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ABSTRACT
         This report capsulizes the problems of defining the
meaning of social competency in young children in relation to a panel
discussion held in January 1973. Four approaches are discussed: (1)
the "bag of virtues" approach, (2) the "industrial psychology"
approach, (3) the normative-expectation approach, and (4) the
theory-guided approach. Seven conceptual distinctions important in
defining social competency, and twenty-nine statements that represent
facets of social competency in young children are outlined.
Implications for measurement, research, and policy, and an index of
competency variables are included. (SET)

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SOCIAL COMPETENCY in young children

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and

Samuel Messick

March 1973

PS 006695

Members of the January 1973 panel:

Ernest Bernal, Jr., Director, Bilingual Early Elementary Program, Southwest Educational Development Laboratory; John B. Carroll, Chairman, Human Learning and Cognition, Psychological Studies Division, ETS; Donald Cohen, Yale Child Development Center; Bruce Dohrenwend, Community Psychiatric Research Unit, Columbia University; Walter Emmerich, Chairman, Human Development, Psychological Studies Division, ETS; Edmund Gordon, Director, Health Services, Sciences, and Education, Teachers College; David Goslin, Staff Sociologist, Russell Sage Foundation; Phyllis Katz, Graduate Center, City University of New York; Leonard Krasner, Department of Psychology, State University of New York - Stony Brook; Patricia Minuchin, Department of Psychoeducational Processes, Temple University; Charles Leo Thomas, School of Education, Indiana University; Edward Zigler, Psychology Department, Yale University.

Others attending the meeting:

Scarvia B. Anderson, Executive Director for Special Development, ETS; Samuel Ball, Research Psychologist, ETS; Ray Collins, Chief, Program Development and Innovation, OCD; Joan Costello, Psychology Department, Yale University (for the Carnegie Council on Children); Harley Frankel, Associate Director, Bureau of Child Development Services, OCD; Karla Goldman, Senior Research Assistant, ETS; Nathaniel H. Hartshorne, Managing Editor, Writing Services, ETS; Ann Jungeblut, Senior Research Assistant, ETS; Esther Kresh, Acting Chief, Early Childhood Research & Evaluation Branch, OCD; Michael Lewis, Senior Research Psychologist, ETS; Samuel Messick, Vice President for Research, ETS; Barbara Phillips, Early Education Program, Columbia University; Debbie Walker, Special Consultant, Office of Assistant Secretary for Planning and Evaluation, HEW.

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Contents

On January 23-25, 1973, a panel of experts met in Princeton, New Jersey, to try to define the meaning of "social competency" in young children. They were united in feeling that social competency was something more than general intelligence and in recognizing the need to explicate that "something more" as a basis for fostering and evaluating children's development. They were divided in their approaches to the problem, largely because of differences in their own professional ideologies and experiences.

In this report, an attempt has been made to distill the essence of the panel discussion, to consolidate the divergent directions it took, and, in some cases, to compromise opposing viewpoints.

Coping with the Complexities of Competence

It should not have been surprising that the panel had difficulties with its task or that a major integrative effort was required after they had gone home. The history of attempts by philosophers, scientists, and educators to cope with the complexities of human competence should have provided ample notice of the problems.

Guttman, summarizing Spearman, reminds us that

> Plato distinguished between two kinds of abilities:
> sense and intellect. Later some writers added memory,
> and others added imagination or invention. Before the
> fall of the Roman empire, speech and attention were fre-
> quently introduced to the list. And lastly, movement.

Over the centuries the lists of abilities gradually became longer until the nineteenth century when faculty psychologists produced the longest list of all.

Spearman began The Abilities of Man with a scene from Oliver Twist describing Fagin's treatment of Oliver after the boy attempted to escape and call the police. "Here," Spearman said, "is a typical picture of mental life in one of its most acute phases.... Fagin sees Oliver, remembers his attempt to escape, thinks of punishing him, notices the club, marks the boy shrinking away and breathing quickly, perceives him stagger under the blow," and so on. "Fagin also becomes angry at what the boy has done, entertains a desire to punish him, relishes the anticipation of his writhing in pain, seizes voluntarily the club and actually uses it." Processes of the first kind Spearman called "cognition" and processes of the second kind, he said, involved "conation and affection." Although Spearman asserted that "the processes of cognition cannot possibly be treated apart from those of conation and affection," he insisted that "no less certainly the various aspects of the behavior can and must be submitted to separate consideration." That was in 1927.

In 1931, the Carnegie Corporation established the Unitary Traits Committee to explore the social and psychological implications of a broader conception of human intellectual functioning than was reflected in the theories and practices of the day. Among their grants were ones to E. L. Thorndike for an exploratory study of unitary differential traits in human nature and to Karl Holzinger and Charles Spearman for analyses designed to uncover additional factors of human competence. With the repeated application of factor analysis by many investigators over the years, again the lists of mental dimensions proliferated.

Nicholas Murray Butler talked about differential traits in somewhat different terms and related them to the outcomes of education:

> There are five tests of the evidence of education--
> correctness and precision in the mother tongue; refined
> and gentle manners, the result of fixed habits of
> thought and action; sound standards of appreciation of
> beauty, and of worth, and a character based on those
> standards; power and habit of reflection; efficiency
> or the power to do.

In 1968, Edmund Gordon repeated what he had said many times since the

summer of 1965 when Head Start was born:

> Although the goals of education tend to be stated in
> broad terms, when we come to assess education it is
> always to cognitive development and academic achievement
> that we first look for evidence of change. Too often
> we either stop with those first results or turn with
> less rigor to look at other areas either as a second
> thought or as a rationalization for our failure to find
> more impressive evidence in the cognitive domain.

In 1972, Edward Zigler--again not for the first time--bemoaned that "it

may come as a surprise to the Nation that this preschool program was not

mounted in hopes of dramatically raising IQ scores... Rather, the creators

of Head Start hoped to bring about greater social competence in disad-

vantaged children. By social competence is meant an individual's everyday

effectiveness in dealing with his environment ... his ability to master

appropriate formal concepts, to perform well in school, to stay out of

trouble with the law, and to relate well to adults and other children."

Recourse to Symposia

Not only is the problem of defining the full range of human competence

an ancient one but the current process for coming to this definition is not

without its enlightening, if somewhat discouraging, precedents. We have

mentioned the Carnegie Committee of 1931. Spearman, whose perceptiveness is

surprisingly timely, devoted an entire section of his great book to "Re-

peated recourse to symposia":

In a resolute effort to clear up the situation, recourse
was had to a symposium of several pre-eminent British
authorities. And as was inevitable from such an assembly,
many thoughts were uttered of high interest and sugges-
tiveness. But in respect of the main purpose, the result
can hardly be regarded as other than disappointing.

And after another symposium:

As before, such a distinguished gathering could not fail
to beget many an observation bearing the stamp of bril-
liancy. But as for the essential aim ... there appears
to have been no success obtained.

And after yet another symposium (this one in 1923):

But the situation became even more perplexed than at the
previous meeting.

In addition to all of the committees who through the years have assailed

the domain of intelligence (and of effective human functioning in general),

there have been many groups called together to decide which of these dimen-

sions were to be the targets of educational programs. The panel that met

in Princeton in January 1973 was just one in a sequence of committees con-

cerned with the objectives of interventions at early childhood levels. It

is true that the questions different panels sought to answer were phrased

in somewhat different terms--for example, "What should be the character-

istics of a comprehensive set of instruments designed to assess children's

readiness to enter usual school programs?" "What should be the goals of

Head Start for children of 4 to 5?" "What are the most important variables

to assess in a comprehensive evaluation of the effectiveness of preschool

programs?" However, the substantive issues underlying all of these efforts

have been very similar. The particular charge to the January panel was to

define "social competency" in young children and to specify some of the im-

plications of this definition for measurement and research.

Tenacity of IQ

After all that has gone before, it is not easy to see why in 1973 people are still using general IQ as the major yardstick of development and the principal criterion of the effectiveness of early education programs. And why it was deemed necessary to convoke still another symposium. And why there was any reason to anticipate that this effort would be any more successful than its predecessors--or its results any more influential.

The continued emphasis on IQ can probably be attributed to several factors. It is a venerable concept in psychology and has been comparatively well measured. Furthermore it has a larger collection of correlates that are predictive of success in a wide variety of human endeavors than any other variable. In fact, IQ is such a global variable that it incorporates a great many other variables in whole or in part. Thus there are those who argue that unless an intervention program influences IQ, it is trivial to look for other effects; if there were any significant other effects they would be reflected in IQ changes. Some go further to state that improvements in motivation, attention, and the like are worthwhile goals only if they affect general intelligence.

It would be easier to accede to the primacy of IQ in early education if education were only a distributive enterprise, gradually channeling individuals into adult-role niches on the basis of expectancy of success. (Even here, however, IQ seems to be more predictive of level of later accomplishment than of type of accomplishment. Although Terman said, "I am convinced that to achieve greatly in almost any field, ... special talents have to be backed up by a lot of Spearman's g," he also pointed out that

"tests of 'general intelligence' ... do not ... enable us to predict what direction the achievement will take, and least of all do they tell us what personality factors or what accidents of fortune will affect the fruition of exceptional ability.")

However, education cannot be concerned only with distribution or pre-diction. In some cases--and these are the cases in which education is most appropriately characterized as "intervention"--its very nature is to try to change the predictions which backgrounds of poverty or earlier poor achieve-ment would lead to. In most cases, its programs are oriented primarily to-ward the special talents Terman referred to and the factors that may affect fruition of abilities. In all cases, it must be concerned with the quality of children's lives while they are being educated as well as in the future.

Underlying all of these conceptions of the role of education are a differentiated view of human capability and potentiality and a need for differentiated treatments. By definition, this view and this need cannot be served by undifferentiated measurement strategies.

Unfortunately, the very predictive power of the IQ variable has tended to dominate developments in psychological and educational measurement. Thus, as we indicated earlier, many investigators and practitioners have continued to use IQ tests because they were there. When they sought dif-ferential measures of abilities, achievements, and noncognitive factors, they encountered both a paucity of valid and reliable measures and a con-fusing abundance of inadequate and idiosyncratic tests, indexes, and sched-ules. This was partially because development of measures of particular variables had not proceeded out of a systematic, rational mapping of domains

and the relationships between them. Thus there might be hundreds of measures of anxiety (representing various investigators' limited operational definitions), dozens of measures of rigidity (with low correlations among them), and only one or two measures of interpersonal sensitivity in the child. The lack of mapping in turn could be traced to the difficulty of getting educators and social scientists to agree about what the variables were that belonged on the map.*

Goal Definition and the Problem of Values

Participants in the successive panels struggling with the problem of defining goals and dimensions of competence for young children are typically struck at the outset by the value-laden nature of the enterprise. Reactions quickly encompass a number of concerns: with being value-free or at least value-neutral (the conventional stance of social science), with the pluralistic and sometimes conflicting values of our society, with whether there are transcendent values holding for the whole society, and with the fact that values change over time and circumstances. Panel members also suffer from a reluctance to impose their value-free or value-full analyses on others.

This concern with value issues is related to the kinds of approaches taken to defining goals and desirable dimensions. Kohlberg and Mayer (1972)

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*Some social scientists insist that specification of the domains is an empirical problem and have undertaken long-term programmatic efforts within particular domains; but such an approach must indeed be long-term and provides no guarantee that important areas will be covered first, that some areas will be covered at all, or that relationships between areas will be studied.

outlined three of these approaches and the January panel added a fourth.
They can be summarized as follows:

1. The "bag of virtues" (or Boy Scout or Sunday School) approach.
This approach attempts to specify the set of traits characterizing a healthy,
fully functioning person. It suffers chiefly from historical lethargy, dif-
ficulties in accounting for multiple and sometimes conflicting "ideals,"
and confusions about traits which have different values at different age
levels.

2. The "industrial psychology" (or prediction-of-success or predictors-
and-precursors) approach. This strategy is always future-oriented; goals
for young children may be stated in terms of capabilities needed for adult-
role functioning. Difficulties arise to the extent that certain adult abil-
ities are not directly predictable from the characteristics of children.
Indeed, some children's characteristics may be positive predictors of adult
functioning at one age and negative predictors--or unrelated to adult be-
havior--at another age. There is a criterion problem here too, since the
dimensions of effective adult behavior have not been much better defined or
mapped than the dimensions of effective child behavior. Furthermore, by the
time the children become adults the requirements for adults may have changed.

Another problem that must be faced with approach 2 as well as approach
1 has to do with characteristics that may be valued and adaptive at one
point in time but either may lead to negative consequences or be considered
inappropriate at a later point in time. For example, exploratory behavior
is valued for everyone, but if it is permitted to occur without any re-
straints in the young child it can lead to inability to control and focus

attention in situations that demand a disciplined response. And impulse ex-
pression, frequently encouraged in preschool programs, can cause serious
problems in many business and social situations.

3. The normative-expectation approach. Goals are stated in terms of
age- or grade-related expectancies. Usually these expectancies are derived
from population surveys--for example, those using achievement and ability
tests. Frequently, too, goals are oriented toward the averages established
by those surveys--for example, to have all third graders in a city reading
at the national median or above. In addition to the problems of shifting
norms groups and changes in the meaning of scores at different points on the
measurement scale, this approach runs into the danger of limited purview:
Its proponents may tend to focus attention only on those variables with which
they have had a good deal of experience or which have been extensively
measured (and that can mean the variables that have been easy and inexpensive
to measure). An even more serious drawback to this third approach is, that,
just as focus may be limited, so may aspirations be unnecessarily assimilated
to the status quo.*

4. The theory-guided approach. This approach rests upon the existence
of theoretical conceptions about the nature of the developing organism and
its interactions with the environment. It should have the advantage not only
of identifying important variables but also of considering those variables in
hierarchical and interdependent structures. Mediating and organizing

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*It is interesting to note that the goals and measures for the National Assess-
ment of Educational Progress were built on the basis of expectations about the
level of performance that should be attained by the top 10 percent, the
average, and the bottom 10 percent in four age groups in the United States.

processes in the human being would then become the organizing scheme for structuring and implementing the goals. · Thus the choice of variables and goals would derive from an understanding of the nature of the processes of learning, development, and social involvement. The Kohlberg-Mayer "developmental-philosophic" strategy is one such theory-guided approach; it is based on the cognitive-developmental theories of Piaget and the philosophic-educational theories of Dewey. The theory-guided approach is possible only if there are relevant theories to guide it. It is fruitful to the extent that those theories are comprehensive enough to embrace a wide range of critical variables, including those which common sense and intuition indicate are important.

There is a relatively short step between the processes of specifying goals and of specifying criterion measures for program evaluation. The January panel vacillated between the task of defining "social competency" in general terms and the task of defining those dimensions of social competency that are implicit in the stated goals of existing intervention programs, specifically Head Start. The latter program-centered focus leads to a fifth strategy for defining variables, a "goal-guided" strategy, but it is not really directed toward the same end as the four preceding approaches which treat goals and associated variables simultaneously. The goal-guided strategy is, of course, entirely relevant only in situations where the goals are already well defined, and it does not necessarily generalize to other programs and other times. The panel recognized the weaknesses of each of the four strategies for defining goals and thus the need not to exclude any of them in their efforts to create a broad delineation of "social competency." As indicated above, they also moved into the fifth (goal-guided or evaluation)

strategy occasionally, and the strategy was useful in some cases for apprais-
ing the feasibility of translating a variable or construct into measurement
terms.*

The meeting was oriented toward definitions of "social competency" that
would guide the planning of future programs as well as the improvement of
ongoing ones, and the panel noted the urgent need for better assessment and
evaluation of programs that have been in existence for a number of years.
At the same time it was recognized that rational analyses and program evalua-
tions--however sound--are not enough to effect substantial improvements in
interventions into the lives of young children. Such improvements can only
come from increased understanding of the processes of learning and develop-
ment that a concomitant program of targeted research can provide.

Conceptual Distinctions Important in Defining "Social Competency"

"Social competency" is just one of many phrases that might have been
used to mobilize attention to the broad range of cognitive and personal-social
dimensions of the developing child. As indicated earlier, the panel members
were united in rejection of intelligence as a unitary trait or as the sole

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*When the panel used this strategy for the task at hand, they focused mainly
on the educational component of intervention programs. It must be recognized
that comprehensive programs such as Head Start also involve health and
social service components, and some advocates of these programs stress these
components over education. Any evaluation of these programs would, of course,
have to encompass all components.

criterion for evaluation of intervention programs. They were also united in

doubt that their symposium could generate a definitive description of the

parameters of "the whole child."

Among the problems that had to be resolved--or at least confronted--were

these:

1. <u>Distinguishing between behaviors that are prized by many segments of</u>

<u>society across a large number of situations, and behaviors that are not nec-</u>

<u>essarily universally admired or are differentially appropriate to different</u>

<u>situations.</u> There are actually two coordinates here and four quadrants, for

a behavior can be prized by many but only for certain situations or be adap-

tive in many situations but not widely valued. In reality, the dimensions

are correlated, and it is more difficult to think of examples in some cells

than in others. However, they are not perfectly correlated, and this means

that goal makers must consider the ecological and population generality of

each construct they think is important. It does not mean that they discard

constructs that are context- or population-specific; but it requires that

each statement about a "socially competent" attitude, skill, or coping style

be accompanied by an enumeration of the population subgroups and of the

classes of occasions for which it is an exemplar of competence. This step

requires delineations of the population groups (boys, girls, regional and

ethnic groups, etc.) and taxonomies of contexts (preschool, home, adult-child

interactions, peer relationships, etc.) that are relevant to the young child.

2. <u>Distinguishing between proficiency and performance, and between</u>

<u>maximal and typical performance.</u> The former distinction acknowledges the

difficulty of making inferences about capability in the absence of a response

or when the child makes a low-level response. It is related to the preceding problem, in that context and other factors can play as large a role as capability in determining level of response. Early education programs must be concerned, first, with developing response proficiency within the child's repertoire and then with encouraging its display or performance in appropriate situations.

The maximal-typical distinction is both goal- and measurement-related. We are sometimes interested in the best performance that the child is capable of, but more often we are interested in the level and quality of performance that he exhibits under ordinary circumstances.* Most specifications of goals of early childhood programs are not explicit on this point, and this leads to confusion on the part of those who try to implement or evaluate the programs. On the measurement side of the problem, we should recognize that there is a bias toward assessing maximal performance, especially in the cognitive area. This is probably an appropriate bias, because, even when typical performance is at issue and is being measured, it is frequently necessary to estimate maximal performance (or underlying proficiency) in order to interpret the meaning of typical-performance levels. As indicated earlier, this is of critical importance when typical performance is low. The discrepancies between maximal and typical performances are also valuable in deciding on appropriate intervention strategies for individual children: If both typical and maximal performances are low, it is better to concentrate on improving

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*This distinction between maximal and typical performance should not be confused with the distinction between optimal and minimally acceptable performance. Maximal and typical performance relate to observed behavior, whereas optimal and minimally acceptable performance relate to standards used in the evaluation of performance.

proficiency; if typical performance is low and maximal performance is high, it is better to concentrate on raising typical performance levels, probably through motivational and context manipulations; if maximal performance is low and typical performance is high, we should reexamine our concepts and measurement techniques.

3. Recognizing that variables may have different meanings--and thus different implications for social/educational action--at different levels of intensity or in their positive and negative ranges. For example, with a variable such as impulsivity, measured in terms of reaction time, quick responses may indicate lack of reflection but extremely slow responses may be more indicative of obsessiveness than of reflectivity. Examples of bipolar dimensions include flexibility-rigidity (frequently measured with different scales in its positive and negative regions) and sociability (extroversion-introversion); extreme behavior at either end may be maladaptive, but in the case of young children we are frequently most concerned with identification and treatment of the negative extremes (extreme rigidity, or introversion carried to the point of complete withdrawal). Some of the confusion in this area arises from taking labels for variables too literally without careful analysis of their meanings and correlates.

4. Distinguishing between the positive components of social competency (the characteristics we can agree we want the child to have or develop) and negative characteristics which may serve as obstacles to learning, development, and societal adjustment. In the first case, we can state the goal in terms of developing, increasing, or maintaining the component, while in the second case we are concerned with reducing or eliminating it. Examples of

variables in the latter category are hostility, aggression, and anxiety. In
the extreme these are pathological behaviors, and unfortunately they seem to
be more stable longitudinally than some of the more positive traits.

5. Identifying different classes of variables in terms of their de-
velopmental trends. The easiest class to deal with encompasses those vari-
ables that increase with age and training (frequently tapering off at later
ages or with lack of utilization); many of the typical school achievement
variables and variables of intellectual competency belong here. An error
made frequently in the past was to assume the same form of incremental func-
tion for variables which in fact behave quite differently. Indeed some
variables decrease with maturity--for example, impulsivity and even positive
self-image (at least for high achieving children). Other variables may be
cyclical or remain relatively constant. Those in the last categories pre-
sent special challenges in terms of goal definition and intervention, depend-
ing on whether the characteristic is judged positive or negative, on the age
level for which the goal is being defined, and on the developmental stage at
which the intervention is introduced.

6. Recognizing the importance of defining and assessing social compe-
tency in dynamic as opposed to static terms. This implies both taking account
of the different developmental trends for variables (as discussed in the pre-
ceding point) and the need for repeated measurement of the stage or direction
of development. It implies too that criterion variables at one point in time
may serve as mediating variables in the longer run.

7. Making explicit the relationships between program goals for parents
and program goals for children. In some cases, a major program goal is to
effect changes in parents. And such attempts to foster changes in parents

are frequently based upon a general philosophy that improving parent compe-

tency and ameliorating family problems through social services will have an

indirect and long-term positive effect upon the children in the family.

Furthermore, some of the variables of social competency for parents resemble

those for children. However, this panel's objective was to define the goals

for children, and indeed in the short time available it could not do complete

justice even to that task. Parent involvement thus was examined only as it

might be directly instrumental to the development of child competency. In

this case, the criteria of children's social competency would be appropriate

not only for evaluating the direct effects of a program on the children but

also the effectiveness of the program in engaging parents as agents. For

example, some programs attempt to increase parent ability to interact sup-

portively with children; this should in turn help the child in such areas as

language development and self-confidence and, in general, to learn how to

utilize adults as learning resources.

Components of Social Competency and Goals of
Early Intervention Programs

The twenty-nine statements that follow represent facets of social com-

petency in young children and can serve as goals of early intervention pro-

grams. To some extent, the statements reflect all of the approaches to goal

definition cited earlier, although the "prediction-of-success" approach was

less directive than the others and criteria of success were left implicit

rather than explicit. At first glance, the "bag of virtues" approach may

appear to dominate; it does to the extent that behaviors valued by parents

and society in the seventies are essential components. However, some of the statements are also associated with a normative-expectation approach, in that age- and stage-appropriateness are highlighted. Most important, the statements are systematically theory-guided, although there was no single theoretical school of thought to embrace the full range of "competency." Rather, concepts were drawn from a number of different theories within domains and from partial formulations bridging domains. Among the most influential were the conceptualizations of Piaget, Guilford, David Russell, Rapaport, and Binet in the cognitive-perceptual areas; Tomkins, Rotter, Schachtel, Seymour Sarason, Carl Rogers, Emmerich, and Bandura in the personal-social areas; and Lewin, Werner, Thurstone, Witkin, Dewey, Kohlberg, J. McV. Hunt, Robert White, Bruner, and Kagan in the areas of interface between cognition and personality.

There are no doubt some facets of social competency that have been omitted. Moreover, without a corresponding taxonomy of situations (see the first point in the preceding section), it has not been possible to specify all of the conditions under which a given process or behavior is desirable. It should be recognized too that few intervention programs would attempt explicitly to implement all of the goals. However, if the goal options are viewed in a comprehensive context, program directors should at least be sensitized to the need to avoid subverting some of the goals in their zeal to foster others.

For the reader's convenience, there is an Index of Competency Variables at the end of the report.

1. <u>Differentiated self-concept and consolidation of identity</u>

   The child recognizes that he has different levels and kinds of skills in
   different areas of cognitive and interpersonal functioning and different
   interests in different areas; at the same time there should be an inte-
   gration of these differentiated subsystems into a consolidated identity so
   that he appreciates some constancy of self across time and situations.

2. <u>Conception of self as an initiating and controlling agent</u>

   The child tends to initiate action and direct his own behavior within
   realistic environmental constraints; he does not feel powerless, or a
   pawn of environmental forces. This goal includes some feelings of re-
   sponsibility on the part of the child for his own learning and skills
   acquisition and for decisions affecting himself and others.

3. <u>Habits of personal maintenance and care</u>

   The child meets common standards for his peer group in cleanliness,
   grooming, hygiene, eating habits, bladder and bowel control, sleeping
   habits, and safety practices.

4. <u>Realistic appraisal of self, accompanied by feelings of personal worth</u>

   The child's appraisal of his abilities and interests is not at substantial
   variance with his performance and behavior; however, even for children
   at relatively low levels of proficiency, there must be some feeling of
   worth as an individual. Here is a case where the goal is not necessarily
   to develop higher and higher feelings of worth but rather to avoid any
   instances of extremely negative self-deprecation. (At adult levels,
   <u>positive</u> extremes in self-esteem--grandiosity--may also have pathological
   implications.) Realistic appraisal of self and feelings of personal worth,

while important objectives in their own right, also undergird resiliency
in the face of failure or frustration and are reflected in level of
aspiration and other motivational processes.

5. Differentiation of feelings and appreciation of their manifestations and
   implications

   The child knows about and experiences different types of negative and
   positive feelings, recognizes their expression in himself and others, and
   takes this recognition into account in his actions and judgments. These
   abilities are a necessary, if not sufficient, basis for the development
   of intra- and interpersonal sensitivity. They also provide an affective
   groundwork for later aesthetic satisfaction.

6. Sensitivity and understanding in social relationships

   The child perceives and accepts differences between himself and others,
   and appreciates perspectives and viewpoints of others. He rejects clearly
   antisocial values (e.g., violence) but tolerates a broad range of values
   different from his own.

7. Positive and affectionate personal relationships

   The child does not hesitate to display affection to adults and other
   children and forms relatively stable friendships and personal associations.

8. Role perception and appreciation

   The child recognizes that children and adults take somewhat different
   roles in different situational and interpersonal contexts, knows what
   is expected of others and himself in these different contexts, and takes
   role expectations into account in his own behavior. These kinds of

sensitivities and adaptations are especially important when radical shifts

in social or cultural context occur--e.g., between Spanish home and

"mainstream" school. However it is important too that the child appreci-

ate the diversity of available role options and reject artificial (or

stereotypic) boundaries on role opportunities.

9. <u>Appropriate regulation of antisocial behavior</u>

The child does not exhibit a recurring pattern of extremely disruptive,

violent, aggressive, hostile, or other types of antisocial behavior (e.g.,

lying, stealing, cheating). Neither does he avoid these behaviors through

massive and primitive defenses that repress or deny the underlying im-

pulses, for such defenses are associated with anxiety and neurosis.

Rather he avoids such antisocial behavior through moderation, redirection,

or other mechanisms of impulse regulation that are at least partially

under his cognitive control.

10. <u>Morality and prosocial tendencies</u>

When there is an opportunity or situational expectation for prosocial

behavior, the child engages in such behavior more often than not. (That

is, the child tends to be cooperative, obedient, helpful, and fair as a

function of the role requirements, his perceptions of the needs of others,

and other situational factors.) Not only does the child exhibit prosocial

behavior, but as he matures he becomes increasingly aware of the reasons

and principles (moral and social) for it.

11. <u>Curiosity and exploratory behavior</u>

The child evinces curiosity about his environment and actively explores it.

He undertakes and continues such exploration without external inducement

or pressure, particularly in areas of personal interest.

12. <u>Control of attention</u>

As a function of situational or task requirements, the child attends to
relevant cues for an appropriate length of time and at an appropriate
level of concentration. The important goal here is for direction, dura-
tion, and intensity of attention to be under the control of the child.

13. <u>Perceptual skills</u>

The child perceives a unit or form as separate from its background, dis-
criminates between similar units and forms (even under simple transforma-
tions), analyzes forms into their constituent units and parts, and
synthesizes units or parts into an organized form. These goals apply
within each of the critical sense modalities: visual, auditory, tactile,
and kinesthetic. Skills in visual and auditory differentiation are
ordinarily basic to competency in language and reading; perceptual skills
in these modalities include seeing letters within words (hearing phonemes
within longer utterances), discriminating between similar letters such
as p and b (hearing the distinction between similar sounds such as ch and
sh), separating a word into syllables, and blending letters (or sounds)
into meaningful wholes.

14. <u>Fine motor dexterity</u>

The child manipulates small objects and uses tools--within his limits of
physical development.

15. <u>Gross motor skills</u>

The child walks, runs, jumps, and reaches without excessive clumsiness
and within the limits of his physical development. Note that this goal
does not imply that every child should achieve athletic or aesthetic
superiority in movement.

16. Perceptual-motor skills

The child coordinates visual, auditory, and motor behavior at an age-appropriate level or within limits of sensory acuity and other aspects of his physical development. Included here are skills in copying forms, mimicking sounds, and imitating gestures and movements.

17. Language skills

The child recognizes the meaning of words he hears, and recalls, comprehends, and interprets spoken words and sentences. At the later age levels, he exhibits the same skills with printed words and sentences and also extracts information from a body of text or tabular material. He labels objects and events appropriately, repeats information given to him, retells stories, describes objects and events, makes requests and gives instructions, and tells stories of his own invention--speaking audibly and comprehensibly. At the later age levels, he labels, retells, describes, makes requests, gives instructions, and tells stories in writing; he records information from dictation, written text, or other sources; and his writing is legible and intelligible. In his writing, he observes the simpler conventions of punctuation and capitalization and he misspells only the more difficult words. He recognizes the functional properties of words/phrases and the structural components of sentences, and applies this knowledge in his own spoken and written production.

18. Categorizing skills

The child recognizes whether objects (or events) are similar or different; apprehends the nature of the similarities and differences; categorizes objects or events on the basis of attributes, generic classes, or relationships (functional or thematic), dealing with exclusions as well as

inclusions; labels categories; and verbalizes the principles underlying
categories.

19. <u>Memory skills</u>

The child has adequate memory skills to retrieve information on the basis
of relevant cues--not just immediately but also over time. The memory
skills encompass appropriate strategies of attending, organizing, and
rehearsing. "Appropriate" here is relative to the content/form and the
retrieval expectancies. Memory is usually measured in terms of retrieval
performance. However, if a child's retrieval performance is unsatis-
factory, then it is important to try to determine where the difficulty
lies: in the attention process, the organization and storage process,
or the retrieval process itself.

20. <u>Critical thinking skills</u>

The child perceives and identifies problems, analyzes and appraises the
elements of situations (including missing components, contradictions,
and inconsistencies), and judges and evaluates conceptions, processes,
and products (his own and those of others). Essential to these analyses
and evaluations is the child's ability to appraise his own capabilities
and resources in the context of situational demands.

21. <u>Creative thinking skills</u>

The child generates multiple responses (language and motor) and con-
ceptions (ideas, associations, implications, hypotheses) to situations;
in generating these responses, the child moves flexibly across contents
and forms (does <u>not</u> perseverate within categories and breaks set or
habit adaptively); some of the responses the child generates are

original, unusual, or aesthetically satisfying. The occasion for cre-
ative responses may be invented by the child or may be initiated by
others. In either case, responses may involve translation and elabor-
ation of existing forms or, at increasingly higher levels, transformation
of existing forms and construction of new forms.

22. Problem-solving skills

The child applies memory skills and skills of critical and creative
thinking to identification, analysis, and solution of problems and to
evaluation of his own responses and products in the process. In problem
solving for decision making, this evaluation includes appraisal of
alternative solutions and their consequences. With the repeated applica-
tion of these skills in recurrent problem areas (such as categorizing),
the child develops generalized strategies of problem solution that he
draws upon appropriately in encounters with similar problems.

23. Flexibility in the application of information-processing strategies

The child recognizes that there are different approaches to exploring
the environment and to obtaining and processing information from it and
that these approaches are differentially effective in different situations;
he applies these approaches flexibly and appropriately (singly and in
balance or combination) without being locked into habitual modes of per-
ceiving and thinking (cognitive styles). For example, in order to
obtain information about a new situation, he does not limit his explora-
tion to discrete components but considers the situation as a whole and
the relationships among components (focusing vs. scanning). Of course,
the child cannot apply differential information-processing strategies

if he does not have them in his repertoire, so this goal of flexibility
in application is attainable only if the child first learns to adopt
such opposing strategies as:

risk taking - caution

persistence - relinquishment

spontaneity - reflection

memorization - organization for reference

intolerance of   accommodation of
ambiguity, contradiction   ambiguity, contradiction

24. <u>Quantitative and relational concepts, understandings, and skills</u>

The child exhibits increasing evidence of concept attainment, under-
standing, and skills--at age- and stage-appropriate levels--in the follow-
ing areas: number (including one-to-one correspondence; meaning of the
positive integers, zero, and fractions), number properties (e.g., odd-
even, divisibility), seriation and ordinality, conservation, relation
and comparison (numerosity, size, time, spatial position, value, etc.),
causality, and measurement and estimation; enumeration, counting, and
simple arithmetic and other formal operations.

25. <u>General knowledge</u>

The child has a reasonable amount of knowledge in areas important to
functioning in school and outside: health and safety, social environ-
ment (including adult roles), physical environment, practical arts
(including knowledge of tools), consumer behavior, sports and games, art
and music, literature, etc. Such general knowledge not only is important
to present functioning and survival, but also facilitates the acquisition
of more advanced knowledge and provides a basis for interpersonal com-
munication and aesthetic satisfaction.

26. <u>Competence motivation</u>

The child wants to improve his skills, exhibits satisfaction with improvement or mastery, and seeks learning experiences in the absence of external pressure or reward. This kind of motivation is more associated with the <u>process</u> of mastery than with any particular content of learning, and evidence for the generality of competency motivation would have to be accumulated across tasks and situations. This is not to say, however, that we would expect children to find this intrinsic satisfaction from learning and improvement in all areas of their activity. Nor does "competence motivation" encompass all aspects of achievement motivation; some motives to achieve are stimulated by the <u>effects</u> of success (or fear of failure) rather than by the accomplishing per se.

27. <u>Facility in the use of resources for learning and problem solving</u>

The child knows that he can obtain help and information from various external sources, knows what some of these sources are (adults, children, books, library, fire department, police department, hospital, etc.), and uses these resources appropriately and effectively.

28. <u>Some positive attitudes toward learning and school experiences</u>

The child does not have a generalized negative attitude toward learning and school experiences. While it is not realistic--or perhaps even functional--to expect every child to like all aspects of education and learning, he should have positive feelings toward some aspects and not reject the total process.

29. <u>Enjoyment of humor, play, and fantasy</u>

The child enjoys situations involving humor, play, and fantasy and par-

ticipates in them within the limits of opportunity and ability. With

increasing age, his sense of humor broadens, even to encompass himself.

Implications for Measurement, Research, and Policy

The foregoing statements about social competency carry with them certain

implications for measurement, research, and policy relating to young children.

Among these implications are two major ones:

1. <u>The immediate need to translate the components of each of the twenty-</u>

<u>nine statements into appropriate measurement terms.</u> By "measurement" we in-

clude observations, ratings, records, and social indices, as well as tests

(or other performance measures) and self-reports. Indeed, with the youngest

children and for certain classes of variables throughout the age range, tests

do not provide a valid basis for inferences about social competency, other

measurement techniques must be used. Candidate measures already exist for a

number of the social competency variables and dimensions (for various age

levels and population groups), and the framework provided in this report

offers a useful scheme for searching these measures out and codifying them.

Furthermore, the goal statements, used along with standard principles of con-

struct validity and psychometrics, provide a basis for evaluating the adequacy

of the measures that are identified.

The codification and evaluation of existing measures will also reveal

areas where new measures are needed and where construct validity must be

established. Considerations for measurement development and validation are

offered in an earlier report by Anderson, Messick, and Hartshorne. That re-

port includes sections on the importance of theoretical conceptualization,

critical properties of measuring instruments, environmental assessment as a

necessary concomitant of person assessment, educational and social applica-

tions of measurement, manpower development needs, and important policy

supports.

2. The long-range importance of increasing our understanding of the

mechanisms of learning and development. The goal statements presented in

this report reflect certain fundamental inadequacies in both our theories

and our empirical findings about young children; there are a number of pro-

cesses that we simply do not yet understand. These inadequacies will be

further reflected in the measures related to the goals and hence in any

policy decisions based on uses of those measures unless we deliberately

undertake coordinated efforts to increase our understanding and knowledge.

It is, of course, essential that the results of these efforts be systematic-

ally incorporated into program applications. In other words, we cannot hope

to improve the formulation of goals, the quality of measurement, or the

appropriateness of policy decisions without a continuous commitment to re-

search inquiry into the processes of human development.

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*The numbers after each variable refer to the numbers of the 29 competency
statements in the section entitled "Components of Social Competency and
Goals of Early Intervention Programs."

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Index of Competency Variables, cont.

Index of Competency Variables, cont.

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