Measurement for affective education within in-service teacher education is considered. Affective education is regarded as teaching that has emotions and feelings as its primary subject matter. The three main approaches to affective education are seen as (1) facilitation of emotional insight and understanding, (2) facilitation of emotional experience, and (3) facilitation of emotion-modifying actions. The dimensions for assessment of competency are referred to as knowledge, attitude, and skill. Measurement is considered in relation to these dimensions and the major competency areas—cognitive, experiential, or action-oriented. Technical and process issues are identified. The skill dimension is considered the most critical in measurement. (DB)
Issues in Measuring Teacher Competence for Affective Education

Stanley A. Fagen and Stephen Checkon
Mark Twain School
Montgomery County Public Schools

INTRODUCTION

This paper will look at the measurement challenge for affective education from a base of in-service teacher education. While we will set out a broad schema for addressing measurement, the specific orientation is to assessment of teacher competence in various areas of affective education within in-service teacher education programs. In our view, the major deterrent to measurement of competency in affective education derives from aversive attitudes, rather than methodological or conceptual problems. Because affective education involves more personal, often uncomfortable phenomena it has been perceived as less accessible to measurement. It is this perception of inaccessibility that has stalled advances in measurement rather than technical obstacles. Technical issues are essentially the same for measurement in affective education as in any other educational field.

AFFECTIVE EDUCATION: A PERSPECTIVE

The first problem facing research and evaluation in affective education is an obvious one - what does the term mean; or, more accurately, what meaning is given to the term by the evaluator? The bias here is to give generic meaning to the term, rather than reserving use for specialized curricula applications or intervention programs. In this paper, affective education will simply refer to teaching and learning about self and others' feelings (emotions, values, beliefs). Given a teacher-education focus, affective education will be defined primarily as teaching which facilitates learning about own and others' feelings. The task is that of educating people about emotions. Right off we intend to convey an integration of rational and emotional processes as inherent in the term affective education.

This perspective is highly consistent with efforts to build appreciation for the necessary interaction between cognitive and affective domains. Brown defines "confluent education" as "essentially a synthesis of the affective...and cognitive" (1970). Combs says affective education is attaching personal meaning to learning, and thus meaningful learning is synonymous with affective education (1971). Glasser (1969), Rogers (1969), Lyon (1971), Rath's, Harmin & Simon (1966), and Borton (1970) all share the premise that optimal learning occurs through the integration of thought, feelings, and actions.

These writers help us to recognize that subject content must be affectively connected to the learner for education to be relevant. In the past, subject matter was mostly impersonally related to students, and

feelings were seen as peripheral, associated, or interfering. The affective education movement has turned matters upside down, however, and currently educating people about emotions is regarded as a legitimate, indeed necessary school activity.

**MAIN APPROACHES TO AFFECTIVE EDUCATION**

Our intention is to regard affective education as teaching that has emotions and feelings as its primary subject matter. In other words, with or without a formal subject designation (e.g., science, home ec., math), affective education is happening whenever there is a planned focus on teaching about feelings. And just as any other content to be learned is effected by thoughts, feelings, and actions, so is this true for learning about feelings. Thus, in teaching about emotions, emphasis may be placed on any or all of three main functions: thoughts/ideas, experiences, or actions.

We are saying then that teaching about emotions may involve the stimulation of cognitions, experiences, or actions, and that teacher-education programs may focus on any or all of these approaches in preparing teachers for affective education. These three functions have, in fact, been represented by the main approaches to education about emotions (see Figure 1).

<table>
<thead>
<tr>
<th>Function:</th>
<th>Cognition</th>
<th>Feeling</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required for learner:</td>
<td>Insight/understanding</td>
<td>Awareness</td>
<td>Behavior</td>
</tr>
<tr>
<td>Required for teacher:</td>
<td>Facilitating understanding of feelings (feeling-ideas)</td>
<td>Facilitating awareness of feelings (feeling-acceptance)</td>
<td>Facilitating modification of feelings (feeling-alteration)</td>
</tr>
<tr>
<td>Example of Strategies:</td>
<td>Affective Curriculum</td>
<td>Affective Curriculum</td>
<td>Operant Conditioning</td>
</tr>
<tr>
<td></td>
<td>Life Space Interviewing</td>
<td>Laboratory Method</td>
<td>Desensitization</td>
</tr>
<tr>
<td></td>
<td>Classroom Meeting</td>
<td>Gestalt Exercises</td>
<td>Reciprocal Inhibition</td>
</tr>
<tr>
<td></td>
<td>Model</td>
<td>Awareness Training</td>
<td>Relaxation Training</td>
</tr>
<tr>
<td></td>
<td>Non-Directive Teaching</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 1. Main Approaches to Affective Education*
Each main approach to affective education circumscribes an area of teacher-competence. Thus for the remaining discussion of measurement in affective education we will adopt the following position:

(1) Affective education is not defined by the person using it but by the relevance of the approach used to teaching-learning about feelings.

(2) Teacher educators can prepare teachers for affective education through one or more of three major approaches: (a) facilitation of emotional insight and understanding, (b) facilitation of emotional experience, (c) facilitation of emotion-modifying actions.

(3) Each of these main approaches is associated with various teaching strategies, allowing for flexible selection of more specific competencies within a competency area.

DIMENSIONS FOR COMPETENCY ASSESSMENT

We have found it useful to come at assessment of any competency objective through the same awareness of integrated human functioning spoken to earlier. In a previous research report (Fagen & Long, 1970), progress in attaining each teacher-education goal was evaluated in terms of measurements related to each major functional dimension, i.e., cognitive, affective, action. Operationally these dimensions are referred to as knowledge, attitude, and skill, and are defined as follows:

Knowledge dimension - acquisition of concepts, facts, information pertaining to the particular competency, which is expressed in an academic or "study" type situation. Turner has identified this dimension as Level 6 on his continuum of criteria for competency-based certification.

1 Our preference is for development of basic skills in each of these competency areas, rather than specialization in any one. For example, the Mark Twain School teacher education program includes goals encompassing each of these main approaches: ability to comprehend and communicate effectively with others, and to promote mutual understanding of problems (cognitive approach); ability to employ curriculum and teaching strategies to meet emotional needs of the learner (experiential approach); ability to apply operant principles towards increasing desirable behavior (behavior modification approach). Depth and expertise in any one area may be pursued electively or through continued in-service or graduate study. The question that emerges concerns training of generalists vs. specialists - an issue that requires more space than can be given here.

We also share the viewpoint that availability of alternative patterns of teaching increases the possibility of meeting different learner needs and situations (cf. Hunt, 1960; Joyce, 1971).
Attitude dimension - personal feelings or values associated with the particular competency, and, generalized aspects of self-concept which effect translation of knowledge into practice.

Skill dimension - application of knowledge to teaching behavior which closely approximates that required in direct association with children. Turner's levels 3-5 including skills assessed via classroom observation, simulations, role playing, and micro-teaching.

These dimensions are not mutually exclusive in that skill is more a resultant of knowledge, attitude, and life habits than a separate parameter. They are listed in parallel, however, because of the different measurement techniques encompassed within each dimension. It is also helpful to review skill limitations (where measures are of applied behavior) with an eye to knowledge and attitude sources.

MEASUREMENT OF COMPETENCY IN AFFECTIVE EDUCATION

Measurement will now be considered in relation to the primary dimensions for assessment of competency, and, the main competency areas in affective education. Some technical and process issues will be identified briefly, in an effort to pinpoint problems requiring awareness and further research.

KNOWLEDGE DIMENSION

It appears that measurement of factual and theoretical information involves issues common to each major competency area (cognitive, experiential, or action-oriented).

1. Technical issues

The traditional problems in testing or sampling knowledge are applicable. Sampling techniques may include essay, true-false and multiple choice exams, case studies, written reports, completing missing statements, and structured interviews. We have recently developed a format where we provide items of information about a child (from a variety of data sources including tests, teacher observations, cumulative grade reports), and ask teacher-interns to rank order these items for importance in making judgments about the child's functioning (intellectually, emotionally, and interpersonally). In addition to rank ordering information items, interns are requested to make a concise summary statement of the child's functioning in several areas. Intern responses are evaluated against a criterion group of experienced psychologists. All of these techniques of sampling knowledge present well known problems in developing reliability, and validity, e.g., objective-subjective scoring, meaningfulness of information sought, predictive utility.
2. Process issues

Implementation of knowledge measurement procedures in an in-service teacher education program should be guided by several considerations:

a. Information sampled and material presented needs to be relevant to real work situations, e.g., a report on one of teacher's own students,

b. Mastery of information tested has definite potential for application to the classroom.

c. Objectives for knowledge dimension need to be explicitly stated, with pre-testing accomplished whenever possible.

Teachers investing in in-service programs are apt to be highly motivated to improve their teaching effectiveness, yet short on time and patience. They become quickly dissatisfied with purely academic issues or tasks, and yearn to put theory into practice. These observations seem genuine, although to a lesser extent, for experienced teachers who enter into advanced study at a University.

ATTITUDE DIMENSION.

As with knowledge, measurement of attitude seems to involve similar issues for each of the major competency areas in affective education. It is evident that degree of skill demonstrated in a teaching act is significantly influenced by attitudinal forces (cf. DiVesta, 1961; Rasmussen, 1962). Thus, while it is quite useful for a teacher to independently view a videotape of his own teaching, this procedure is limited to the extent that cognitive objectives are in conflict with personal values or attitudes about the specified objectives. Goldhammer (1969) has emphasized the importance of sensitive supervision in bridging the gap between avowed objectives of a teaching act and actual performance. Recently in conferring with one of our teachers about a strategy for working with a negative student, the teacher mentioned that the student loves to work with clay sculpturing and will complete less preferred tasks to get more time in the arts lab. When I remarked that this was a nice example of an operant principle, the teacher was taken aback. "I don't think of that as a behavior mod thing - it's so simple and just developed naturally."

Despite considerable exposure to ideas about naturalistic reinforcement and humanistic applications of operant principles, the teacher still reflected a personal bias that behavior modification involves artificial or mechanical procedures.

1. Technical issues

There are two central issues in measuring the attitude dimension:

a. Selection or construction of techniques that reveal feelings specifically related to an affective approach, and,
b. Selection or construction of techniques that reveal generalized feelings toward oneself which, in turn, effect confidence and performance (Diggory, 1966).

The first of these issues demands consideration of "value-indicators" (Raths et al., 1966) related to facilitation of feeling-ideas, feeling-acceptance, or feeling-modification. For example, skill in promoting student understanding about feelings relates to value placed on self-awareness, empathic understanding, and psychodynamic explanations of behavior. Or, skill in facilitating acceptance of emotional experience relates to the valuing of emotional freedom and openness.

While attitude scales have not been developed to specifically tap these approaches to affective education, a number of measures contain variables which conceptually relate, e.g., permissiveness in HTAI, open-mindedness in Rokeach Value Survey, control in VAL-ED, authoritarianism in California F-Scale. More direct probing of feelings toward an approach can be accomplished by eliciting attitudes toward particular teaching functions (e.g., counselor and disciplinarian roles of Teacher Practices Questionnaire, or ratings of importance on Specialized Proficiencies Questionnaire (Tompkins, 1971). Much more research is needed on teaching style or strategy in relation to personal values, although there are indications of a strong relationship (e.g., Maguire, 1968). Teacher-educators need to keep such a relationship in mind as they consider matching instruction to learning needs, and maximizing possibility for utilization of techniques or concepts acquired during training.

Positive self-concept has an enhancing effect on performance in general (e.g., Rogers, 1969). Measurement of teacher competency which includes self-concept data allows for analysis of such questions as: how does level of self-satisfaction relate to subsequent success in teaching?; how does self-acceptance correlate with degree of manifest knowledge or skill?

2. Process issues

Any technique for assessment of personal attitudes (toward self or particular aspects of a teacher education program) requires honesty and genuineness of response to be useful. An attitude of trust and respect for confidentiality has to be fostered. Whether the measurement process is geared to program evaluation will influence decisions regarding data feedback to respondents.

---

2 It is no coincidence that leaders in development of experiential approaches to affective education have fundamentally valued self-actualization through emotional honesty (e.g., Lyon, 1971).
If one regards the attainment of competence (for example, in facilitating verbal expression of positive or negative feelings) as a terminal objective then feedback on relevant attitudes is desirable as part of the learning process towards reaching the objective. If, on the other hand, program function is the objective, then attitude change may be regarded as a dependent variable.

It should be possible, however, to provide personal feedback without corrupting the need for evaluation of program. Typically our concern has been that knowledge of test results on attitude scales contaminates genuine test-taking. It is felt that underlying variables need to be disguised or kept secret. The implication is that feedback will lead to deliberate attempts to present a false but socially desirable attitude, thereby rendering results invalid. But, knowledge of results may be just as easily, and more usefully, viewed as interacting with movement towards the goal. If awareness facilitates change then enlightenment on one's own attitudes may further enable positive change to occur. This means sincere appraisal by the respondent and some ownership of the desire to evaluate goal or competency progress. In short, it appears that little or nothing is to be gained from withholding feedback - anyone bent on creating false impressions will undoubtedly do so.

Attitude feedback may be provided, with confidentiality preserved. In our program, trainees have an option to consult with a knowledgeable staff member about their results or keep results to themselves. Each trainee is assigned a multi-digit number which is used on all test forms and establishes anonymity. When used anonymously, data helps establish the relationship between attitude and performance. When used dynamically, data helps a teacher to consider a relationship between attitude and performance, thus increasing the possibility of closing any gap between actual and desired performance.

**SKILL DIMENSION.**

This is the most critical dimension of measurement, and one needing much concentrated effort. The challenge is finding the means to specify what teacher-trainees are expected to do, how they will do them, and what way the teaching action(s) will be evaluated.

---

3 Including the possibility of responsible rejection of a particular competence goal as desirable.
1. Technical issues

Several problems of a technical sort can be enumerated:

a. Specific affective skills have not yet been developed despite some initial, catalytic attempts at defining such teaching behaviors (Krathwohl, Bloom & Masia, 1964).

b. Specific behaviors need to be appraised in terms of relationship, and, technique skills. Relationship skills have to do with creating conditions for helping. These skills are basic regardless of competency areas. Thus, warmth, respect, and genuineness are as relevant for a behavior mod approach as for an insight-oriented one. Perhaps a common denominator of any approach to affective education is positive affect itself. However, relationship skills are not easily specified. Consider Carkhuff's specification for respect as an interpersonal competency: "Level 5. The facilitator communicates the very deepest respect for the second person's worth as a person and his potentials as a free individual" (1969).

Each competency approach also involves techniques which have to be specified. For example, insight approaches emphasize the techniques of active listening, decoding feelings, and causal thinking. Behavior modification approaches rely on such techniques as constructing hierarchies, desensitization and relaxation, and contingency management. All of these techniques can be translated into some clear objectives, which would prepare things for meaningful evaluation.

c. A definite and important distinction needs to be drawn between skill attainment and skill impact. Skill attainment involves measurement of specified or prescribed teacher behavior, i.e., degree to which skill meets a certain level of proficiency. For example, a skill objective might be a demonstrated ability to accurately reflect another person's feeling statements 90% of the time in a 10 minute interview. The clear focus is on the behavior displayed by the trainee in interaction with the learner.

Skill impact, however, places the focus on the payoff for the learner. Thus, the skill of reflecting feelings may be considered to promote self-insight in the learner.

It is not even far-fetched to note that in many instances operant or reinforcement strategies enable movement from antagonistic to positive relationships.
To validate this prediction one must measure the outcome or response of the learner, and not that of the teacher. In other words, skill impact signifies an outcome of an instructional or teaching intervention whereas skill attainment certifies a designated teaching input.

Clearly, when a skill is specified as needing attainment, it is with the belief that the impact on the learner will be positive. However, there is no necessary connection between attainment and impact. In-service program measurement must largely confine itself to skill attainment, while attempting to obtain follow-up data regarding teacher impact on students. Program staff must also keep alert to research findings on individual learning needs in relation to differing teaching styles.

d. Mode for observation or recording of behavior is apt to be videotape, audiotape, or in-class observation. Each has advantages and disadvantages, with technical problems for videotapes taking the lead.

e. Identifying and establishing criteria for observed teacher-behavior is a complex, time-consuming function involving many issues, e.g., agreement in scoring, inter-rater reliability, need for extensive training of raters, invasion of privacy, and interference in school program.

2. Process issues

The following issues warrant attention:

a. Influence of the video or tape recorder on the transaction observed. Efforts should be made to desensitize trainee and students to these devices.

b. Protection of learner's rights to informed consent or granting permission to be part of an observed interaction with the trainee. In the Mark Twain School teachers ask students for blanket permission (at least), to activate remote-controlled TV cameras for learning purposes.

c. Recognition that the ultimate criterion for many interpersonal actions resides within the learner. For example, insight may be predicted from such teacher behavior as reasonableness of interpretation from data given and productivity in relating feelings to antecedent and outcome behaviors, but the actual occurrence of insight can only be determined by the learner. Thus, learner-based evaluation should be sought wherever possible.
d. Skill should be considered in relation to timing of specific interventions. For example, it is not enough that a trainee can initiate confrontation techniques, they must be introduced at the appropriate time in the development of a relationship (cf. Weinstein, 1971).

**SUMMARY**

Affective education involves teaching and learning about one's feelings and, like other subjects, is enhanced by the integration of ideas, feelings, and actions. Competency in affective education may thus be developed by focusing on any one of three main areas: (1) facilitating cognitive understanding and insight about feelings, (2) facilitating experiential awareness and acceptance of feelings, (3) facilitating actions which promote desired modifications in feeling-states. Any comprehensive in-service teacher education program should develop competency within each of these three areas, although emphasis may well be different between programs and for individual trainees within programs.

It is important to measure progress in competence along three dimensions: knowledge, attitude, and skill. Salient problems in measurement have been briefly pinpointed for each of these dimensions in terms of technical and process issues. Many of these problems are tough, particularly along attitude and skill dimensions, but all are manageable.

In our view measurement in affective education will make rapid progress as educators become comfortable with teaching about feelings and values. Because affective education deals with the more personal, private, and sensitive facets of social learning it has been regarded as less accessible to measurement. In reality the major deterrent to measurement is attitudinal, rather than methodological. Recent advances in observation techniques and systems even make it possible to assess natural teacher to student interactions in the classroom. The main barrier is our personal anxieties and uncertainties. As techniques and curriculum in affective education reach further into schools, measurement problems will not seem nearly as stubborn. And, as Lyon points out, the kids may even be more open to teaching and learning about feelings than we are. "Young people today are, for the most part, much more in touch with their feelings than were youngsters of the past few generations. Many of the problems in our classrooms and on our campuses stem from the fact that teachers and faculty deny or refuse to integrate them with the intellectual content of the classroom."
REFERENCES


Joyce, B. R. AGAINST DOGMATISM - ALTERNATIVE SOURCES OF REALITY IN TEACHING AND CURRICULUM MAKING. Pre-publication draft, Columbia University, 1971.


Lyon, H. C. LEARNING TO FEEL - FEELING TO LEARN: HUMANISTIC EDUCATION FOR THE WHOLE MAN. Columbus, Ohio: Merrill, 1971.


Rogers, C. FREEDOM TO LEARN. Columbus, Ohio: Merrill, 1969.
Tompkins, J. R. A Program Content Analysis of Masters Degree Level
Teacher Training Programs in the Special Education Area of Emotional

Weinstein, G. The Trumpet: A Guide to Humanistic Psychological
Curriculum. Theory Into Practice, Ohio State University, 1971, 10,
196-203.