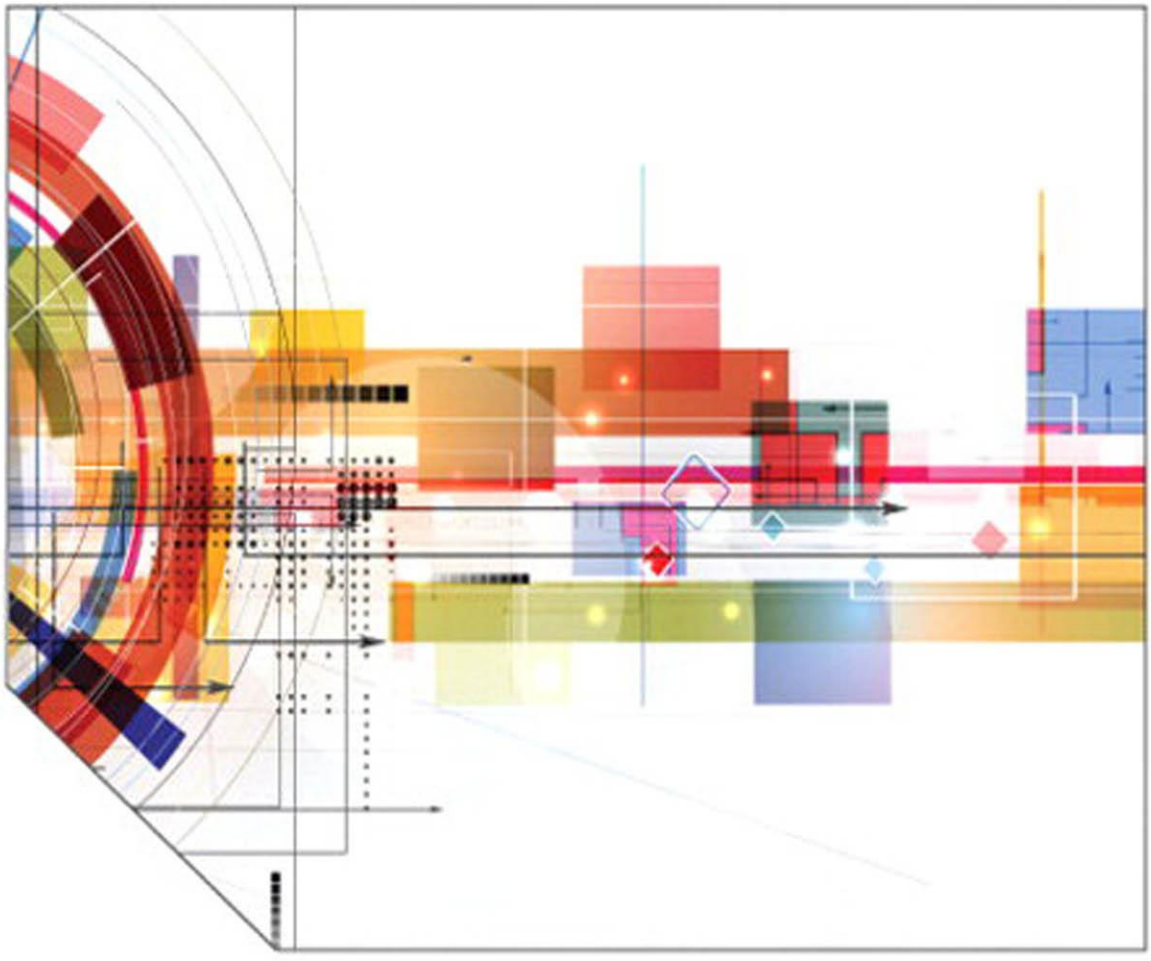
The Allyn & Bacon Educational Leadership Series

CONTEMPORARY ISSUES IN CURRICULUM

SIXTH EDITION



Allan C. Ornstein
Edward F. Pajak
Stacey B. Ornstein

CONTEMPORARY ISSUES IN CURRICULUM

This page intentionally left blank

CONTEMPORARY ISSUES IN CURRICULUM

SIXTH EDITION

ALLAN C. ORNSTEIN
St. John's University

EDWARD F. PAJAK
Johns Hopkins University

STACEY B. ORNSTEIN
New York University

PEARSON

Boston Columbus Indianapolis New York San Francisco Upper Saddle River
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montreal Toronto
Delhi Mexico City São Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

Vice President and Editorial Director: Jeffery W. Johnston
Senior Acquisitions Editor: Meredith Fossel
Editorial Assistant: Janelle Criner
Vice President, Director of Marketing: Margaret Waples
Senior Marketing Manager: Darcy Betts
Production Project Manager: Jenny Gessner
Procurement Specialist: Pat Tonneman
Senior Art Director: Jayne Conte
Cover Designer: Suzanne Behnke
Cover Photo: © kras99, Fotolia
Media Project Manager: Noelle Chun
Development Project Management: Aptara®, Inc.
Full-Service Project Management: Niraj Bhatt, Aptara®, Inc.
Composition: Aptara®, Inc
Printer/Binder: Courier/Westford
Cover Printer: Moore Langen
Text Font: Palatino LT Std 10/12

Credits and acknowledgments for material borrowed from other sources and reproduced, with permission, in this textbook appear on the appropriate page within the text.

Every effort has been made to provide accurate and current Internet information in this book. However, the Internet and information posted on it are constantly changing, so it is inevitable that some of the Internet addresses listed in this textbook will change.

Library of Congress Cataloging-in-Publication Data

Contemporary issues in curriculum/Allan C. Ornstein, Edward F. Pajak,
Stacey B. Ornstein.—Sixth edition.
p. cm.
Includes index.
ISBN-13: 978-0-13-325997-1
ISBN-10: 0-13-325997-8
1. Education—Curricula—United States. 2. Curriculum planning—United States.
I. Ornstein, Allan C. II. Pajak, Edward III. Ornstein, Stacey B.
LB1570.C813 2015
375'.001—dc23

2013029293

10 9 8 7 6 5 4 3 2 1

PEARSON

ISBN 10: 0-13-325997-8
ISBN 13: 978-0-13-325997-1

Contributors

Ronald S. Brandt, Association for Supervision and Curriculum Development
Ted Britton, WestEd's National Center for Improving Science Education
Arthur L. Costa, Emeritus, California State University, Sacramento
Larry Cuban, Emeritus, Stanford University
Linda Darling-Hammond, Stanford University
Daniel L. Duke, University of Virginia
Elliot Eisner, Stanford University
Norman Eng, Brooklyn College
Chester E. Finn, Jr., Thomas B. Fordham Institute
Howard Gardner, Harvard Graduate School of Education
Tom Gasner, University of Wisconsin, Whitewater
Geneva Gay, University of Washington
Carl D. Glickman, Emeritus, University of Georgia
Maxine Greene, Emeritus, Teachers College, Columbia University
Andy Hargreaves, Lynch School of Education, Boston College
Edwin Lou Javius, EDEquity Inc.
Lawrence Kohlberg, Emeritus, Harvard University
Todd I. Lubart, Yale University
Veronica Boix Mansilla, Harvard Graduate School of Education
Frank Masci, Johns Hopkins University
Laura McCloskey, Stanford University
Nel Noddings, Stanford University
Allan C. Ornstein, St. John's University
Edward F. Pajak, Johns Hopkins University
Parker J. Palmer, American Association for Higher Education
David Perkins, Harvard Graduate School of Education
James Popham, Emeritus, University of California, Los Angeles
Robert Rothman, Alliance for Excellent Education
Thomas J. Sergiovanni, Trinity University
Dennis Shirley, Lynch School of Education, Boston College
Nancy Faust Sizer, Francis W. Parker Charter School, Massachusetts
Theodore R. Sizer, Coalition of Essential Schools, California
Robert J. Sternberg, Yale University
Elaine Stotko, Johns Hopkins University
Carol Ann Tomlinson, University of Virginia
Ralph W. Tyler, Center for Advanced Study in the Behavioral Sciences, California
Herbert J. Walberg, Emeritus, University of Illinois, Chicago and Hoover Institute, Palo Alto
Grant Wiggins, Authentic Education
Harry K. Wong, Author and Lecturer on Teacher Success and Retention
Yong Zhao, University of Oregon

This page intentionally left blank

Preface

This sixth edition of *Contemporary Issues in Curriculum* is a text for students or school leaders studying the disciplines of curriculum, instruction, supervision, administration, and teacher education. It is written for those who are exploring the issues that have the potential to influence the planning, implementation, and evaluation of curriculum at all levels of teaching and learning. The articles reflect emergent trends in the field of curriculum and instruction.

NEW TO THIS EDITION

In an effort to improve the quality and relevance of the new edition, the editors have added 10 new chapters. As in earlier editions, the overall intent of the editors was to focus on well-known contributors in the field of curriculum and to select articles that were easy to read and that simultaneously offered an in-depth perspective on a subject or issue important to curriculum. In deciding to delete or add chapters, the editors considered two factors: (1) Whether the original article had become dated or less relevant to the changing trends in schools and/or society and (2) whether the original piece was either too lengthy or difficult to fully understand. Then, the purpose was to incorporate new chapters that students and instructors would find relevant to the field of curriculum and their own personal situations. The criteria for selection of the new chapters were as follows:

- The new articles are meant to interest those who are preparing for a teaching career as well as experienced educators concerned with issues and policies that influence education.
- The chapters are valuable for use in introductory courses in curriculum and in a variety of upper-level and graduate education courses and address relevant topics such as the Common Core Standards and aiming higher with expectations for student performance.
- The new authors (as in the case of previous editions) are well known in the field of curriculum and/or related domains—philosophy, teaching, learning, instruction, supervision, and policy. To be sure, the best authors in all fields of social science and education have a distinctive message.
- The new authors chosen include a wide range of philosophical viewpoints, but always represent contemporary and emerging issues such as changing societal demographics, pre-K education, and teacher induction and retention.
- The story and issues in the new chapters are well defined and coherent and offer a comprehensive body of information on various educational trends and curriculum issues. They are written in a way that engages readers or takes sides in some political or philosophical struggle.
- The articles selected are intended to be controversial and encourage critical thinking as well as to give the reader ready access to important ideas and issues that affect education in general and curriculum, including new topics related to international comparisons and competitiveness, as well as how one can truly judge the success of a school and the value of an education.
- Although the notions of currency and relevancy filtered through the selection process, it is essential to understand that our pasts blend with our present, and there are no single timelines, no specific historical periods, separate from another time period. Another factor was

duration, that the articles selected would have a time value of at least 5 years into the future.

- The editors are particularly concerned about traditional issues related to teaching and learning, as well as contemporary issues such as global, multicultural, and egalitarian perspectives. Given this bias, the greatest amount of change took place in the sections on curriculum and philosophy, curriculum and learning, curriculum and instruction, and curriculum and policy.
- Finally, it is naïve to believe that more education stories on the front page of any newspaper or news media will change the course of schools or radically alter the curriculum. Nevertheless, the authors chosen tend to have the wind behind their backs and a broad frame of reference for understanding the important problems and trends affecting the present and future in education, as well as the field of curriculum.

ORGANIZATION OF THE TEXT

This text is divided into six parts: philosophy, teaching, learning, instruction, supervision, and policy. Each part consists of five or six chapters and is preceded by an introduction that provides a brief overview of the articles and focuses the reader's attention on the issues to be discussed. Each chapter begins with a set of focusing questions and ends with several discussion questions. A pro–con chart that explores views on both sides of a current controversial curricular concern and a case study problem appear at the end of each part. These instructional features help the reader integrate the content and the issues of the text. Instructors may wish to use these features as the bases for class discussion or essay assignments.

To ensure that the breadth and depth of viewpoints in the field are represented, we have included articles that portray current trends and illustrate the dynamism within the field. The readings present views that reflect traditionally held beliefs as well as other perspectives that might be considered more controversial in nature. Students and practitioners should have an opportunity to investigate the breadth of issues that are affecting curriculum and be able to access such information in a single source. Readers are encouraged to examine and debate these issues, formulate their own ideas regarding the issues affecting the field of curriculum, and decide what direction that field should take.

In Part I, the Eisner and Rothman chapters are new. No additions were made for Part II. The Finn and Eng pieces were added for Part III. In the next part, the Zhao, Tomlinson and Javius, and Wiggins chapters are new. There is one new piece in Part V, by Ingersoll. As for the sixth part, two new chapters were added by Odden and Ornstein.

Acknowledgments

We acknowledge with gratitude the many authors who granted us permission to reprint their work. Allan Ornstein expresses love for Esther, his wife, and especially his children, Joel, Stacey, and Jason, and advises them to always take the high road in life. Edward Pajak thanks Diane, his wife, and his children, Alexandra and Zachary, for their unflagging encouragement. Stacey Ornstein dedicates this book to her husband David, and her son Adrian, and thanks them for their continuous support in all her endeavors.

We thank the following reviewers for their helpful suggestions: Savilla Banister, Bowling Green State University; Timothy G. Cashman, University of Texas at El Paso; and Jo Ann Sumbry, University of Montevallo.

This page intentionally left blank

Contents

PART ONE

Curriculum and Philosophy

How does philosophy influence the curriculum? To what extent does the curriculum reflect personal beliefs and societal ways? How do different conceptions of curriculum affect schooling and student achievement? In what way has curriculum been a catalyst in empowering certain segments of society while disenfranchising others?

In Chapter 1, Allan Ornstein considers how philosophy guides the organization of the curriculum. He explores how beliefs about the purposes of education are reflected in the subject matter and the process of teaching and learning. In Chapter 2, Ronald Brandt and Ralph Tyler present a rationale for establishing educational goals. They identify the sources that they believe should be considered before articulating goals, as well as how goals should be used in planning learning activities.

In Chapter 3, Elliot Eisner warns that leadership in education requires more than just accepting the limited measures now used for determining how well schools are doing and describes some features of a more human vision of schooling. The true measure of educational attainment, he tells us, is what students do with what they learn and when they can do what they want to do. Next, Maxine Greene reminds us in Chapter 4 of the essential role that arts experiences play in helping students develop esthetic awareness. She explains why encounters with the arts are likely to enrich students' learning experiences. She also discusses why experience with the arts is critical to combating the delivery of prescriptive curricula and developing students' metacognitive strategies. In Chapter 5, Robert Rothman argues for the importance of adopting the Common Core Curriculum Standards, such as the need for highly skilled workers in the midst of rapidly changing technology and the inadequacy of state standards for global competitiveness and for comparing student performance across state lines. He describes the content of the Common Core for reading, writing, and mathematics as well as next steps to be taken toward implementation.

CHAPTER

1 Philosophy as a Basis for Curriculum Decisions

Allan C. Ornstein

FOCUSING QUESTIONS

1. How does philosophy guide the organization and implementation of curriculum?
2. What are the sources of knowledge that shape a person's philosophy of curriculum?
3. What are the sources of knowledge that shape your philosophical view of curriculum?
4. How do the aims, means, and ends of education differ?
5. What is the major philosophical issue that must be determined before we can define a philosophy of curriculum?
6. What are the four major educational philosophies that have influenced curriculum in the United States?
7. What is your philosophy of curriculum?

Philosophic issues always have had and still do have an impact on schools and society. Contemporary society and its schools are changing fundamentally and rapidly, much more so than in the past. There is a special urgency that dictates continuous appraisal and reappraisal of the role of schools, and calls for a philosophy of education. Without philosophy, educators are directionless in the whats and hows of organizing and implementing what we are trying to achieve. In short, our philosophy of education influences, and to a large extent determines, our educational decisions, choices, and alternatives.

PHILOSOPHY AND CURRICULUM

Philosophy provides educators, especially curriculum specialists, with a framework for organizing schools and classrooms. It helps them answer questions about what the school's purpose is, what subjects are of value, how students learn, and what methods and materials to use. Philosophy provides them with a framework for broad issues and

tasks, such as determining the goals of education, subject content and its organization, the process of teaching and learning, and, in general, what experiences and activities to stress in schools and classrooms. It also provides educators with a basis for making such decisions as what workbooks, textbooks, or other cognitive and noncognitive activities to utilize and how to utilize them, what and how much homework to assign, how to test students and how to use the test results, and what courses or subject matter to emphasize.

The importance of philosophy in determining curriculum decisions is expressed well by the classic statement of Thomas Hopkins (1941): "Philosophy has entered into every important decision that has ever been made about curriculum and teaching in the past and will continue to be the basis of every important decision in the future. . . . There is rarely a moment in a school day when a teacher is not confronted with occasions where philosophy is a vital part of action." Hopkins' statement reminds us of how important philosophy is to all aspects of curriculum decisions, whether it operates overtly or covertly. Indeed, almost all elements of curriculum are based on philosophy. As John Goodlad (1979b) points out, philosophy is the beginning point in curriculum decision making and is the basis for all subsequent decisions regarding curriculum. Philosophy becomes the criterion for determining the aims, means, and ends of curriculum. The aims are statements of value, based on philosophical beliefs; the means represent processes and methods, which reflect philosophical choices; and the ends connote the facts, concepts, and principles of the knowledge or behavior learned—what is felt to be important to learning.

Smith, Stanley, and Shores (1957) also put great emphasis on the role of philosophy in developing curriculum, asserting that it is essential when formulating and justifying educational purposes, selecting and organizing knowledge, formulating basic procedures and activities, and dealing with verbal traps (what we see versus what is read). Curriculum theorists, they point out, often fail to recognize both how important philosophy is to developing curriculum and how it influences aspects of curriculum.

Philosophy and the Curriculum Specialist

The philosophy of curriculum specialists reflects their life experiences, common sense, social and economic background, education, and general beliefs about people. An individual's philosophy evolves and continues to evolve as long as there is personal growth, development, and learning from experience. Philosophy is a description, explanation, and evaluation of the world as seen from personal perspective, or through what some social scientists call "social lenses."

Curriculum specialists can turn to many sources of knowledge, but no matter how many sources they draw on or how many authorities they listen to, their decisions are shaped by all the experiences that have affected them and the social groups with which they identify. These decisions are based on values, attitudes, and beliefs that they have developed, involving their knowledge and interpretation of causes, events, and their consequences. Philosophy determines principles for guiding action.

No one can be totally objective in a cultural or social setting, but curriculum specialists can broaden their base of knowledge and experiences by trying to understand other people's sense of values and by analyzing problems from various perspectives. They can also try to modify their own critical analyses and points of view by learning from their experiences and those of others. Curriculum specialists who are unwilling to modify their points of view, or to compromise philosophical positions when school officials or their colleagues espouse another philosophy, are at risk of causing conflict and disrupting the school. Ronald Doll (1986)

puts it this way: "Conflict among curriculum planners occurs when persons . . . hold positions along a continuum of [different] beliefs and . . . persuasions." The conflict may become so intense that "curriculum study grinds to a halt." Most of the time, the differences can be reconciled "temporarily in deference to the demands of a temporary, immediate task." However, Doll further explains that "teachers and administrators who are clearly divided in philosophy can seldom work together in close proximity for long periods of time."

The more mature and understanding and the less personally threatened and ego-involved individuals are, the more capable they are of reexamining or modifying their philosophy, or at least of being willing to appreciate other points of view. It is important for curriculum specialists to regard their attitudes and beliefs as tentative—as subject to reexamination whenever facts or trends challenge them. Equally dangerous for curriculum specialists is the opposite—indecision or lack of any philosophy, which can be reflected in attempts to avoid commitment to a set of values. A measure of positive conviction is essential to prudent action. Having a personal philosophy that is tentative or subject to modification, however, does not lead to lack of conviction or disorganized behavior. Curriculum specialists can arrive at their conclusions on the best evidence available, and they then can change when better evidence surfaces.

Philosophy as a Curriculum Source

The function of philosophy can be conceived as either the base for the starting point in curriculum development or an interdependent function of other functions in curriculum development. John Dewey (1916) represents the first school of thought by contending that "philosophy may . . . be defined as the general theory of education," and that "the business of philosophy is to provide [the framework] for the aims and methods" of schools. For Dewey, philosophy provides a generalized meaning to our lives and a way of thinking, "an explicit formulation of the . . . mental and moral attitudes in respect to the difficulties of contemporary social life." Philosophy is not only a starting point for schools; it is also crucial for all curriculum activities. For as Dewey adds, "Education is the laboratory in which philosophic distinctions become concrete and are tested."

Highly influenced by Dewey, Ralph Tyler's (1949) framework of curriculum includes philosophy as only one of five criteria commonly used for selecting educational purposes. The relationship between philosophy and the other criteria—studies of learners, studies of contemporary life, suggestions from subject specialists, and the psychology of learning—is the basis for determining the school's purposes. Although philosophy is not the starting point in Tyler's curriculum, but rather interacts on an equal basis with the other criteria, he does seem to place more importance on philosophy for developing educational purposes. Tyler (1949) writes, "The educational and social philosophy to which the school is committed can serve as the first screen for developing the social program." He concludes that "philosophy attempts to define the nature of the good life and a good society," and that the "educational philosophies in a democratic society are likely to emphasize strongly democratic values in schools."

There can be no serious discussion about philosophy until we embrace the question of what is education. When we agree on what education is, we can ask what the school's purpose is. We can then pursue philosophy, aims, and goals of curriculum. According to Goodlad (1979b), the school's first responsibility is to the social order, what he calls the "nation-state," but in our society the sense of individual growth and potential is paramount. This duality—society versus the individual—has been a major philosophical issue

in Western society for centuries and was a very important issue in Dewey's works. As Dewey (1916) claimed, we not only wish "to make [good] citizens and workers" but also ultimately want "to make human beings who will live life to the fullest."

The compromise of the duality between national allegiance and individual fulfillment is a noble aim that should guide all curriculum specialists—from the means to the ends. When many individuals grow and prosper, then society flourishes. The original question set forth by Goodlad can be answered: Education is growth and the focal point for the individual as well as society; it is a never-ending process of life, and the more refined the guiding philosophy, the better the quality of the educational process.

In considering the influence of philosophic thought on curriculum, several classification schemes are possible; therefore, no superiority is claimed for the categories used in the tables here. The clusters of ideas are those that often evolve openly or unwittingly during curriculum planning.

Four major educational philosophies have influenced curriculum in the United States: Perennialism, Essentialism, Progressivism, and Reconstructionism. Table 1.1 provides an overview of these education philosophies and how they affect curriculum, instruction, and teaching. Teachers and administrators should compare the content of the categories with their own philosophical "lens" in terms of how they view curriculum and how other views of curriculum and related instructional and teaching issues may disagree.

Another way of interpreting philosophy and its effect on curriculum is to analyze philosophy in terms of polarity. The danger of this method is that it may simplify philosophies in terms of a dichotomy, and not recognize that there are overlaps and shifts. Table 1.2 illustrates philosophy in terms of traditional and contemporary categories. The traditional philosophy, as shown, tends to overlap with Perennialism and Essentialism. Contemporary philosophy tends to coincide with Progressivism and Reconstructionism.

Table 1.2 shows that traditional philosophy focuses on the past, emphasizes fixed and absolute values, and glorifies our cultural heritage. Contemporary philosophy emphasizes the present and future and views events as changeable and relative; for the latter, nothing can be preserved forever, for despite any attempt, change is inevitable. The traditionalists wish to train the mind, emphasize subject matter, and fill the learner with knowledge and information. Those who subscribe to contemporary philosophies are more concerned with problem solving and emphasize student interests and needs. Whereas subject matter is considered important for its own sake, according to traditionalists, certain subjects are more important than others. For contemporary educators, subject matter is considered a medium for teaching skills and attitudes, and most subjects have similar value. According to the traditionalists, the teacher is an authority in subject matter, who dominates the lesson with explanations and lectures. For the contemporary proponent, the teacher is a guide for learning, as well as an agent for change; students and teachers often are engaged in dialogue.

In terms of social issues and society, traditionalists view education as a means of providing direction, control, and restraint, while their counterparts focus on individual expression and freedom from authority. Citizenship is linked to cognitive development for the traditional educator, and it is linked to moral and social development for the contemporary educator. Knowledge and the disciplines prepare students for freedom, according to the traditional view, but it is direct experience in democratic living and political/social action that prepares students for freedom, according to the contemporary ideal. Traditionalists believe in excellence, and contemporary educators favor equality.

TABLE 1.1 Overview of Educational Philosophies

	Philosophical Base	*Instructional Objective*	*Knowledge*	*Role of Teacher*	*Curriculum Focus*	*Related Curriculum Trends*
Perennialism	Realism	To educate the rational person; to cultivate the intellect	Focus on past and permanent studies; mastery of facts and timeless knowledge	Teacher helps students think rationally; based on Socratic method and oral exposition; explicit teaching of traditional values	Classical subjects; literary analysis; constant curriculum	Great books; *Paideia* proposal
Essentialism	Idealism, Realism	To promote the intellectual growth of the individual; to educate the competent person	Essential skills and academic subjects; mastery of concepts and principles of subject matter	Teacher is authority in his or her field; explicit teaching of traditional values	Essential skills (three Rs) and essential subjects (English, arithmetic, science, history, and foreign language)	Back to basics; excellence in education
Progressivism	Pragmatism	To promote democratic, social living	Knowledge leads to growth and development; a living-learning process; focus on active and interesting learning	Teacher is a guide for problem solving and scientific inquiry	Based on students' interests; involves the application of human problems and affairs; inter-disciplinary subject matter; activities, and projects	Relevant curriculum; humanistic education; alternative and free schooling
Reconstructionism	Pragmatism	To improve and reconstruct society; education for change and social reform	Skills and subjects needed to identify and ameliorate problems of society; learning is active and concerned with contemporary and future society	Teacher serves as an agent of change and reform; acts as a project director and research leader; helps students become aware of problems confronting humankind	Emphasis on social sciences and social research methods; examination of social, economic, and political problems; focus on present and future trends as well as national and international issues	Equality of education; cultural pluralism; international education; futurism

Source: Allan C. Ornstein and Francis P. Hunkins, *Curriculum: Foundations, Principles, and Theory,* 3rd ed. (Boston: Allyn and Bacon, 1998), p. 56.

TABLE 1.2 Overview of Traditional and Contemporary Philosophies

Philosophical Consideration	*Traditional Philosophy*	*Contemporary Philosophy*
Educational philosophy	Perennialism, Essentialism	Progressivism, Reconstructionism
Direction in time	Superiority of past; education for preserving past	Education is growth; reconstruction of present experiences; changing society; concern for future and shaping it
Values	Fixed, absolute, objective, and/or universal	Changeable, subjective, and/or relative
Educational process	Education is viewed as instruction; mind is disciplined and filled with knowledge	Education is viewed as creative self-learning; active process in which learner reconstructs knowledge
Intellectual emphasis	To train or discipline the mind; emphasis on subject matter	To engage in problem-solving activities and social activities; emphasis on student interests and needs
Worth of subject matter	Subject matter for its own importance; certain subjects are better than others for training the mind	Subject matter is a medium for teaching skills, attitudes, and intellectual processes; all subjects have similar value for problem-solving activities
Curriculum content	Curriculum is composed of three Rs, as well as liberal studies or essential academic subjects	Curriculum is composed of three Rs, as well as skills and concepts in arts, sciences, and vocational studies
Learning	Emphasis on cognitive learning; learning is acquiring knowledge and/or competency in disciplines	Emphasis on whole child; learning is giving meaning to experiences and/or active involvement in reform
Grouping	Homogeneous grouping and teaching of students by ability	Heterogeneous grouping and integration of students by ability (as well as race, sex, and class)
Teacher	Teacher is an authority on subject matter; teacher plans activities; teacher supplies knowledge to student; teacher talks, dominates lesson; Socratic method	Teacher is a guide for inquiry and change agent; teacher and students plan activities; students learn on their own independent of the teacher; teacher-student dialogue; student initiates much of the discussion and activities
Social roles	Education involves direction, control, and restraint; group (family, community, church, nation, etc.) always comes first	Education involves individual expression; individual comes first
Citizenship	Cognitive and moral development leads to good citizenship	Personal and social development leads to good citizenship
Freedom and democracy	Acceptance of one's fate, conformity, and compliance with authority; knowledge and discipline prepare students for freedom	Emphasis on creativeness, nonconformity, and self-actualization; direct experiences in democratic living and political/social action prepare students for freedom
Excellence vs. equality	Excellence in education; education as far as human potential permits; academic rewards and jobs based on merit	Equality of education; education that permits more than one chance and more than an equal chance to disadvantaged groups; education and employment sectors consider unequal abilities of individuals and put some restraints on achieving individuals so that different outcomes and group scores, if any, are reduced
Society	Emphasis on group values; acceptance of norms of and roles in society; cooperative and conforming behavior; importance of society; individual restricted by customs and traditions of society	Emphasis on individual growth and development; belief in individual with ability to modify, even reconstruct, the social environment; independent and self-realizing, fully functioning behavior; importance of person; full opportunity to develop one's own potential

The traditional view of education maintains that group values come first, where cooperative and conforming behaviors are important for the good of society. Contemporary educators assert that what is good for the individual should come first, and they believe in the individual modifying and perhaps reconstructing society.

The Curriculum Specialist at Work

Philosophy gives meaning to our decisions and actions. In the absence of a philosophy, educators are vulnerable to externally imposed prescriptions, to fads and frills, to authoritarian schemes, and to other "isms." Dewey (1916) was so convinced of the importance of philosophy that he viewed it as the all-encompassing aspect of the educational process—as necessary for "forming fundamental dispositions, intellectual and emotional, toward nature and fellow man." If this conclusion is accepted, it becomes evident that many aspects of a curriculum, if not most of the educational processes in school, are developed from a philosophy. Even if it is believed that Dewey's point is an overstatement, the pervasiveness of philosophy in determining views of reality, the values and knowledge that are worthwhile, and the decisions to be made about education and curriculum should still be recognized.

Very few schools adopt a single philosophy; in practice, most schools combine various philosophies. Moreover, the author's position is that no single philosophy, old or new, should serve as the exclusive guide for making decisions about schools or about the curriculum. All philosophical groups want the same things of education—that is, they wish to improve the educational process, to enhance the achievement of the learner, to produce better and more productive citizens, and to improve society. Because of their different views of reality, values, and knowledge, however, they find it difficult to agree on how to achieve these ends.

What we need to do, as curricularists, is to search for the middle ground, a highly elusive and abstract concept, in which there is no extreme emphasis on subject matter or student, cognitive development or sociopsychological development, excellence or equality. What we need is a prudent school philosophy, one that is politically and economically feasible, that serves the needs of students and society. Implicit in this view of education is that too much emphasis on any one philosophy may do harm and cause conflict. How much one philosophy is emphasized, under the guise of reform (or for whatever reason), is critical because no one society can give itself over to extreme "isms" or political views and still remain a democracy. The kind of society that evolves is in part reflected in the education system, which is influenced by the philosophy that is eventually defined and developed.

CONCLUSION

In the final analysis, curriculum specialists must understand that they are continuously faced with curriculum decisions, and that philosophy is important in determining these decisions. Unfortunately, few school people test their notions of curriculum against their school's statement of philosophy. According to Brandt and Tyler (1983), it is not uncommon to find teachers and administrators developing elaborate lists of behavioral objectives with little or no consideration to the overall philosophy of the school. Curriculum workers need to provide assistance in developing and designing school practices that coincide with the philosophy of the school and community. Teaching, learning, and curriculum are all interwoven in school practices and should reflect a school's and a community's philosophy.

REFERENCES

Brandt, R. S., & Tyler, R. W. (1983). Goals and objectives. In F. W. English (Ed.), *Fundamental curriculum decisions.* Alexandria, VA: Association for Supervision and Curriculum Development.

Dewey, J. (1916). *Democracy and education.* New York, NY: Macmillan, pp. 383–384.

Doll, R. C. (1986). *Curriculum improvement: Decision-making and process,* 6th ed. Boston, MA: Allyn & Bacon, p. 30.

Goodlad, J. I. (1979b). *What schools are for.* Bloomington, IN: Phi Delta Kappa Educational Foundation.

Hopkins, L. T. (1941). *Interaction: The democratic process.* Boston, MA: D. C. Heath, pp. 198–200.

Smith, B. O., Stanley, W. O., & Shores, J. H. (1957). *Fundamentals of curriculum development,* rev. ed. New York, NY: Worldbook.

Tyler, R. W. (1949). *Basic principles of curriculum and instruction.* Chicago, IL: University of Chicago Press, pp. 33–34.

DISCUSSION QUESTIONS

1. Which philosophical approach reflects your beliefs about (a) the school's purpose, (b) what subjects are of value, (c) how students learn, and (d) the process of teaching and learning?
2. What curriculum focus would the perennialists and essentialists recommend for our increasingly diverse school-age population?
3. What curriculum would the progressivists and reconstructionists select for a multicultural student population?
4. Should curriculum workers adopt a single philosophy to guide their practices? Why? Why not?
5. Which philosophy is most relevant to contemporary education? Why?

CHAPTER

2 Goals and Objectives

Ronald S. Brandt
Ralph W. Tyler

FOCUSING QUESTIONS

1. Why is it important to establish goals for student learning?
2. How do goals and objectives differ?
3. What are three types of goals?
4. What are the factors that should be considered in developing educational goals?
5. What is the relationship between goals and learning activities?
6. In what ways are curriculum goals integral to the process of evaluation?
7. What types of goals should be addressed by schools?

Whether planning for one classroom or many, curriculum developers must have a clear idea of what they expect students to learn. Establishing goals is an important and necessary step because there are many desirable things students could learn—more than schools have time to teach them—so schools should spend valuable instructional time only on high-priority learnings.

Another reason for clarifying goals is that schools must be able to resist pressures from various sources. Some of the things schools are asked to teach are untrue, would hinder students' development, or would help make them narrow, bigoted persons. Some would focus students' learning so narrowly it would reduce, rather than increase, their life options.

FORMS OF GOALS AND OBJECTIVES

Statements of intent appear in different forms, and words such as goals, objectives, aims, ends, outcomes, and purposes are often used interchangeably. Some people find it useful to think of goals as long-term aims to be achieved eventually and objectives as specific learning that students are to acquire as a result of current instruction.

Planners in the Portland, Oregon, area schools say these distinctions are not clear enough to meet organizational planning requirements. They use "goal" to mean any desired outcome of a program, regardless of its specificity, and "objective" only in

connection with *program change objectives,* which are defined as statements of intent to change program elements in specified ways. Doherty and Peters (1981) say this distinction avoids confusion and is consistent with the philosophy of "management by objectives."

They refer to three types of goals: instructional, support, and management. Educational goals are defined as learnings to be acquired; support goals as services to be rendered; and management goals as functions of management, such as planning, operating, and evaluating. Such a goal structure permits evaluation to focus on measures of learning acquired (educational outcomes), measures of quantity and quality of service delivery (support outcomes), and measures of quality and effectiveness of management functions (management outcomes).

The Tri-County Goal Development Project, which has published 14 volumes containing over 25,000 goal statements,[1] is concerned only with *educational goals.* For these collections, the following distinctions are made within the general category of "goals":

System level goals (set for the school district by the board of education)
Program level goals (set by curriculum personnel in each subject field)
Course level goals (set by groups of teachers for each subject or unit of instruction)
Instructional level goals (set by individual teachers for daily planning)

Examples of this outcome hierarchy are shown in Figure 2.1.

What distinguishes this system of terminology from others is its recognition that a learning outcome has the same essential character at all levels of planning (hence the appropriateness of a single term, goal, to describe it) and that the level of generality used to represent learning varies with the planning requirements at each level of school organization. The degree of generality chosen for planning at each level is, of course, a matter of judgment; there is no "correct" level but only a sense of appropriateness to purpose.

Teachers, curriculum specialists, and university consultants who write and review course goals use the following guidelines (Doherty & Peters, 1980, pp. 26–27):

1. Is the stated educational outcome potentially significant?
2. Does the goal begin with "The student knows . . ." if it is a knowledge goal and "The student is able to . . ." if it is a process goal?
3. Is the goal stated in language that is sufficiently clear, concise, and appropriate? (Can it be stated in simpler language and/or fewer words?)
4. Can learning experiences be thought of that would lead to the goal's achievement?
5. Do curricular options exist for the goal's achievement? (Methodology should not be a part of the learning outcome statement.)

System Goal:	The student knows and is able to apply basic scientific and technological processes.
Program Goal:	The student is able to use the conventional language, instruments, and operations of science.
Course Goal:	The student is able to classify organisms according to their conventional taxonomic categories.
Instructional Goal:	The student is able to correctly classify cuttings from the following trees as needle-leaf, hemlock, pine, spruce, fir, larch, cypress, redwood, and cedar.

FIGURE 2.1 Examples of Goals at Each Level of Planning

6. Does the goal clearly contribute to the attainment of one or more of the program goals in its subject area?
7. Can the goal be identified with the approximate level of student development?
8. Can criteria for evaluating the goal be identified?

Curriculum developers need to decide the types and definitions of goals most useful to them and to users of their materials. Some authors advise avoiding vagueness by using highly specific language.[2] Mager (1962) and other writers insist that words denoting observable behaviors, such as "construct" and "identify," should be used in place of words like "understand" and "appreciate." Others reject this approach, claiming that behavioral objectives "are in no way adequate for conceptualizing most of our most cherished educational aspirations" (Eisner, 1979, p. 101). Unfortunately this dispute has developed into a debate about behavioral objectives rather than dialogue over the kinds of behavior appropriate for a humane and civilized person.

The debate is partly semantic and partly conceptual. To some persons the word "behavior" carries the meaning of an observable act, like the movement of the fingers in typing. To them, behavioral objectives refer only to overt behavior. Others use the term "behavior" to emphasize the active nature of the learner. They want to emphasize that learners are not passive receptacles but living, reasoning persons. In this sense, behavior refers to all kinds of human reactions.

For example, a detailed set of "behavioral goals" was prepared by French and others (1957). Organized under the major headings of "self-realization," "face-to-face relationships," and "membership in large organizations," *Behavioral Goals of General Education in High School* includes aims such as "Shows growing ability to appreciate and apply good standards of performance and artistic principles." These are expanded by illustrative behaviors such as "Appreciates good workmanship and design in commercial products."

The other aspect of the debate over behavioral objectives arises from focusing on limited kinds of learning, such as training factory workers to perform specific tasks. The term "conditioning" is commonly used for the learning of behaviors initiated by clear stimuli and calling for automatic, fixed responses. Most driving behavior, for example, consists of conditioned responses to traffic lights, to the approach of other cars and pedestrians, and to the sensations a driver receives from the car's movements. Conditioning is a necessary and important type of learning.

In some situations, though, an automatic response is inappropriate. A more complex model of learning compatible with development of responsible persons in a changing society conceives of the learner as actively seeking meaning. This implies understanding and conscious pursuit of one's goals. The rewards of such learning include the satisfaction of coping with problems successfully.

Planning curriculum for self-directed learning requires goals that are not directly observable: ways of thinking, understanding of concepts and principles, broadening and deepening of interests, changing of attitudes, developing satisfying emotional responses to aesthetic experiences, and the like.

Even these goals, however, should use terms with clearly defined meanings. Saying that a student should "understand the concept of freedom" is far too broad and ambiguous, both because the meaning of the term "concept" is not sufficiently agreed on among educators and because concept words such as "freedom" have too great a range of possible informational loadings to ensure similar interpretation from teacher to teacher. If used at all, such a statement would be at the program level and would require increasingly specific elaboration at the course and lesson plan levels.

Some educators find it useful to refer to a particular type of goal as a *competency.* Used in the early 1970s in connection with Oregon's effort to relate high school instruction to daily life (Oregon State Board of Education, 1972), the term "minimum competency" has become identified with state and district testing programs designed to ensure that students have a minimum level of basic skills before being promoted or graduated. Spady (1978) and other advocates of performance-based education point out that competency involves more than "capacities" such as the ability to read and calculate; it should refer to *application* of school-learned skills in situations outside of school.

One definition of competency is the ability to perform a set of related tasks with a high degree of skill. The concept is especially useful in vocational education, where a particular competency can be broken down through task analysis into its component skills so that teachers and curriculum planners have both a broad statement of expected performance and an array of skills specific enough to be taught and measured (Chalupsky, Phillips-Jones, & Danoff, 1981).

CONSIDERATIONS IN CHOOSING GOALS

Educational goals should reflect three important factors: the nature of organized knowledge, the nature of society, and the nature of learners (Tyler, 1949). An obvious source is the nature of organized fields of study. Schools teach music, chemistry, and algebra because these fields have been developed through centuries of painstaking inquiry. Each academic discipline has its own concepts, principles, and processes. It would be unthinkable to neglect passing on to future generations this priceless heritage and these tools for continued learning.

Another factor affecting school goals is the nature of society. For example, the goals of education in the United States are quite different from those in Russia. In the United States, we stress individuality, competition, creativity, and freedom to choose government officials. Russian schools teach loyalty to the state and subordination of one's individuality to the welfare of the collective. One result is that most U.S. schools offer a great many electives, while the curriculum in Russian schools consists mostly of required subjects. For example, all students in Russia must study advanced mathematics and science to serve their technologically advanced nation (Wirszup, 1981).

U.S. schools have assumed, explicitly or implicitly, many goals related to the nature of society. For example, schools offer drug education, sex education, driver education, and other programs because of concerns about the values and behavior of youth and adults. Schools teach visual literacy because of the influence of television, consumer education because our economic system offers so many choices, and energy education because of the shortage of natural resources.

A goal statement by Ehrenberg and Ehrenberg (1978) specifically recognizes the expectations of society. Their model for curriculum development begins with a statement of "ends sought": "It is intended that as a result of participating in the K–12 educational program students will consistently and effectively take *intelligent, ethical action:* (1) to accomplish the tasks society legitimately expects of all its members, and (2) to establish and pursue worthwhile goals of their own choosing."

The curriculum development process outlined by the Ehrenbergs involves preparing a complete rationale for the ends-sought statement and then defining, for example, areas of societal expectations. The work of the curriculum developer consists of defining a framework of "criterion tasks," all either derived from expectations of society or necessary to pursue individual goals. These tasks, at various levels of pupil development, become the focus of day-to-day instruction. In this way, all curriculum is directly related to school system goals.

A third consideration in choosing goals, sometimes overlooked, is the nature of learners. For example, because Lawrence Kohlberg (1980) found that children pass through a series of stages in their moral development, he believes schools should adopt the goal of raising students' levels of moral reasoning. Sternberg (1981) and other "information processing" psychologists believe that intelligence is, partly at least, a set of strategies and skills that can be learned. Their research suggests, according to Sternberg, that schools can and should set a goal of improving students' intellectual performance.

Recognizing that students often have little interest in knowledge for its own sake or in adult applications of that knowledge, some educators believe goals not only should be based on what we know about students, but should come from students themselves. Many alternative schools emphasize this source of goals more than conventional schools typically do (Raywid, 1981).

While knowledge, society, and learners are all legitimate considerations, the three are sometimes in conflict. For example, many of the products of the curriculum reform movement of the 1960s had goals based almost exclusively on the nature of knowledge. The emphasis of curriculum developers was on the "structure of the disciplines" (Bruner, 1960). Goals of some curriculums failed to fully reflect the nature of society and students, so teachers either refused to use them or gave up after trying them for a year or two (Stake & Easley, 1978).

In the 1970s, educators and the general public reacted against this discipline-centered emphasis by stressing practical activities drawn from daily life. Schools were urged to teach students how to balance a checkbook, how to choose economical purchases, how to complete a job application, and how to read a traffic ticket. Career education enthusiasts, not content with the reasonable idea that education should help prepare students for satisfying careers, claimed that *all* education should be career-related in some way.

Conflicts of this sort between the academic and the practical are persistent and unavoidable, but curriculum developers err if they emphasize only one source of goals and ignore the others. If noneducators are preoccupied with only one factor, educational leaders have a responsibility to stress the importance of the others and to insist on balance.

SCOPE OF THE SCHOOL'S RESPONSIBILITY

There have been many attempts to define the general aims of schools and school programs, including the well-known Cardinal Principles listed by a national commission in 1918 (Commission on the Reorganization of Secondary Education, U.S. Office of Education, 1918). The seven goals in that report—health, fundamental processes, worthy home membership, vocation, civic education, worthy use of leisure, and ethical character—encompass nearly every aspect of human existence, and most goal statements written since that time have been equally comprehensive.

Some authors contend that schools are mistaken to assume such broad aims. Martin (1980) argued that intellectual development and citizenship are the only goals for which schools should have primary responsibility and that other institutions should be mainly responsible for such goals as worthy home membership. He proposed that schools undertake a new role of coordinating educational efforts of all community agencies.

Paul (1982) reported that in three different communities large numbers of teachers, students, and parents agreed on a limited set of goals confined mostly to basic skills. Paul contended that schools often confuse the issue when involving citizens in setting goals because they ask what students should learn rather than what schools should teach. Goal surveys conducted by her organization showed, she said, that adults want young

people to develop many qualities for which they do not expect schools to be responsible.

Undeniably, the aims and activities of U.S. schools are multiple and diverse. They not only teach toothbrushing, crafts, religion, care of animals, advertising, cooking, automobile repair, philosophy, hunting, and chess; they also provide health and food services to children, conduct parent education classes, and offer a variety of programs for the elderly. Periodic review of these obligations is clearly in order. However, in trying to delimit their mission, schools must not minimize concern for qualities that, though hard to define and develop, distinguish educated persons from the less educated.

A carefully refined statement of goals of schooling in the United States was developed by Goodlad (1979) and his colleagues in connection with their Study of Schooling. Deliberately derived from an analysis of hundreds of goal statements adopted by school districts and state departments of education so as to reflect accurately the currently declared aims of U.S. education, the list comprises 65 goals in 12 categories, including "intellectual development," "self-concept," and "moral and ethical character."

An equally broad set of goals is used in Pennsylvania's Educational Quality Assessment, which includes questions intended to measure such elusive aims as "understanding others" and "self-esteem." School districts must give the tests at least once every five years as part of a plan to make schools accountable for the 12 state-adopted goals (Seiverling, 1980). An adaptation of the Pennsylvania goals was used by the ASCD Committee on Research and Theory (1980) in connection with their plan for *Measuring and Attaining the Goals of Education.*

In many cases, schools contribute modestly or not at all to helping students become loving parents and considerate neighbors. In other cases, school experiences may have lasting effects on values, attitudes, and behavior. We believe school goals should include such aims as "interpersonal relations" and "autonomy," as well as "intellectual development" and "basic skills" (Goodlad, 1979), although the goal statement should specifically recognize that most goals are not the exclusive domain of schools but are a shared responsibility with other institutions.

ESTABLISHING LOCAL GOALS

It is usually helpful to begin identification of goals by listing all the promising possibilities from various sources. Consider contemporary *society.* What things could one's students learn that would help them meet current demands and take advantage of future opportunities? General data about modern society may be found in studies of economic, political, and social conditions. Data directly relevant to the lives of one's students will usually require local studies, which can be made by older students, parents, and other local people.

Consider the *background of the students:* their previous experiences, things they have already learned, their interests and needs—that is, the gaps between desired ways of thinking, feeling, and acting and their present ways. This information should be specific to one's own students, although generalized studies of the development of children and youth in our culture will suggest what to look for.

Consider the potential of the various *subject fields.* What things could one's students learn about their world and themselves from the sciences, history, literature, and so on? What can mathematics provide as a resource for their lives? Visual arts? Music? Each new generation is likely to find new possibilities in these growing fields of knowledge and human expression.

In the effort to identify possible goals, don't be unduly concerned about the form in which you state these "things to be learned." For example, you may find a possibility in "Learn new ways of expressing emotions

through various experiences provided in literature," and another in "Understand how animal ecologies are disturbed and the consequences of the disturbance." These are in different forms and at different levels of generality, but at this stage the purpose is only to consider carefully all the promising possibilities. Later, those selected as most important and appropriate for one's students can be refined and restated in common form so as to guide curriculum developers in designing learning experiences. At that point, it will probably be helpful to standardize terms and definitions. At early stages, however, curriculum developers should use terminology familiar and understandable to teachers, principals, parents, and citizens rather than insisting on distinctions that others may have difficulty remembering and using.

The comprehensive list of possible outcomes should be carefully scrutinized to sift out those that appear to be of minor importance or in conflict with the school's educational philosophy. The list should also be examined in the light of the apparent prospects for one's students being able to learn these things in school. For example, we know that things once learned are usually forgotten unless there are continuing opportunities to use them. So one criterion for retaining a goal is that students will have opportunities in and out of school to think, feel, and act as expected. We also know that learning of habits requires continuous practice with few errors, so work and study habits should be selected as goals only if they are to be emphasized consistently in school work.

This procedure for identifying what students are to be helped to learn is designed to prevent a common weakness in curriculum development: selection of goals that are obsolete or irrelevant, inappropriate for students' current levels of development, not in keeping with sound scholarship, not in harmony with America's democratic philosophy, or for which the school cannot provide the necessary learning conditions.

A common practice when planning curriculum is to refer to published taxonomies (Bloom, 1956; Krathwohl et al., 1964). Taxonomies can be useful for their original purpose—classifying goals already formulated—but they do not resolve the issue of the relevance of any particular goal to contemporary society or to one's own students. The Bloom and Krathwohl taxonomies are organized in terms of what the authors conceive to be higher or lower levels, but higher ones are not always more important or even necessary. In typewriting, for example, so-called higher mental processes interfere with the speed and accuracy of typing.

A similar caution applies to uncritically taking goals from curriculum materials of other school systems. The fact that educators in Scarsdale or some other district chose certain goals is not in itself evidence that they are appropriate for your students.

Development of general goals for a school system should be a lengthy process with opportunities for students, parents, and others to participate. This can be done, for example, by sponsoring "town meetings," by publishing draft statements of goals in local newspapers with an invitation to respond, and by holding and publicizing hearings on goals sponsored by the board of education.

A factor that complicates the matter is that some sources of goals are simply not subject to a majority vote. Knowledge—whether about physics, poetry, or welding—is the province of specialists. Educators sometimes know more about the nature of children and the learning process than many other adults in the community. Nevertheless, in a democracy there is no higher authority than the people, so the people must be involved in deciding what public schools are to teach.

Most general goals, because they are so broad and because they deal with major categories of human experience, are acceptable to most people. Few will quarrel with a goal such as "Know about human beings, their

environments and their achievements, past and present." The problem in developing a general goal statement is usually not to decide which goals are proper and which are not, but to select among many possibilities the ones that are most important, are at the proper level of generality, and are at least partially the responsibility of schools.

While general goals are not usually controversial, more specific ones can be. For example, parents might not quarrel with "Understand and follow practices associated with good health," but some would reject "Describe two effective and two ineffective methods of birth control." Thus, parents and other citizens should be involved in formulating course and program goals as well as general system goals.

USING GOALS TO PLAN LEARNING ACTIVITIES

To some extent, well-stated goals imply the kinds of learning activities that would be appropriate for achieving them. For example, if an instructional goal is "Solve word problems requiring estimation involving use of simple fractions such as 1/2, 1/4, 2/3," students would have to practice estimating solutions to practical problems as well as learning to calculate using fractions. In many instances, however, knowing the goal does not automatically help an educator know how to teach it. For example, to enable students to "understand and appreciate significant human achievements," one teacher might have students read about outstanding scientists of the nineteenth century, supplement the readings with several lectures, and give a multiple-choice examination. Another teacher might decide to divide students into groups and have each group prepare a presentation to the class about a great scientist using demonstrations, dramatic skits, and so on. Forging the link between goals and other steps in curriculum development requires professional knowledge, experience, and imagination.

A factor that distorts what might appear to be a straightforward relationship between goals and activities is that every instructional activity has multiple goals. The goal-setting process is sometimes seen as a one-to-one relationship between various levels of goals and levels of school activity. For example, the mission of a local school system might be to "Offer all students equitable opportunities for a basic education plus some opportunities to develop individual talents and interests." "Basic education" would be defined to include "Communicate effectively by reading, writing, speaking, observing, and listening." A middle school in that district might have a goal such as "Read and understand nonfiction at a level of the average article in *Reader's Digest*" or, more specifically, "Students will be able to distinguish between expressions of fact and opinion in writing."

While similar chains of related goals are basic to sound curriculum planning, developers should never assume that such simplicity fully represents the reality of schools. When a teacher is engaged in teaching reading, he or she must also be conscious of and teach toward other goals: thinking ability, knowledge of human achievements, relationships with others, positive self-concept, and so on.

Not only must teachers address several officially adopted "outside" goals all at once; they must cope with "inside" goals as well. Although Goodlad (1979) uses declared goals to remind educators and the public what schools are said to be for, he cautions that the ends-means model doesn't do justice to the educational process and offers, as an alternative, an ecological perspective. Insisting that school activities should "be viewed for their intrinsic value, quite apart from their linkage or lack of linkage to stated ends" (p. 76), he points out that in addition to "goals that have been set outside of the system for the system" there are also goals inside the system—"students'

goals, teachers' goals, principals' goals, and so on—and . . . these goals are not necessarily compatible" (p. 77).

The message to curriculum developers is that although "outside" goals and objectives are fundamental to educational planning, the relationship between purposes and practices is more complex than it may seem.

USING GOALS IN CURRICULUM EVALUATION

Some writers argue that specific objectives are essential in order to design suitable evaluation plans and write valid test items. The work of the National Assessment of Educational Progress shows, however, that even evaluators may not require objectives written in highly technical language.[3] National Assessment objectives do not contain stipulations of conditions or performance standards; in fact, they are expected to meet just two criteria: clarity and importance. The educators, citizens, and subject matter experts who review the objectives are asked, "Do you understand what this objective means? How important is it that students learn this in school?" Objectives are often considered clear and important even though they are stated briefly and simply. When the objectives have been identified, National Assessment staff members or consultants develop exercises designed to be operational definitions of the intended outcomes. Conditions, standards of performance, and so on are specified for the exercises, not for the objectives.

Setting goals is difficult because it requires assembling and weighing all the factors to be considered in selecting the relatively few but important goals that can be attained with the limited time and resources available to schools. The demands and opportunities of society, the needs of students, the resources of scholarship, the values of democracy, and the conditions needed for effective learning must all be considered.

A common error is the failure to distinguish purposes appropriate for the school from those attainable largely through experiences in the home and community. The school can reinforce the family in helping children develop punctuality, dependability, self-discipline, and other important habits. The school can be and usually is a community in which children and adults respect each other, treat each other fairly, and cooperate. But the primary task for which public schools were established is to enlarge students' vision and experience by helping them learn to draw upon the resources of scholarship, thus overcoming the limitations of direct experience and the narrow confines of a local environment. Students can learn to use sources of knowledge that are more accurate and reliable than folklore and superstition. They can participate vicariously through literature and the arts with peoples whose lives are both similar to and different from those they have known. The school is the only institution whose primary purpose is enabling students to explore these scholarly fields and to learn to use them as resources in their own lives. Great emphasis should be given to goals of this sort.

Goals are frequently not stated at the appropriate degree of generality–specificity for each level of educational responsibility. Goals promulgated by state education authorities should not be too specific because of the wide variation in conditions among districts in the state. State goals should furnish general guidance for the kinds and areas of learning for which schools are responsible in that state. The school district should furnish more detailed guidance by identifying goals that fall between the general aims listed by the state and those appropriate to the local school. School goals should be adapted to the background of students and the needs and resources of the neighborhood, especially the educational role the parents can assume. The goals of each teacher should be designed to attain the goals of the school.

The test of whether a goal is stated at the appropriate degree of generality–specificity is its clarity and helpfulness in guiding the educational activities necessary at that level of responsibility.

CONCLUSION

When states list specific skills as goals and develop statewide testing programs to measure them, they may overlook a significant part of what schools should teach: understanding, analysis, and problem solving. If students are taught only to follow prescribed rules, they will be unable to deal with varied situations. Another common limitation of such lists is their neglect of affective components, such as finding satisfaction in reading and developing the habit of reading to learn.

The form and wording of goals and objectives should be appropriate for the way they are to be used. For clarity, we have generally used the term "goal" for all statements of intended learning outcomes regardless of their degree of specificity, but we recognize that no one formula is best for all situations. The criteria for judging goals and objectives are their usefulness in communicating educational purposes and their helpfulness to teachers in planning educational activities.

ENDNOTES

1. Available from Commercial-Educational Distributing Service, P.O. Box 4791, Portland, OR 97208.

2. Collections of "measurable objectives" may be purchased from Instructional Objectives Exchange, Box 24095-M, Los Angeles, CA 90024-0095.

3. National Assessment has developed objectives for a number of subject areas, including art, citizenship, career and occupational development, literature, mathematics, music, reading, science, social studies, and writing. Because they have been carefully written and thoroughly reviewed, the objectives and accompanying exercises are a helpful resource for local curriculum developers, although they are designed only for assessment, not for curriculum planning.

REFERENCES

ASCD Committee on Research and Theory, Wilbur B. Brookover, Chairman. (1980). *Measuring and attaining the goals of education.* Alexandria, VA: Association for Supervision and Curriculum Development.

Bloom, Benjamin S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York, NY: David McKay.

Bruner, Jerome. (1960). *The process of education.* Cambridge, MA: Harvard University.

Chalupsky, Albert B., Phillips-Jones, Linda, & Danoff, Malcolm N. (1981). Competency measurement in vocational education: A review of the state of the art. Prepared by American Institute for Research. Washington, DC: Office of Vocational and Adult Education, U.S. Department of Education.

Commission on the Reorganization of Secondary Education, U.S. Office of Education. (1918). *Cardinal principles of secondary education.* Washington, DC: Government Printing Office.

Doherty, Victor W., & Peters, Linda B. (1980). *Introduction to K–12 course goals for educational planning and evaluation,* 3rd ed. Portland, OR: Commercial-Educational Distributing Services.

Doherty, Victor W., & Peters, Linda B. (1981, May). Goals and objectives in educational planning and evaluation. *Educational Leadership, 38*, 606.

Ehrenberg, Sydelle D., & Ehrenberg, Lyle M. (1978). *A strategy for curriculum design—the ICI model.* Miami, FL: Institute for Curriculum and Instruction.

Eisner, Eliot W. (1979). *The educational imagination.* New York, NY: Macmillan.

French, Will. (1957). *Behavioral goals of general education in high school.* New York, NY: Russell Sage Foundation.

Goodlad, John I. (1979). *What schools are for?* Bloomington, IN: Phi Delta Kappa.

Kohlberg, Lawrence. (1980, October). Moral education: A response to Thomas Sobol. *Educational Leadership, 38,* 19–23.

Krathwohl, David R., Bloom, Benjamin S., & Masia, Bertram B. (1964). *Taxonomy of educational objectives: The classification of educational goals, handbook II: Affective domain.* New York, NY: David McKay Company, Inc.

Mager, R. F. (1962). *Preparing instructional objectives.* Palo Alto, CA: Fearon Publishers.

Martin, John Henry. (1980, January). Reconsidering the goals of high school education. *Educational Leadership, 37*, 278–285.

Oregon State Board of Education. (1972). Minimum state requirements standards for graduation from high school. Salem, OR.

Paul, Regina. (1982, January). Are you out on a limb? *Educational Leadership, 39*, 260–264.

Raywid, Mary Anne. (1981, April). The first decade of public school alternatives. *Phi Delta Kappan, 62*, 551–554.

Seiverling, Richard F. (Ed.). (1980). *Educational quality assessment: Getting out the EQA results.* Harrisburg, PA: Pennsylvania Department of Education.

Spady, William G. (1978, October). The concept and implications of competency-based education. *Educational Leadership, 36*, 16–22.

Stake, R. E., & Easley, J. A., Jr. (1978). *Case studies in science education.* 2 vols. Washington, DC: U.S. Government Printing Office.

Sternberg, Robert J. (1981, October). Intelligence as thinking and learning skills. *Educational Leadership, 39*, 18–20.

Tyler, Ralph W. (1949). *Basic principles of curriculum and instruction* (1974 ed.). Chicago, IL: University of Chicago Press.

Wirszup, Izaak. (1981, February). The Soviet challenge. *Educational Leadership, 38*, 358–360.

DISCUSSION QUESTIONS

1. What should the goals of contemporary education be?
2. Should the goals of education be the same for all students?
3. What is the best method for defining goals: by behavioral objectives or by competencies?
4. Who should assume responsibility for determining educational goals: the federal government, the state board of education, local school districts, building principals, or the faculty at each school? Why?
5. What is the best criterion for judging goals and objectives?

CHAPTER

3 What Does It Mean to Say a School Is Doing Well?

Elliot W. Eisner

FOCUSING QUESTIONS

1. What kinds of decisions about education should made at the national level? At the state level? At the local level?
2. How much freedom should students have in deciding what they want to learn, when, and how much?
3. Might it be possible for education policy to promote creativity, spontaneity, surprise, and discovery as educational outcomes?
4. Can schools pursue both quality and equality without sacrificing one or the other?

Driven by discontent with the performance of our schools, we are, once again, in the midst of education reform, as we were in 1983 with *A Nation at Risk*, in 1987 with *America 2000*, and a few years later with *Goals 2000*. Each of these reform efforts was intended to rationalize the practice and performance of our schools. Each was designed to work out and install a system of measurable goals and evaluation practices that would ensure that our nation would be first in science and mathematics by the year 2000, that all our children would come to school ready to learn, and that each school would be drug-free, safe, and nonviolent.

The formulation of standards and the measurement of performance were intended to tidy up a messy system and to make teachers and school administrators truly accountable. The aim was then, and is today, to systematize and standardize so that the public will know which schools are performing well and which are not. There were to be then, and there are today, payments and penalties for performance.

America is one of the few nations in which responsibility for schools is not under the aegis of a national ministry of education. Although we have a federal agency, the U.S. Department of Education, the Tenth Amendment to the U.S. Constitution indicates that those responsibilities that the Constitution does not assign explicitly to the federal government belong to the states (or to the people). And because the Constitution makes no mention of education, it is a responsibility of the states.

As a result, we have 50 departments of education, one for each state, overseeing some 16,000 school districts that serve 52 million students in more than 100,000 schools. In addition, each school district has latitude for shaping education policy. Given the complexity of the way education is organized in the United States, it is understandable that from one perspective the view looks pretty messy and not altogether rational. Furthermore, more than a few believe that we have a national problem in American education and that national problems require national solutions. The use of highly rationalized procedures for improving schools is a part of the solution.

I mention the concept of rationalization because I am trying to describe the ethos being created in our schools. I am trying to reveal a world view that shapes our conception of education and the direction we take for making our schools better.

Rationalization as a concept has a number of features. First, it depends on a clear specification of intended outcomes. That is what standards and rubrics are supposed to do. We are supposed to know what the outcomes of educational practice are to be, and rubrics are to exemplify those outcomes. Standards are more general statements intended to proclaim our values. One argument for the use of standards and rubrics is that they are necessary if we are to function rationally. As the saying goes, if you don't know where you're headed, you will not know where you have arrived. In fact, it's more than knowing where you're headed; it's also knowing the precise destination. Thus the specification of intended outcomes has become one of the primary practices in the process of rationalizing school reform efforts. Holding people accountable for the results is another.

Second, rationalization typically uses measurement as a means through which the quality of a product or performance is assessed and represented. Measurement, of course, is one way to describe the world. Measurement has to do with determining matters of magnitude, and it deals with matters of magnitude through the specification of units. In the United States, the unit for weight is pounds. In Sweden or the Netherlands, it is kilograms. It's kilometers in Europe; it's miles in the United States. It really doesn't matter what unit you use, as long as everyone agrees what the unit is.

Quantification is believed to be a way to increase objectivity, secure rigor, and advance precision in assessment. For describing some features of the world, including the educational world, it is indispensable. But it is not good for everything, and the limitations of quantification are increasingly being recognized. For example, although initial discussions about standards emphasized the need for them to be measurable, as standards have become increasingly general and ideological, measurability has become less salient.

Third, the rationalization of practice is predicated on the ability to control and predict. We assume that we can know the specific effects of our interventions, an assumption that is questionable.

Fourth, rationalization downplays interactions. Interactions take into account not simply the conditions that are to be introduced in classrooms or schools but also the kinds of personal qualities, expectations, orientations, ideas, and temperaments that interact with those conditions. Philosophical constructivists have pointed out that what something means comes both from the features of the phenomenon to be addressed and from the way those features are interpreted or experienced by individuals. Such idiosyncratic considerations always complicate assessment. They complicate efforts to rationalize education as well. Prediction is not easy when what the outcome is going to be is a function not only of what is introduced in the situation but also of what a student makes of what has been introduced.

Fifth, rationalization promotes comparison, and comparison requires what is called "commensurability." Commensurability is possible only if you know what the programs were in which the youngsters participated in the schools being compared. If youngsters are in schools that have different curricula or that allocate differing amounts of time to different areas of the curriculum, comparing the outcomes of those schools without taking into account their differences is extremely questionable. Making comparisons between the math performance of youngsters in Japan and those in the United States without taking into account cultural differences, different allocations of time for instruction, or different approaches to teaching makes it impossible to account for differences in student performance or to consider the side-effects or opportunity costs associated with different programs in different cultures. The same principle holds in comparing student performance across school districts in the United States.

Sixth, rationalization relies upon extrinsic incentives to motivate action; that's what vouchers are intended to do. Schools are likened to businesses, and the survival of the fittest is the principle that determines which ones survive. If schools don't produce effective results on tests, they go out of business.

In California and in some other parts of the country, principals and superintendents are often paid a bonus if their students perform well on standardized tests: payment by results. And, of course, such a reward system has consequences for a school's priorities. Are test scores the criteria that we want to use to reward professional performance?

The features that I have just described are a legacy of the Enlightenment. We believe that our rational abilities can be used to discover the regularities of the universe and, once we've found them, to implement, as my colleague David Tyack titled his book, "the one best system." We have a faith in our ability to discover what the U.S. Department of Education once described as "what works." The result is an approach to reform that leaves little room for surprise, for imagination, for improvisation, or for the cultivation of productive idiosyncrasy. Our reform efforts are closer in spirit to the ideas of René Descartes and Auguste Comte than to those of William Blake. They are efforts that use league tables to compare schools and that regard test scores as valid proxies for the quality of education our children receive. And they constitute an approach to reform that has given us three major educationally feckless reform efforts in the past 20 years. Are we going to have another?

What are the consequences of the approach to reform that we have taken and that should we pay attention to in order to tell when a school is doing well? First, one of the consequences of our approach to reform is that the curriculum gets narrowed as school district policies make it clear that what is to be tested is what is to be taught. Tests come to define our priorities, and now we have legitimated those priorities by talking about "core subjects." The introduction of the concept of core subjects explicitly marginalizes subjects that are not part of the core. One of the areas that we marginalize is the arts, an area that when well taught offers substantial benefits to students. Our idea of core subjects is related to our assessment practices and the tests we use to determine whether or not schools are doing well.

Because we who are in education take test scores seriously, the public is reinforced in its view that test scores are good proxies for the quality of education a school provides. Yet what test scores predict best are other test scores. If we are going to use proxies that have predictive validity, we need proxies that predict performances that matter outside the context of school. The function of schooling is not to enable students to do better in school. The function of schooling is to enable students to do better in life. What students learn in school ought to exceed in relevance the limits of the school's program.

As we focus on standards, rubrics, and measurement, the deeper problems of schooling go unattended. What are some of the deeper problems of schooling? One has to do with the quality of conversation in classrooms. We need to provide opportunities for youngsters and adolescents to engage in challenging kinds of conversation, and we need to help them learn how to do so. Such conversation is all too rare in schools. I use the term "conversation" seriously, for challenging conversation is an intellectual affair. It has to do with thinking about what people have said and responding reflectively, analytically, and imaginatively to that process. The practice of conversation is almost a lost art. We turn to talk shows to experience what we cannot do very well or very often.

The deeper problems of schooling have to do with teacher isolation and the fact that teachers don't often have access to other people who know what they're doing when they teach and who can help them do it better. Although there are many issues that need attention in schooling, we search for the silver bullet and believe that, if we get our standards straight and our rubrics right and make our tests tough enough, we will have an improved school system. I am not so sure.

The message that we send to students is that what really matters in their education are their test scores. As a result, students in high-stakes testing programs find ways to cut corners—and so do some teachers. We read increasingly often not only about students who are cheating but also about teachers who are unfairly helping students get higher scores on the tests. It's a pressure that undermines the kind of experience that students ought to have in schools.

Perhaps the major consequence of the approach we have taken to rationalize our schools is that it ineluctably colors the school climate. It promotes an orientation to practice that emphasizes extrinsically defined attainment targets that have a specified quantitative value. This, in turn, leads students to want to know just what it is they need to do to earn a particular grade. Even at Stanford, I sometimes get requests from graduate students who want to know precisely, or as precisely as I can put it, what they need to do in order to get an A in the class.

Now from one angle such a request sounds reasonable. After all, it is a means/ends approach to educational planning. Students are, it can be said, rationally planning their education. But such planning has very little to do with intellectual life, where risk-taking, exploration, uncertainty, and speculation are what it's about. And if you create a culture of schooling in which a narrow means/ends orientation is promoted, that culture can undermine the development of intellectual dispositions. By intellectual dispositions I mean a curiosity and interest in engaging and challenging ideas.

What the field has not provided is an efficient alternative to the testing procedures we now use. And for good reason. The good reason is that there are no efficient alternatives. Educationally useful evaluation takes time, it's labor intensive and complex, and it's subtle, particularly if evaluation is used not simply to score children or adults but to provide information to improve the process of teaching and learning.

The price one pays for providing many ways for students to demonstrate what has been learned is a reduction of commensurability. Commensurability decreases when attention to individuality increases. John Dewey commented about comparisons in a book that he wrote in 1934 when he was 76 years old. The book is *Art as Experience*. He observed that nothing is more odious than comparisons in the arts. What he was getting at was that attention to or appreciation of an art form requires attention to and appreciation of its distinctive features. It was individuality that Dewey was emphasizing, and it is the description of individuality we would do well to think about in our assessment practices. We should be trying to

discover where a youngster is, where his strengths are, where additional work is warranted. Commensurability is possible when everybody is on the same track, when there are common assessment practices, and when there is a common curriculum. But when students work on different kinds of problems, and when there is concern with the development of an individual's thumbprint, so to speak, commensurability is an inappropriate aim.

What have been the consequences of the rationalized approach to education reform that we have embraced? Only this: In our desire to improve our schools, education has become a casualty. That is, in the process of rationalization, education—always a delicate, complex, and subtle process having to do with both cultural transmission and self-actualization—has become a commodity. Education has evolved from a form of human development serving personal and civic needs into a product our nation produces to compete in a global economy. Schools have become places to mass produce this product.

Let us assume that we impose a moratorium on standardized testing for a five-year period. What might we pay attention to in schools in order to say that a school is doing well? If it is not higher test scores that we are looking for, what is it? Let me suggest the kind of data we might seek by raising some questions that might guide our search.

What kinds of problems and activities do students engage in? What kind of thinking do these activities invite? Are students encouraged to wonder and to raise questions about what they have studied? Perhaps we should be less concerned with whether they can answer our questions than with whether they can ask their own. The most significant intellectual achievement is not so much in problem solving, but in question posing. What if we took that idea seriously and concluded units of study by looking for the sorts of questions that youngsters are able to raise as a result of being immersed in a domain of study? What would that practice teach youngsters about inquiry?

What is the intellectual significance of the ideas that youngsters encounter? (I have a maxim that I work with: If it's not worth teaching, it's not worth teaching well.) Are the ideas they encounter important? Are they ideas that have legs? Do they go someplace?

Are students introduced to multiple perspectives? Are they asked to provide multiple perspectives on an issue or a set of ideas? The implications of such an expectation for curriculum development are extraordinary. To develop such an ability and habit of mind, we would need to invent activities that encourage students to practice, refine, and develop certain modes of thought. Taking multiple perspectives is just one such mode.

In 1950 the American psychologist J. P. Guilford developed what he called "the structure of intellect," in which 130 different kinds of cognitive processes were identified. What if we used that kind of structure to promote various forms of thinking? My point is that the activities in which youngsters participate in classes are the means through which their thinking is promoted. When youngsters have no reason to raise questions, the processes that enable them to learn how to discover intellectual problems go undeveloped.

The ability to raise telling questions is not an automatic consequence of maturation. Do you know the biggest problem that Stanford students have in the course of their doctoral work? It is not getting good grades in courses; they all get good grades in courses. Their biggest obstacle is in framing a dissertation problem. We can do something about that before students get to the doctoral level. In a school that is doing well, opportunities for the kind of thinking that yields good questions would be promoted.

What connections are students helped to make between what they study in class and the world outside of school? A major aim of

education has to do with what psychologists refer to as "transfer of learning." Can students apply what they have learned or what they have learned how to learn? Can they engage in the kind of learning they will need in order to deal with problems and issues outside the classroom? If what students are learning is simply used as a means to increase their scores on the next test, we may win the battle and lose the war. In such a context, school learning becomes a hurdle to jump over. We need to determine whether students can use what they have learned. But even being able to use what has been learned is no indication that it will be used. There is a difference between what a student can do and what a student will do.

The really important dependent variables in education are not located in classrooms. Nor are they located in schools. The really important dependent variables are located outside schools. Our assessment practices haven't even begun to scratch that surface. It's what students do with what they learn when they can do what they want to do that is the real measure of educational achievement.

What opportunities do youngsters have to become literate in the use of different representational forms? By representational forms, I mean the various symbol systems through which humans shape experience and give it meaning. Different forms of human meaning are expressed in different forms of representation. The kinds of meaning one secures from poetry are not the kinds of meaning one secures from propositional signs. The kinds of meanings expressed in music are not the meanings experienced in the visual arts. To be able to secure any of those meanings, you have to know how to "read" them. Seeing is a reading. Hearing is a reading. They are the processes of interpreting and construing meaning from the material encountered; reading text is not only a process of decoding, it is also a process of encoding. We make sense of what we read.

What opportunities do students have to formulate their own purposes and to design ways to achieve them? Can a school provide the conditions for youngsters, as they mature, to have increased opportunity to set their own goals and to design ways to realize them? Plato once defined a slave as someone who executes the purposes of another. I would say that, in a free democratic state, at least a part of the role of education is to help youngsters learn how to define their own purposes.

What opportunities do students have to work cooperatively to address problems that they believe to be important? Can we design schools so that we create communities of learners who know how to work with one another? Can we design schools and classrooms in which cooperating with others is part of what it means to be a student?

Do students have the opportunity to serve the community in ways that are not limited to their own personal interests? Can we define a part of the school's role as establishing or helping students establish projects in which they do something beyond their own self-interest? We want to know that in order to know how well a school is doing.

To what extent are students given the opportunity to work in depth in domains that relate to their aptitudes? Is personal talent cultivated? Can we arrange the time for youngsters to work together on the basis of interest rather than on the basis of age grading? Youngsters who are interested in ceramics might work in depth in ceramics; those interested in science might work in depth in science. To make these possibilities a reality, we would need, of course, to address the practical problems of allocating time and responsibility. But without a conception of what is important, we will never even ask questions about allocating time. A vision of what is educationally important must come first.

Do students participate in the assessment of their own work? If so, how? It is important for teachers to understand what

students themselves think of their own work. Can we design assessment practices in which students can help us?

To what degree are students genuinely engaged in what they do in school? Do they find satisfaction in the intellectual journey? How many students come to school early and how many would like to stay late? The motives for such choices have to do with the "locus of satisfactions." Satisfactions generate reasons for doing something. Basically, there are three reasons for doing anything. One reason for doing something is that you like what it feels like and you like who you are when you do it. Sex, play, and art fall into this category. They are intrinsically satisfying activities.

A second reason for doing something is not because you like doing it, but because you like the results of having done it. You might like a clean kitchen, but you might not enjoy cleaning your kitchen. The process is not a source of enjoyment, but the outcome is.

A third reason for doing something is not because you like the process or even the outcome, but because you like the rewards. You like the grades you earn. You like the paycheck you receive. That's what Hannah Arendt described as labor. There is too much labor in our schools— and not enough work. Work is effort from which you derive satisfaction. We ought to be paying attention to the joy of the journey. This is easy to say but difficult and challenging to do. Nevertheless, we ought to keep our minds focused on it as a goal.

Are teachers given the time to observe and work with one another? To what degree is professional discourse an important aspect of what being a teacher means in the school? Is the school a resource, a center for the teacher's own development? Is the school a center for teacher education? The center for teacher education is not the university; it is the school in which the teacher works. Professional growth should be promoted during the 25 years that a teacher works in a school—not just during the year and a half that he or she spends in a teacher education program. Can we create schools that take the professional development of teachers seriously? And what would they look like? Schools will not be better for students than they are for the professionals who work in them.

All of us who teach develop repertoires. We all have routines. We all get by. We get by without serious problems, but getting by is not good enough. We need to get better. And to get better, we have to think about school in ways that address teachers' real needs. And when I say, "address teachers' real needs," I don't mean sending them out every 6,000 miles to get "inserviced" by a stranger.

Are parents helped to understand what their child has accomplished in class? Do they come to understand the educational import of what is going on? Very often children's artwork is displayed in the school, with the only information provided being the student's name, the grade, and the teacher's name, all in the lower right-hand corner. Then the best student work is posted more formally. What we do, in effect, is use a gallery model of exhibition. We take the best work, and we display it. What we need to create is an educationally interpretive exhibition that explains to viewers what problems the youngsters were addressing and how they resolved them. This can be done by looking at prior work and comparing it with present work—that is, by looking at what students have accomplished over time. I am talking about interpretation. I am talking about getting people to focus not so much on what the grade is, but on what process led to the outcome.

What is my point? All my arguments have had to do with creating an educationally informed community. We need to ask better questions.

Can we widen what parents and others believe to be important in judging the quality of our schools? Can we widen and diversify

what they think matters? Can those of us who teach think about public education not only as the education of the public in the schools (i.e., our students), but also as the education of the public outside our schools (i.e., parents and community members)? Can a more substantial and complex understanding of what constitutes good schooling contribute to better, more enlightened support for our schools?

Can a more informed conception of what constitutes quality in education lead to greater equity for students and ultimately for the culture? Educational equity is much more than just allowing students to cross the threshold of the school. It has to do with what students find after they do so. We ought to be providing environments that enable each youngster in our schools to find a place in the educational sun. But when we narrow the program so that there is only a limited array of areas in which assessment occurs and performance is honored, youngsters whose aptitudes and interests lie elsewhere are going to be marginalized in our schools. The more we diversify those opportunities, the more equity we are going to have because we are going to provide wider opportunities for youngsters to find what it is that they are good at.

And that leads me to the observation that, in our push for attaining standards, we have tended to focus on outcomes that are standard for all youngsters. We want youngsters to arrive at the same place at about the same time. I would argue that really good schools increase variance in student performance. Really good schools increase the variance and raise the mean. The reason I say that is because, when youngsters can play to their strengths, those whose aptitudes are in, say, mathematics are going to go faster and further in that area than youngsters whose aptitudes are in other fields. But in those other fields, those youngsters would go faster and further than those whose aptitudes are in math. Merely by conceiving of a system of educational organization that regards productive variance as something to be valued and pursued, we undermine the expectation that everybody should be moving in lockstep through a series of 10-month years in a standardized system and coming out at pretty much the same place by age 18.

Part of our press toward standardization has to do with what is inherent in our age-graded schools system. Age-graded systems work on the assumption that children remain more alike than different over time and that we should be teaching within the general expectations for any particular grade. Yet, if you examine reading performance, for example, the average range of reading ability in an ordinary classroom approximates the grade level. Thus at the second grade, there is a two-year spread; at the third grade, a three-year range; at the fourth grade, a four-year range. Consider how varied the picture would be if performance in four or five different fields were examined. Children become more different as they get older, and we ought to be promoting those differences and at the same time working to escalate the mean.

Does a more enlightened grasp of what matters in schools put us in a better position to improve them? I hope so. What I have argued here is intended to divert our focus away from what we normally use to make judgments about the quality of schools and redirect it instead toward the processes, conditions, and culture that are closer to the heart of education. I am unabashedly endorsing the promotion of improvisation, surprise, and diversity of outcomes as educational virtues that we ought to try to realize through our teaching.

The point of the questions I have raised is to provide something better than the blinkered vision of school quality that now gets front-page coverage in our newspapers. Perhaps this vision serves best those in positions of privilege. Perhaps our society needs losers

so that it can have winners. Whatever the case, I believe that those of us who wish to exercise leadership in education must do more than simply accept the inadequate criteria that are now used to determine how well our schools are doing.

We need a fresh and humane vision of what schools might become because what our schools become has everything to do with what our children and our culture will become. I have suggested some of the features and some of the questions that I believe matter educationally. We need reform efforts that are better than those we now have. The vision of education implicit in what I have described here is just a beginning.

DISCUSSION QUESTIONS

1. How does Eisner's vision for education differ from what most policy makers advocate?
2. Do you agree that a sole focus on the measurable outcomes of education blinds us to what are the true measures of quality?
3. What does Eisner suggest is the relationship between rationalization and quantification? Do these processes serve any useful purposes?
4. How would schools have to be organized and operate differently if student interests were the starting point for learning?

CHAPTER

4 Art and Imagination: Overcoming a Desperate Stasis

Maxine Greene

FOCUSING QUESTIONS

1. What are the existential contexts of education?
2. How do encounters with the arts influence student engagement in learning?
3. How might experience with the arts affect student (a) imagination, (b) construction of reality, and (c) depth of perspective?
4. What is the relationship between individual freedom and learning?
5. What are the contradictory goals of education?
6. What is the relationship between encounters with the arts and the goals of education?

The existential contexts of education reach far beyond what is conceived of in Goals 2000. They have to do with the human condition in these often desolate days, and in some ways they make the notions of world-class achievement, benchmarks, and the rest seem superficial and limited, if not absurd. They extend beyond the appalling actualities of family breakdown, homelessness, violence, and the "savage inequalities" described by Jonathan Kozol, although social injustice has an existential dimension.

Like their elders, children and young persons inhabit a world of fearful moral uncertainty—a world in which it appears that almost nothing can be done to reduce suffering, contain massacres, and protect human rights. The faces of refugee children in search of their mothers, of teenage girls repeatedly raped by soldiers, of rootless people staring at the charred remains of churches and libraries may strike some of us as little more than a "virtual reality." Those who persist in looking feel numbed and, reminded over and over of helplessness, are persuaded to look away.

It has been said that Pablo Picasso's paintings of "weeping women" have become the icons of our time.[1] They have replaced the statues of men on horseback and men in battle; they overshadow the emblems of what once seemed worth fighting for, perhaps dying for. When even the young confront images of loss and death, as most of us are bound to do today, "it is important that everything we love be summed up into something

unforgettably beautiful."[2] This suggests one of the roles of the arts. To see sketch after sketch of women holding dead babies, as Picasso has forced us to do, is to become aware of a tragic deficiency in the fabric of life. If we know enough to make those paintings the objects of our experience, to encounter them against the background of our lives, we are likely to strain toward conceptions of a better order of things, in which there will be no more wars that make women weep like that, no more bombs to murder innocent children. We are likely, in rebelling against such horror, to summon up images of smiling mothers and lovely children, metaphors for what *ought* to be.

Clearly, this is not the only role of the arts, although encounters with them frequently do move us to want to restore some kind of order, to repair, and to heal. Participatory involvement with the many forms of art does enable us, at the very least, to *see* more in our experience, to *hear* more on normally unheard frequencies, to *become conscious* of what daily routines, habits, and conventions have obscured.

We might think of what Pecola Breedlove in *The Bluest Eye* has made us realize about the metanarrative implicit in the Dick and Jane basal readers or in the cultural artifact called Shirley Temple, who made so many invisible children yearn desperately to have blue eyes.[3] We might recall the revelations discovered by so many through an involvement with *Schindler's List.* We might try to retrieve the physical consciousness of unutterable grief aroused in us by Martha Graham's dance "Lamentation," with only feet and hands visible outside draped fabric—and agony expressed through stress lines on the cloth. To see more, to hear more. By such experiences, we are not only wrenched out of the familiar and the taken-for-granted, but we may also discover new avenues for action. We may experience a sudden sense of new possibilities and thus new beginnings.

The prevailing cynicism with regard to values and the feelings of resignation it breeds cannot help but create an atmosphere in the schools that is at odds with the unpredictability associated with the experience of art. The neglect of the arts by those who identified the goals of Goals 2000 was consistent with the focus on the manageable, the predictable, and the measurable. There have been efforts to include the arts in the official statements of goals, but the arguments mustered in their favor are of a piece with the arguments for education geared toward economic competitiveness, technological mastery, and the rest. They have also helped support the dominant arguments for the development of "higher-level skills," academic achievement, standards, and preparation for the workplace.

The danger afflicting both teachers and students because of such emphases is, in part, the danger of feeling locked into existing circumstances defined by others. Young people find themselves described as "human resources," rather than as persons who are centers of choice and evaluation. It is suggested that young people are to be molded in the service of technology and the market, no matter who they are. Yet, as many are now realizing, great numbers of our young people will find themselves unable to locate satisfying jobs, and the very notion of "all the children" and even of human resources carries with it deceptions of all kinds. Perhaps it is no wonder that the dominant mood in many classrooms is one of passive reception.

Umberto Eco, the Italian critic of popular culture, writes about the desperate need to introduce a critical dimension into such reception. Where media and messages are concerned, it is far more important, he says, to focus on the point of reception than on the point of transmission. Finding a threat in "the universal of technological communication" and in situations where "the medium is the message," he calls seriously for a return to individual resistance. "To the anonymous

divinity of Technological Communication, our answer could be: 'Not thy, but *our* will be done.'"[4]

The kind of resistance Eco has in mind can best be evoked when imagination is released. But, as we well know, the bombardment of images identified with "Technological Communication" frequently has the effect of freezing imaginative thinking. Instead of freeing audiences to look at things as if they could be otherwise, present-day media impose predigested frameworks on their audiences. Dreams are caught in the meshes of the salable; the alternative to gloom or feelings of pointlessness is consumerist acquisition. For Mary Warnock, imagination is identified with the belief that "there is more in our experience of the world than can possibly meet the unreflecting eye."[5] It tells us that experience always holds more than we can predict. But Warnock knows that acknowledging the existence of undiscovered vistas and perspectives requires reflectiveness. The passive, apathetic person is all too likely to be unresponsive to ideas of the unreal, as if, the merely possible. He or she becomes the one who bars the arts as frivolous, mere frills, irrelevant to learning in the postindustrial world.

It is my conviction that informed engagements with the several arts would be the most likely way to release the imaginative capacity and give it play. However, this does not happen automatically or "naturally." We have all witnessed the surface contacts with paintings when groups of tourists hasten through museums. Without time spent, without tutoring, and without dialogue regarding the arts, people merely seek the right labels. They look for the artists' names. There are those who watch a ballet for the story, not for the movement or the music; they wait for Giselle to go mad or for Sleeping Beauty to be awakened or for the white swan to return.

Mere exposure to a work of art is not sufficient to occasion an aesthetic experience. There must be conscious participation in a work, a going out of energy, an ability to notice what is there to be noticed in the play, the poem, the quartet. "Knowing about," even in the most formal, academic manner, is entirely different from creating an unreal world imaginatively and entering it perceptually, affectively, and cognitively. To introduce people to such engagement is to strike a delicate balance between helping learners to pay heed—to attend to shapes, patterns, sounds, rhythms, figures of speech, contours, lines, and so on—and freeing them to perceive particular works as meaningful. Indeed, the inability to control what is discovered as meaningful makes many traditional educators uneasy and strikes them as being at odds with conceptions of a norm, even with notions of appropriate "cultural literacy." This uneasiness may well be at the root of certain administrators' current preoccupation with national standards.

However, if we are to provide occasions for significant encounters with works of art, we have to combat standardization and what Hannah Arendt called "thoughtlessness" on the part of all those involved. What she meant by thoughtlessness was "the heedless recklessness or hopeless confusion or complacent repetition of 'truths' which have become trivial and empty."[6] There is something in that statement that recalls what John Dewey described as a "social pathology"—a condition that still seems to afflict us today. Dewey wrote that it manifests itself "in querulousness, in impotent drifting, in uneasy snatching at distractions, in idealization of the long established, in a facile optimism assumed as a cloak."[7] Concerned about "sloppiness, superficiality, and recourse to sensations as a substitute for ideas," Dewey made the point that "thinking deprived of its normal course takes refuge in academic specialism."[8]

For Arendt, the remedy for this condition is "to think what we are doing." She had in mind developing a self-reflectiveness that originates in situated life, the life of persons open to one another in their distinctive

locations and engaging one another in dialogue. Provoked by the spectacle of the Nazi Adolf Eichmann, Arendt warned against "clichés, stock phrases, adherence to conventional, standardized codes of expression and conduct," which have, she said, "the socially recognized function of protecting us against reality, that is, against the claim on our thinking attention that all events and facts make by virtue of their existence."[9] She was not calling for a new intellectualism or for a new concentration on "higher-order skills." She was asking for a way of seeking clarity and authenticity in the face of thoughtlessness, and it seems to me that we might ask much the same thing if we are committed to the release of the imagination and truly wish to open the young to the arts.

Thoughtfulness in this sense is necessary if we are to resist the messages of the media in the fashion Eco suggests, and it is difficult to think of young imaginations being freed without learners finding out how to take a critical and thoughtful approach to the illusory or fabricated "realities" presented to them by the media. To be thoughtful about what we are doing is to be conscious of ourselves struggling to make meanings, to make critical sense of what authoritative others are offering as objectively "real."

I find a metaphor for the reification of experience in the plague as it is confronted in Albert Camus' novel. The pestilence that struck the town of Oran (submerged as it was in habit and "doing business") thrust most of the inhabitants into resignation, isolation, or despair. Gradually revealing itself as inexorable and incurable, the plague froze people in place; it was simply *there.* At first Dr. Rieux fights the plague for the most abstract of reasons: because it is his job. Only later, when the unspeakable tragedies he witnesses make him actually think about what he is doing, does he reconceive his practice and his struggle and talk about not wanting to be complicit with the pestilence. By then he has met Tarrou, who is trying to be a "saint without God" and who has the wit and, yes, the imagination to organize people into sanitary squads to fight the plague and make it the moral concern of all.

Tarrou has the imagination too to find in the plague a metaphor for indifference or distancing or (we might say) thoughtlessness. Everyone carries the microbe, he tells his friend; it is only natural. He means what Hannah Arendt meant—and Dewey and Eco and all the others who resist a lack of concern. He has in mind evasions of complex problems, the embrace of facile formulations of the human predicament, the reliance on conventional solutions—all those factors I would say stand in the way of imaginative thinking and engagement with the arts. "All the rest," says Tarrou, "health, integrity, purity (if you like)—is a product of the human will, of a vigilance that must never falter." He means, of course, that we (and those who are our students) must be given opportunities to choose to be persons of integrity, persons who care.

Tarrou has a deep suspicion of turgid language that obscures the actualities of things, that too often substitutes abstract constructions for concrete particulars. This is one of the modes of the thoughtlessness Arendt was urging us to fight. She, too, wanted to use "plain, clear-cut language." She wanted to urge people, as does Tarrou, to attend to what is around them, "to stop and think." I am trying to affirm that this kind of awareness, this openness to the world, is what allows for the consciousness of alternative possibilities and thus for a willingness to risk encounters with the "weeping women," with Euripides' *Medea,* with *Moby Dick,* with Balanchine's (and, yes, the Scripture's) *Prodigal Son,* with Mahler's *Songs of the Earth.*

Another novel that enables its readers to envisage what stands in the way of imagination is Christa Wolf's *Accident: A Day's News.* It moves me to clarify my own response to the technical and the abstract. I turn to it not in order to add to my knowledge or to find some buried truth, but because it makes me

see, over the course of time, what I might never have seen in my own lived world.

The power the book holds for me may be because it has to do with the accident at Chernobyl, as experienced by a woman writer, who is also a mother and grandmother. She is preoccupied by her brother's brain surgery, taking place on the same day, and by the consequences of the nuclear accident for her grandchildren and for children around the world. She spends no time wondering about her own response to such a crisis; her preoccupation is with others—those she loves and the unknown ones whom she cannot for a moment forget. It is particularly interesting, within the context of an ethic of care, to contain for a moment within our own experience the thoughts of a frightened young mother, the narrator's daughter, picturing what it means to pour away thousands of liters of milk for fear of poisoning children while "children on the other side of the earth are perishing for lack of those foods."

The narrator wants to change the conversation and asks her daughter to "tell me something else, preferably about the children." Whereupon she hears that "the little one had pranced about the kitchen, a wing nut on his thumb, his hand held high. Me Punch. Me Punch. I was thrilled by the image."[10] Only a moment before, another sequence of pictures had come into her mind and caused her to

> admire the way in which everything fits together with a sleepwalker's precision: the desire of most people for a comfortable life, their tendency to believe the speakers on raised platforms and the men in white coats; the addiction to harmony and the fear of contradiction of the many seem to correspond to the arrogance and hunger for power, the dedication to profit, unscrupulous inquisitiveness, and self-infatuation of the few. So what was it that didn't add up in this equation?[11]

This passage seems to me to suggest the kind of questioning and, yes, the kind of picturing that may well be barred by the preoccupation with "world-class achievement" and by the focus on human resources that permeate Goals 2000.

But it does not have to be so. Cognitive adventuring and inquiry are much more likely to be provoked by the narrator's question about "this equation" than by the best of curriculum frameworks or by the most responsible and "authentic" assessment. To set the imagination moving in response to a text such as Wolf's may well be to confront learners with a demand to choose in a fundamental way between a desire for harmony with its easy answers and a commitment to the risky search for alternative possibilities.

Wolf's narrator, almost as if she were one of Picasso's weeping women, looks at the blue sky and, quoting some nameless source, says, "Aghast, the mothers search the sky for the inventions of learned men."[12] Like others to whom I have referred, she begins pondering the language and the difficulty of breaking through such terms as "half-life," "cesium," and "cloud" when "polluted rain" is so much more direct. Once again, the experience of the literary work may help us feel the need to break through the mystification of technology and the language to which it has given rise.

The narrator feels the need to battle the disengagement that often goes with knowing and speaking. When she ponders the motives of those who thought up the procedures for the "peaceful utilization of nuclear energy," she recalls a youthful protest against a power plant and the rebukes and reprimands directed at the protesters for their skepticism with regard to a scientific utopia. And then she lists the activities that the men of science and technology presumably do not pursue and would probably consider a waste of time if they were forced to:

> Changing a baby's diapers. Cooking, shopping with a child on one's arm or in the baby carriage. Doing the laundry, hanging it up to dry, taking it down, folding it, ironing it, darning it. Sweeping the floor, mopping it,

> polishing it, vacuuming it. Dusting. Sewing. Knitting. Crocheting. Embroidering. Doing the dishes. Taking care of a sick child. Thinking up stories to tell. Singing songs. And how many of these activities do I myself consider a waste of time?[13]

Reading this passage and posing a new set of questions, we cannot but consider the role of such concrete images in classroom conversation and in our efforts to awaken persons to talk about what ought to be. The narrator believes that the "expanding monstrous technological creation" may be a substitute for life for many people. She is quite aware of the benevolent aspects of technology: her brother, after all, is having advanced neurosurgery (which he does survive). But she is thinking, as we might well do in the schools, about the consequences of technological expansion for the ones we love. Her thinking may remind us of how important it is to keep alive images of "everything we love." I want to believe that by doing so we may be able to create classroom atmospheres that once again encourage individuals to have hope.

This brings me back to my argument for the arts, so unconscionably neglected in the talk swirling around Goals 2000. It is important to make the point that the events that make up aesthetic experiences are events that occur within and by means of the transactions with our environment that situate us in time and space. Some say that participatory encounters with paintings, dances, stories, and the rest enable us to recapture a lost spontaneity. By breaking through the frames of presuppositions and conventions, we may be enabled to reconnect ourselves with the processes of becoming who we are. By reflecting on our life histories, we may be able to gain some perspective on the men in white coats, even on our own desires to withdraw from complexity and to embrace a predictable harmony. By becoming aware of ourselves as questioners, as makers of meaning, as persons engaged in constructing and reconstructing realities with those around us, we may be able to communicate to students the notion that reality depends on perspective, that its construction is never complete, and that there is always more. I am reminded of Paul Cézanne's several renderings of Mont St. Victoire and of his way of suggesting that it must be viewed from several angles if its reality is to be apprehended.

Cézanne made much of the insertion of the body into his landscapes, and that itself may suggest a dimension of experience with which to ground our thinking and the thinking of those we teach. There are some who suggest that, of all the arts, dance confronts most directly the question of what it means to be human. Arnold Berleant writes that

> in establishing a human realm through movement, the dancer, with the participating audience, engages in the basic act out of which arise both all experience and our human constructions of the world. . . . [That basic act] stands as the direct denial of that most pernicious of all dualisms, the division of body and consciousness. In dance, thought is primed at the point of action. This is not the reflection of the contemplative mind but rather intellect poised in the body, not the deliberate consideration of alternative courses but thought in process, intimately responding to and guiding the actively engaged body.[14]

The focus is on process and practice; the skill in the making is embodied in the object made. In addition, dance provides occasions for the emergence of the integrated self. Surely, this ought to be taken into account in our peculiarly technical and academic time.

Some of what Berleant says relates as well to painting, if painting is viewed as an orientation in time and space of the physical body—of both perceiver and creator. If we take a participatory stance, we may enter a landscape or a room or an open street. Different modes of perception are asked of us, of course, by different artists, but that ought to mean a widening of sensitivity with regard

to perceived form, color, and space. Jean-Paul Sartre, writing about painting, made a point that is significant for anyone concerned about the role of art and the awakening of imagination:

> The work is never limited to the painted, sculpted or narrated object. Just as one perceives things only against the background of the world, so the objects represented by art appear against the background of the universe. . . . [T]he creative act aims at a total renewal of the world. Each painting, each book, is a recovery of the totality of being. Each of them presents this totality to the freedom of the spectator. For this is quite the final goal of art: to recover this world by giving it to be seen as it is, but as if it had its source in human freedom.[15]

In this passage Sartre suggests the many ways in which classroom encounters with the arts can move the young to imagine, to extend, and to renew. And surely nothing can be more important than finding the source of learning not in extrinsic demands, but in human freedom.

All this is directly related to developing what is today described as the active learner, here conceived as one awakened to pursue meaning. There are, of course, two contradictory tendencies in education today: One has to do with shaping malleable young people to serve the needs of technology in a postindustrial society; the other has to do with educating young people to grow and to become different, to find their individual voices, and to participate in a community in the making. Encounters with the arts nurture and sometimes provoke the growth of individuals who reach out to one another as they seek clearings in their experience and try to live more ardently in the world. If the significance of the arts for growth, inventiveness, and problem solving is recognized at last, a desperate stasis may be overcome, and people may come to recognize the need for new raids on what T. S. Eliot called the "inarticulate."

I choose to end this extended reflection on art and imagination with some words from "Elegy in Joy," by Muriel Rukeyser:

> Out of our life the living eyes
> See peace in our own image made,
> Able to give only what we can give:
> Bearing two days like midnight. "Live,"
> The moment offers: the night requires
> Promise effort love and praise.
>
> Now there are no maps and no magicians.
> No prophets but the young prophet, the sense of the world.
> The gift of our time, the world to be discovered.
> All the continents giving off their several lights,
> the one sea, and the air. And all things glow.[16]

These words offer life; they offer hope; they offer the prospect of discovery; they offer light. By resisting the tyranny of the technical, we may yet make them our pedagogic creed.

ENDNOTES

1. Judi Freeman, *Picasso and the Weeping Women* (Los Angeles: Los Angeles Museum of Art, 1994).
2. Michel Leiris. "Faire-part," in E. C. Oppler, ed., *Picasso's Guernica* (New York: Norton, 1988), p. 201.
3. Toni Morrison, *The Bluest Eye* (New York: Washington Square Press, 1970), p. 19.
4. Richard Kearney, *The Wake of Imagination* (Minneapolis: University of Minnesota Press, 1988), p. 382.
5. Mary Warnock, *Imagination* (Berkeley: University of California Press, 1978), p. 202.
6. Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958), p. 5.
7. John Dewey, *The Public and Its Problems* (Athens, OH: Swallow Press, 1954), p. 170.
8. Ibid., p. 168.
9. Hannah Arendt, *Thinking: Vol. II, The Life of the Mind* (New York: Harcourt Brace Jovanovich, 1978), p. 4.
10. Christa Wolf, *Accident: A Day's News* (New York: Farrar, Straus & Giroux, 1989), p. 17.
11. Ibid.
12. Ibid., p. 27.

13. Ibid., p. 31.
14. Arnold Berleant, *Art and Engagement* (Philadelphia: Temple University Press, 1991), p. 167.
15. Jean-Paul Sartre, *Literature and Existentialism* (New York: Citadel Press, 1949), p. 57.
16. Muriel Rukeyser, "Tenth Elegy: An Elegy in Joy," in idem. *Out in Silence: Selected Poems* (Evanston, IL: TriQuarterly Books, 1992), p. 104.

DISCUSSION QUESTIONS

1. What are the implications of understanding the existential contexts of education and educational goals?
2. Why does inclusion of the arts in the school curriculum continue to be a topic of debate among many educators?
3. Why is mere exposure to a work of art insufficient for stimulating an aesthetic experience?
4. How does a neglect of the arts in school experiences affect students?
5. How might repeated significant encounters with the arts be used to combat standardization?

CHAPTER

5 A Common Core of Readiness

Robert Rothman

FOCUSING QUESTIONS

1. Why is postsecondary education increasingly important?
2. How does the Common Core ensure college and career readiness for all students?
3. Explain why college-completion rates are lower among younger people in the United States?
4. What is the problem with state standards?
5. Describe how student reading and writing will change under the Common Core.
6. How will the Common Core affect high school math?

The common core state standards, which have now been adopted by 46 states and the District of Columbia, differ from most previous state standards in many ways. Perhaps the most significant difference, however, is that the new standards were explicitly designed around the goal of ensuring college and career readiness for all students. How likely are the common core state standards to achieve this goal?

READY OR (MOSTLY) NOT

In the past decade, a growing body of research has shown the increased importance of postsecondary education. A 2004 study by labor economists Frank Levy and Richard Murnane, for example, found that technology is transforming the workplace by reducing the need for routine skills and placing a premium on problem-solving and communication skills. Carnevale, Smith, and Strohl (2010) quantified this workplace shift. They projected that 62 percent of U.S. jobs in 2018 (compared with just 28 percent in 1973) will require education beyond high school.

The resulting shortage of college-educated workers has driven up the wage premium for postsecondary education: Workers with bachelor's degrees earned 74 percent more than those with high school diplomas in 2010, compared with 40 percent more in 1980. If current trends continue, college-educated workers will earn twice as much as high school graduates by 2025 (Carnevale & Rose, 2011).

Unfortunately, the proportion of U.S. students with college degrees is not rising fast enough to meet the demand. Although the U.S. college graduation rate increased from 42 percent in 2000 to 49 percent in 2009, the rate increased much faster in other countries. As a result, in 2011, the United States ranked 15th among 20 major industrialized countries in the number of adults ages 25–34 with bachelor's degrees. In fact, the United States is the only country in the Organisation for Economic Co-operation and Development in which the college-completion rate is lower among younger people than it is among older workers (Organisation for Economic Co-operation and Development, 2011).

One likely reason for the shortfall in postsecondary success is the inadequate preparation of students in high school. ACT has conducted research for years to determine the level of performance a student would have to achieve on its widely used college admissions test to have a 50 percent chance of earning a grade of B or higher, or a 75 percent chance of earning a C or higher, in an entry-level college class. In 2011, just one in four students who took the ACT test met the benchmark scores in all four subjects: English, mathematics, reading, and science (ACT, 2011). And because these data were based on scores for students who had taken the test—that is, students who had indicated their intentions to go to college—we can assume that the preparation of high school students overall is lower.

The ACT findings are consistent with the relatively high remediation rates in colleges and universities. Nationwide, about 40 percent of entering college students are required to take at least one remedial course before enrolling in credit-bearing coursework, and the rates are much higher for students of color.[1] Students who enroll in remedial courses are more likely than those who do not to drop out of college before earning a degree.

Businesses, college professors, and students themselves agree that there are gaps in student preparation for the postsecondary world. In a 2005 survey, U.S. employers stated that 39 percent of high school graduates were unprepared for entry-level work and 45 percent of graduates were inadequately prepared for jobs beyond the entry level. Only 18 percent of college instructors said that students came to their classes extremely or very well prepared. And 39 percent of graduates themselves said that they were unprepared for college or the workplace (Peter D. Hart Research Associates, 2005).

THE TROUBLE WITH STATE STANDARDS

What has caused this mismatch between student preparation and the needs of college and career? A growing number of educators believe the answer might be inadequate curriculum standards. If standards are too low, K–12 students may do everything we expect them to do but still come up short when they get to college or begin a career.

Standards-based reform has been the de facto national education reform strategy for more than two decades. Spurred by federal legislation, states have placed standards—statements of the content and skills all students should learn—at the center of their improvement efforts. By the end of the 1990s, all states had adopted standards for student learning, assessments aligned to the standards, and accountability systems that measured school performance on the basis of student attainment of the standards.

But gradually, educators and policymakers have realized that many state standards were set too low and that these standards varied widely from state to state. A 2008 study conducted by researchers at the University of Pennsylvania compared state content standards in mathematics and found very little commonality among the states (National Research Council, 2008).

The most glaring evidence of the variation in state standards came from the results of the National Assessment of Educational Progress (NAEP). No Child Left Behind requires every state to administer the NAEP in reading and mathematics every two years, and the data appear to show some wide differences between NAEP results and the results on state tests. For example, in 2005, 87 percent of fourth graders in Tennessee were proficient on the state test in mathematics, but only 28 percent were proficient on the NAEP. In contrast, in Massachusetts, 40 percent of fourth graders were proficient on the state test in mathematics and almost the same proportion (41 percent) were proficient on the NAEP. These discrepancies have raised concerns that some states' standards set expectations below what students need to succeed in college and careers.

NEW STANDARDS FOCUSED ON READINESS

Faced with such data, state leaders in 2006 began to consider developing standards that would be common among states, not only to reduce variability but also to ensure that the expectations matched the requirements of postsecondary education. The Council of Chief State School Officers and the National Governors Association led the effort, which became known as the Common Core State Standards Initiative (CCSS).

The project, launched in April 2009, was divided into two parts. First, teams would develop anchor standards for college and career readiness in English language arts and mathematics, which would indicate the knowledge and skills students needed at the end of high school. Then a separate team would design grade-by-grade standards in those two subjects that would lead students to the anchor standards. The final set of standards was released in June 2010.

From the outset, CCSS leaders designed the effort to differ from the process most states had used to set their standards. Many state standards were developed by teams of educators and community members, using a variety of criteria. In many cases, the process involved logrolling to gain political support; the result was a long list of standards that might or might not have anything to do with college and career readiness.

CCSS leaders, in contrast, established clear criteria for the standards; one of the most important was that the standards reflect research on college and career readiness. Topics that might be interesting but that were not essential for postsecondary success would be thrown out. The research did not have to be ironclad; it just had to represent the best available knowledge. This criterion guided the standards writers' work and minimized some of the ideological battles that had plagued standards setting in the past.

In addition, the CCSS leaders asked representatives from Achieve, ACT, and the College Board to craft the anchor standards. These organizations had considerable expertise in the area of college and career readiness, and they could enlist business and higher education partners to verify their judgments about what might be necessary for employment or postsecondary education.

In developing the college and career readiness standards, the standards writers defined readiness as the ability to succeed in entry-level, credit-bearing, academic college courses and in workforce training programs. That is, students who met the standards should be able to enroll in postsecondary education without needing remediation. For college, that meant enrolling in either a two-year or four-year institution; for workforce training, it meant enrolling in programs that prepare students for careers that offer competitive, livable salaries and opportunities for career advancement in a growing or sustainable industry.

To develop the standards for college and career readiness, the standards writers started with evidence from postsecondary