AN EXPLORATION OF THE ROLE OF THEORIES IN COMMUNICATION FOR GUIDING PRACTITIONERS

ILENE B. HARRIS, University of Minnesota Medical School

Communication for guiding practitioners is a fundamental problem in preparing practitioners generally and in implementing curricula. Walker highlighted the importance of communication for guiding practitioners, but noted, "the amount written about the craft of writing curriculum documents is quite small compared, say, with what has been written about the more specific art of stating behavioral objectives." These comments by Walker, and others, suggest the need to address the problems inherent in the goal that a written text guide practitioners.

Three modes of discourse are frequently used for guiding practitioners—persuasive writing, descriptions of practice, and theories or theory-based prescriptions. Elsewhere, I explored the role of persuasive discourse and descriptions of practice in communications for guiding practitioners. In this paper, the role of theories or theory-based prescriptions in communications for guiding practitioners is explored. The education literature abounds with claims for the value of theories in guiding practitioners. Yet, many invest-
gators suggest that practitioners eschew theories in guiding practice and view them as irrelevant. Wherein lies the gap?

In this paper, I address this problem. First, four different types of theory are characterized in terms of their potential roles in communications for guiding practitioners. Then, I discuss two generic and fundamental characteristics of all theories—selectivity and generality. It is suggested that the value of theories for guiding practitioners depends in part on how they are expressed, and therefore strategies for their effective communication in guides for practice are formulated. The term "guide" refers to any written communication that is intended to help practitioners implement educational ideas and strategies or that is read with a view to obtaining such help. Such communications may be teachers' editions of textbooks, journal articles, methods books, tracts by popular education writers, such as Ashton Warner, Holt, Kohl, and Kozol, and so on. These analyses are intended to help authors (who may be practitioners) and practitioners better understand the role of theories in communications for guiding practice. It should be observed that the analyses pertain to teachers, as well as to a broad range of educational practitioners, such as school principals and superintendents and curriculum specialists.

CHARACTERIZATION OF FOUR TYPES OF THEORIES

What is meant by "theories"? Theories are general representations of phenomena. Here, I explore the role in guiding practitioners of four important types of theory that I label: explanatory theory, doctrine, applied theory, and practice theory. Briefly, explanatory theories are conceptual frameworks intended to provide persuasive explanations for puzzling aspects of phenomena, such as Piaget's theory of cognitive development. Doctrines are philosophical assumptions about the means and ends of education, typically justified by either sustained arguments or persuasive exhortations. Applied theories are principled structures, frequently grounded in explanatory theories, that suggest strategies for attaining outcomes. Such theories are typically buttressed with research designed to demonstrate the effectiveness of the strategies. Practice theories are rationalized formulations of practitioners' educational strategies, recommended on the basis of practical wisdom, rather than experimental validation.

Theories can serve three basic functions in guiding practitioners. First, theories can provide persuasive representations of reality, and thereby provide the impetus to try out new ideas. Second, theories can provide frameworks...
for understanding educational practices. Each sheds its special light on experience. Schwab contends that each can give practitioners a distinct perspective for viewing reality. Third, theories provide frameworks for the major task of practitioners—thinking about and implementing educational interventions.

Theories serve different roles for guiding practitioners in the proactive and interactive phases of a practice such as teaching. In the planning phase, practitioners can use theories to think about appropriate actions. As Gowin comments:

The theory is not a guide to the action in the same sense that a musical score is a guide to the action of a performing musician. It is a guide to the action of thinking, as it were, but not a guide to direct action.

In the implementation phase, practitioners eschew lengthy deliberations about interventions but are inevitably guided by their beliefs and theories. Getzels argues, "Our actions are inevitably founded in our motives and steered toward goals by the relevant explicit or implicit theories that we hold."

In this section, each type of theory is characterized, with a focus on its particular role in guiding practitioners. The different types of theory are intertwined, conceptually and in relation to guiding practitioners; they are assessed separately for purposes of analysis.

**Explanatory Theories**

Explanatory theories are conceptual frameworks designed to account for problematic aspects of reality. They range from those that are limited in scope (such as a particular teacher's attempt to account for the problematic behavior of a particular student) to those offering explanations of a wide range of phenomena, such as Freud's theory of personality, Piaget's theory of cognitive development, or Dewey's theory of the relationship between knowledge and experience.

There is an extensive literature concerning how explanatory theories are or should be derived. Among the proposals are: "serendipity," intuitive personal knowledge, and "discovery of grounded theory" through semisys-

---

A clear explanation of the role of theories in communication for guiding practitioners starts with the observation that theories originate in some interaction between personal insight and the data of experience. Some types of explanatory theories are distinguished here in terms of their origins and subject-matter, since the sources of theories can affect their expression and use by practitioners.

Some explanatory theories, such as those by Freud and Piaget, originate in attempts to account generally for such matters as personality development or cognitive development, they are not developed or originally expressed with a view toward educational applications. Thus, they may be expressed in terms alien to practitioners, and their implications for practice may not be immediately apparent. Other explanatory theories originate closer to educational practice in investigations of the character of teaching, of school subject learning, of socialization in schools, and so on, such theories are labeled here as theories of schooling. For example, in *Complexities of an Urban Classroom*, Smith and Geoffrey proposed a metatheory of teaching based on their observations of Geoffrey's interactions with his class. These theories of schooling tend to be phrased in terms that are familiar to practitioners. The fact that theories of schooling originate close to educational practice does not, however, make them immediately useful for guiding practitioners. It is argued later that only applied and practice theories are useful for communicating the decision-making parameters of a practice such as teaching.

Explanatory theories are designed to interpret experience, they must also be verified in experience. In everyday activities, constructs are tested informally by assessing their fit with further observations and reflection. Within the various disciplines, rationalized schemas for verifying theories (for example, guidelines for research design) exist in custom and tradition, they are explicitly formulated in texts and treatises.

Research schemas for verifying explanatory theories are frequently viewed within a paradigm drawn from the natural sciences. Namely, theories are phrased in hypotheses that are tested, according to strictly defined procedures, to yield lawlike statements within an antecedent-consequent or predictive framework. Explanatory theories can be viewed within a variety of other paradigms, which relate to the subject-matter addressed, the type of resolutions that resolve initial puzzlements, and the guidelines for research design that develop within particular disciplines. For example, antipositivists such as Dithey, Von Wright, and Dray each argue that truth in human studies might be better approximated by statements rich in detail and the sense of complex...
human encounter than by the propositional statements of lawlike relationships recommended by positivists such as Hempel and Popper. The research strategies used to validate theories are designed with one aim—to provide persuasive evidence in support of the theories.

Theories must be codified in appropriate terms. The terms that may be most appropriate for communication of theories among researchers may not be the most useful for practitioners. Two types of language are available to communicate theories: the language of everyday experience and technical terminology. The language of ordinary experience includes both literal and figurative language. Literal language identifies facets of reality in conventional, consensual terms that retain their primary meanings. Figurative language is a discourse of linguistic devices such as metaphor, simile, or personification, which is used to suggestively portray facets of reality that resist formulation in literal terms. Technical terminology can be viewed broadly as terms embedded within networks of characterization, explanation, or definition that acquire conventional meanings within those networks. Such terms can be borrowed from ordinary language and redefined within a network of definitions, or they can be invented.

Initially, theories are communicated in the language of everyday experience. Highly developed theories tend to be expressed in technical terminology, because they are characteristically proposed and investigated within communities of scholars who require a language suitable for precise communication. Hempel argues that ordinary language tends to be inadequate to these requirements because it often lacks precision and uniformity of usage.

Thus, considerable effort is expended toward developing languages to communicate emerging theories. Smith and Geoffrey's work provides an interesting example. In their discussion of the dimensions of teaching in *The Complexities of an Urban Classroom*, they comment, "Our interests lie in description, model and theory building, and interpretation As description moves beyond the rough categories and concepts of the laymen, the issue of a language system appropriate to the classroom arises." The terms of the language system that they developed are presented in a glossary at the end of their report. Two types of technical terms are defined in this glossary. Terms from ordinary languages—such as "teacher," "time," and "variety"—are con-

---


verted into technical terms through succinct definitions. For instance, "teacher" is defined as "a role in the school in which an individual tries to change the learning of another, the pupil." Also, new terms are invented and defined to express their constructs, such as "preparation for contingencies," "the provisional try," and "ring mastership."

The theories that education borrows from the behavioral sciences tend to be expressed in technical terms, such as "accommodation" and "assimilation" from Piagetian developmental psychology, "reinforcement," "operant conditioning," and "extinction" from behavioral learning theory, and "id," "ego," and "superego" from Freudian personality theory. While technical terms can facilitate communication among persons versed in the research tradition, such terms may present barriers to understanding for practitioners. As Scheffler comments:

Scientific definitions are evaluated primarily in terms of their contributions to theoretical adequacy, irrespective of their degree of conformity to familiar usage, their ability to enlighten the laymen, and their social and rhetorical effects. Yet, practitioners must be able to reference the constructs and technical terms of theories in familiar language and in their experience before the theories in which they are embedded can be accessible to them as guides.

Explanatory theories can serve important functions in guiding practitioners. First, they can persuade practitioners to reflect upon their experiences and interventions in their terms. Smith and Geoffrey commented:

Our many diagrams and figures are, in reality, miniature theories about teaching. We hope they are persuasive enough to challenge teachers to test them against their own experience and powerful enough to illuminate further that experience.

One source of their persuasive power is their explanatory constructs. As Vallance comments, "Theory pertains to regularities, giving persuasive representations of phenomena, bringing sense out of chaos, showing commonalities and principles of order and explanation." What makes such representations persuasive? Schwab contends that theories are persuasive when they resonate with and help to make sense of experience. Findings from empirical investigations associated with theories add to their persuasive impact through the rhetorical power of the scientific method. As Ziman comments, "Experimental evidence is public knowledge, par excellence with the power of car-

---

22Ibid, p 268
rying complete conviction. . . the familiar 'method' of Science . . . has tremendous rhetorical power. . . it has overwhelming persuasive force."\textsuperscript{27}

Explanatory theories also provide practitioners with frameworks for understanding and interpreting reality. For example, a vignette from the Murrows' book, Children Come First: The Inspired Work of English Primary Schools, portrays a day in the classroom life of one child, Ann. They portray her moving in and out of her school and classroom without attention to time schedules. She engages in a variety of activities, individually or with other children, pursuing her own interests, working and playing with a variety of materials, and asking and being asked questions by a teacher who is similarly engaged, attending to the activities, interests, and questions of each child in her class—a typical open classroom scenario.\textsuperscript{28} Imagine a teacher observing such a scenario armed with Piaget's theories of cognitive development. Individuals proceed through stages of cognitive development, each at their own pace. During the primary school years, children reach higher stages through manipulation of materials and interactions with peers and adults. The teacher will have therein one useful framework for interpreting this educational reality. By contrast, a teacher who observes this scenario armed with Skinner's theories of behavior change will view it in a different, but useful, light.

Explanatory theories can suggest to inventive practitioners potentially fruitful educational strategies. The practitioner who uses Piaget's theories of cognitive development as a framework for viewing educational practice might be enticed to provision a classroom with appropriate educational toys. One point, however, is critical. Explanatory theories do not directly communicate operational strategies.

Doctrines

Doctrines are rationalized systems of values—general frames of reference, viewpoints, or philosophical assumptions—about the means and ends of education in relation to general orientations toward human life and culture. Such systems of values are often labeled as "ideologies." Following the usage of Smith and Keith,\textsuperscript{29} I label them doctrines, to emphasize the conscious and codified character of ideologies.

Doctrines vary in scope. Some present encompassing views about the nature of man, society, knowledge, and so on, in relation to the goals, content, and organization of curriculums, for example, the five curricular orientations identified by Eisner and Vallance. Development of cognitive processes, curriculum as technology, self-actualization, social-reconstruction relevance, and aca-

\textsuperscript{27}John M. Ziman, Public Knowledge An Essay Concerning the Social Dimension of Science (Cambridge England Cambridge University Press, 1968), pp 31-32


\textsuperscript{29}Louis L. Smith and Pat M. Keith, Anatomy of Educational Innovation An Organizational Analysis of an Elementary School (New York: Wiley, 1971), p 23
An Exploration of the Role of Theories in Communication for Guiding Practitioners

demic rationalism. Others are narrower in scope and focus on matters such as the proper character of social studies in relation to views of society. Oliver and Shaver, for example, present a conception of American society as pluralistic and proceed from this formulation to formulation of a curriculum centered on analysis of public controversy through a "jurisprudential" approach. Other doctrines constitute particular beliefs that ground particular actions. Barth, for example, isolated specific beliefs that appear to underlie teachers' practices associated with open education, such as the belief that "children's innate curiosity leads to exploratory behavior that is self-perpetuating."

Doctrines and explanatory theories differ in their sources and validation. Exponents of doctrines tend to defend their views by arguments (of varying rigor), rather than by experimental validation. Travers, for example, distinguishes what I have labeled "explanatory theories" from "doctrines," noting that some theories of instruction are developed in the "scientific and pragmatic tradition," while others, such as Froebel's concept of education, represent and codify beliefs concerning the nature of man (in Froebel's case, deep religious convictions concerning unity of the soul).

Doctrines, like explanatory theories, tend to be expressed in characteristic idioms. The idioms may be invented. Smith and Keith comment that, "At Kensington, little was called by a usual name. Teachers were not teachers; they were academic counselors and resource specialists. Classrooms were laboratory suites, and the library was the perception core."

Alternatively, the idioms may be borrowed from well-developed forms of discourse, such as theology or aesthetics. Proponents of a "self-actualization" orientation, for instance, such as Phenix, Greene, Maslow, and Newmann and Oliver contend that the function of education is to "provide personally satisfying, consummatory experiences aimed at personal integration."

Their language is drawn from the characteristic discourse of humanism, existentialism, and existential psychology as illustrated in the following passage:

A curriculum of transcendence provides the context of engendering, gestating, expecting, and celebrating the moments of singular awareness and inner illumination when

---

31 Donald W. Oliver and James P. Shaver, Teaching Public Issues in the High School (Boston: Houghton Mifflin, 1966)
each person comes into the consciousness of his inimitable personal being. It is not characterized so much by the objective content of study as by the atmosphere created by those who comprise the learning community. Its opposite is the engineering outlook that regards the learner as material to be formed by means of a variety of technical procedures.

These idioms, like the technical terms in which explanatory theories are expressed, take on conventional meanings for those steeped in the doctrine, but the terms and the concepts they express may be alien to those not versed in the doctrine. Practitioners must be able to reference the idioms in which doctrines are expressed in familiar language and in their own experience before the doctrines become accessible to them in guiding their practice.

I distinguish doctrines, as just characterized, from a type of discourse through which they are often distorted, namely slogan language. The values so expressed may be merely expressions of belief, without sustained arguments. Or, doctrines that were at first formulated in sustained arguments begin to be expressed in slogans. Elsewhere, I analyzed the role of slogan language in guides for practitioners. To reiterate briefly, slogans function emotively to evoke enthusiasm and support for educational ideas and practices. They provide rallying symbols and organizing labels for educational emphases. Yet slogans are vague as to implications for specific educational practices, they tend to distort the character of the doctrines they are frequently used to express. Practitioners who aspire to translate enthusiasm for educational practices into school programs must recognize the limitations of slogans for guiding practice.

Doctrines are fundamentally theoretical bases for educational practice. Like explanatory theories, doctrines can contribute to the persuasive impact of proposals for educational practice. Doctrines have two sources of persuasive impact—the power of supporting arguments and the evocative power of the idioms in which they are expressed.

Doctrines, like explanatory theories, can provide practitioners with frameworks for understanding educational reality. For example, Bennet and Zaret use two different theoretical frameworks—curriculum decision making and humanist existential psychology—to analyze the same classroom instructional dialogue. They argue that each is useful for understanding the teaching-learning process represented in the particular dialogue, although each sheds a different perspective.

Doctrines also serve as screens for recommended educational practices. Travers argues:

---

37 Ilene B. Harris, "Role of Persuasive Discoveries in Communication for Guiding Practice," paper presented at AERA, April 1983.
A framework of values, establishes the limits that must be recognized by those who wish to apply scientific knowledge to the solution of learning problems. A scientific and comprehensive theory of educational phenomena might include statements concerning the conditions under which punishment is an effective modifier of behavior, but the values that provide the foundation for an educational program might exclude the use of punishment.  

Doctrines can also suggest the character of recommended programs and provide rationales for educational practices Joyce and Weil comment. Educational procedures are generated from general views about human nature and the kinds of goals and environments that enhance human beings. Because of their frames of reference educators are likely to focus on specific kinds of learning outcomes and to favor certain ways of creating educational environments.  

However, like explanatory theories, doctrines do not directly communicate the character of educational strategies.

**Applied Theories and Practice Theories**

Explanatory theories and doctrines do not entail or directly formulate methods of instruction. As William James argued with respect to explanatory theories:

You make a great . . . mistake, if you think that psychology, being the science of the mind's laws, is something from which you can deduce definite programs and schemes and methods of instruction for immediate schoolroom use. Psychology is a science, and teaching is an art, and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application, by using its originality.  

In this section, two types of theories that do explicitly formulate methods for instruction are characterized: applied theories and practice theories. Practitioners confronted with the task of achieving some desired outcome, whether a cure, a piece of sculpture, or children's learning, will search for others' effective strategies and invent strategies. There is an eternal quest among practitioners and researchers to invent and/or codify generalized principles of practices that work—theories—so that practitioners can benefit from others' investigations and experiences.

One source of such theories is application of explanatory theories for example, behavioral learning theory, an explanatory theory of learning, has spawned numerous applications, including programmed instruction and

---


teaching machines, behavior modification programs, and behavioral counseling. The intermediary inventive minds, to whom James refers, apply explanatory theories to develop rationalized, validated technologies for effecting desired outcomes. This genre of theorizing and its outcomes is one type of what I label applied theory, following the usage of Polanyi.

Another source of theories for practice is the (presumably) successful practice of skilled practitioners. Analysts and practitioners may attempt to codify expert practice in general principles of practice. This type of theorizing and its outcomes are labeled here as practice theory. Practice theories, as distinguished from applied theories, are rationalized formulations of practitioners' practices, recommended on the basis of faith, custom, and practical wisdom, rather than experimental validation against appropriate outcome measures.

**Applied theories** and **practice theories** are closely linked. The critical attribute of both is their focus on the invention and articulation of methods for achieving preferred conditions or outcomes. In this respect, Dewey's characterization of "applied" sciences is equally appropriate to both types. What is sometimes termed "applied" science is directly concerned with instrumentality at work in effecting modifications of existence in behalf of conclusions that are reflectively preferred ... Engineering, medicine, social arts realize relationships that were unrealized in actual existence.

The two types are also closely linked in that practice theories can be subjected to experimental validation against appropriate outcome measures. Conversely, strategies suggested by explanatory theories—applications of explanatory theories—can be recommended to practitioners and adopted by them, based on faith and personal preference, rather than validation against outcome measures. Although the two types of theory are closely linked, there are important differences between them: their sources and their potential availability for guiding practitioners.

**Applied Theories**

Applied theories, as just discussed, can be applications of explanatory theories; they can also be strategies designed to achieve certain outcomes,

---


7John Dewey, Experience and Nature (Chicago: Open Court, 1925), pp 161-162.
irrespective of any explanatory theory. Many advances in medicine have resulted from a model in which inventions, such as drugs, are experimentally demonstrated (through controlled studies) to cure or meliorate patients' medical problems, although explanatory theories may be lacking.

In either case, applied theories have two critical attributes. First, they offer rationalized designs for methods useful in human affairs, an attribute at the core of Polanyi's distinction between pure and applied sciences. Second, as distinguished from practice theories, they have a characteristic experimental or pragmatic cast.

However, validation of applied theories for educational practice is elusive. Education takes place in a complex context, with significant variations among settings in the characteristics of teachers, students, organizational structures, social and political milieus, and so on. This complexity makes validation of applied theories elusive, in several respects.

First, to validate strategies against outcome measures, the strategies must be appropriately enacted and observable, the outcomes must be identifiable, and other presumably extraneous variables must be controlled. Given the complexity of classroom situations, these conditions are difficult to attain and, some would argue, perhaps inappropriate. Canons for validation of applied theories vary in relation to views of classroom phenomena. For example, Flanders, Medley and Mitzel, and Travers share a laboratory orientation to research on classroom phenomena in which they seek to control extraneous variables. By contrast, Smith, Gump, and Biddle argue that results of laboratory research are unlikely to generalize to complex classroom situations, they share a naturalistic orientation to studies of teaching.

Second, the types of instructional strategies and outcomes that can be validated by experimental methods are likely to be relatively limited ones, in terms of the complex instructional strategies and outcomes of concern in education. Glaser has made this point with respect to attempts to use "optimization methods" (developed in statistical decision theory, management sciences, and engineering design) in instructional design. He argues that determination of optimal instructional alternatives described by Atkinson and his students for learning the vocabulary of a second language and for paired associate list learning, is relatively easy only for "trivial" cases. Third, it is increasingly clear that educators are unlikely to validate generally applicable

---


50Ibid

strategies, for the content in which strategies are implemented significantly influences their usefulness and effectiveness. Good and Power note that despite countless studies designed to identify process measures of teacher behavior that are consistently associated with student progress, no single teaching behavior has ever been associated, categorically, with effective student behavior. They propose that the search for generally applicable instructional strategies be abandoned and recommend research on the interaction between teaching strategies and configurations of student characteristics, which they label typologies. Their argument implies that the value of any strategy varies in relation to the specific characteristics of educational situations. The interaction between instructional strategies, student characteristics, and desired outcomes must be specified for practitioners.

Finally, a complex configuration of characteristics that resist measurement or control affects the value of any applied theory and confounds validation efforts. The Abt Associates evaluation of the Follow Through Program was conducted as a planned variation design to assess the effectiveness of different models for teaching disadvantaged children. Investigators cite flaws that confound evaluation findings. However, to our knowledge, one finding of particular interest remains undisputed: that there is great variation from site to site in the results of each model. In fact, variation of the mean results within each model, from site to site, is greater than the variation of mean results among the models. House comments, "This finding is an important confirmation of contentions that the success of any educational innovation is dependent on contextual factors than can neither be implemented in the local scene nor controlled by outside parties."

Practice Theories

Practitioners develop effective instructional strategies, which all too often remain in the realm of personal techniques, clearly, such strategies can benefit others if codified in general principles for practice. Analyses of master practitioners' practices should offer a robust area for finding effective approaches to educational practice. I suggest that useful codifications of such practices

---

14 Thomas L. Good and C. N. Power, "Designating Successful Classroom Environments for Different Types of Students," *Journal of Curriculum Studies* 8 (May 1976) 46


would include practitioners'. (1) generalizable strategies, (2) rationales for the strategies (their personal explanations and doctrines); and (3) decision parameters for implementing strategies in actual classrooms. Codifications of practice that incorporate these critical elements are rare, however, due to difficulties in identifying and formulating them.

Practice theories, as just defined, will be characterized by discussing some types of communications that might be taken as codifying practice theories and demonstrating that they are in fact incomplete.

Handbooks of specific teaching methods, written by master-practitioners are available to teachers. Baratta-Lorton's *Workjobs*, for example, is intended as a handbook to help parents and teachers facilitate activity-centered learning. It contains detailed descriptions of 43 activities and for each it identifies (1) the skills toward which it is aimed, (2) specific questions for getting started, (3) specific ideas for follow-up discussion, and (4) specific materials. In one activity the child arranges size-graduated cardboard tubes in a size-ordered row. Among the skills toward which this activity is aimed is that of making comparisons. Required materials include cardboard tubing cut into 1/2-inch graduated pieces, spray paint, a container for the cylinder, and a reference card glued to the container that shows the gradations. The handbook recommends that the teacher start the activity as follows. "Pointing to the reference card, you might say, 'Arrange the cylinders to look like this pattern.' " For follow-up discussion, one of six suggested questions is "Which cylinder is the tallest? Is it on the right or left side?"

Such detailed descriptions of practical strategies are no doubt useful to teachers, but without supplementation, they are fundamentally incomplete for guiding educational practice, because they tend to provide only sketchy rationales for recommended activities and teaching strategies. In *Workjobs*, for instance, Baratta-Lorton presents the rationale for activity-centered education in just four brief paragraphs within the introductory materials. From reading just this handbook, practitioners do not have access to rationalized strategies for developing activities and questions, other than the specific ones it suggests.

Other communications do attempt to formulate practitioners' rationales for educational practices associated with open education. Barth has analyzed anecdotal and descriptive accounts of educational practices associated with open education, to elicit practitioners' assumptions about learning. The outcome of his analysis is a set of ten assumptions about children's learning, for example, "Children's innate curiosity leads to exploratory behavior that is self-perpetuating." Barth links this assumption with an emphasis on intrinsic motivation as a powerful impetus for learning.

---


"Roland S. Barth, 'Open Education Assumptions About Learning,' *Educational Philosophy and Theory* 11 (November 1969) 29–39"
Formulations of such rationales, if accurate, can no doubt help practitioners obtain perspectives of educational practice. Nevertheless, without supplementation, they are also incomplete as guides. Assumptions related to practice are a type of doctrine, and doctrines do not necessarily entail any particular educational strategies. More fundamentally, the assumptions, as stated, formulate partial views of children's learning with respect to viable teaching and educational practices. For instance, children's innate curiosity does motivate learning, but as Barth comments, "One must have something to be motivated about. The source of motivation resides neither in the child nor in the external world, but in the interaction of one with the other." He adds, "It remains for open educators to clarify the place of the adult in releasing or activating the child's inner motivation and of differentiating the control which is the child's from that which is the adult's."7

Detailed exemplars of educational practice (such as those presented in Workjobs) combined with associated rationales (such as those formulated by Barth) would effectively codify some critical aspects of educational practice. As adequate practice theory must also formulate coping strategies for implementing conceptions of education in actual classrooms, master practitioners do develop such strategies. The challenge for practitioners and analysts is to codify them.

Berlak and her colleagues have codified doctrines for open education in a form that I view as a paradigm for adequate practice theory.8 Based on extensive observation in open classrooms and interviews with teachers, Berlak and her colleagues conceptualize schooling in terms of a set of 15 persistent theoretical and practical dilemmas that teachers do resolve in practice. This conceptualization resulted from their efforts to account for apparent contradictions in teachers' meanings of practice, "for example, Mr Thomas letting one student decide how much math to do while telling another exactly what was required."9

In a provocative paper, they analyze teachers' patterns of resolutions to dilemmas such as teachers making learning decisions for children vs children making learning decisions. With respect to this dilemma, they posited that there appeared to be a simultaneous pull in two directions—toward the teacher making learning decisions and toward the children making the decisions. They present a framework to order the complex ways in which this type of dilemma can be manifested and resolved:

Decisions—not necessarily deliberated—are made about (1) whether or not a child will study in a given area, (2) what specifically is to be learned within that area, (3) when the task is to begin and when it is to be completed, and (4) how the learner is to proceed with the task. In a given learning situation, the child, or the teacher, or both jointly exercise one or more of these decisions, a teacher can follow different

---

7Ibid, pp 30, 31
9Ibid, p 233
patterns of resolution for different children, and at different times of the year, or for
different subjects or learning experiences.

Whether this decision matrix is adequate to account for the actual problems
that confront teachers in open classrooms is not the issue here; it is presented
as a paradigm for the type of analysis and codification that should characterize
doctrines adequate to account for the complexity of educational practice.

The potential value of practice theories for guiding practitioners makes
their formulation a task of critical importance. A growing body of literature
reports research that can contribute significantly to development of practice
theories. In general, this research is designed to elicit practitioners’ concep-
tions about education and teaching, typically in concrete situations. More
specifically, this research addresses questions such as the following: What
factors do teachers consider in instructional planning? How do teachers use
curriculum plans and programs in planning and actual implementation? What
qualities characterize teachers’ thinking and decision making during
interactive instruction? What is the nature of teachers’ perspectives, implicit
theories, or belief systems about teaching and learning? The methods

---

60 Ibid., pp 227–228
61 Christopher M Clark and Robert J Yinger, “Research on Teacher Thinking, Curriculum
Thoughts, Judgments, Decisions, and Behavior,” Review of Educational Research 51 (Winter
62 Penelope L. Peterson, Ronald W Marx, and Christopher M Clark, “Teacher Planning,
Teacher Behavior, and Student Achievement,” American Educational Research Journal 15 (Sum-
mer 1978) 417–432, Philip H. Taylor, How Teachers Plan Their Courses (Slough, England
Description and Theory Development Using Ethnographic and Information Processing Models”
Educational Leadership 35 (November 1975) 134–139
63 Michael F Connelly and Miriam Ben-Peretz, “Teachers’ Roles in the Using and Doing of
95–108, John K. Olson, “Teacher Constructs and Curriculum Change,” Journal of Curriculum
Studies 12 (January-June 1980). 1–11, and “Teacher Education and Curriculum Change Re-
examining the Relationship,” Curriculum Inquiry 7 (Spring 1977) 61–66
64 Christopher M. Clark and Bruce R. Joyce, “Teacher Decision-Making and Teacher Effective-
ness,” paper presented at the American Educational Research Association Annual Meeting, Wash-
ington, D C, April 1975, Christopher M Clark and Penelope L. Peterson, “Teacher Simulated
Recall of Interactive Decisions,” paper presented at the American Educational Research Associa-
tion Annual Meeting, San Francisco, April 1976, Percy W. Marland, “A Study of Teachers’ Interactive
Thoughts” (Ph.D. dissertation, the University of Alberta, 1977), Ronald W. Marx and Penelope L.
Research Association Annual Meeting, Washington, D.C., April 1985, Greta Morine and Elizabeth
Vallance, A Study of Teacher and Pupil Perceptions of Classroom Interaction,” BTES Technical
Report 75-11-6 (San Francisco Far West Laboratory for Educational Research, 1975)
65 Valerie Janesick, “An Ethnographic Study of a Teacher’s Classroom Perspective” (Ph D
dissertation, Michigan State University, 1977)
66 National Institute of Education, Theory Development Report of Panel 10, National Confer-
67 Jere E. Brophy and Thomas L. Good, Teacher-Student Relationships Courses and Conse-
quen ces (New York Holt, Rinehart & Winston, 1974)
68 Anne M. Bussis, Edward A. Chittenden, and Marianne Amarel, Beyond Surface Curriculum
(Boulder, Colo. Westview Press, 1976), Gerald Duffy, “A Study of Teacher Conceptions of
used to address these questions have ranged from obtaining teachers' self-reports through questionnaires, thinking-aloud techniques, and simulated recall to ethnographic participant observation techniques. This body of research is still in its infancy. Further research in the area will undoubtedly yield valuable tools for improving codifications of educational practices and teaching through development of practice theories.

**Interim Conclusion**

Applied theories and practice theories, as distinguished from explanatory theories and doctrines, *directly* suggest instructional strategies. The availability and effective expression of such strategies most likely determines whether practitioners are persuaded to experiment with educational practices. Doyle and Ponder, for example, conceptualize practitioner decision making related to adoption of educational programs in terms of a practicality ethic; the minimal criterion for program trial is instrumentality: formulation of specific instructional procedures in terms of classroom contingencies. More fundamentally, applied and practice theories must supplement explanatory theories and doctrines so that understanding can become the basis for effective intervention.

**GENERIC CHARACTERISTICS OF THEORIES**

Four important types of theory have been identified and characterized: (a) explanatory theory, (b) doctrine, (c) applied theory, and (d) practice theory. Each has distinct characteristics that affect its function and codification in guides for practice. The four types also have characteristics in common, which affect their potential functions and codification for guiding practitioners. First, theories are general representations of reality. Second, theories *selectively represent* reality, they are partial with respect to their subject matter.

Practical educational situations are concrete, particular, and complex. As Schwab comments:

Curriculum is brought to bear on the concrete case in all its completeness and with all its differences from all other concrete cases. The materials of a concrete curriculum will be particular assertions about selected matters couched in a particular vocabulary, syntax, and rhetoric. particular acts upon particular matters in a given sequence in a particular locus in time and space very local kinds of children. The same diversity holds with respect to teachers, and what they do

---


Theorists interpretively represent this reality by two techniques—generalization and selection. They abstract and generalize from a plethora of fleeting particulars, there is therefore a striking difference between the character of practice and the character of theory. Piaget, for example, has described and verified stages of cognitive development, the theory achieves its impressive generality by omitting the variations in progress among different children in different environments. The Plowden Report formulates the doctrine the committee believed to be implicit in the educational practices in a growing number of primary schools, but the report expresses a general doctrine, which like other doctrines does not capture the multitude of particular environments and practices consistent with it or from which it was presumably derived. In their powerful analysis of teaching method in open schools, Bussis and Chittenden identify behaviors that they believe characterize teachers in open schools, their explications are phrased in general terms, with reference to generic teachers, children, environments, and localities.¹

Theorists also select for study certain manageable areas from the complex organic whole. Theorists are selective in two ways. They select an area for inquiry such as cognitive development, moral development, social interaction, group process, and so on, for each, they select different principles of inquiry, namely different theoretical viewpoints. The explanatory theories that teachers can use to understand reality generally address only a segment of the whole Piaget's theory of cognitive development addresses only the development of intellectual functioning, Rogers' theories primarily address personal development, Kohlberg's theories primarily address moral development.

Similarly, the doctrines formulated for educational practice present selective views of educational reality. The orientations toward educational practice identified by Eisner and Vallance and by Joyce and Weil each focus on different types of educational outcomes and methods As Feiman argues with reference to Joyce and Weil's models of teaching:

Because of their views of man and what he should become, educators are likely to focus on specific kinds of learning outcomes and favor certain ways of creating educational environments. Each of the four families emphasize particular educational goals and tend to prescribe particular means of achieving them. The categories serve to highlight the inevitable partiality of theory, the existence of competing theories.²

Any theory addresses only part of the problems that arise in practice and presents only one possible perspective.

Given a conception of teaching and educational practice as a complex arena of activities, fraught with endemic uncertainties, it is clear that theories do not entail particular practices or programs. Deductive arguments (such as would be necessary for the entailment of programs) must begin with premises covering all relevant facts of a situation. But as Hirst argues, no one theory or combination of theories is adequate to the requirements of such arguments. Moreover, theories cannot entail programs through inductive arguments. As Schwab comments, "The practical is deliberative. It cannot be inductive because the target of the method is not a generalization or explanation but a decision about action in a concrete situation." Although theories do not entail particular practices, either through inductive or deductive arguments, the different types of theories differ somewhat in this respect.

Doctrines do not entail particular practices, because a wide variety of particular practices could be consistent with any doctrine. As Chittenden suggests in his review of Weber’s book, The English Infant School and Informal Education.

The reference point is standards regarding the nature of quality in learning. In general, observations of such things as whether the room has a variety of math materials or a sand table, some mixture of ages, whether the teacher smiles are all secondary questions since they can only be evaluated with reference to the kinds of learning and human relationships prompted by such materials or activities.

Nor do explanatory theories entail particular practices, however, they can suggest educational interventions through an inventive, deliberative process. For example, Skinner has formulated conceptions concerning the relationship between observable behavior and external conditions, such as reinforcement; behavior is shaped or conditioned through controlling the contingencies of reinforcement. The particular behaviors that are reinforced or extinguished are determined by the values of those who control the contingencies of reinforcement. These behaviors may range from spelling, writing, or mathematical skills, to destructive, criminal actions. The range of programs that utilize Skinner’s principles of behavioral change vary greatly, ranging from programmed learning in a variety of content areas to management of classroom behavior problems. Skinner’s principles do not entail any particular educational practices, rather, they provide input into prescriptions for practice that rest on strongly held personal and group values (as to the behaviors that

---


should be reinforced and the means of reinforcement) and inventions of educational methods.

Applied and practice theories, as distinguished from doctrines and explanatory theories, do explicitly suggest generic decision making parameters and strategies for educational programs. However, all theories, including applied and practice theories, are general and selective and may not entail any particular practices in a given situation. Berlak and her colleagues codified a decision matrix for control of learning decisions, but their matrix does not entail any particular decision in a given situation. The strategies of behavior modification are used only in the context of a particular teacher's diagnostic decisions and value structure.

STRATEGIES FOR EFFECTIVE EXPRESSION OF THEORIES IN GUIDES FOR PRACTITIONERS

Theories formulate some of the understandings that practitioners need as starting points for educational practice. Their value depends, in part, on how they are expressed. In this section, strategies for effective codification of theories are suggested.

Alien Terminology—Translation for Practitioners

Theories tend to be expressed in terminology or idioms designed to facilitate communication within a discipline. Practitioners must be able to reference technical terms and idioms in familiar language and in their experience before the theories in which such terms are embedded become accessible.

Two types of translation can help render theories more accessible. First, technical language and idioms can be translated into the everyday language practitioners use to describe experience. Smith and Geoffrey suggest, "While it has been helpful to us to have the beginnings of clarity in the general language structure utilized in teaching, the 'practical teacher' wants the meta language cloaked in the day-to-day problems of teaching, the flesh and blood, as it were, rather than just the skeleton or ideas. At any given moment in the process of teaching, the teacher presents cues to the children which indicate he is aware of the latent meaning of events outside the give and take of recitation. In the vernacular, he knows what is going on."

Concrete examples can also illustrate the meaning of technical terms or idioms. Elkind, for instance, communicated Piaget's views concerning the "egocentrism" of children in concrete examples from Piaget's own observations of children:

In observing young children at play Piaget noted a peculiar lack of social orientation which was also present in their conversation and in their approaches to certain

A child would make up a new word "socks" for socks, stockings and just assume that everyone knew what he was talking about as if this were the conventional name for the objects he had in mind. Likewise, Piaget noted that when two nursery school children were at play they often spoke *at* rather than *to* one another and were frequently chattering on about two quite different and unrelated topics.

Elkind continues:

In Piaget's view, all of these behaviors can be explained by the young child's inability to put himself in another person's position and to take that person's point of view. Unlike the egocentric adult, who can take another person's point of view but does not, the egocentric child does not take another person's point of view because he cannot.\(^8\)

Given this viewpoint concerning children's mental development, with the primary term "egocentrism" expressed through concrete examples, the practitioner (or parent) can view children's behavior in a new light. Elkind comments:

This conception of childish egocentrism has produced a fundamental alteration in our evaluation of the preschool child's behavior. We now appreciate that it is intellectual immaturity and not moral perversity which makes, for example, a young child continue to pester his mother after she has told him she has a headache and wishes to be left alone. The preschool child is simply unable to put himself in his mother's position and see things from her point of view.\(^9\)

This entire example illustrates how the technical terms in which theories are embedded can be translated for the practitioner through examples that clarify their meanings. The examples render accessible to practitioners the conceptual frameworks in which the terms are embedded.

Furth uses examples to translate the technical terms of Piaget's theories for practitioners.\(^8\) In *Piaget for Teachers*, Furth assumes that appropriate cognitive structures develop in stages somewhat independent of instruction in verbal skills and must precede the intelligent use of written verbal media. He proposes a curriculum that involves children in motor activities, non-verbal sensory experience, and thinking games using non-linguistic symbols. Formal instruction in reading is postponed until children exhibit prerequisite cognitive structures.

This proposal challenges generally accepted views of how intelligence develops, namely through acquisition of reading and writing skills. It also challenges one of the most generally accepted goals of the primary school, the centrality of reading as the major and prerequisite goal. Furth comments:

We are searching continually for new methods of teaching reading without ever asking whether reading is the appropriate focus of early education. Instead, I suggest that the spontaneously growing intelligence of the child should be the focus of grade-school activities and that all else should be subordinated to this priority.


\(^{9}\)Ibid

Furth admits to his readers that his proposal "may not sound altogether convincing until you have a good grasp of what is meant by the thinking foundation on which learning is based." He attempts to communicate this essentially unfamiliar conception in terms that might induce practitioners to give up reading as the central priority of elementary education. In an introduction to *Piaget for Teachers*, Wilhelms describes Furth's methods of translating Piaget for teachers:

In Part One of the book, where he is explicating Piaget, what may appear first as a brief, hard to comprehend definition will keep reappearing with fresh examples and added dimensions. When, in Part Two, the author shifts to practical suggestions of things to do, Furth can only sketch some realistic examples and hint at others.

For instance, he illustrates the concepts of structure and functioning by "an analogy taken from the workings of a nonbiological system familiar to all of us, for example, the radio." He articulates the concepts of assimilation and accommodation by presenting the case of a dog finding its way home under myriad conditions. My aim here is not to evaluate Furth's success in communicating Piaget's concepts for practitioners, but rather to illustrate one strategy for translating the technical terms in which theories may be expressed.

The previous examples demonstrated strategies for helping practitioners reference the technical terms of explanatory theories in their language and their experience, these strategies are equally useful for articulation of doctrines and applied and practice theories. At times, particularly practice theories, are phrased in terms that may be confusing to practitioners, not because they are technical, but because they are simply vague as to implications for practice. For example, Bussis and Chittenden, and others as well, cite "respect for persons" as a major component of teaching method in open schools. What are the implications of this phrase for educational practice? Bussis and Chittenden illustrate one technique for clarifying the meaning of terms that are vague as to specific implications for practice. They cite behavioral evidence of respect for persons, commenting:

How does one evidence respect? Obviously there are any number of ways, but at least three kinds of evidence seemed particularly important to advisors. First and foremost perhaps is the valuing of involved activity, and of the products of such activity, in their own right—not only (or even necessarily) as steps in an overall pattern of growth. Secondly, the ways in which children operate—their personal and cognitive styles—are also to be respected. Finally, the advisors are quite sensitive to the need to respect children's ideas. The problem is how to do this. How do you tell a child (other than by words) that his ideas are worthy of attention? Displaying children's work is one approach. One advisor suggested other possibilities, e.g., do the stories children

---

81Ibid., p 4 and p 5


83Ibid., p 15
have written become legitimate reading material for other children; do the games they invent become incorporated into the classroom as a legitimate activity, where feasible, are their suggestions acted upon?

Clearly the evidence Bussis and Chittenden cite are only some of the ways in which respect for persons could be demonstrated.

Each of these approaches for rendering alien terms and concepts accessible to practitioners is likely to introduce some imprecision into communication of theories, since the vernacular is not codified for precise communication and each example, with its idiosyncratic particulars, sheds a somewhat different perspective on the terms it is used to define. This is the unresolvable dilemma of communication, to maximize shared understandings among persons whose experiences and interpretations will inevitably vary.

**Overcoming the Limits of Selectivity**

Theories are selective in relation to reality. Any theory is partial and incomplete for representing the whole of which its subject is only a part. But as Schwab comments:

Good theories are persuasive theories, plausible theories. Each of them formulates in its own way some truths about some men under some circumstances. If these truths, once well presented to us by a theory, find their referents in their own experience of men, this resonance of experience with assertion persuades us not only of the "truth" of the theory but of its whole truth. We not only seek what it tells us to seek, we do not seek what it does not instruct us to search out. This constitutes our problem as educators.

A practitioner once enamoured of a particular theoretical framework—for example, the theories of Piaget, Skinner, Ausubel, or Rogers—may view each educational situation through its lens and therefore have only a partial view of educational scenarios and a limited repertoire of instructional strategies.

These problems can be overcome to some extent. Guides for practitioners should identify the segments of the whole that a theory addresses. Piaget, Ausubel, and Rogers each followed psychological theories that focus on the person's learning and development, rather than sociological, political, or epistemological theories. Moreover, each focuses on a different aspect of learning or development. Piaget on cognitive development, Ausubel on meaningful conceptual learning, Rogers on the relationship between the environment and personal growth. Each sheds a different, but useful, light on educational reality. Simply identifying those aspects of reality that a theory addresses is inadequate to communicate the particular view it provides of educational practice. Another strategy is likely to be more useful, a guide can present a

---


theory in association with a case and identify in the case those facets to which it is relevant.

Schwab, for instance, suggests a procedure he labels *polyfocal conspectus* as a strategy to help practitioners identify the particular facets of a case to which a theory is relevant. He describes an aspect of this procedure that is pertinent to our point as follows:

The second phase begins, for example, with viewing of a composite motion picture of videotape. The viewing reveals five episodes from the ongoing activities of a teacher and a group of children, a "class." The episodes, singly and together, reveal something of the behaviors of all the students involved and of the teacher. The instructor will be concerned, then, with drawing students' attention to the problem of selecting among exhibited behaviors those to which the Freudian theory demands attention; he will also be concerned that students see in the situation behaviors to which the Freudian view does not command attention and recognize these behaviors as outside the purview of the theory. 86

Schwab suggests using a videotaped scenario to demonstrate the aspects of reality that a theory addresses, a narrative description of educational practice could also serve this purpose.

With only one or a few theories, the practitioner has a limited repertoire for understanding educational reality. An obvious remedy is to master a variety of theories, using the communication strategies just suggested. The practitioner could scan educational scenarios through a series of lenses, each shedding a different, but revealing, light.

**Linking Explanatory Theories, Doctrines, and Applied and Practice Theories in Guides for Practitioners**

Each type of theory—explanatory, applied and practice, and doctrines—formulates only *some* of the general understandings practitioners must have to implement educational practices.

Explanatory theories can formulate persuasive constructs for understanding educational reality and suggest promising instructional methods. However, they do not entail any particular educational program or directly communicate methods for instruction. For example, Skinner's conceptions about the effects of reinforcement on behavior can suggest instructional interventions and explain their consequences. A complete guide for practice must formulate in addition: (1) doctrines as to the types of behaviors reinforced and means of reinforcement, and (2) instructional strategies, such as programmed learning.

Thus, an explanatory theory can function as a major component in programs quite different in character, due to different doctrines and instructional methods. For example, Furth and the SWCEL Communication Arts Program II both rely on Piaget's conception of cognitive development as one basis for an educational program. However, the programs they recommend are different.

86 Ibd., pp 342–343
in character, in line with different emphases in doctrines and teaching methods.87

Furth focuses on development of cognitive processes as the primary goal of elementary education, in lieu of reading skills and subject matter knowledge objectives, he recommends "thinking games" as the educational strategy for helping children develop these cognitive processes. Piaget's explanatory theories enter into Furth's recommendations both as a basis for the goals of elementary education—as doctrines—and as a conceptual framework for understanding children's reactions to "thinking games." By contrast, the SWCEL Communication Arts Program II focuses on more traditional goals of elementary education defined in a list of the "major principles and generalizations to which children in these grades should be introduced" and an index of topics and themes considered as appropriate instructional content for primary grades.88 Recommended methods for reaching these traditional goals differ somewhat from traditional methods. The teacher is urged to use knowledge of children's cognitive levels (defined in Piagetian terms) to provision environments and present problems that spark children's interests. Piaget's explanatory theories enter into SWCEL's recommendations to practitioners primarily as the conceptual basis for recommended teaching methods.

Doctrines formulate persuasive rationalized systems of values pertaining to the means and ends of educational practice. Like explanatory theories, doctrines do not entail any particular educational programs. A wide variety of particular practices would be consistent with any doctrine.

Doctrines must be supplemented in guides for practitioners by applied or practice theories that directly communicate the general character of appropriate instructional interventions. The doctrine associated with open schools formulated in the Plowden report—for example, that the aim of education in these schools is to foster development of "balanced and mature adults, able to live in, contribute to, and look critically at the society of which they will be a part"—could be read in conjunction with Bussis and Chittenden's discussion of general components of behavior (including examples) that they believe characterize teachers in open schools. These general components are: diagnosis of learning events, guidance and extension of learning, honesty of encounters, respect for persons, warmth, provisioning for learning, reflective evaluation of diagnostic information, and seeking activity to promote personal growth.89

---

88Ibid, p 1
Applied and practice theories do directly codify the general parameters of instructional methods. Just as doctrines and explanatory theories are incomplete for guiding practitioners without formulations of associated methods, so too formulations of methods are incomplete without associated doctrines and explanatory theories.

For instance, based on her observations, Resnick formulated some general components of teaching method in open classrooms. She noted that teachers frequently initiated extended substantive conversations with one child or small groups, but permitted frequent interruptions of these extended conversations. The practitioner could distill similar strategies from the Murrows' description of open-classroom life excerpted earlier. Why do teachers in open classrooms use this strategy and what is the substance of these conversations? These questions must be addressed in a Practical Rhetoric for guiding practitioners. The doctrine for open education formulated in the Plowden Report would provide one rationale. They comment, "The school sets out deliberately to devise the right environment for children, to allow them to be themselves and to develop in the way and at the pace appropriate to them. . . . It lays special stress on individual discovery, on first-hand experience." It is likely that teachers in open classrooms have developed such strategies to maintain organization and guidance in settings with student choice and varied activities. But what is the character of the extended conversations teachers should have with individual children and groups of children? An understanding of Piaget's views of cognitive development—an explanatory theory—would help teachers diagnose children's cognitive levels and engage them in conversations aimed at extending children's cognitive abilities.

**Overcoming the Limits of Generality**

Any theory, by definition, provides a general representation of reality. Practitioners, however, must understand theories in light of their potential applicability in their concrete, complex situations. Such understandings are not easily achieved.

Although theories are potentially applicable across many situations, the particulars of special cases modulate their applicability. Consequently, any theory should be communicated in terms of its applicability to individuals or groups of individuals. Hunt and Sullivan argue, "Psychological principles stated for persons-in-general will never answer educational questions such as how to adapt educational approaches to different students." They continue.

When considering a conclusion from the psychological literature such as "Praise facilitates learning more than criticism," we should ask, "For whom?" Inclusion of the person in the principle might lead to a statement such as "Praise is more effective than..."
criticism for introverts while criticism is more effective than praise for extroverts (Thompson and Hunnicut, 1974) the next question is, "For what?" The final form is "Praise is more effective for facilitating cancellation test scores than criticism for introverts, while criticism is more effective for extroverts." It should be noted that "introversion" and "extroversion" are technical terms and should be communicated by the strategies outlined previously.

Such formulations still leave much to be desired; individuals and situations are endowed with a wide variety of particulars, such that in principle not all relevant particulars can be formulated. The practical meaning of theories can be enriched by presenting them in association with cases to which they apply. Clearly, many particular instances would be consistent with any theory. If theories are presented in conjunction with some cases to which they apply, practitioners gain access to some of the rich meanings that become suppressed in the formulation of theories.

This communication strategy is an approach to resolving a particularly tough dilemma in codification of educational practice. Namely, theories are formulated in general terms that suppress the meanings available in any particular instance of their subject matter. By contrast, any instance of educational reality is so dense in meaning that the generally applicable aspects tend to remain undisclosed. This dilemma can be resolved to some extent by presenting theories in association with cases to which they are relevant, and by focusing theories on the relevant aspects of cases. In this way, practitioners can enrich their understanding of theories through access to concrete examples. Conversely, practitioners can enrich their understandings of educational reality by viewing it through the lenses of theories. For example, Piaget's conceptions of cognitive development could be studied in association with deeply textured descriptions of educational scenarios, such as the Murrows' description of one day in the classroom life of Ann, noted earlier. His explanatory theory could help practitioners understand the type of learning likely to be associated with her involvement with concrete materials. At the same time, her involvement with concrete materials could be viewed as exemplars of stages of cognitive development. The critical aspect of this strategy is that the guide must specifically focus a theory on those aspects of the case to which it is particularly applicable. Schwab comments:

The principle (theory) must be selected and adapted to the case. But, the case becomes a case of (an instance of) this theory or another only as it is made to be so. We carve from the facts of the situation what we shall treat as relevant facts of the forming case.

For instance, Berlak and others, as discussed earlier, posit that for teachers in open classrooms, there appears to be simultaneous pull in two directions—

---


toward the teacher making learning decisions and toward children making these decisions. The framework they present to order the complex ways in which this type of dilemma can be manifested and resolved, is cited here again.

Decisions—not necessarily deliberated—are made about (1) whether or not a child will study in a given area, (2) what specifically is to be learned within that area, (3) when the task is to begin and when it is to be completed, and (4) how the learner is to proceed with the task. In a given learning situation, the child, or the teacher, or both jointly exercise one or more of these decisions. A teacher can follow different patterns of resolution for different children, and at different times of the year, or for different subjects or learning experiences.

The meaning of this practice theory can be enriched by focusing it on a description of educational practice, such as the following.

On Mondays, Mr. Thomas makes explicit the minimum each child should accomplish for the week in a variety of academic areas. Students can choose to go beyond the minimum or to do other activities, including observing pets and discussing football. They can, in general, allocate their own time during the mornings of the entire week. Thus, the observer might, at any given time on any morning, see children working on various academic tasks while others are chatting quietly, painting, or working with a cooking group. On Fridays, Mr. Thomas, and perhaps the head, check to make sure students have completed their assigned tasks to the adult's satisfaction; those few who have not will either confer with the teacher or be sanctioned. In the afternoons the students engage in one of a number of schoolwide "commitments" or "minicourses." At 1:00 p.m., they deploy themselves to various locations in the school to join in dance, music, science, "topic," art, or other activity groups.

The guide could explicitly focus on those aspects of the description that pertain to learning decisions and state the character of Mr. Thomas' resolutions of the complex dilemma concerning learning decisions. Mr. Thomas appears to play the major role in deciding whether children should learn in a given area, and what children should learn in a given area. "On Mondays, Mr. Thomas makes explicit the minimum each child should accomplish for the week in a variety of academic areas." By contrast, the children appear to play the major role in deciding when they shall learn. "They can, in general, allocate their own time during the mornings of the entire week." From this description, it is not evident who decides how children shall learn, nor is it evident the extent to which Mr. Thomas and the children jointly negotiate learning decisions. Clearly, the ideal description for this communication strategy would incorporate and represent all important aspects of the doctrinal dilemma, and this particular description falls short of this ideal.

---


9ibid., p 226
CONCLUSION

In this paper, I have explored the role of theories or theory-based prescriptions in communications for guiding practitioners by (1) characterizing four types of theory—explanatory theories, doctrines, applied theories, and practice theories—in terms of their potential roles in communications for guiding teachers, and (2) delineating two generic and fundamental characteristics of all theories—selectivity and generality—in terms that have implications for their role in guides. After suggesting that the value of theories for guiding teachers depends in part on how they are expressed, I therefore formulated rationalized strategies for the effective communication of theories in guides for practice. These strategies relate to translating alien terminology for practitioners; presenting theories in association with cases, and linking doctrines, explanatory theories, and applied or practice theories in guides for practice. The results of these analyses are intended to help authors and practitioners better understand the role of theories in guiding practice as well as the forms of expression they should seek in guides. Moreover, these analyses contribute to discourse in curriculum theory about communication for guiding educational practice.

ILENE B. HARRIS is Research Associate, University of Minnesota Medical School, and Lecturer, College of Education, University of Minnesota, Box 33, Mayo Memorial Building, 420 Delaware Street, S E., Minneapolis, Minnesota 55455

Schon, Donald A. The Reflective Practitioner: How Professionals Think in Action

Schon initially explicates the crisis of confidence in professional knowledge, addressing the questions, "What is it that professionals really do?" and "How can these skills be enhanced and transmitted to others?" Examines professionals in five fields—engineering, architecture, management, psychotherapy, and town planning—as they solve daily problems. Shows that, faced with the typically unpredictable situation of professional practice, one does much more than just apply knowledge learned in school. There is a kind of reflection-in-action that is the essence of professional practice. Findings have profound meaning for the practice of teaching and supervision.