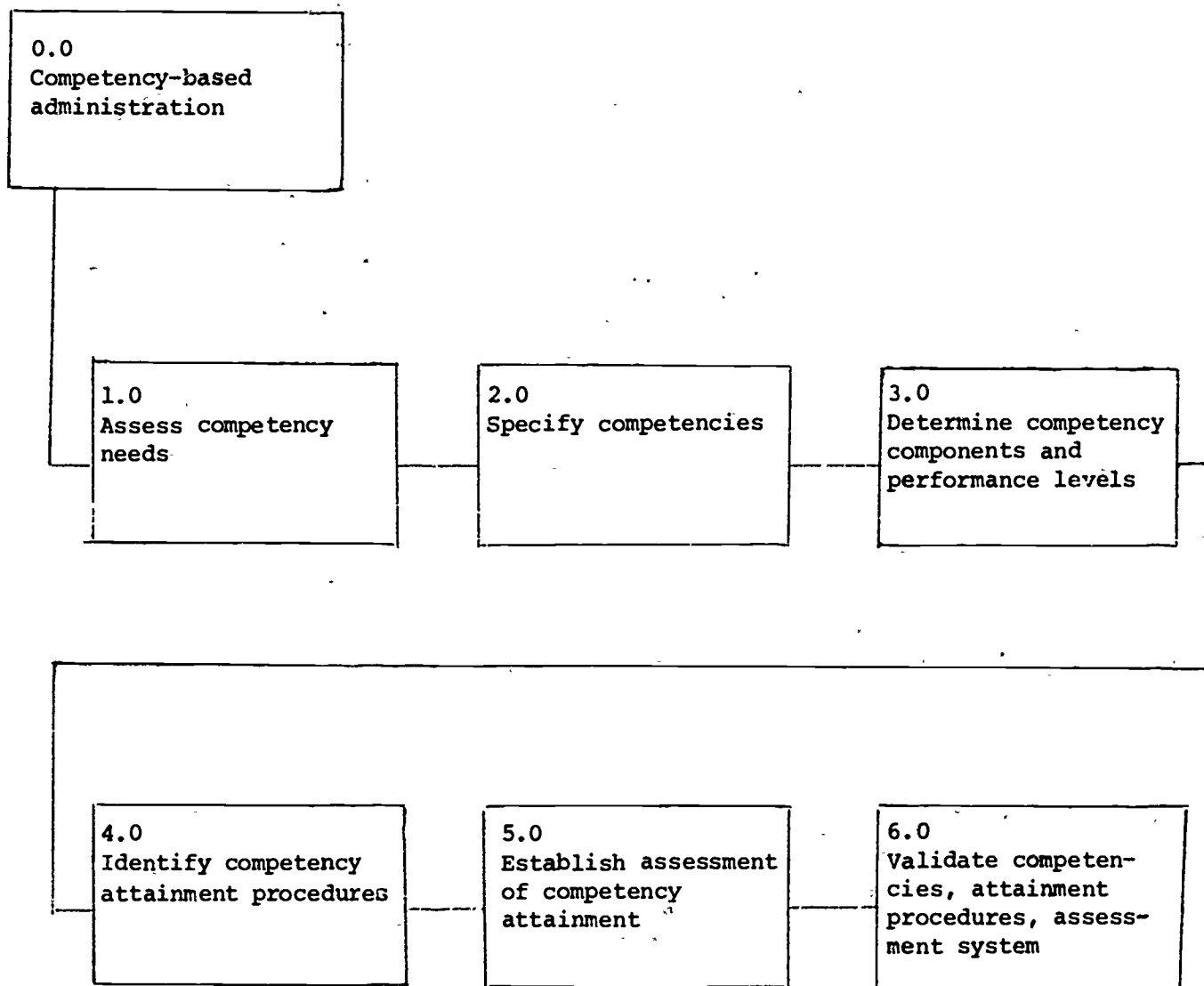of being able, adequate, suitable, capable.

The general definition contains two elements: 1) the specification
of the task or defined role and 2) indication of the knowledge, ability, or
other identifiable characteristics needed to perform the task or role. Legal
definitions distinguish between   competency and credibility--a person can
be legally competent but not give credible testimony. In a court the judge
decides who is competent (qualified to give testimony; the jury decides
whether the testimony is credible. In the professional fields both compe-
tence and credibility must be judged. In professional roles in which
credibility is a major qualification it should be specified.

A Model for Competency Based Administrative Development

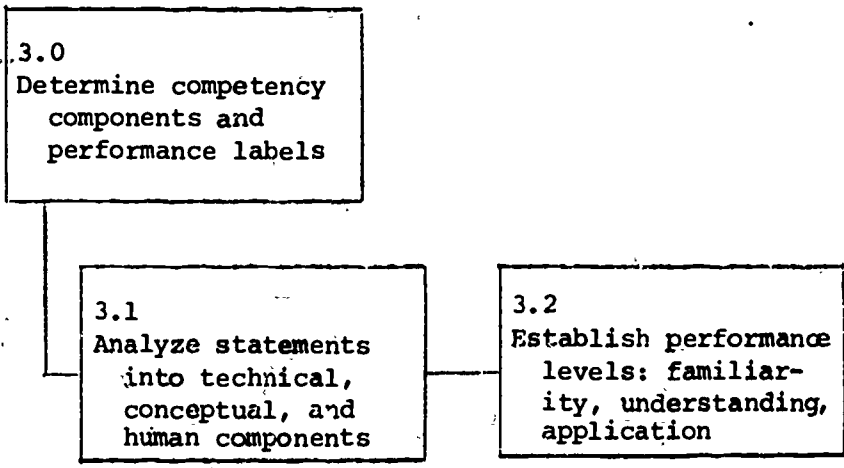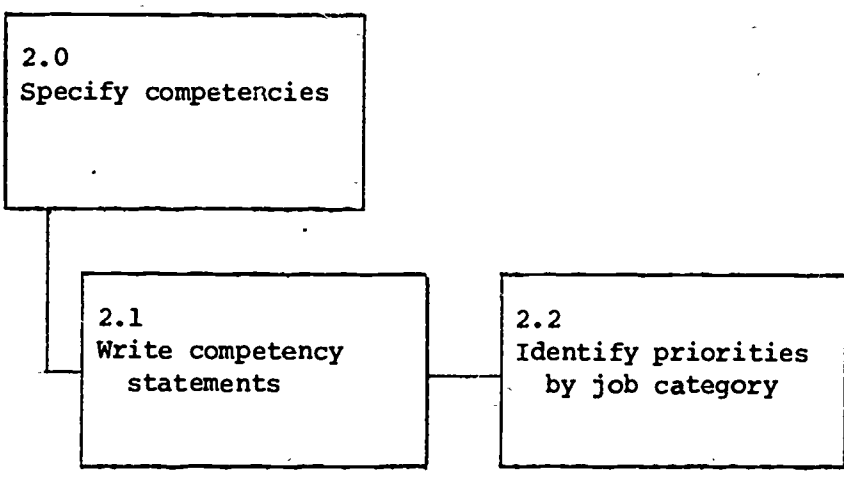The new model for competency based administrative development is
relatively clear--that is, there is reasonable agreement at the conceptual
level about the components that are needed for an integrated, quality
development program. There are differences of opinion about implementation
within each component, and illustrations of these differences will be
indicated. Most important, however, is the need to get a number of model

programs established so that evidence and experience can be obtained to clarify the model operationally.

The application of the general system model to the identification of competencies and design of programs is as follows:

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┌─────────────────────┐
│ 0.0                 │
│ Competency-based    │
│ administration      │
└─────────────────────┘
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┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 1.0                 │   │ 2.0                 │   │ 3.0                 │
│ Assess competency   │───│ Specify competencies│───│ Determine competency│
│ needs               │   │                     │   │ components and      │
│                     │   │                     │   │ performance levels  │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
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┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ 4.0                 │   │ 5.0                 │   │ 6.0                 │
│ Identify competency │   │ Establish assessment│   │ Validate competen-  │
│ attainment procedures│──│ of competency       │───│ cies, attainment    │
│                     │   │ attainment          │   │ procedures, assess- │
│                     │   │                     │   │ ment system         │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
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Each component of the model is specified as follows:

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┌─────────────────────────┐
│ 1.0                     │
│ Assess competency       │
│    needs                │
│                         │
└─────────────────────────┘
     │
     │   ┌──────────────────────┐      ┌──────────────────────┐      ┌──────────────────────┐
     │   │ 1.1                  │      │ 1.2                  │      │ 1.3                  │
     └───│ Conduct job analysis │──────│ Examine content of   │──────│ Survey characteris-  │
         │                      │      │    relevant fields   │      │    tics of those to  │
         │                      │      │                      │      │    be involved       │
         └──────────────────────┘      └──────────────────────┘      └──────────────────────┘


┌─────────────────────────┐
│ 2.0                     │
│ Specify competencies    │
│                         │
│                         │
└─────────────────────────┘
     │
     │   ┌──────────────────────┐      ┌──────────────────────┐
     │   │ 2.1                  │      │ 2.2                  │
     └───│ Write competency     │──────│ Identify priorities  │
         │    statements        │      │    by job category   │
         │                      │      │                      │
         └──────────────────────┘      └──────────────────────┘


┌─────────────────────────┐
│ 3.0                     │
│ Determine competency    │
│    components and        │
│    performance labels    │
└─────────────────────────┘
     │
     │   ┌──────────────────────┐      ┌──────────────────────────┐
     │   │ 3.1                  │      │ 3.2                      │
     └───│ Analyze statements   │──────│ Establish performance    │
         │    into technical,   │      │    levels: familiar-     │
         │    conceptual, and   │      │    ity, understanding,   │
         │    human components  │      │    application           │
         └──────────────────────┘      └──────────────────────────┘
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┌─────────────────────┐
│ 4.0                 │
│ Identify competency │
│   attainment        │
│                     │
└──┬──────────────────┘
   │
   │  ┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐
   │  │ 4.1              │  │ 4.2              │  │ 4.3              │  │ 4.4              │
   └──┤ Identify content │──┤ Identify reality │──┤ Identify integra-│──┤ Identify culmi-  │
      │ and methodology  │  │   oriented       │  │   tive experi-   │  │   nating ex-     │
      │ of formal learn- │  │   experiences    │  │   ences          │  │   periences      │
      │ ing activities   │  │                  │  │                  │  │                  │
      └──────────────────┘  └──────────────────┘  └──────────────────┘  └──────────────────┘
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┌─────────────────────┐
│ 5.0                 │
│ Establish assessment│
│   of competency     │
│   attainment        │
└──┬──────────────────┘
   │
   │  ┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐
   │  │ 5.1              │  │ 5.2              │  │ 5.3              │
   └──┤ Identify and validate│ Identify and validate│ Identify and validate│
      │   performance    │──│   problem-solving│──│   value exemplars│
      │   products       │  │   products       │  │                  │
      └──────────────────┘  └──────────────────┘  └──────────────────┘
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┌─────────────────────┐
│ 6.0                 │
│ Validate competencies,│
│   attainment proced-│
│   ures, and assess- │
│   ment system       │
└──┬──────────────────┘
   │
   │  ┌──────────────────┐  ┌──────────────────┐  ┌──────────────────┐
   │  │ 6.1              │  │ 6.2              │  │ 6.3              │
   └──┤ Identify performance│ Check actual per-│  │ Correlate assessment│
      │   criteria--immedi-│─│   formance with  │──│   data with perfor-│
      │   ate, short-term,│  │   attainment pro-│  │   mance measures on│
      │   long-term       │  │   cedures        │  │   the job        │
      └──────────────────┘  └──────────────────┘  └──────────────────┘
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With the entire system displayed, some of the key elements can be discussed, some issues identified, and a practical approach to the task of the conference laid out.

Needs Assessment. The conduct of the needs assessment hinges upon two considerations: 1) the level of sophistication of analysis of each of the three elements, and 2) the weight of importance given to each in the identification of a given competency. In each case the art of practical intelligence seems to be the key to success--job analysis can become as detailed as "time and motion" studies, extensive survey and observation, or as simple as a few selected interviews. In the case of the examination of relevant content, it is obvious that any given competency can be supported by a pyramid of fundamental knowledge that has a base that is potentially infinite. We must rely on expert knowledge and good judgment. A relatively small group of experienced administrators can provide information about job demands that is sufficiently reliable and accurate to begin the process. Likewise, a reasonable collection of practioners and scholars should know the knowledge domains that require attention. A reasonable assumption is that a small-group attack upon needs assessment by job category can produce a tentative list of needs that will be valid for planning purposes. Later, more sophisticated studies can provide refinements.

Specification of Competencies. Perhaps the most difficult activity, but a very necessary one, is the actual writing of competency statements. The scope of the statement, its form, and the elements to be included all create "hang-ups." If possible, accept the idea that education (competency attainment) is an open system: 1) all possible competencies will never be identified and some can only be vaguely defined, 2) some competencies that you will identify will not have any identifiable means of attainment, and 3) some will seem extremely simple and mundane while others will appear to be so complex as to be unrealistic.

Best progress has been made when statements are molar in form; that is, they represent an identifiable competence that involves technical, conceptual, and human knowledge and skills. Some illustrative statements are provided as well as a model for analyzing competency statements. One such statement for the supervisor might be:

> The supervisor will need to use one or more theories
> of learning to generate principles, recognize and
> diagnose learning problems, and work with teachers
> to improve learning effectiveness.
> (Guilford, Piaget, Mower)

For the principal a competency statement might be:

> The principal needs to know about and be able to
> employ procedures for establishing organizational
> goals, clarifying roles, planning, and otherwise
> providing structure in order for individuals to
> relate to each other in cooperative and supportive
> ways.

The statement is cast in a form that reads: "The principal (or whatever position is being defined) needs to be able to . . . ," or "The principal will . . . " Where possible the statement should point to a performance expectation that need not be detailed at this point. In the illustration above the statement concludes, ". . . in order for individuals to relate to each other in cooperative and supportive ways." This clause contains a performance expectation.

Once a set of competency statements have been listed by job category they should be given priority listing on one or more criteria. Assume that a set of competency statements have been listed and each placed on a card. They might now be sorted into piles from high to low priority in terms of 1) importance to success on the job, 2) the extent to which the training program succeeds in developing them to an acceptable level, 3) which should be given primary attention in pre-service and which learned on the job, etc.

Determine Competency Components and Performance Levels. A model can best be used to illustrate competency components and performance levels. The model is actually a six-faced cube with six dimensions specified. This display shows only three of the six dimensions.
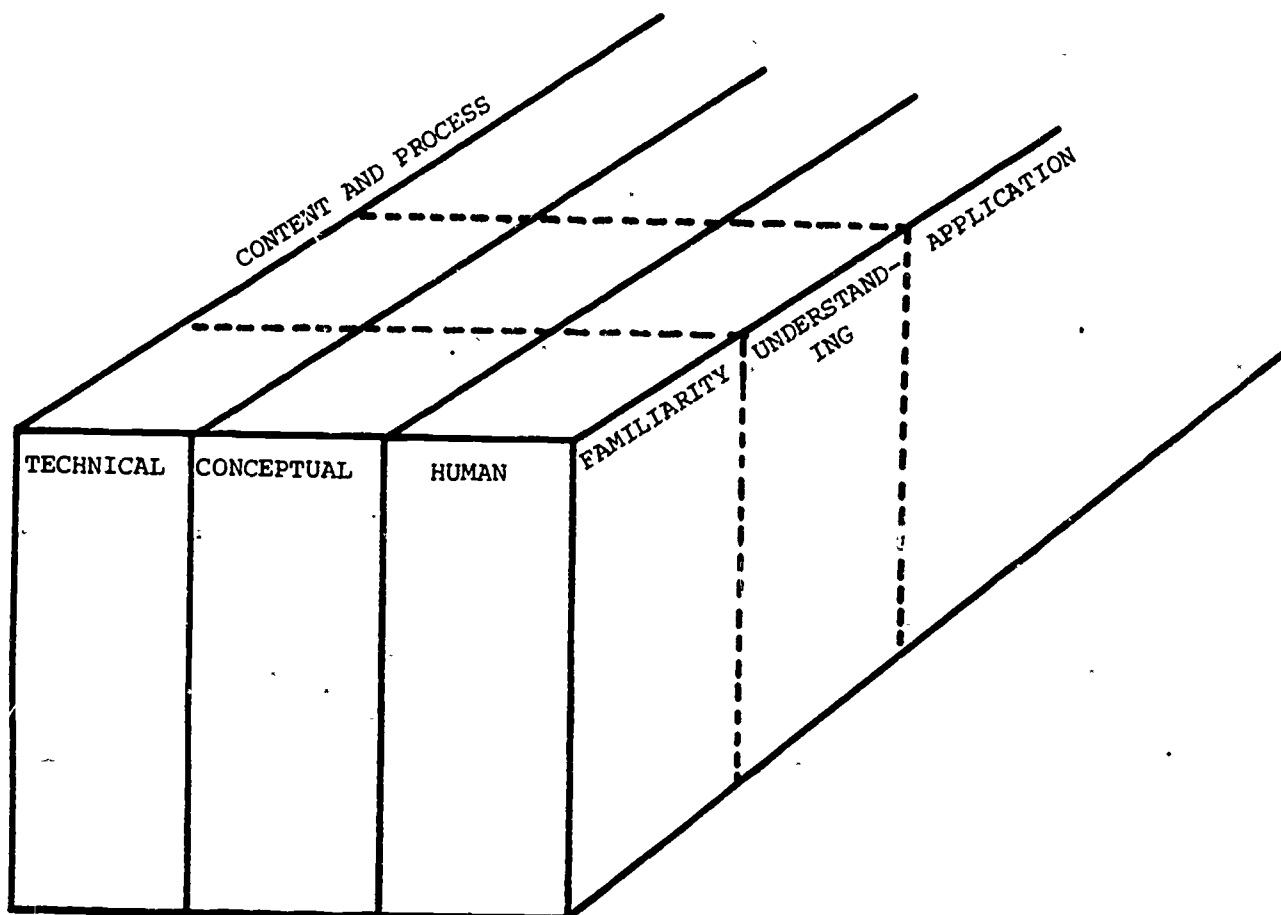
A competency statement in the form advocated in this paper will be written in molar form such that each statement can be broken down into technical, conceptual, and human components and the level of competence (familiarity, understanding, application) can be specified. An illustration of the use of the model to specify component parts and performance level is as follows:

Example of a Competency Statement

The supervisor will help teachers prepare and use lesson plans.

Familiarity

Technical: The supervisor will examine and record at least three forms of lesson plans and accurately describe them.

Conceptual: The supervisor will explain the uses, compare elements, and identify conditions for use of three forms of lesson plans.

Human: The supervisor will list (in discussion) kinds of problems he might encounter in working with teachers who are not in the habit of using formal lesson plans and indicate suggestions for handling such problems.

Understanding

Technical: The supervisor can take an element of content, specify a learner or learning group, prepare a lesson plan, and "talk through" the lesson or teach it.

Conceptual: The supervisor can analyze the elements in each form of lesson plan and critique them demonstrating that he can re-combine elements into a new form, adapt one or more forms to particular uses, etc.

Human: The supervisor will examine situations that illustrate how he would work with teachers to 1) teach them lesson planning, 2) work with them cooperatively in preparing lesson plans, etc. (role playing, discussions with supervisors after observation, etc.)

Application

Technical: The supervisor in training will work with supervisors on the job aiding teachers in the preparation of lesson plans--he will write sample plans, examine and critique plans written by others, etc.

> Conceptual: The supervisor in training will prepare an
> analysis of lesson plans prepared in practice and
> critique them in terms of the model forms.

> Human: The supervisor in training will submit sample plans
> to criticism by teachers and/or supervisors on the
> job; he will present and explain an analysis of
> lesson plans prepared by others.

Note that the card sort technique referred to above might well be
used to identify levels of competence needed for any job category. In the
case of the illustration concerning competence with lesson plans, that
statement could be included in a card sort for all administrative positions.
If this were done, it is quite likely that this competency would be judged
to be needed at the application level for a supervisor and an elementary
principal, at an understanding level for a high school principal, at a
familiarity level for the superintendent and some central office positions,
and not needed at all in such job roles as business manager. Thus the inter-
facing of competencies of the various administrative roles could be determined.
Note also that such distinctions could be used in preparing administrators to
move from one job role to another.

Identify Competency Attainment. One means of better allocation of
competency attainment is to classify the primary means by which competency is
to be attained in a unified program that extends from formal university
instruction into on-the-job education in the field. One set of rubrics being
tried is to ass gn primary responsibility for some competency development to
formal course work, some to reality oriented experiences, some to integrative
experiences, and some to culminating experiences.

Formal courses would provide the knowledge base and be carried on in
professor-directed large group settings. Reality oriented experiences would
include internships and field experiences under the direct supervision of
experienced administrators. Integrative experiences would include seminar
or small group sharing kinds of experiences, some student directed, in which
experiences would be assessed, ideas generated, problems clarified and solu-
tions explored, related fields examined, and the like. Finally culminating
experiences would be largely individual development of performance products
that would demonstrate competency attainment such as designing a new instruc-
tional program, planning and conducting an in-service training program,
codifying all district policies and preparing a policy book, serving as
chief negotiator in an employee dispute, etc. Again, the card sort technique
might serve as an initial screening of competencies into appropriate categories.

Establish Assessment of Competency Attainment. The identification of
instruments and the validation of competence is largely dependent upon the
competencies specified and the assignment of competency attainment in the
total program of administrative development. The need for precision in defin-
ing competencies is brought about by the desire for evaluation. The basis of
assessment of the individual's competency attainment is his performance.
Typically this occurs in three areas: 1) products that illustrate capability
to perform a function or skills, 2) products that illustrate problem solving
capability, and 3) behavior that displays appropriate concern for values

exemplified by education. No competency statement should be carried to the specification of technical, conceptual, and human component stage without performance specification, and no program should be planned without a clearly designed procedure for competency assessment and the development of a competency profile for each individual involved.

Validate Competency Attainment Procedures and Assessment System. The purpose of this paper is not to propose a program evaluation model. The implication for total program assessment is made possible, however, by the program of competency based administrative development. The purpose of evaluation is to monitor the system and insure quality control. Competency development has immediate, short-term, and long-term consequences that require monitoring, and the expected consequences for each time span should be specified. Once performance attainment is measured, then the procedures for achieving competence can be assessed and revised. Whether a particular competency could best be acquired in the field rather than in formal course work, for example, could be better determined than it is now. Finally, measures of performance in a competency based pre-service and on-the-job development program could be correlated with actual job performance.

Conclusion

The definition of competencies is the beginning step in a total competency based program of administrative development. Its major purpose is to provide more precision to each administrator in his development. If competencies are not defined, there is no way to insure their development. However, more precise definition and closer evaluation can expose the entire system to premature closure. Therefore, recognize the limitations in both competency definition and in evaluation and keep the system you design open and responsive. If this can be done, we shall base change upon sound information and have the capability of distinguishing fads and "tail chasing" from real progress.

January 16, 1973