ABSTRACT
        Three papers have been collected dealing with basic
aspects of early childhood education: professionalism, child
development, and knowledge dissemination. The first paper, "The
Nature of Professions: Where Is Early Childhood Education?" applies
eight main features of the concept of a profession to the current
state of the art of early childhood education including social
necessity, altruism, autonomy, a code of ethics, distance from
clients, standards of practice, prolonged training, and specialized
knowledge. The second paper, "Current Perspectives on Child
Development," highlights aspects of development that seem to have
fairly clear implications for pedagogical and curriculum decisions.
Topics are presented in the form of broad general principles that
seem to apply to many aspects of child growth and behavior: optimum
influences; the recursive cycle of development; and the development
of dispositions, particularly the disposition to become interested
and motivated to learn. The third paper, "Issues in the Dissemination
of Child Development Knowledge," describes five issues related to the
dissemination of information in general as well as information about
child development in particular. Issues are related to the
information flow; the conceptual scope of the ideas presented; the
vividness of the presentation; the timeliness of concepts; and the
orientations to knowledge characteristic of the scientists and
practitioners involved in the information dissemination. (RH)

ED275402

PS 016083

Professionalism, Child Development, and Dissemination:

Three Papers

ERIC EECE

Lilian G. Katz

2

PROFESSIONALISM, CHILD DEVELOPMENT, AND DISSEMINATION:

THREE PAPERS

Lilian G. Katz

CONTENTS

PREFACE

The three papers presented in this collection were prepared for particular separate occasions and take up distinct, though related, issues.

The first paper, "The Nature of Professions: Where Is Early Childhood Education," is based on the opening address of a conference on professionalism held in September 1985 to honor Miss Marianne Parry, former preschool advisor in Bristol, England. The occasion brought together many of Miss Parry's colleagues with long experience in the field of early childhood education, and they judged it a good occasion to examine how close the field had come to professional status. As indicated in the paper, concerns among early childhood practitioners and specialists about professional status have intensified over the past decade. These concerns center around the twin issues of upgrading the quality of education and care of young children and the virtually worldwide low pay and status of early childhood practitioners. The pathway toward professionalization is a rocky one, and, unfortunately, the journey is apt to be slower than the urgency of children's needs warrants.

The second paper, "Current Perspectives on Child Development," was prepared primarily for those responsible

for music education in the early years. All teachers have to address the question of "what" to teach; the accumulated knowledge and insight from the study of children's development helps teachers of music and all other subjects answer the "when" and "how" questions of teaching. The principles of development outlined in this paper are aimed at helping achieve answers to these latter questions.

The third paper, "Issues in the Dissemination of Child Development Knowledge," was presented as part of a symposium held by the Early Childhood Special Interest Group at the annual conference of the American Educational Research Association in 1985. Symposium participants were asked to consider the important problems involved in the dissemination of what we know about children's development. The symposium served as a good occasion to share some of the issues in dissemination that have been encountered during many years of work by the ERIC Clearinghouse on Elementary and Early Childhood Education.

Lilian G. Katz, Ph.D.
Director, ERIC Clearinghouse on Elementary
    and Early Childhood Education

7

THE NATURE OF PROFESSIONS:

WHERE IS EARLY CHILDHOOD EDUCATION?

The purpose of this paper is to apply some of the main
features of the concept of a profession to the current state
of the art of early childhood education. However, before
launching into the discussion, I would like to indicate some
of the bases for my interest in this topic.

There is at present a strong drive toward the
professionalization of school teaching in general and
teaching and working in preschool settings in particular.
With respect to the latter, the Illinois Association for the
Education of Young Children has established the Illinois
Society of Early Childhood Professionals, an organization
open only tc specially qualified members of the National
Association for the Education of Young Children (NAEYC). The
Illinois society is expected to be a model for adoption by
other state groups interested in strengthening
professionalism among early childhood educators and child
care workers.

_____

This discussion is based on a paper presented at the Early
Childhood Organisation Conference in honor of Miss E.
Marianne Parry, O.B.E., Bristol Polytechnic, Bristol,
England, September 20, 1985.

1

The mounting pressure to identify and acknowledge early childhood "professionals" is in part due to grave concerns over the very low pay, status, and prestige of those who work in preschool settings. Indeed, the theme of the 1985 annual conference of NAEYC was "Early Childhood Education: A Proud Profession!" But this theme might be seen as a case of protesting too much. While early childhood workers may not be members of an "ashamed" profession, considering its public image, financial status, and intellectual standing (Silin, 1985), it can hardly be described as a "proud" one.

Another basis for my interest in the status of the early childhood practitioner is the assumption that we cannot have optimum environments for children unless the environments are also optimum for the adults who work with them. For several years, taking this assumption as virtually axiomatic, I have tried to describe the factors required to create optimum environments for teachers of young children (cf. Katz, 1977). By focusing on the needs of teachers, I do not intend in any way to diminish the centrality of parents' roles in their children's welfare and development. On the contrary, it seems to me that it is in the best interests of parents to be concerned about the qualities, status, and working conditions of their children's teachers and caregivers.

In other words, improving the lot of teachers is in no way antithetical to the interests of parents. Indeed, there

is persuasive evidence that young children are very sensitive to the moods, emotional states, and morale of the adults around them (Cummings, Iannotti, & Zahn-Waxler, 1985). Thus, it seems useful to illuminate issues relating to those factors affecting the status and morale of teachers of young children. However, we must acknowledge that much of what is required to upgrade the conditions and wages of practitioners would place a heavy burden upon precisely that portion of the population that can least afford to accept it.

WHAT ARE THE CHARACTERISTICS OF A PROFESSION?

Early in this century, scholars began analyzing the nature of professions. Analyses continue apace today as more and more occupational groups strive to upgrade themselves to professional status (Forsyth & Danisiewicz, 1983; Goode, 1983). Many definitions of the term "professional" appear in the literature. While I have attempted to synthesize these various definitions, for the purpose of this discussion I am drawing most heavily on the work of H. S. Becker (1962) in his classic paper "The Nature of a Profession."

Becker distinguishes between two uses of the term "professional": the scientific concept and the "folk" concept. The former refers to the way social scientists use

3

the term, and the latter corresponds to meanings given to the term in everyday language.

Popular Uses of the Term "Profession"

According to Becker (1962), the folk conception of a profession is evaluative in that it is used as an honorific designation. In popular use, the term denotes a quality of spirit, an exceptional level of dedication to morally praiseworthy work. It is also associated with high social status and is often assumed to be correlated with a high income. As is apparent from the realities of the field of early childhood education, much of the drive toward professionalization is based on popular rather than scientific connotations of the term.

With respect to achieving the goals implicit in the popular conception of professionalism, early childhood practitioners do not seem to be doing very well. It is my impression from extensive experience with colleagues in many parts of the world that the younger the child with whom the practitioner works, the less trainining is required, the less ability is expected, the lower the pay, the fewer the working benefits, and the poorer the working conditions.

While it may seem to us that our moral praiseworthiness should be obvious to all, acknowledgment of this fact is not widespread. I think this situation is due in part to the possibility that, in many countries, people really believe

that young children should be at home with their mothers enjoying what is sometimes referred to as a "Norman Rockwellian" version of family life. While the fact that young children participate in various kinds of preschool settings is not to be blamed on the workers who staff them, many laypersons believe that the work involved in caring for children is no more than minding babies whose mothers are otherwise engaged.

We ourselves have consistently and strongly asserted that young children learn through play. It is perhaps not surprising, then, to find policy makers and others suggesting that children might just as well be left to play at home or on the neighborhood playground. Such critics frequently assert that such learning experiences do not require the provision of highly trained personnel, specialized buildings, or equipment. However, contemporary research and scholarship concerning the role and effects of play on various aspects of development shows play to be a very complex phenomenon (cf. Brown & Gottfried, 1985; Carpenter, 1983). We must be careful to indicate that some play experiences are more beneficial than others and to stress that adults have a major role in maximizing the benefits children may derive from them.

As to our status, good reason exists to believe that, as the proportion of women in an occupation increases, its status decreases (Wolfle, 1978). As if that were not enough,

there is also evidence that the status of a practitioner is correlated with the status of the client. If this is indeed the case, then teachers and nannies who work with the offspring of high status and high income families may enjoy greater status than those who work with the children of inner-city poor or unemployed parents. Such status diffusion, applicable to many fields of work, is unlikely to be altered much by the present drive toward professionalization.

Scientific Definitions of the Term "Profession"

Most scholars of the subject agree that eight criteria must be met before a field of endeavor may be termed a profession. In the absence of a formal or conceptual rationale for ordering the importance of these criteria, I shall introduce them in order of those to be treated most briefly first and most fully last.

Social necessity. Most scholars include as a criterion of a profession that its work be essential to the functioning of a society, suggesting that the absence of its knowledge and techniques would weaken the society in some way.

The evidence bearing on whether or not the work of early childhood educators is essential to society is mixed at best. While recent reports of the longitudinal effects of

6

13

early childhood education (Consortium for Longitudinal Studies, 1984) are very encouraging, they are in need of large scale replication. We still have a long way to go to make a convincing case that teachers of the highest quality can provide services to young children without which society is at risk.

Given the power of experiences in later childhood and adolescence to offset the benefits of good early experiences, we must be very careful in the statements we make about what we can achieve. We can be no more sure that the effects of good early experiences cannot be reversed than that early bad experiences can be remediated. Haskins' (1985) recent report of a long term follow-up study of primary school children who had been in day care has indicated that such children are more aggressive in their primary school years than children not in day care and that those who had been in "cognitive" programs were more aggressive than those in other types of settings. Since we do not know what Haskins meant by "cognitive," these results are highly susceptible to misinterpretation and abuse by policy makers. Nor is it likely that any of the subjects in his study were in programs of the quality to which most· of us are committed.

Altruism. The mission of a profession is said to be altruistic in that it is service-oriented rather than

7

14

profit-oriented. Professionals are said to have clients rather than customers or consumers. Ideally, professionals are expected to perform their services with unselfish dedication, if necessary working beyond normal hours and giving up personal comforts in the interests of society. Professions identify the goals of their work with the good of humanity at large, placing strong emphasis on social ends in contrast to the more tangible or immediate ends served by tradespersons, merchants, or entertainers.

On this criterion, we ought to be doing very well. No one can claim that teachers of young children are busy amassing riches or engaged in work that is simply easy or glamorous! The service ideal and client-centeredness of professions seems clearly characteristic of teaching in general and early childhood teaching in particular.

Autonomy. Most scholars in the sociology of professions agree that, ideally, a profession is an occupation that is autonomous in at least two ways (Forsyth & Danisiewicz, 1983). The client is autc nous in that he or she does not dictate to the practitioner what services are to be rendered or how they are to be received. Ideally, professionals who practice in large organizations or institutions are also autonomous with respect to their employer, who does not dictate the nature of practice but hires the professional to exercise judgment based on specialized knowledge,

8

principles, and techniques. As Braude (cited in Forsyth & Danisiewicz, 1983) points out, "To the degree that a worker is constrained in the performance of his work by the controls and demands of others, that individual is less professional."

Issues concerning autonomy with respect to clients are complex for the early childhood educator. Our profession has at least three client groups: parents, children, and the larger society or posterity. All of us are challenged by the paradoxical situation of wanting to strengthen and increase parent involvement in children's education while at the same time wishing to exercise our best professional judgment as to what is in children's best interests. We still have much to learn about how . be more sensitive to parents without being intimidated by them. To laypersons, parent involvement seems so simple that our apparent resistance to it is difficult to understand. A large part of the parent involvement problem is that parents are not a monolithic aggregate. Understandably, parents do not all agree on what goals and methods are appropriate for early childhood education. Let us hope that we work in a country that prizes diversity of views, values, opinions, and cultures among the parents of the children we teach. However, the more diverse the client group, the less likely it is that all the parents of any one teacher's pupils will be equally satisfied. To which of the parents is the teacher to accede? All of them?

9

16

The one with the loudest voice? The highest status? In the United States, schools have always been responsive to parents--but not to all parents . . . just to the one or two who have power and status in the community. To develop as a profession requires that we learn how to respond on the basis of our very best professional judgment, based on the best available knowledge and practices, to desires that are sometimes strident and often contradictory.

Although parents and society at large are served by our profession, most teachers think of children as their primary clients. A possible pitfall exists in this narrow view of the client group. Specifically, every "school of thought," educational method, or approach in part argues its merits on the basis that "the children love it." Maybe so. But the fact that children "love" an activity is not sufficient justification for its inclusion in the curriculum. Children love candy, junk food, silly cartoons, and what many of us consider inappropriate television programs. Although children's preferences must be taken into consideration, decisions concerning curriculum should not be made solely on the basis of the enjoyment of one client group. Enjoyment, in and of itself, is not an appropriate goal for education. The appropriate goal for education--at every level--is to engage the learner's mind and to assist that mind in its efforts to make better and deeper sense of significant experiences. I should add here that, when teachers

accomplish this end, most children find their education enjoyable. In other words, enjoyment is a by-product rather than a goal of good teaching.

In a sense, society or posterity is the educator's ultimate client. But societies like ours often demand incompatible achievements. They want the young to learn to be both cooperative and competitive. They want conformity and initiative. It is no simple matter to help children learn where and when such different dispositions are appropriate. Our communities say that, at the least, they want excellence, high standards of achievement, and equality of opportunity. What principles of learning, development, curriculum, evaluation, and testing can we apply to meet such multiple and often contradictory expectations (cf. Green, 1983)?

Code of ethics. Consistent with client-centeredness, professional societies subscribe to a code of ethics intended to protect the best interests of clients and to minimize yielding to the temptations inherent in the practice of the profession. In addition, professional societies institute procedures for disciplining members in cases of violations of the code of ethics.

The development of a code of ethics for early childhood educators is not an easy task. The process involves identifying the major temptations confronted in the course

of practice (Katz, 1984c). The code should address ethical dilemmas inherent in relations with children, parents, colleagues, employers, and the general lay public. Many people are skeptical about the usefulness of such codes. However, it seems to me that the ethical norms of a group of colleagues, articulated in a code of ethics, can help to give individual members the feeling that colleagues will back them up when they have to take a risky but courageous stand on a controversial ethical issue. It is likely that, when we believe our fellow practitioners will take the same stands as ourselves or would censure us if we failed to live up to the code, our commitment to right action is strengthened.

The NAEYC has formed a special committee to work on the development of a code for its members. Several state branches of the association have already developed their own. Inasmuch as local values and cultural variations play a strong role in conceptions of ethical standards, it would seem wise for each country, region, or cultural unit to develop its own code.

Distance from client. Since, by definition, the practice of a profession requires bringing to bear a body of knowledge and principles to the solution of problems and predicaments, the relationship between practitioner and client is marked by optimum emotional distance, disinterest,

19

or "detached concern" (Katz, 1984a). This distance from the client is reflected in the strong taboo against physicians treating members of their own families; in such situations, it is felt that emotional attachment and empathy might interfere with the exercise of reasoned judgment. This feature of professional practice does not preclude such feelings as empathy or compassion but is intended to place these feelings in appropriate perspective. Emphasis on such optimum distance is also expected to minimize the temptation to develop favorites among children and parents, and to inhibit the tendency to respond to clients in terms of personal predilection or impulses rather than on the basis of reasoned judgment.

I am aware that many specialists and teachers in early childhood education resist this aspect of professionalism-- and not without reason. Among other things, they worry about meeting children's apparent need for closeness and affection. However, young children generally are capable of experiencing such feelings even when the teacher maintains an optimum distance. Though effective teaching requires intimate knowledge of pupils, this can be achieved by frequent contact, observation, and listening without the kind of emotionality required of family relationships. In addition, many early childhood educators associate optimum distance with a stereotypical view of a remote, unresponsive, and intimidating expert who is likely to breed

resentment among parents. In fact, optimum distance serves to protect the teacher from the risks of an emotional "burn-out" that can endanger functioning as well as undermine effectiveness with children. I want to emphasize that the emotional distance should be an optimum one in that it permits the teacher to be responsive, caring, and compassionate, as well as to exercise professional judgment and bring knowledge to bear on responses to children.

Standards of practice. Most scholars also agree that a profession adopts standards of practice that are significant in three ways:

1. The profession adopts standards below which it is hoped no practitioner will fall. These standards are meant to insure that every practitioner applies the standard procedures in the course of exercising professional judgment. In some measure, these standards result in standardization of professional performance (e.g., all physicians follow standard procedures in making diagnoses but exercise their own judgment in deciding what actions to take). In theory, at least, professional practice is distinguished from the work of artisans, tradespersons, technicians, or bureaucrats in that it does not simply implement fixed routines, rules of thumb, or regulations.

14

Rather than following a set of recipes, the professional practitioner acts on the basis of accepted principles that are taken into account in the formulation of professional judgment.

2. The standards developed and adopted are addressed to the standard predicaments that every member can be expected to encounter fairly often in the course of practice. The standard procedures applied to the standard problems encountered in the course of practice are accumulated into the body of professional knowledge.

3. Another goal of a profession is that its standards of performance are universalistic rather than particularistic. Universalistic standards of performance imply that all the knowledge, skill, insight, ingenuity, etc. possessed by the practitioner is available to every client independent of such irrelevant personal attributes of the client as social and ethnic background, ability to pay, or personal appeal.

One of the major tasks ahead for us, as I see it, is to develop and articulate our perceptions of professional standards. One approach that we might consider is to enumerate and describe the standard predicaments that all

15

early childhood educators confront in the course of their day-to-day work. One such effort of my own (Katz, 1984b), depicts a situation in which 4-year-olds quarrel over whose turn it is to use a tricycle. In this examination, the responses of a professionally trained teacher are compared with the responses of an untrained person in order to highlight how professional judgment comes into play.

A colleague and I are now working on a paper concerning standard predicaments teachers of young children may encounter in their work with parents (Katz & Becher, 1985). We have identified five types of predicaments: (a) differences between a parent and a teacher concerning pedagogical issues; (b) parents' expectations for their own children that might undermine the welfare of other children in the group; (c) parental hostility, anger, or denial of a teacher's competence; (d) a teacher's need to inform a parent that his or her child's development is not going well and that special help is required; and (e) a teacher's perception that the parents' behavior puts the child's development at risk.

Our task is to suggest professionally appropriate responses for each of the five types of predicaments and to indicate what knowledge, principles, and professional techniques might be applied. Our hope is that this kind of effort will help in developing the body of knowledge, principles, and techniques that should underlie professional

23

practice. Much more work needs to be done along these lines; such work requires identifying the predicaments considered most important and articulating our understanding of the knowledge and practices that can help in problem resolution.

Prolonged training. Most scholars of the sociology of professions agree that a major defining attribute of a profession is that it requires entrants to undergo prolonged training. Although there are no standards by which to judge how long such training should be, the training process itself is thought to have several particular characteristics:

1. The training is specialized in order to ensure the acquisition of complex knowledge and techniques.

2. The training processes are difficult and require cognitive strain. As a consequence of careful screening, some candidates can be expected to fail. Training should be marked by optimum stress and sacrifice, resulting in dedication and commitment to the profession (Katz & Raths, 1986).

3. In all professions, candidates are required to master more knowledge than is likely to be applied and more than the student perceives to be necessary. In all professions, candidates complain about these excesses and the apparent irrelevance

of much of the knowledge they are expected to master.

4. Insitutions responsible for professional training must be accredited or licensed by processes monitored by practicing members of the profession. These institutions award certificates, diplomas, or degrees under the supervision of members of the profession.

5. All professional training institutions offer trainees a common core of knowledge and techniques so that the entire membership of the profession shares a common allusionary base.

6. Professional societies and training institutions, very often in concert, provide systematic and regular continuing education for members.

It is not clear what kind and amount of training is required for high quality professional performance (see, for example, Katz, 1984b). In general, I think we should stop being defensive about expecting candidates in teacher education to study theory, research, history, and philosophy. My reasons for this stance include the point made above that all professions expose their candidates to more knowledge than they ever apply, expecting not more than about a third of what is mastered to be retained. (The more studied, the larger that third is.) Furthermore, evidence

18

25

exists to show that, even though one forgets facts and concepts once mastered, such knowledge enables one to go on absorbing new facts and concepts more easily long after training has been completed (Broudy, 1983). In addition, I would like to suggest that there is a sense in which it is important for practitioners to be "literate" in their own fields: though they may never use Montessori's ideas, all early childhood practitioners should know who she was and should comprehend the main ideas she espoused.

In many countries, there is cause for concern about the characteristics of entrants into training. Too often, young women are advised to enter early childhood education because their shyness makes them unsuitable for work with older pupils or because they are not academically strong enough to take up a more challenging or profitable occupation. Sadly, we have heard reports from several countries that preschool teachers have been urged to transfer into secondary teaching because they were judged "too good for infants."

Disheartening evidence exists to suggest that, among graduates of teacher education degree programs, those with the greatest ability last the shortest length of time in the teaching service (Schlecty & Vance, 1981). As more alternatives and attractive opportunities for women become available, this "brain drain" is likely to continue. It can only be stemmed if working conditions and pay scales are dramatically improved and if the needs of young children are

19

given higher social priority. To some extent, the field of early childhood education--especially child care and day nursery work--is caught in a vicious cycle: People enter it with few skills, and no one wants to pay good wages for workers with few skills. Because the pay is low, the likelihood is that those with little training and few skills will take up the work. How can we break this cycle? While we must acknowledge that there are poor teachers at work, even among those with extensive training, good inservice education can help. But what may be required for a real break in the cycle is public understanding and recognition of the potential benefits of high quality education in the early years and deeper public commitment to the welfare of young children.

It is not uncommon for laypersons to point out that they know of an outstanding teacher who has had no training. Perhaps all of us have encountered just such a gifted or "natural" teacher. This claim is, however, a dangerous one. Abraham Lincoln was a self-taught lawyer, but virtually everything about him was exceptional. Furthermore, there was a great deal less to be learned by lawyers in his time. The main point here is that a profession can never be designed on the basis of its exceptions. On the contrary, professional training is designed to provide all its practitioner with minimal standards to help them perform effectively. If all lawyers had Lincoln's remarkable

20

qualities of mind and could teach themselves as thoroughly as he did, we might have no need for law schools.

Specialized knowledge. Scholars seem to agree that a major defining attribute of a profession is that it is an occupation whose practices are based on specialized knowledge. This knowledge is thought to have several characteristics:

1. The knowledge is abstract rather than concrete (as in the case of crafts, sports, trades, or bureaucracies, in which the knowledge may consist of rules of thumb, rules, or regulations).

2. The knowledge consists of principles that are reasonably reliable generalizations to be considered in the course of practicing the profession. Some scholars insist that the knowledge underlying professional practice is organized into a systematic body of principles.

3. The knowledge and principles are relevant to practical rather than metaphysical or academic concerns. They are intended to rationalize the techniques of the profession and, as such, are oriented to some kind of practical and socially useful end.

21

28

4. The body of knowledge is esoteric or exclusive in
   that it is known only to practitioners of the
   profession and is unknown to laypersons. In this
   sense, the profession has a monopoly on most of
   its relevant knowledge and techniques.

5. Practitioners belong to professional societies
   that take responsibility for disseminating new
   knowledge relevant to practice by producing
   scholarly journals and by providing conferences
   and workshops through which members are kept
   informed.

Can we identify the body of knowledge, specify the
reliable principles, and develop a consensus as to the best
available practices that will serve as a basis for
professional practice in early childhood education? It is
not clear what procedures are to be followed in finding
answers to this question. We each might begin by listing
those principles we consider essential and worthy of
inclusion and then examine the list in a systematic way. To
what extent would we agree on our lists? Finding answers to
these questions is one of the biggest tasks ahead of us.

Some principles I wish to nominate for inclusion in our
professional body of specialized knowledge are outlined very
briefly below. These assertions are derived from my own
understanding of what constitutes the best practice and my

22

interpretation of the literature on children's learning and development.

1. Teaching strategies and curriculum decisions are best when they take into account both the potential value of immediate experiences and their long-term benefits. Teaching and curriculum practices that keep children busy and/or amused in the short term may or may not provide a solid foundation for the long course of learning and development.

2. Young children's learning is optimized when children are engaged in interaction and in active rather than passive activities.

3. Many of the experiences or factors that influence development and learning are likely to be most beneficial when they occur in optimum rather than extreme amounts, intensities, or frequencies. In terms of teaching strategies, for example, the help, attention, or stimulation given can be both too little or too great for the development of a given individual's self-reliance. Likewise, the extent to which the curriculum includes routines can also be excessive or insufficient for the management of the life of a group of children.

23

4. The curriculum for young children is oriented toward helping them to make better sense of their own environment and experiences. As children grow, the concepts, ideas, and topics introduced are extended to include others' environments and experiences.

5. Many aspects of development and learning have the characteristic of a recursive cycle in that once a child has a behavior pattern, the chances are that others will respond to him or her in such a way that the pattern will be strengthened. Thus, for example, a child who is unlikable is very likely to be responded to with rejection and to respond to rejection in such a way as to become more unlikable. A related principle of development is that a child cannot effect a change on his or her own; the adult must intervene to interrupt the recursive cycle.

6. The more informal the learning environment, the more access the teacher has to information about where the child is in terms of development and learning. The more informed the teacher is, the more likely he or she is to be able to make appropriate decisions about what teaching strategies to use and what curriculum activities

24

31

to introduce. A related principle is that the life of the group is likely to be enhanced by optimum rather than maximium informality.

7. The three basic functions of language--communication, expression and reason--are acquired and strengthened through conversation rather than by passive exposure or systematic instruction.

8. Young children's development and learning are enhanced by a curriculum including activities and materials that provide them with content for conversation that is relevant, vivid, interesting, familiar, and/or significant to them.

9. Appropriate teaching strategies and curricula are those that take into account the acquisition of knowledge, skills and dispositions, especially the dispositions to go on learning and to apply the knowledge and skills acquired. Emphasis on the acquisition of knowledge and on practicing skills is excessive when it undermines such dispositions as curiosity, creativity, and other types of intrinsic motivation.

10. The younger children are, the greater the variety of teaching strategies and the greater the flexibility of the curriculum required. The use of

a single pedagogical method or narrow range of
curriculum materials and activities increases the
likelihood that a significant proportion of
children will experience feelings of incompetence.

Many more principles can be added to these ten, and I urge
members of the early childhood community both as individuals
and as members of a professional society to develop and
share more.

WHAT LIES AHEAD?

It seems to me that the research on development and
learning currently being reported in the journals is much
more applicable to pedagogical practice than it was when I
first entered the field 20 years ago. In Britain, the work
of such scholars as Clark (Clark & Wade, 1983), Wells
(1983), Donaldson (1983), Dunn (Dunn & Dale, 1984),
Karmiloff-Smith (1984), Rutter (Garmezy & Rutter, 1983) and
many others is rich in implications for principles of
education in the early years. In the United States, the list
of scholars whose work supports the "informal," or
intellectually rather than academically oriented, approach
to early childhood education is also long. I commend the
research of Brown (Brown & Campione, 1984), Nelson (Nelson &
Seidman, 1984), Gottman (1983), Carpenter (1983), and Rogoff
(1982), among many others. These investigators support the

26   33

view that--with the help of very skilled, observant, attentive, reflective, and thoughtful adults--children construct their own understandings and sharpen their skills through interaction with their environment. In this sense, it seems to me that contemporary developmental researchers are painstakingly rediscovering the insights of John Dewey.

I recently came across a copy of D. E. M. Gardner's Testing Results in the Infant School, a book published in England in 1941 and not widely known among early childhood educators in the United States. I was surprised to find that Gardner begins by describing two contrasting types of infant schools. Although she refers to the two types as School A and School B, we would most likely refer to one as formal and academic and the other as informal or child-centered. These descriptions can be used almost verbatim to characterize contrasting early childhood education settings today in many parts of the world. The basic arguments Gardner makes about appropriate learning environments for young children still have to be made today. Although current research on children's intellectual development reaffirms Gardner's views of how children learn, we have yet to marshal the kind of compelling evidence we need to prove that the methods advocated by Gardner and Marianne Parry are more effective than others--particularly in the long term.

There are several reasons why we cannot produce the kind of persuasive empirical evidence we need. First, it is

difficult to conduct longitudinal studies of young children and their teachers that would take into account the accepted canons of social science research. It seems as though the more rigorous the research design, the less relevant or valid the data, and vice versa. Second, to conduct investigations that would satisfy standard scientific requirements would very likely be unethical: it is unethical to subject others to experiences one has reason to suspect may not be good for them for the sake of research--or for any other purpose.

Inevitably, then, we work in a field in which reliable data are difficult to obtain. In any field in which the database is slippery, the informational vacuum is filled by ideologies or doctrines (i.e., systems of beliefs that we hold most strongly about the things of which we are least certain). Thus, our commitment to particular approaches, even in the absence of compelling evidence that they are best or right, is in the nature of the field. However, the risks attendant upon such conditions are that we tend to reject counter-evidence and resist others' views. A professional code of ethics should remind us to keep an open mind, to look carefully at all the available evidence, to clearly identify our stands as being based respectively on evidence, on experience, and on ideology. Such reminders are among the important functions of professional societies. It may be that, when we are clear about the bases of our views,

28

we shall be better able to increase public understanding of them and thereby gain their support in our efforts to improve provisions for young children.

REFERENCES

Becker, H. S. (1962). The nature of a profession. In N. B. Henry (Ed.), Education for the professions (pp. 27-46). National Society for the Study of Education Yearbook. Chicago: National Society for the Study of Education.

Broudy, H. S. (1983). The humanities and their uses: Proper claims and expectations. Journal of Aesthetic Education, 17(4), 125-148.

Brown, A. L., & Campione, J. C. (1984). Three faces of transfer: Implications for early competence, individual differences, and instruction. In M. E. Lamb, A. L. Brown, & B. Rogoff (Eds), Advances in developmental psychology (Vol. 3, pp. 143-192). Hillsdale, NJ: Erlbaum.

Brown, C. C., & Gottfried, A. (1985). Play interactions: The role of toys and parental involvement in children's development. Pediatric Round Table 11. Skillman, NJ: Johnson & Johnson.

Carpenter, J. (1983). Activity structure and play: Implications for socialization. In M. B. Liss. (Ed.),

Social and cognitive skills: Sex roles and children's play (pp. 117-143). New York: Academic.

Clark, M. M., & Wade, B. (1983). Early childhood education [Special issue]. Educational Review, 5(2).

Consortium for Longitudinal Studies. (1983). As the twig is bent. Hillsdale, NJ: Erlbaum.

Cummings, E. M., Iannotti, R. J., & Zahn-Waxler, C. (1985). Influence of conflict between adults on the emotions and aggression of young children. Developmental Psychology, 21(3), 495-507.

Donaldson, M. (1983). Children's reasoning. In M. Donaldson, R. Grieve, & C. Pratt (Eds.), Early childhood development and education (pp. 231-236). London: Guilford.

Dunn, J., & Dale, N. (1984). Collaboration in joint pretend. In I. Bretherton (Ed.), Symbolic play: The development of social understanding (pp. 131-157). New York: Academic.

Forsyth, P. B., & Danisiewicz, T. J. (1983). Toward a theory of professionalization. In P. Silver (Ed.), Professionalism in educational administration (pp. 39-45). Victoria, Australia: Deakin University Press.

Gardner, D. E. M. (1941). Testing results in the infant school. London: Methuen.

30

37

Garmezy, N., & Rutter, M. (Eds.) (1983). Stress, coping and development in children. New York: McGraw Hill.

Gottman, J. M. (1983). How children become friends. Monographs of the Society for Research in Child Development, 48 (3, Serial No. 201).

Goode, W. J. (1983). The theoretical limits of professionalization. In P. Silver (Ed.), Professionalism in educational administration (pp. 46-67). Victoria, Australia: Deakin University Press.

Green, T. F. (1983). Excellence, equity, and equality. In L. Shulman & G. Sykes (Eds.), Handbook of teaching and policy (pp. 318-341). New York: Longmans.

Haskins, R. (1985). Public school aggression in children with varying day-care experiences. Child Development, 56, 689-703.

Karmiloff-Smith, A. (1984). Children's problem solving. In M. Lamb, A. Brown, & B. Rogoff (Eds.), Advances in developmental psychology (Vol. 3, pp. 39-90). Hillsdale, NJ: Erlbaum.

Katz, L. G. (1977). Talks with teachers. Washington, DC: National Association for the Education of Young Children.

Katz, L. G. (1984a). Contemporary perspectives on the roles of mothers and teachers. In L. G. Katz, More talks with teachers (pp. 1-26). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education.

Katz, L. G. (1984b) The education of preprimary teachers. In L. G. Katz, P. J. Wagemaker, & K. Steiner (Eds.), Current topics in early childhood education (Vol. 5, pp. 209-227). Norwood, NJ: Ablex.

Katz, L. G. (1984c) Ethical issues in working with young children. In L. G. Katz., More talks with teachers (pp. 45-60). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education.

Katz, L. G. & Becher, R. M. (1985, November). Professionalism in teacher-parent relations. Paper presented at the annual conference of the National Association for the Education of Young Children, New Orleans.

Katz, L. G., & Raths, J. D. (1986). A framework for research on teacher education programs. Journal of Teacher Education, 26(6), 9-15.

Nelson, K., & Seidman, S. (1984). Playing with scripts. In I. Bretherton (Ed.), Symbolic play: The development of social understanding (pp. 45-71). New York: Academic.

39

Rogoff, B. (1983). Integrating context and cognitive
    development. In M. E. Lamb & A. L. Brown (Eds.), Advances
    in developmental psychology (Vol. 2, pp. 125-170).
    Hillsdale, NJ: Erlbaum.

Schlechty, P.C ., & Vance, V. S. (1981). Do academically
    able teachers leave education? The North Carolina case.
    Phi Delta Kappan, 63(2), 106-112.

Silin, J. (1985). Authority as knowledge: A problem of
    professionalization. Young Children, March, 41-46.

Wells, G. (1983). Talking with children: The complementary
    roles of parents and teachers. In M. Donaldson, R.
    Grieve, & C. Pratt (Eds.), Early childhood development
    and education. London: Guilford.

Wolfle, L. M. (1978). Prestige in an American university.
    Paper presented at the annual meeting of the American
    Educational Research Assocation, Toronto, Canada.

CURRENT PERSPECTIVES ON CHILD DEVELOPMENT

Developmental psychology is that branch of psychology dealing with the changes in perception, thought, feelings, and behavior that appear with increasing age. The term "child development" overlaps with developmental psychology. It includes all of the latter plus the study of physical development as it relates to the development of the "whole child." The knowledge produced by the scientific study of developmental changes in children is designed to illuminate the processes that influence them and to increase understanding of what can be done to optimize developmental outcomes. The rate at which the developmental research literature is growing, in both size and specialization, is so great that a comprehensive encyclopedia of its current state-of-the-art would require several volumes and several years to compile.

Therefore, it seems best to highlight those aspects of development that seem to have fairly clear implications for

---

pedagogical and curriculum decisions. These ideas are presented in the form of broad general principles that seem to apply to many aspects of child growth and behavior. It should be noted, however, that not all developmentalists agree on the generality of the principles presented and alternative interpretations of the developmental research literature are available.

In general, developmental psychologists agree that the long period of development from infancy to adulthood is an orderly one, even though some behaviors appear, disappear, and reappear at a later time (Strauss & Stacey, 1982). It is also generally assumed that early experiences, and the developmental accomplishments and failures they give rise to, have more or less long term sequelae. There is also fairly general agreement that virtually all functions of an organism can be seen to progress from simple and undifferentiated to more complex and more differentiated and to increasing organization. However, when it comes to discussions of the specific developmental stages and the extent to which they are detectable, reliable, or universal, agreement breaks down fairly quickly (cf. Collins, 1982).

The Principle of Optimum Influences

Research on a wide variety of topics within the field of child development suggests that almost any factor that

influences a given developmental achievement can be thought
of as beneficial only in the "right" proportions,
intensities, amounts, or frequencies. In other words,
whatever factors influence development can be equally
damaging in extreme proportions, intensities, amounts, or
freqencies, and just because something is "good" for a
child's development, more of it is not necessarily better.
This principle can be depicted as a curvilinear
relationship, as illustrated in Figure 1.

OPTIMUM ZONE
↓

Developmental
Achievement
(e.g., self-
reliance)

Low   Optimum   High

Proportion of Influencing Factor
(e.g., maternal attachment)
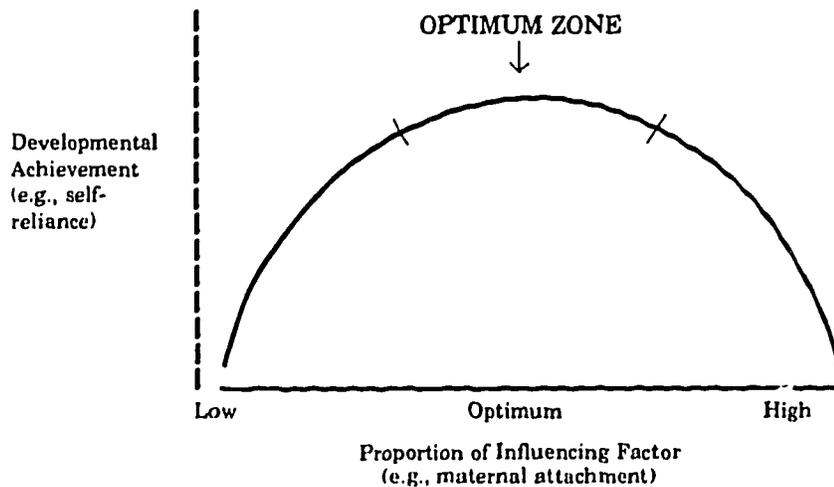
Figure 1. The Relationship between Developmental
Achievements and Factors that Influence Them

Examples of developmental achievements that may conform
to this curvilinear relationship are numerous and varied. As
depicted, a curvilinear relationship can be expected to
occur between the proportion of maternal affection and the
development of self-reliance or independence such that both

37

the extremes of low and high maternal affection or attachment may yield a child equally low on self-sufficiency. It appears that children thrive best when the strength of mothers' attachment and amount of affection are relatively moderate. At the low end of the scale, the child may experience neglect and feel a constant need for affection, reassurance, and support. At the high end, the child may experience "smother love" and suffer from insufficient opportunities to test herself against real contingencies from which to gain the kind of confidence in her own competence required for self-sufficiency.

Another example of this "optimum effect," which concerns the distress reactions of 18-month-olds to separation from their mothers, was recently reported in the realm of socioemotional development. Jacobson and Willie (1984) found that those infants with both the least and the most previous experience with being separated from their mothers exhibited the greatest distress on separation. Infants with moderate amounts of experience with separation showed the least distress. Other developmental factors that appear to fit the optimum, or curvilinear, model of influence include stimulation, attention, assistance, level of aspiration, expectations for achievement, time on task (cf. Walberg & Tsai, 1984), and many others.

One of the difficulties in applying the principle of optimum effects is the related principle that what is

44

optimum for one child may be excessive or insufficient for another. In other words, the "optimum zone" varies among individuals. Thus, the burden seems to fall on adults to determine what constitutes the optimum amount, frequency, intensity, etc. of an influencing factor for each individual child. Of the many variables of potential interest and relevance to music educators that could be included in this list are amount of choice, level of anxiety, and amoun of practice or drill.

Educators of young children generally believe that children are more motivated to participate in various activities when they are given opportunities to exercise choice or to make selections among alternative activities, e.g., instruments to play, songs to perform, etc. (cf. deCharms, 1983; Deci & Ryan, 1982). It seems clear from available evidence (Wang, 1983) that opportunities for choice, selection, and control over learning tasks and the learning environment enhance effort and achievement. In most classrooms, the tendency is to err on the low side, i.e., to offer too few opportunities for selection, choice, and control. However, for young children it is possible to offer too many choices and too much control. Thus, care should be taken to avoid providing more choices and control than young children can successfully manage.

The study of anxiety (e.g., test anxiety) and its effects on various kinds of performance under pressure has a

long history (Dweck & Elliott, 1983). Increasing specification of subvariables and the cognitive processes that are triggered by anxiety have made the present findings concerning its role difficult to generalize. Nevertheless, it is reasonable to suggest that teachers can help children not by eliminating performance anxiety or the situations that produce it, but by helping to keep anxiety at optimum levels and by helping children to cope with and accept it as an inevitable as well as important part of social participation and achievement.

Much of education in the early years involves the acquisition of the skills that lay the foundation for most subsequent educational attainment. Although it is obvious that all skills require drill and practice for the achievement of mastery, the fact that both drill and practice are helpful in optimum rather than maximum amounts is often overlooked. The effects of insufficient drill and practice are easy to discern. The complex effects of their excesses are discussed in a later section of this paper.

The Recursive Cycle

Evidence mounts that much development occurs in cyclic rather than linear or simple incremental fashion. The principle is that, once an individual has a given behavior or characteristic, reactions to him tend to increase the

40   46

chances that he will have more of it. The principle applies to a wide variety of developmental achievements in both the social and intellectual realms. For example, children who are likable, attractive, and friendly tend to elicit positive responses in others fairly easily. Because they receive such positive responses, they become more likable, attractive, and friendly--and so forth. Similarly, children who are unattractive, unfriendly, and difficult to like tend to be avoided or rejected by others. In response to this avoidance and rejection, they tend to behave in ways that make them even more unattractive. This in turn increases the likelihood that they will more often be avoided or rejected, and the cycle becomes well-established. This general principle can be applied to many kinds of behavior and learning.

A specific case of the general principle, called "character definition," refers to the tendency among adults to define children's characters fairly early, often assigning them a social role within a group. A child may be labeled "the quiet one," "the class clown," "the noisy one," and so forth. Evidence suggests that children tend to bring their behavior into line with the character definitions attributed to them (Grusec & Arnason, 1982) and that once a child's character has been defined it is extremely difficult for the child to behave in other ways. There is reason to believe that the child's behaviors that do not correspond to

41
47

the definition she has been given are not perceived by the adult making the attributions. In this way, the attempts some children make to overcome negative definitions go unnoticed or unacknowledged and therefore become weakened instead of strengthened, and the cycle remains entrenched.

The principle of the recursive cycle also applies to many aspects of intellectual development. For example, there is now good evidence to suggest that, within a given early childhood classroom, those half-dozen or so children who are the most verbally articulate receive most of the teacher's verbal interaction and therefore become more articulate. This in turn increases the chances that they will receive more verbal stimulation and interaction from the teacher, and so forth. The least articulate class members receive the least teacher verbal input and interaction and therefore fail to progress as fast as the others (Crahay, 1980). It is not difficult to see how a busy teacher inevitably engages in minimum verbal interaction with children who hesitate, stammer, fail to respond, or mumble. Nevertheless, the child cannot break the cycle. As Willes (1983) points out, children's language development is unlikely to prosper "if a child has little experience of activity shared with an adult, and accompanied by the sort of talk that acknowledges his right to take part in the exchange, and supports and extends his [often stumbling and hesitant] efforts to use that right" (p. 26). Changing the direction of the cycle

42

requires a deliberate and conscious effort on the part of the adult in the situation.

A major implication of the recursive cyclic nature of both social and intellectual development is that a young child cannot break the cycle she is in alone; only an adult can do so, and techniques are available with which to do it (Brophy, 1983; Maccoby, 1984).

The Development of Dispositions

The broad goals of education include helping children to acquire at least three types of learning: knowledge, skills, and dispositions.

Knowledge can be roughly defined as such "contents of mind" as ideas, facts, concepts, constructs, schemas, etc. that make up much of the content of school curricula. Skills are defined as relatively small units of action or behavior that are relatively easily observed, as in walking a balance beam, writing the letters of the alphabet, playing a scale on a recorder, and so forth. They include mental skills, which are relatively easily inferred from observed behavior that occurs in small units of time or on a given single occasion, e.g., arithmetic computation or sight-singing. Skills may be learned, strengthened, and improved by instruction, observation, trial and error, and optimum (rather than maximum) amounts of drill and practice. Lessons

and workbooks can be used to aid in the acquisition of skills.

Dispositions, on the other hand, are broadly defined as relatively enduring "habits of mind," or characteristic ways of responding to categories of experience across types of situations. Examples of dispositions include curiosity, humor, creativity, affability, quarrelsomeness, etc. Dispositions are not likely to be acquired through workbook exercises, lessons, or direct instruction. Some may be linked to "inborn" individual characteristics. Most are likely to be learned from observation and emulation of models, and shaped or strengthened by being appreciated and acknowledged. In order to strengthen dispositions, they must be "behaved" or expressed. These behaviors and expressions must be followed up by being appreciated and welcomed. Thus, for example, if we wish to strengthen childrens' dispositions to be curious, it will be necessary to provide opportunities for them to act upon or otherwise express their curiosity. We must then convey our appreciation of the disposition with appropriate responses. Of course, not all dispositions are desirable, and some have to be responded to in such a way that they are weakened.

It is suggested by long term follow-up studies of children enrolled in different kinds of preschool and kindergarten programs (Miller & Bizzell, 1983) that, when the curriculum takes a strongly remedial approach and

44

allocates large proportions of time to practicing skills and drills, the initial test results look impressive, and the approach seems to have clearly positive effects, at least in the short term. On the other hand, curriculum approaches that emphasize strengthening such dispositions as curiosity, interest, and creativity show relatively unimpressive test results in the short term but reveal considerable benefits in the long term.

Such results can be interpreted in many ways. However, one reasonable interpretation is that, when children are required to work at skill practice and drill beyond an optimum amount, they may lose the disposition to use the skills. This may help to account for the proverbial piano pupil who swears that the minute he is allowed to quit taking lessons, he will never play again! For teachers of music, the cultivation and strengthening of the music-making disposition that is very likely still present in most young children should be balanced against the temptation to pressure them to acquire specific music-related skills very early. Furthermore, emphasis on strengthening the disposition to "make music" is likely to be increased by providing music-related activities that involve the music the children already know well (from home and the media) and progressing very gradually to less familiar musical experiences. In addition, emphasis on strengthening desirable dispositions suggests that teachers can help by

45

being alert to those situations in which it may be necessary to back off from demanding practice, drill, or workbook exercises lest a disposition, e.g. to be a reader or violinist, be undermined by what a child may experience as excessive skill drill.

Teachers' diagnoses of childrens' dispositional development are thus important components of the professional judgment involved in curriculum implementation. Furthermore, it is likely that dispositions can become robust only if they can be supported and strengthened throughout the long period of development. This is most likely if the educational environment provides optimum opportunity to behave or express desired dispositions and to have them reinforced.

Results from long term studies suggest that curricula and teaching methods for early childhood education should be approached so as to optimize the acquisition of both skills and the dispositions to use them. It is clearly not very useful to have skills if in the process of aquiring them the disposition to use them is lost; on the other hand having the disposition without the requisite skills is also not very useful. In other words, the issue for curriculum design and teaching methods in not whether to emphasize basic skills or dispositional learning; rather, it is to develop approaches that make the acquisition of both mutually inclusive.

46

The Development of Interest

One of the important dispositions among those of concern to educators of young children is _interest_, or the capacity to "lose oneself" in something outside of oneself. Interest refers to the capability of becoming deeply enough absorbed in something to pursue it over time and with sufficient commitment to accept and work at its routine as well as novel aspects. Sometimes called "intrinsic motivation" (Morgan, 1984), "continuing motivation" (Maehr, 1982), or "self-directed learning" (Benware & Deci, 1984), this disposition appears to be present in the normal human at birth (in the form of the Orienting Response) and is affected by a variety of social-psychological processes throughout childhood (Maehr, 1982; Morgan, 1984).

Recent research has illuminated the effects of different kinds of feedback on learners' interest and intrinsic motivation. Research on the the so-called "overjustification effect" suggests that, when children are rewarded for tasks in which they had initially shown spontaneous interest, they subsequently lose interest in the tasks. Thus, rewards are seen to undermine children's interest in such cases. The overjustification effect refers to metacognitive processes assumed to be occurring in children's minds, suggesting that children respond to such rewards by saying to themselves, as it were, "It must be

47

wrong to like doing X, or I would not be given a reward for doing it" (Deci & Ryan, 1982). Since this effect applies especially to those activities children originally find interesting, it suggests that teachers exercise special care not to offer rewards for those activities young children spontaneously enjoy. In the early years, these activities will include many of a musical nature.

Another line of research on related processes suggests that, when the positive feedback given to children is general in nature, it may serve to increase productivity but not interest (deCharms, 1983). General positive feedback includes vague comments on the part of the teacher like "very good," "well done," and the smiling face or gold star. If, on the other hand, the positive feedback is specific rather than general, particularly if it includes information about the competence of the performance, it serves to strengthen interest. The latter is called a "tribute"; the former, an "inducement."

As suggested elsewhere (Katz, 1977 , curricula and teaching methods that attempt to provide childre :h constant fun and excitement also risk undermining the development of children's disposition for interest. Thus, the teacher's role in strengthening children's dispositions to be interested in relevant and worthwhile phenomena is a complex and highly critical one.

48   5 l

Summary

This paper has presented an overview of some of the
principles of development having major implications for
classroom practice. The principles apply to developmental
processes throughout childhood and can be summarized as
follows:

1. Those factors which influence development do so best
   when they are provided in optimum amounts,
   proportions, or frequencies.

2. Adults tend to respond to children in ways that
   increase the chances that the characteristics they
   already have will be strengthened, and only the
   adult can break the cycle in which the child is
   caught.

3. The development of worthwhile dispositions may be
   threatened by early emphasis on skill practice such
   that it is possible for children to acquire skills
   at the expense of the disposition to use them. A
   major challenge at every level of education is to
   make the acquisition of knowledge, skills, and
   dispositions mutually inclusive.

REFERENCES

Benware, C. A., & Deci, E. L. (1984). Quality of learning with an active versus passive motivational set. American Educational Research Journal, 21(4), 755-765.

Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. Journal of Educational Psychology, 75(5) 631-661.

Collins, W. A. (1982). The concept of development. Minnesota Symposium on Child Psychology (Vol. 15). Hillsdale, NJ: Erlbaum.

Crahay, M. (1980). Characteristiques socio-culturelles de la population scolaire et curriculum realise dans quatre classes maternelles. Document de Travail. Liege, Belgium: Univeriste de Liege, Laboratoire de Pedagogie Experimentale.

deCharms, R. (1983). Intrinsic motivation, peer tutoring, and cooperative learning: Practical maxims. In J.M. Levine & M. C. Wang (Eds.), Teacher and student perceptions: Implications for learning. Hillsdale, NJ: Erlbaum.

Deci, E. L., & Ryan, R. M. (1982). Curiosity and self-directed learning" In L. G. Katz (Ed.), Current

topics in early childhood education (Vol. 4). Norwood,
NJ: Ablex.

Dweck, C. S., & Elliott, E. C. (1983). Achievement
motivation. In M. E. Hetherington (Ed.), Handbook of
Child Psychology: Vol. 4. Socialization, personality,
and social development (4th ed.). New York: Wiley.

Grusec, J. E., & Arnason, L. (1982). Considerations for
others: Approaches to enhancing altruiusm. In S. G.
Moore & C. R. Cooper (Eds.), The young child: Reviews
of research (Vol. 3). Washington, DC: National
Association for the Education of Young Children.

Jacobson, J. L., & Willie, D. E. (1984). Influence of
attachment and separation experience on separation
distress at 18 Months. Developmental Psychology, 20(3),
477-484.

Katz, L. G. (1977). Education or excitement. In L. G. Katz,
(Ed.) Talks with teachers. Washington, DC: National
Association for the Education of Young Children.

Maccoby, E. E. (1984). Socialization and developmental
change. Child Development, 55, 317-328.

Maehr, M. L. (1982). Motivational factors in school
achievement. (ERIC Document Reproduction Service No. ED
227 095)

Miller, L. M., & Bizzell, R. P. (1983). Long-term effects of four preschool programs: Sixth, seventh, and eighth grades. Child Development, 54(3), 727-741.

Morgan, M. (1984). Reward-induced decrements and increments in intrinsic motivation. Review of Educational Research, 54(1), 5-30.

Strauss, S., & Stacey, R. (1982). U-shaped behavioral growth: Implications for theories of development. In W. W. Hartup (Ed.), Review of child development research (Vol. 6). Chicago, IL: University of Chicago Press.

Walberg, H. J., & Tsai, S. (1984). Reading ac᷉ ᷉ent and diminishing returns to time. Journal of Educational Psychology, 76(3), 442-451.

Wang, M. (1983). Development and consequences of students' sense of personal Control. In. J. M. Levine & M. C. Wang (Eds.), Teacher and student perceptions: Implications for learning. Hillsdale, NJ: Erlbaum.

Willes, M. J. (1983). Children into pupils. A study of language in early schooling. London: Routledge & Kegan Paul.

ISSUES IN THE DISSEMINATION
OF CHILD DEVELOPMENT KNOWLEDGE

One of the principal missions of the ERIC system and each of
the 16 clearinghouses that constitute its information supply
network is to disseminate the contents of the ERIC document
collection. The Office of Educational Research and
Improvement--which supports, guides, and continues to
develop and refine the ERIC system--is strongly committed to
"practitioners" as one of the main targets of ERIC's
dissemination efforts. The experience at the ERIC
Clearinghouse on Elementary and Early Childhood Education
(ERIC/EECE) has been with efforts to disseminate information
to practitioners who work in preschools, day care centers,
and kindergarten and primary classrooms, as well as to
others such as pediatric nurses, parent educators, social
workers, and parents themselves.

Five issues that have marked and marred the efforts of
the Clearinghouse throughout its 14 years of operation are
described below. These issues relate to dissemination of

---

information in general as well as to the dissemination of information about child development in particular.

The Optimum Information Hypothesis

West (1981) has suggested that the more information confronting individuals, the more likely they are to be selective in what they attend to, and the more selective they are, the more likely they are to attend to information that is agreeable, compatible, or even identical with what they already hold to be true or right. Thus, the more information confronting people, the less likely they are to attend to what is new or to what departs from what they accept as true and right, or from what they already know anyway. Although this statement is offered in terms of amounts of information, it also refers to the rate at which a given quantity of information is presented or made available (i.e., the amount of information provided in a given unit of time).

West's (1981) suggestion can be stated as the hypothesis that there is an optimum amount of information below and above which new information in the form of ideas, concepts, knowledge, facts, etc. is not acquired. That is to say, having both too little or too much information available is equally unlikely to advance the acquisition of new ideas. It is likely that individuals vary in what

constitutes an optimum quantity of information. It would be difficult to ascertain empirically what constitutes an optimum amount of information or optimum rates of information flow. However, West's hypothesis may serve to remind us to inhibit our dissemination impulses, to be wary of simply churning out more pieces of information. At least we might be encouraged to temper our expectations of what impact we can have and to be more modest in our expectations of getting knowledge adopted and applied.

The notion that more is not necessarily better puts a different light on Rohwer's (1970) statement that "the better the amount of information about children available to schoolmen, the better the chances of improving educational practice" (p. 1380). On the contrary, perhaps there is too much information and knowledge (in its various forms) being disseminated for the majority of those whose knowledge and behavior we wish to modify. This hypothesis also suggests that the new electronic mechanisms for making more and more information more and more rapidly accessible might be a mixed blessing! We have not even taken up the question of whether the quality of this increasing quantity of more rapidly available information is sufficiently high to warrant greater effort in dissemination. It is not even clear how the quality of information can be evaluated.

The "Goldilocks" Problem of Dissemination

Occasionally, on reviewing reports of research in the developmental and educational psychology literature, I suspect that one attribute that may influence applicability and adoptability of information is the "size" of the ideas with which such reports deal. If, for example, we inspect the table of contents of such journals as Child Development, Developmental Psychology and the Merrill-Palmer Quarterly, we are likely to find that the majority of articles deal with relatively small-scale phenomena or with molecular or even micro-level variables (e.g., object versus person permanence, children's memory for spatial locations, lexical access, etc.

On the other hand, many of the concepts and ideas found in the practitioner's literature seem to be too large in size to make them useful, applicable, or adoptable. Ideas like "all children are individuals," "each child has his or her own learning style," and so forth seem very large. Of course, all children are individuals! The assertion that "all children are individuals" is a "non-statement": It does not help a practitioner determine to which events, situations, or phenomena it does or does not apply. To some extent, the construct "developmental stage"--especially Erikson's (1963) formulation--suffers also from being too

"large" to do very much with, except perhaps to rationalize certain preferences for given pedagogical practices.

The relatively small size of ideas in the developmental research literature is highly appropriate where it is--in the journals in which we write for each other. But ideas or concepts of the micro-level size are unlikely to stimulate new practices directly, which is what we are hoping for in undertaking such dissemination efforts as are represented by the ERIC system. On the other hand, the very large ideas in the literature directed to practitioners may appropriately serve as doctrine, or ideological reminders, strengthening practitioners' sense of certainty (correctly or incorrectly). As indicated in the discussion below, the sense of certainty may make important contributions to practitioners' effectiveness.

The issue, then, is whether or not we will increase the applicability of our child development knowledge if we can learn how to present it in a particular conceptual size. Ideas are the "right" size if they help practitioners determine for which classes of cases or teaching situations they are appropriate.

In the field of developmental psychology, review and synthesis papers are more likely to present information and ideas of the right size than are individual articles. For an excellent example of a thorough review of a body of literature dealing with reports of smaller size variables,

we might take Jere Brophy's (1983) treatment of the accumulated reports of the self-fulfilling prophecy research. At the end of an exhaustive discussion of the accumulated research literature, he lists specific implications for teaching. Since applicability may be related to conceptual size, it would be interesting to know which of his implications would be classified as being too small, too large, or of just the right size for application by practitioners as well as by developmental psychologists. Some research on how practitioners respond to different sizes of ideas might be helpful. This, then, is the disseminator's "Goldilocks" problem!

Somewhat related to the Goldilocks problem is the scientific ethic of presenting information with appropriate and adequate qualifiers. Inasmuch as virtually all results and findings are probabalistic, and almost all variables can be infinitely differentiated into more microscopic or molecular levels beyond those actually studied, it is difficult to report them with the clarity as well as confidence that would encourage would-be adopters. Flavell (1982) chastises psychologists' clients for wanting "a neat and simple 'ages-and-stages' developmental story" (p.7). But so do we ourselves, he points out! As indicated in the discussion below, the world of action--occupied by parents and teachers and other child-caring professionals--requires clear, unequivocal ideas of just the right size.

The Vividness Problem

Another issue in dissemination is what might be called the "after they've seen the movie they'll read the book" phenomenon. It appears that, at least when it comes to entertainment, reading follows exposure to ideas presented through a more vivid medium. Following a film adaptation, there is frequently a rush on books that had been gathering dust on library shelves for years (as was the case for A.J. Cronin's The Citadel) and a demand for more information on a particular person or event depicted in a film (as, for example, the demand for information about Indian life and culture following the film version of E. M. Forester's A Passage to India). There also exists the process of "novelization", or writing a book after a film has been shown when none existed before (as was the case for the book based on the film adventures of Indiana Jones). Thus, ideas, images, thoughts, and feelings stirred through film or television whet appetites for further exposure to the original souces.

This is not, strictly speaking, a particular problem of the adoptability or applicability of child development knowledge per se. Rather, this issue relates to some of the problems of getting information, ideas, and concepts attended to through one medium in order to get them followed up in another.

If this is indeed a genuine phenomenon generalizable to non-entertainment reading, then we might consider what vivid media are most effective as mechanisms for the dissemination of child development knowledge. It has often been observed that, following formal lectures that include references to articles and books, members of the audience ask for complete citations and references and show strong interest in obtaining copies of the paper presented or of references cited--presumably with the intention of following up what has been made vivid during the lecture. I am not aware of any empirical data on this phenomenon, but the notion is intuitively appealing. The extent of actual follow-up is hard to guess. In the case of references available exclusively through a particular source (e.g., ERIC documents or the technical ports of a research institute), it might be possible to stud, patterns of follow-up interest in ideas and information presented vividly in lectures or films. If it is indeed the case that the probability of reading research reports increases following a "live" or "lively" presentation, what dissemination practices should we consider?

Propitiousness

The popularity of the expression "an idea whose time has come" is probably well-deserved. Not just in cosmic

66

chronology, but in more specific and concrete terms, child development knowledge is wanted and presumably utilized when a particular predicament occurs or when a teacher or parent has reached the end of his or her tether. Making ideas, concepts, and facts available when people are at the beginning of their tethers appears to be ineffective. Perhaps if a consultant or child development specialist were easily accessible via some kind of hot/warm line or interactive computer network, the available knowledge would be used more often.

Orientations to Knowledge

Another aspect of dissemination in this field concerns the possibility that those of us who produce child development knowledge and those we wish would adopt and apply it have quite different ways of apprehending and using such knowledge. If this is so, we will have to take those differences in orientation to knowledge into account to increase the likelihood that the knowledge will be used.

Potential differences in orientation to knowledge can be examined by adopting the ideas of Freidson (1972), as expressed in his study of the sociology of knowledge in the medical profession. Freidson classifies subsets of members of the medical profession in terms of two distinct types of

"mind sets," or orientations to knowledge and research. According to Friedson's analysis, groups within the field of medicine can be classified into at least two groups: the scientific mentality, embodied in the professor of medicine, who is usually a scientist and not a physician; the other the clinical mentality, reflected in the perspective of the medical practitioner. These contrasting orientations to knowledge are described on five interrelated dimensions, as shown in Table 1.

The first dimension, reflective versus active, suggests that scientists--developmental psychologists, let us say--are well-served by the disposition to be reflective

Table 1
Orientations to Knowledge and Research

Scientific Orientation (e.g., psychologist)	Professor or Trainer of Practitioners	Practitioner Orientation (e.g., teacher)
1. reflective	?	1. active
2. conceptual	?	2. pragmatic
3. theoretical	?	3. subjective
4. skepticism	?	4. faith
5. determinacy	?	5. indeterminacy

and to consider alternative courses of action, explanation, theories, and so forth. On the other hand, the practitioner--a teacher, child care worker, or perhaps

parent--needs to be disposed to action in situations of high
ambiguity, even in situations in which no relevant
information is available.

The second dimension, conceptual versus pragmatic
orientation, suggests that psychologists seek concepts to
explain how something works, whereas the teacher or parent
will settle more quickly for what works even without
explanations. For the latter group, who sometimes adopt an
"I'll try anything" approach, the premium is on doing
something, on the practicalities of the situation.

The third dimension, theoretical versus subjective
orientation, similarly suggests that the psychologist is
looking for theories that help organize observations and
build a system of understandings and concepts that hang
together sensibly. According to Freidson (1972), the
practitioner is more disposed to be reassured by direct,
firsthand experiences, or even by the secondhand reports of
other practitioners' firsthand experiences, than by a
theory. Practitioners are likely to accept scientists' data
if, and only if, these data correspond to their own
subjectively derived views (i.e., if they know it from their
own experience or at "gut level"); they seem less likely to
abandon their subjectively acquired views when the
scientifically developed knowledge gainsays them.

Perhaps this disposition to rely heavily on
subjectively derived views and insights is what is alluded

63

69

to in statements about the importance of "owning" one's own program, innovation, or idea. The importance of ownership is often emphasized in discussions about the erroneousness of the so-called "trickle-down" theory of information dissemination. What does "ownership" per se cause? Much literature on the importance of so-called "action research" or "teacher-researchers" implies that ownership of innovations and data causes greater or better application. Perhaps so. But why? What would the underlying mechanism be? It would be a pity if such ownership were required in engineering or medicine for innovations to be applied!

The fourth dimension, skepticism versus faith, refers to such dispositional or orientational differences as the scientist's tendencies to prize doubt, to be concerned about the reliability and generalizability of the results of experiments, and so forth. For practitioners, however, doubt and skepticism may be dysfunctional. For example, strong conviction about the rightness of a course of action may influence its effectiveness: Uncertainty in teaching or parenting may result in giving children mixed signals, which may in turn cause the children to resist the adult, which may further undermine the adult's confidence and hence the effectiveness of the action taken. The term "faith" is used here in the sense that the practitioner needs to believe in the appropriateness of the action chosen even when no supportive evidence is available. Indeed, sometimes

counter-evidence is dismissed as irrelevant or on the grounds that it is based on experimental, unrealistic, contrived, un-lifelike or non-naturalistic treatment conditions. (However, when the results of such contrived experimental treatments support strongly held beliefs, methodological nit-picking is usually set aside!)

The fifth dimension, determinacy versus indeterminacy, refers to the scientist's search for lawfulness, or discovery of the underlying laws and theories upon which he or she hopes to be able to make good predications. The practitioner, on the other hand, tends to hold that events in the real world are far too complex to make discovery of the operating laws possible.

The two groups within the field of early childood education and care can be thought of as two subcultures, perhaps, each with its own orientations or "habits or mind" and, to some extent, with its own its own language or technical jargon. Table 1 depicts the two orientations in opposing columns. I have suggested elsewhere that those who train practitioners might occupy the column between the scientist and the practitioner, the psychologist and the teacher (Katz et al., 1982). What would the positions of this middle group be on the five dimensions? What positions would be desirable ones?

Perhaps many of us belong in more than one of the three columns; perhaps some of us operate in all three at the same

65

time or are sometimes in one at one time and in the other at another time. Those of us responsible for training practitioners--the logical adopters and appliers of child development knowledge--are not really welcomed either by the pure scientist, whose findings we wish to transmit, or by the pure practitioner, whose practices we wish to shape. Each of these groups is likely to see us as deficient in its own specializations (Fitz & Raths, 1982). Shulman (1986) points out that

> to conduct research, scholars must necessarily narrow their scope, focus their view, and formulate a question far less complex than the form in which the world presents itself in practice. This holds for any piece of research; there are no exceptions. (p. 6)

Empirical studies of how we are perceived by our colleagues who do "basic research" and by those who make things happen "in the trenches"--in schools, day care centers, hospitals, etc.--might help clarify some of these issues.

Conclusion

It seems that, if we are to succeed in getting child development knowledge applied, we will have to attend to the rate at which our audience receives information, or at least to the extent to which we must compete with all other sources of information to which they are subjected. We will also have to concern ourselves with how to speak with enough

confider.., and clarity about ideas large enough to be useful and small enough to be discriminable. We may have to use the visual media more often and imaginatively than ever, to find ways to be "on call," or reachable when we are really needed. And finally, the time has come when we must learn to be equally fluent in the language of both the scientists and the practitioner, to be at home in both the scientific and the practitioner cultures, to be good interpreters of one to the other, and to be able to speak these languages in vivid ways that cause listeners to want to "read the book after they've seen the movie."

We may have to learn to be bilingual and bicultural and be committed to multiculturalism, having respect and understanding of the contributions each culture makes to the larger one in which we work. However, it is not only the members of the scientific culture who may need to be bicultural; the members of the practitioner culture as well should be encouraged to understand the contributions their scientific colleagues are trying to make to the welfare of all. When it comes to the status of college/university people and preschool/day care practitioners, we still seem to hold to a sort of "moral superiority of the victim" notion.

No research has been found that asks practitioners to identify the most recent changes they have made in their own practices and what sources of information about the new

practices they used. I expect the most likely response to such questions would be that the source of new practices was another practitioner! Another line of research would be to survey our scientific colleagues and to ask for nominations of three or four pieces of "child development knowledge" they want disseminated and adopted. What would be the bases underlying their nominations? To what extent would there be consensus on the knowledge most worth disseminating?

In summary, several factors affecting efforts to disseminate information about child development have been discussed. Among them, the sheer amount of information in the flow as well as the "conceptual size," vividness, and timeliness of the ideas being broadcast deserve consideration. A final factor concerns the orientations to knowledge characteristic of the respective cultures of scientists and practitioners. It is proposed that, to be fully effective, those whose major assignments involve preservice or inservice education of teachers and child care workers need to become versed in the languages of both these cultures.

REFERENCES

Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. Journal of Educational Psychology, 75(5), 631-661.

68

Erikson, E. H. (1963). Childhood and society (2nd ed.). New
     York: Norton.

Flavell, J. H. (1982). Structures, stages, and sequences in
     cognitive development. In W.A. Collins (Ed.), The
     Concept of Development. The Minnesota Symposia on Child
     Psychology (Vol. 15). Hillsdale, N.J: Erlbaum.

Freidson, E. (1972). The professional of medicine. New York:
     Dodds Head.

Katz, L. G., Raths, J. D., Irving, J., Mohanty, C., Kurachi,
     A., & Sani, M. (1982). Reputations of teacher educators
     among members of their role set. Paper presented at the
     annual conference of the American Educational Research
     Association, New York.

Rohwer, W. D., Jr. (1970). Cognitive development and
     education. In P.H. Mussen (Ed.), Carmichael's manual of
     child psychology (3rd ed). New York: Wiley.

Shulman, L. S. (1986). Those who understand: knowledge
     growth in teaching. Educational Researcher, 15(2),
     4-21.

West, C.K. (1981). The social and psychological distortion
     of information. Chicago, IL: Nelson-Hall.

69

ERIC, the largest education database in the world, is funded by the Office of Educational Research and Improvement of the United States Department of Education. Each month, abstr. .ts and bibliographic information for more than 1,200 documents and 1,500 journal articles on all phases of education are entered into the ERIC database by the 16 clearinghouses in the ERIC system.

Each clearinghouse is responsible for acquiring and processing research reports, program descriptions, curriculum guides, and other documents related to a specific area in education. For example, the ERIC Clearinghouse on Elementary and Early Childhood Education (ERIC/EECE) deals specifically with information on the cognitive, physical, emotional, and social development and education of children from birth through early adolescence.

Like other clearinghouses, ERIC/EECE also publishes topical papers, bibliographies, information digests, bulletins, and resource lists for teachers, parents, administrators, researchers, and policy makers. In addition, staff members respond to requests for information related to elementary and early childhood education.

Information in the ERIC database can be retrieved by computer search or by using published indexes. Abstracts and bibliographic information are listed in two monthly publications: Resources in Education (RIE) and Current Index to Journals in Education (CIJE). The complete text of most ERIC documents announced in RIE can be read on microfiche in ERIC microfiche collections available in more than 700 libraries and information centers. In addition, most of these documents can be ordered in paper copy and/or microfiche from the ERIC Document Reproduction Service, 3900 Wheeler Avenue, Alexandria, VA 22304 (Telephone: 800-227-3742).

CIJE provides access to journal articles, which may be read in the periodicals in which they were originally published. Selected reprints are also available from UMI Article Clearinghouse, 300 North Zeeb Road, Ann Arbor, MI 48106 (Telephone: 800-732-0616).

For complete searching and ordering details, consult the pages of RIE or CIJE. For more information about the ERIC system and about ERIC/EECE, contact ERIC/EECE Information Services, University of Illinois, 805 West Pennsylvania Avenue, Urbana, IL 61801 (Telephone: 217-333-1386).

77

ADULT, CAREER, AND VOCATIONAL EDUCATION
Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, OH 43210
(614) 486-3655

COUNSELING AND PERSONNEL SERVICES
University of Michigan
School of Education, Room 2108
Ann Arbor, MI 48109-1259
(313) 764-9492

EDUCATIONAL MANAGEMENT
University of Oregon
1787 Agate Street
Eugene, OR 97403
(503) 686-5043

ELEMENTARY AND EARLY CHILDHOOD EDUCATION
University of Illinois
805 W. Pennsylvania Avenue
Urbana, IL 61801
(217) 333-1386

HANDICAPPED AND GIFTED CHILDREN
Council for Exceptional Children
1920 Association Drive
Reston, VA 22091
(703) 620-3660

HIGHER EDUCATION
George Washington University
One Dupont Circle N.W., Suite 630
Washington, DC 20036
(202) 296-2597

INFORMATION RESOURCES
Syracuse University
School of Education
Huntington Hall, Room 030
Syracuse, NY 13210
(315) 423-3640

JUNIOR COLLEGES
University of California at Los Angeles
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, CA 90024
(213) 825-3931

LANGUAGES AND LINGUISTICS
Center for Applied Linguistics
1118 22nd Street, N.W.
Washington, DC 20037
(202) 429-9292

READING AND COMMUNICATION SKILLS
National Council of Teachers of English
1111 Kenyon Road
Urbana, IL 61801
(217) 328-3870

RURAL EDUCATION AND SMALL SCHOOLS
New Mexico State University
Box 3AP
Las Cruces, NM 88003
(505) 646-2623

SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION
Ohio State University
1200 Chambers Road, Room 310
Columbus, OH 43212
(614) 422-6717

SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION
Indiana University
Social Studies Development Center
2805 E. 10th Street
Bloomington, IN 47405
(812) 335-3838

TEACHER EDUCATION
One Dupont Circle, N.W., Suite 610
Washington, DC 20036
(202) 293-2450

TESTS, MEASUREMENT, AND EVALUATION
Educational Testing Service
Rosedale Road
Princeton, NJ 08541
(609) 734-5176

URBAN EDUCATION
Teachers College, Columbia University
Institute for Urban and Minority Education
Box 40
525 W. 120th Street
New York, NY 10027
(212) 678-3433