MONTANA STATE UNIVERSITY

Great teachers on teaching adults : comparison of philosophy and practice from antiquity to the present
by Marsha Elaine Covington

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education
Montana State University
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Abstract:
To supplement the existing body of research in adult education, a comparison of the philosophies and practice of great teachers of adults from ancient times to the present was undertaken. Initial review of the literature produced a list of those considered great teachers. Delimitors were used to choose fourteen representatives: Pythagoras, Socrates/ Plato, Aristotle, Confucius, Gautama, Jesus, Aurelius Augustine, Thomas Aquinas, Desiderius Erasmus, Benjamin Franklin, Francis Bacon, Alfred North Whitehead, Nadia Boulanger and Myles Horton. Another literature search was conducted to examine each great teacher for: 1. a brief biography; 2. personal vision or philosophy about learning and teaching; 3. characteristics as a teacher; 4. attitudes toward learners; 5. attitudes toward subject matter; and 6. teaching methods used. Case studies were written about each focussing on the aforementioned criteria. These nine principles of educating adults were derived by comparing each of the representatives: 1. Learners are their own best teachers; 2. Teachers play a significant role in guiding learners through the learning process; 3. The primary underlying purpose of education for the adult is personal development rather than acquisition of knowledge that relates to facts and skills; 4. A teacher's responsibility, as lifelong learner, is to model that which learners are trying to become; 5. Each student is unique, therefore teaching should be constructed to fit individual differences; 6. Discipline in learning involves the expectation that the student needs to exert his own effort toward the accomplishment of his learning; 7. Knowledge is not just for the keeping, but for action in the world; 8. Learning requires personal assimilation coupled with some type of interaction with others; 9. The teacher/student relationship can be the highest form of relationship and can include intimacy, support and love as well as challenge and discomfort. Teachers sacrifice something of themselves that learners might succeed—and even exceed—their best efforts.

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of the requirements for the degree

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Date April 18, 1997

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ABSTRACT

To supplement the existing body of research in adult education, a comparison of the philosophies and practice of great teachers of adults from ancient times to the present was undertaken. Initial review of the literature produced a list of those considered great teachers. Delimitors were used to choose fourteen representatives: Pythagoras, Socrates/ Plato, Aristotle, Confucius, Gautama, Jesus, Aurelius Augustine, Thomas Aquinas, Desiderius Erasmus, Benjamin Franklin, Francis Bacon, Alfred North Whitehead, Nadia Boulanger and Myles Horton. Another literature search was conducted to examine each great teacher for: 1. a brief biography; 2. personal vision or philosophy about learning and teaching; 3. characteristics as a teacher; 4. attitudes toward learners; 5. attitudes toward subject matter; and 6. teaching methods used. Case studies were written about each focussing on the aforementioned criteria. These nine principles of educating adults were derived by comparing each of the representatives: 1. Learners are their own best teachers; 2. Teachers play a significant role in guiding learners through the learning process; 3. The primary underlying purpose of education for the adult is personal development rather than acquisition of knowledge that relates to facts and skills; 4. A teacher's responsibility, as lifelong learner, is to model that which learners are trying to become; 5. Each student is unique, therefore teaching should be constructed to fit individual differences; 6. Discipline in learning involves the expectation that the student needs to exert his own effort toward the accomplishment of his learning; 7. Knowledge is not just for the keeping, but for action in the world; 8. Learning requires personal assimilation coupled with some type of interaction with others; 9. The teacher/student relationship can be the highest form of relationship and can include intimacy, support and love as well as challenge and discomfort. Teachers sacrifice something of themselves that learners might succeed—and even exceed—their best efforts.

INTRODUCTION

Every discipline needs a history. As Confucius taught in the fifth century, our history gives us the foundation for all our future learning. To the ancient Chinese, history was thought to serve as a guide to present conduct. In a common Chinese metaphor history was portrayed as a mirror in which men could see their own actions, understand their own motives and judge their own behavior. The past was understood to provide a bridge to the understanding of the present. On this point Cicero shared with Confucius the belief that to be ignorant of what occurred before you were born is to remain always a child. Both shared with George Orwell the understanding that whoever controls the past also controls the future (Dawson, 1981).

In addition, every discipline needs a methodology, a set of procedures which, if followed, are likely to result in success. In the discipline of education, the methodology provides each new practitioner with at least some of the tools they need to approach the task of designing learning programs without having to reinvent all the techniques they'll use with their students.

Finally, to be truly effective, every discipline needs emulators of its methods who, by their example, leave a record written in their own "sweat and blood" as proof of the validity of the recommended methodology. A real-life example is perhaps the most powerful form of scientific proof. Sir Isaac Newton reasoned that if we achieve something of value, it is because we stand on the shoulders of giants who have come before us (Novak & Bowin, 1984). Francis Bacon stated in *The Advancement of Learning*, "now that the times abound with history, the aim is better when the mark is

alive" (Bacon in Wallace, 1943, p. 96). Though he valued the persuasive power of fictional parables, in education as well as politics Bacon preferred historical examples. Because they recount events and encounters that really happened, examples drawn from history produce a unique effect on the psyche. They are pure in that they rely for their effect on nothing but their true and accurate retelling; in addition they are closely aligned with action and hence especially fitted for the influencing of people.

Those who built the foundations of the adult education movement over the past several decades have approached the compilation of a certain methodology for practicing their discipline. While the adult education movement is relatively short, some historians and theorists have dedicated themselves to the task of recording its history as it has been practiced over the past several decades, going back as far as a few centuries. But missing still in the adult education literature are histories that include a review of the education of adults as it was practiced from ancient times through the Middle Ages and the Renaissance and into the modern era.

Harold W. Stubblefield, a foundational historian for the movement, while recognizing that several avenues of adult education, from the chautauguas and lyceum lectures to women's organizations and service clubs, were in place in the United States before World War I, he none-the-less assigns the first real theoretical analysis of the adult education movement to a group of theorists who gathered after World War I (Stubblefield, 1988). His history of the movement, *Towards a History of Adult Education in America,* goes no further back in history than this period.

Malcolm Knowles is also considered an important historian for the movement. Though very early in his career he expressed interest in studying "great teachers from ancient history" and the practice of adult education in the Middle Ages (Knowles, 1972)

none of his published writings have undertaken a serious study of the practice of adult education in these historical times.

John Elias and Sharan Merriam's important work *Philosophical Foundations of Adult Education*, a comprehensive analysis of the philosophical foundations of six major systems of educational thought, certainly does contribute to our understanding of the personalities, issues and programs of adult education. In the process of delineating various philosophies, Elias and Merriam mention many people who have provided the foundation for the discipline of adult education. But mention is the operative words here; none are given much more than a page describing their philosophies and/or methods of teaching. As important as this much-needed work is, it does not provide the basis for the indepth analysis of the way each teacher practiced his art, and the ways in which his or her students reacted to and learned from these methods. As Elias and Merriam admit, "The philosophy of adult education does not equip a person with knowledge about what to teach, how to teach, or how to organize a program. It is more concerned with the why of education. . . " (Elias & Merriam, 1980, p. 8).

A review of the published history of the adult education movement shows that a comprehensive history and analysis of the art of educating adults centered on teachers and their interaction with their students going back to the earliest records has yet to be undertaken by modern scholars in the field of adult education.

While Bacon believed that histories make men wise, Carlyle was convinced that the history of the world really consists of nothing but the biographies of great men (Hook, 1943). The other element missing from the discipline of adult education is the compilation of such biographies—the stories of the emulators, the philosophies and activities of the heroes and heroines—of adult education, those who have been the living

examples of the art of teaching through the centuries. Though history abounds with examples of great teachers who have worked with adults, the writers, theorists and philosophers of the adult education movement have neglected to hold them up as the best examples—the best proofs—that the methods taught within the field today have worked for centuries.

Note that this reference is to adult education theorists. Pedagogical writers who focus on the teaching of children have paid fair tribute to their best teachers from the past and, to some degree, have continued to do so. Writers eager to illumine the path for present and future teachers of children have provided several notable volumes portraying the acts of and reactions to teachers who have come to be known as "great teachers." But to date adult educators have neglected to study their own great lights in delineating the teaching methods they profess.

This study is being offered in an attempt to provide a much-needed examination of the educational activities of some of the best practitioners of the art of teaching adults that can be identified as far back as the ancient Greeks and the Orient and to use the examples of the world's finest teachers to begin to build a history, case by case, of the practitioners of adult education. Specifically it will look at several aspects of the man or woman who has been a great teacher including:

1. A biography in order to get the flavor of his or her experiences with learning and teaching as well as his or her personality and temperament
2. His personal vision or philosophy about learning and teaching
3. His personal characteristics as a teacher, looking at such matters as his expertise and personal qualities such as morality, integrity and behavior
4. The teacher's attitudes toward learners

5. The teacher's attitudes towards the subjects he teaches

6. The teaching methods used. For this last category an attempt will be made to determine as clearly as possible: a) the reasons the teacher had for choosing certain methods; b) the manner in which the methods were applied; and c) the success or failure of each method as it has been recorded in history. In addition it will examine as closely as possible d) the reactions of students to the use of particular methods to determine, from their own commentary and by historical analysis, the relative success of the methods used from the student's perspective.

Though this review is being offered not in the infancy of the adult education movement but well after the development of a strong theory and methodology, nevertheless the findings of this study should provide much needed insight into the foundations of the discipline and a platform for the analysis of various educative philosophies and teaching methods to determine how they have or have not stood the test of time.

Statement of the Problem

Why is this study coming so relatively late in the development of the adult education movement? Why has an important examination of great teachers not previously been undertaken by adult education scholars for the benefit of those being trained as educators of adults? Why has it been neglected by the adult education movement but not by the general education community? Has this simply been an oversight?

One major contributing factor may be the attitude many adult educators hold toward the role of the teacher in adult education. A review of the current literature in adult education reveals that the role of the teacher has been minimized by adult education

theorists in this century. Many educators and writers strongly prefer the role of the "facilitator" over that of "teacher." Some of these actually use the term "teacher" as a pejorative. This preference is not merely a controversy over semantics; just as the two words "teacher" and "facilitator" carry their own separate meanings, so do they each imply very different roles, and with them very different activities, responsibilities and relationships as applied within those roles.

The reasons for the preference among adult educators for the role of facilitator are clearly delineated in the literature. Research and observation of adult learners in this century has shown that adults are distinctly different from children in how they learn. They do not come to a learning experience as *tabula rasa*, but full of experiences by which they have learned to judge their worlds. The adult education theorists who have developed the principles of adult education have challenged the traditional methods and attitudes of teachers who have treated adults like children, using directing and controlling techniques, calling instead for a new teaching style which would be more learner centered. No more the authority figure who lectures at blank faces, the new teacher trained within the adult education movement is more an equal with the student, giving the student not what he or she thinks the student needs, but what the student decides she wants. The new teacher no longer necessarily teaches what he has learned from a point of expertise, but facilitates the learning of those assigned to work with him. As a result, some feel that the new "teacher" in adult education is really not a teacher at all, but rather a "facilitator" of learning.

This attitude may have had a major impact upon the amount of attention (or lack of attention) that has been given to studying teachers of adults. Another reason may be the swing of the pendulum over the last several decades away from interest in biography as a means of understanding people.

Whatever the reason, there has been a neglect of any effort within the field of adult education to review case histories of those who have been the most successful at their art. Rare are references in the literature to the great lights of education such as Plato, Pythagoras, Confucius, Jesus, Bacon, Franklin and others, teachers of adults who have had a profound effect on numbers of students, and on the evolution of the discipline as a whole. Though references to these and other great teachers and their teaching methods are not completely absent, they are often so fleeting that the effect is to make the teacher seem to reflect the exception and not the rule. One reference to great teachers of the past stands out as especially intriguing, perhaps specifically because of the lack of a follow-up study or any further references in subsequent literature. I refer here to the very brief mention made by foundational adult education theorist Malcolm Knowles regarding the relevance of great teachers of the past to the adult education movement.

Knowles claimed in his early article "Innovations in Teaching Styles and Approaches Based Upon Adult Learning," published in the *Journal of Education for Social Work*, Vol. 8, Spring 1972, that there indeed was an ancient art of teaching adults which flourished in the centuries before the life of Jesus, but that the practice of the art was lost and all but forgotten with the rise of Christianity. He proposed that this loss resulted from the power struggle which took place during the Middle Ages between the hierarchy of the Catholic Church and other religious elements:

> I believe that the cultural lag in education can be explained by the fact that we got hemmed in from the beginning of the development of our educational system by the assumptions about learning that were made when the education of children became organized in the Middle Ages. Pedagogy became a millstone around education's neck. Tragically, the earlier traditions of teaching and learning were aborted and lost with the fall of Rome; for all the great teachers of ancient history—Lao Tsè and Confucius in China, the Hebrew prophets, Jesus, Socrates, Plato, Aristotle,

> Euclid, Cicero, Quintilian—were chiefly teachers of adults, not children. And they made assumptions about learning (such as that learning is a process of discovery by the learner) and used procedures (dialogue and "learning by doing") that came to be labeled "pagan" and were therefore forbidden when monastic schools started being organized in the seventh century (pp. 32-33).

This brief acknowledgment that the great teachers of the past were important practitioners of the art of teaching adults has never been followed up with subsequent commentary. This researcher has been able to uncover no other references to this theory in any other published writings of Knowles, or in the works of any other writer. Why was this fascinating question dropped by Knowles?

We find in this passage excellent material for further inquiry. Most interesting is the theory that the reason the art of adult education was lost as a discipline was due specifically to the religious objections of Middle Age Catholic educators to the study of "pagan" teachers of antiquity. In addition, several questions surface regarding the statement that "the earlier traditions of teaching and learning were aborted and lost with the fall of Rome." What were these "traditions" and their accompanying educational philosophies? What methods were practiced within these traditions, and who practiced them? How effective were they in the education of earlier generations? Did these traditions go underground, and how might they have been in part assimilated into or synthesized by subsequent educational systems?

Finally, the passage leaves this researcher with another, more personal question of Knowles and other recent scholars: Why did they not, at the time of this reference or at any other time, "return to the scene of the crime" and undertake thorough research to determine just what these traditions consisted of in the practical everyday life of a teacher and his student? Why was such a study not undertaken, and how and why has a

methodology of teaching been developed which seems to have almost completely ignored these very great teachers who were acknowledged as far back as 1972 as possessing perhaps the first awareness of the best methods for teaching adults. In fact, Knowles is implying here that these figures held the great key to the practice of adult teaching and learning which was snatched from us in the seventh century and which adult educators in this century have gone about reinventing.

Purpose of the Study

This research focuses on some of the same teachers mentioned by Knowles as well as other, more recent teachers who have been recognized as great. The specific goal is to examine the philosophy of and methodology used by these teachers as they created programs of learning for their students. This research is being conducted under the premise that these individuals truly were the practitioners of a well-developed art of teaching practiced among adults within adult communities, and that those who have been acclaimed by their students as being particularly effective did have (and that their counterparts from more recent history do have) important insight into a methodology for teaching adults.

This research is based on the premise that, by studying the methods used by effective teachers, students of adult education can better determine which qualities and methods they would emulate in their own teaching. From the study of effective teachers of the past and present and within various cultures we can outline the qualities, attitudes and methods which help to make teachers particularly effective.

Specific questions to be answered by this research include:

1. What have been the educational philosophies of teachers studied? What have they believed about how adults learn?

2. How have they designed their teaching programs to reflect beliefs about learning?
3. What have been the personal characteristics of these teachers?
4. What attitudes have they held towards their students, and how has this effected their relationships with them?
5. What have been their attitudes toward their subjects?
6. What methods were used by teachers studied?
7. What have been the failures, mistakes and unfortunate long-term effects of the theories and practice of some who have been considered great teachers?
7. What general principles can be drawn from the practices of the teachers studied?

Scope of the Research

Of utmost importance to the success of this research is the question of which great teachers of the distant past and more recent history should be studied. While there have surely been thousands of highly effective teachers throughout the centuries, this study must necessarily be limited in its scope. The following criteria have been applied in choosing those who will be studied:

A. The candidate must be a "great teacher" worthy of study. Some students of education (albeit, not students of adult education) have attempted to determine what makes a teacher a "great" teacher. Others have been satisfied to examine "famous" teachers, including in a large general category any well-known teacher who has been recognized for some real contribution to the field of education. Some studies have concentrated on great or famous "educators" which category can include those who have had a well known philosophy and/or have administered a school or college. For the purposes of this study, a great teacher who may be included must be recognized as a great teacher as opposed to a

famous teacher, a great or famous educational philosopher or great educator. A major concern with this subject is the difficulty of defining greatness and of determining who is "great" and who isn't. *Webster's New World Dictionary* (1989) defines "great" as "1) of much more than ordinary size, extent, etc.; 2) much above the average; 3) most important, main" (p. 189). Other elements defined in Merriam Webster's Collegiate Dictionary Tenth Edition (1993) include: "predominant, major;" "remarkable in magnitude, degree or effectiveness;" "eminent, distinguished;" "chief or preeminent over others;" "remarkably skilled;" and "marked by enthusiasm" (p. 410). This research focuses on those teachers from the ancient Greeks to our modern era who have been particularly noted by a number of reviewers as being "great" in the sense of being preeminent, remarkable and influential in changing the lives of the people they taught and, in most cases, of subsequent generations. Many of these people have been called "great" by their own students, by those generations which came after them and by educational historians. They have also been regarded as "great" by the general public as their teaching has impacted subsequent cultures.

What "great" does *not* mean in the context of this research is morally superior. A great teacher is not necessarily one who has perfected himself, even according to his or her own standards. All the teachers studied strove, as lifelong learners, to fulfill their own ideal of what a teacher should be; some succeeded more than others. Still some held to a different set of standards than we do today. For the modern researcher, some are a disappointment when their human characteristics and educational theories are held up against those who have come to represent the highest that human minds and hearts can achieve: Socrates and

Plato both appear to have tolerated what we would consider improper sexual relations between adults and young boys; Plato's concepts about how learners should strive to become all they can be is toppled by his ideal educational system (recorded in his *Republic*) which denies the power of adults to grow out of their state-imposed classes; Augustine's intensity and fanaticism resulted in his codifying several doctrines in the Catholic church that actually hampered learning through the dark ages; and the scientific attitudes and methods of Aristotle and Aquinas, while they have advanced outer knowledge, have overshadowed the power of the individual learner to "know" without the aid of outer proofs.

"Great" teachers in the context of this research implies teachers who have had great influence through the centuries, whose influence has been expansive and who have been noted over and over again by educational critics. They are influential role models for certain principles they taught or certain techniques they popularized. They are not necessarily "great" by all standards. They are not all great moral exemplars, and there is no suggestion intended that all that these teachers stood for or believed in should be held up for teachers to emulate today.

Another word which requires definition is "teacher." By teacher is meant (for the purpose of this study) one who assists in the education of adults and who can be said to have had some impact upon the successful achievement of learning on the part of the students with whom he or she has interacted. Dictionaries almost unanimously define "teacher" as "one who teaches." But the definitions of what it means to "teach" vary widely. *Webster's Ninth* (1973) defines "teach" as "1) to cause one to know something; 2) to guide the studies of, 3) to impart, 4) to instruct by precept, example, or experience, 5) to conduct instruction regularly."

Teaching is treated as synonymous with "instruct, educate, train and discipline" (pp. 440-441). *Webster's New World Dictionary* (1989) adjusts the more traditional definitions by defining "teach" as "1) to show or help to learn to do something, 2) to give lessons to, 3) to give lessons in, 4) to provide with knowledge, insight, etc. (p. 441)." An underlying assumption is that one who teachers also has some philosophy or beliefs about how students learn, and how to be of most assistance to learners.

These definitions imply that a teacher is one who takes an active role in some way in the education of learners. As part of this research it has been noted that for most of history, the one-on-one, personal "oral" tradition has been the format for teaching. But since the scientific revolution, the possiblities for teaching expand well beyond the close, personal teacher/student relationship. Now it is possible for one teacher to assist hundreds—even thousands—of students around the world simultaniously. With the invention of the printing press and more recently other forms of communication technology our concept of who is a teacher is challenged. Is a seminar presenter a teacher? Is a media anchor fulfilling the role of teacher? Can someone whose main form of interaction with learners is through publications a teacher if he fulfills all other criteria for a teacher?

For this research, when considering those who taught before the scientific revolution, only those teachers who have had personal interaction with learners have been considered. For those teachers who have lived after the scientific revolution, the scope was broadened to include some teachers who taught using mass communication methods (the printing press).

B. The teacher must specifically teach adults. The presumption here is based on the understanding that there are differences between children and adults in the way they learn, their reasons for learning and their methods of going about their studies. At this point it is necessary to define the word "adult." Though there are legal definitions which state that an adult is one who has reached a specific age, Websters also defines an adult as "fully developed and mature; grown up." The adult education movement has attempted to apply what we know about adult learning to the teaching of adults. This is an important distinction in the current search for the qualities which make a teacher effective. Effective teaching of adults in many instances will not be equal to effective teaching of children.

C. The teacher must have been recognized as a highly effective teacher over time. For this reason, none of the teachers being considered for this study are living at the time of the research, and most belong to distant centuries. It usually takes some time for the effectiveness of a person or his or her students to be recognized and recorded in history. (The exception in this study is Myles Horton, a modern teacher who has not been deceased long enough for his reputation to grow.)

D. Additionally, there must be sufficient record of the teaching methods used and philosophies promoted, and those records must be available to the researcher on this project.

Who Qualified for the Study?

As mentioned earlier, a number of attempts have been made to identify the world's greatest teachers, though few studies have focused on great teachers of adults exclusively. Joseph Epstein's *Masters: Portraits of Great Teachers (1981)* includes a compilation of essays by twentieth-century writers about their favorite college teachers. It features

several modern instructors including Alfred North Whitehead, C. S. Lewis, Christian Gauss, Arthur O. Lovejoy, Hannah Arendt and Leo Strauss. Houston Peterson's *Great Teachers Portrayed By Those Who Studied Under Them* (1946) has a similar theme. Of particular interest are chapters on William James and Emerson. Neil Lamper's Ph.D dissertation at Michigan State University, "*Characteristics of Great Teachers*," (1959) comes closest to the current research project. It lists twelve great teachers from antiquity through the twentieth century. However this work does not deal with adult educators but concentrates on learning theory and the education of the youth.

A good review of famous woman teachers is offered by Alice Fleming in *Great Woman Teachers,* though many of the teachers studied taught children. Elbert Hubbard's well known series *Little Journeys to the Homes of Great Teacher*s (1916) includes biographies of several of the world's most well-known teachers of children and adults including Moses, Confucius, Booker T. Washington, Erasmus, Hypatia, and Mary Baker Eddy. Several other books attempt to establish a list of the word's best teachers.

From a review of these and other works on great teachers the following list of the teachers most often mentioned was devised:

Pythagoras	Homer
Plato/Socrates	Lao-Tzu
Aristotle	Cicero
Gautama	Quintillian
Confucius	Saint Bonaventure
Jesus	Thomas Jefferson
Hypatia	Benjamin Franklin
Saint Augustine	Sexton Knapp
Thomas Aquinas	T.S. Elliot
Erasmus	Alfred North Whitehead
Myles Horton	C.S. Lewis
Ghandi	Martin Buber

Mary Baker Eddy	Jane Adams
Dorathia Dix	Nadia Boulanger

From this list, fourteen teachers were chosen for study. Each meets the criteria listed above, and there was sufficient material for each to warrant inclusion in this study. In addition, an attempt was made to choose teachers from each epoch of history, from ancient Greece to the modern era, and to include a few people from the Eastern tradition as well. The following teachers have been included in this study:

From ancient Greece and Italy:

1. Pythagoras
2. Socrates
3. Aristotle

From the ancient Eastern tradition:

4. Confucius
5. Gautama

From the Early Christian era and Middle Ages:

6. Jesus
7. Aurelius Augustine
8. Thomas Aquinas

From the Renaissance

9. Desiderius Erasmus
10. Francis Bacon

From the American Revolution

11. Benjamin Franklin

From the modern era:

12. Alfred North Whitehead
13. Nadia Boulanger
14. Myles Horton

Research Parameters

Though much of this study involves historical research, the purpose of the study fits more precisely into the category of historical case study. Some limits must necessarily have been applied to the gathering of this research. Availability of primary sources has been limited, so while some primary sources have been used where they were

available, much of the research has been done using secondary sources. For these historical case studies, secondary sources have been invaluable sources for opinions about great teachers. While primary works give the actual words of the teacher about his or her philosophy and practice, the influence of the teacher, the effects of her methods, her relationships with learners and the learners' feelings about the experience are generally not known through primary sources. A person does not establish her own greatness; others do. Also, teacher relationships with students are rarely written in primary sources. For this reason the researcher must access various categories of secondary sources. The majority of the sources used for this research have therefore been secondary sources.

PYTHAGORAS

Pythagoras was one of the first great teachers to influence Western civilization. Known as the "long-haired Samian" (Guthrie, 1987), Pythagoras has been honored as the first historical philosopher, mathematician and astronomer (Philip, 1966). Unfortunately, most of the resources available today come down from the epistles and writings of later-day Pythagoreans like Diogenes, Porphyry, Iamblicus, Ovid, Diodorus and Siculus as a mixture of fact with fiction (Heninger, 1974; Clark, 1957). Many Pythagorean stories fall into the category of legend and represent the exaggerated tales of a folk-hero. But they remain valuable to us as they bridge gaps in the history of early Greek thought, offering possible explanations regarding the origins of philosophy, music and other sciences. They also give us clues to the impression Pythagoras made on his contemporaries, and they help us understand the philosophy and character of one of the most important and well-respected teachers who has ever lived.

Life of Pythagoras

Various dates are given for the birth of Pythagoras. The event appears to have occurred between 582 and 566 BC at Sidon in Phoenicia, and Pythagoras is said to have died in 500 BC. His parents were Mnesarchus and Pythias, descendants of Ancaeus who colonized the island of Samos in the Aegean Sea, reportedly by the order of the Pythian oracle who promised in return "a son who would be useful to all men through all time" (Theosophical, 1925, pp. 11-12). His father was a wealthy jeweler, and the prominent family were very religious in their devotion to Apollo. Because the child had been promised by the Oracle, the birth was treated as a special event.

The family moved to Sidon in Phoenicia during the time of Phthias' pregnancy in order that the child might be gestated away from any disturbances. When he was one year old the boy was taken to the Temple of Adonai in the valley of Liban where he was consecrated to Apollo. The family then returned to Samos. Pythagoras later stated that his parents were very much in love with each other, declaring that this kind of relationship was a prerequisite for parenting in its highest form (Theosophical Press, 1925).

The name Pythagoras signified one whose birth had been predicted by the Pythian oracle. The name in Welsh means "explication of the universe" and derives from the verb *pythagori*, "to explain the system of the universe." The name has also been traced back to the Hindu word *pitha-guru*, or "teacher of the essential substance, or pith, of things." Laertius states that at the time there were at least four men with the same name within close geographic proximity to one another, and that tradition has falsely ascribed to the Samian some things actually done by his contemporaries (Theosophical Press, 1925).

Pythagoras was tutored by some of the most advanced teachers of this time including Creophilus, Pherecides and Anaximander, but Thales had the most long-lasting influence upon him. Iamblicus says that the young man "pursued his studies . . . out of a love for knowledge and a fear lest anything worthy to be known should escape him" (Theosophical Press, 1925, p. 25). At the age of eighteen Thales urged the youth to escape the political tyranny of Polycrates and to leave Samos for Sidon. Thus began a long series of journeys which would provide intellectual food for the making of a great philosopher and teacher.

Pythagoras' travels led him to Egypt where he spent much time studying the mystery religions. Eventually Egypt was conquered by Babylon and Pythagoras was taken captive. In Babylon he acquired much new knowledge from the Magi. Next he

traveled to Palestine, Arabia, Crete and Sparta. He may also have gone to Brittany and to India, though evidence for these travels is sparse. Diogenes said that Pythagoras received much of his education and insight by way of his travels to other nations. It was the philosopher's ability to assimilate the wisdom of several cultures into one philosophy which made him such a learned man and his contribution so unique (Guthrie, 1987).

By the time he returned to Samos Pythagoras was considered an eminent teacher, and his countrymen called upon him to impart to them all he knew. Pythagoras therefore established a school known as the Semicircle of Pythagoras in which Samians assembled to discuss civic affairs. But because of its focus on public negotiations, Pythagoras spent most of his time outside the city away from the controversy that began to surround the school (Theosophical Press, 1925).

After much time and effort spent trying to teach philosophy in his own country, Pythagoras was only able to attract to himself one student, a boy who had athletic talent but no money to afford to practice. The story is told that, as Pythagoras was visiting in the gymnasium one day, he noticed this young man very skilled in playing ball. Pythagoras wondered if this lad, once supplied with the necessities of life, could be induced to study with him. He therefore called to the youth and proposed to furnish him with the means to continue his physical training if the boy would study with him. Moved by hope of financial reward, the boy gladly took up the study of arithmetic and geometry with Pythagoras.

The young man became captivated by the study of logic. Pythagoras then wondered if the boy would continue to study even if he were not being paid to do so. So Pythagoras feigned poverty and said he could no longer afford to pay for instruction. The youth replied that, even without the fee, he would go on learning and receiving

instruction. Then Pythagoras said, "But even I myself am lacking the means to procure food! " Loath to discontinue his studies, the boy replied, "In the future, it is I who will provide for you, and repay your kindness." From that time on the boy continued to study with the Master and became the only Samian to leave home to follow Pythagoras to Crotona in southern Italy when the teacher moved with his mother to open a new school (Guthrie, 1987).

Establishment of the School At Crotona

Pythagoras' aim at Crotona was not just to teach esoteric doctrine to those who wished to be initiated into the mysteries, but also to apply his educational ideas to a program of education for the entire community. According to extant writings Pythagoras was highly honored and esteemed in Crotona and throughout Italy. The following story is told about his initial visit to the town.

A few days after moving to Crotona Pythagoras was surrounded by a group of young citizens. Pythagoras took the opportunity to address them, exhorting them to honor their elders. He advised the youth never to revile anyone, that they should never become enemies to their friends but become friends to their enemies. He also encouraged his hearers to devote themselves to learning. When the young people went home and told their fathers what the teacher had said, hundreds of parents summoned Pythagoras to a meeting with the Senate, commending him for giving such good advice. In addition they asked him to continue discoursing with them should he have other important messages to convey (Theosophical Press, 1925).

His response to the Senate of Crotona was to present a formal educational plan. First he suggested that the town should collectively build a temple to the Muses in which all the people could worship and which would also provide a focus for community

education. In addition Pythagoras proposed that he would found an institution for himself and his immediate disciples (who eventually came to number about six hundred). He proposed that some of his students would live together as a brotherhood in a building constructed for that purpose, but that they would not separate themselves from public life. Those students who were already qualified to teach would teach physical, religious and psychic sciences. Men and women would be equally admitted to the lessons of these teachers, and also to the different grades of initiation within the mystery religion according to their intelligence and earnestness in study. Pupils would have to submit themselves to the rules of the community and would spend their days as students under the supervision of these teachers.

Pythagoras' educational design divided students into two groups; one group was to live as a community, each sharing possessions in common. The other students would continue to live in the outer community, owning property but assembling together for classes in pursuit of the same wisdom. Nicomachus reported that this later group eventually came to number two thousand.

The plan was accepted by the Senate. The city erected a Temple to the Muses, and later Pythagoras received a portion of land on which he built his esoteric institute. Thus his educational program provided two kinds of educational experiences for the adults in the community. One was open to anyone wishing to learn the sciences he and his other instructors taught as long as they agreed to basic spiritual practices. The other Pythagorean school was quite a formal school, with strict criteria for admittance, and representing a confined society with a curriculum and a code of conduct governing every phase of human activity (Theosophical Press, 1925).

Pythagorean Educational Philosophy

Pythagoras is considered the first philosopher. He has been called the "high priest, par excellence, of the divine wisdom" (Burkert, 1972, p. 1). It is unanimously agreed that Pythagoras coined the word "philosopher," and many see him as the father of Greek philosophy. The way he determined to call himself a philosopher is an interesting story: Once, as a group of learned men discoursed with Pythagoras, they asked him if he was the most perfect of men. Pythagoras answered that he was a "lover of wisdom," or a "philosopher" (Needleman, 1982). As he later talked about how philosophers differ from other men, he compared mankind to the three kinds of groups that frequent public games—contestants, vendors and spectators. People, he said, are like these who come to the games, some seeking glory and some money. But very few come simply for the contemplation of nature. These, he said, are the true "lovers of wisdom" (Guthrie, 1987).

In his philosophy of education, Pythagoras firmly established the idea that the power to know and to understand resides with the individual. To this first philosopher, self knowledge was man's greatest wisdom. Truth is an ideal which one finds only within one's self. His famous expression "Man, know thyself" is best revealed in the analogy of the microcosm and the macrocosm: Pythagoras believed that by fully knowing oneself, the individual will have knowledge of the entire universe; conversely, when he studies the sciences of the world, it helps him to better understand himself. This concept that the student is ultimately his or her own best teacher became the basis of ancient educational theory, as will be shown in this research. So strongly has this principle been inculcated that it has crossed geographical barriers East to West and has survived for centuries in the work of the best teachers who have lived.

Based on his philosophy concerning how student's learn, Pythagoras did not focus in his teaching on facts and figures, though lectures were given in the application of various scientific principles (such as mathematics and music theory). Even these teachings were offered as a help to the student in the understanding of himself.

The teacher's job, according to Pythagorean educational philosophy, was to create an atmosphere in which the student could contemplate his or her own experiences. By providing time and space for such contemplation, the teacher assists the student to reach his own wisdom, to find truth within himself.

In discussing Pythagorean educational theory, Neopythagorean scholar Proclus explained the teacher's thinking on the role of the teacher in learning: Pythagoras saw both learning and discovery as a process of recollection. In the lower degrees, the pupil is guided by the teacher to discover within himself knowledge that is innate in his soul. More advanced students also discover knowledge innate in themselves, but they are capable of accomplishing this without needing so much interaction with a teacher. This is the reason there are different degrees in learning. At lower degrees students require teachers as guides to arouse or provoke in them this process of self discovery; at higher degrees students are more capable of such discovery on their own, thus they require less guidance (O'Meara, 1989).

The other principle which Pythagoras established is the idea that every teacher is also a student constantly striving for his or her own perfectionment. The teacher must stay ahead of his pupil in order that he might help the student understand the reason for the performance of various disciplines, and to provide the student with the perfect example of one who has attained to self knowledge. Therefore, foundational to the path of both student and teacher in the Pythagorean system is the importance of living a moral

and virtuous life. The principle purpose of a Pythagorean student was to find and follow a simple life lived in accord with nature.

The letter Y was an important symbol to Pythagoreans, It represented the choices each person must make in his life. This anonymous verse explains its meaning:

> The Pythagoras Letter, two ways spread,
> Shows the two Paths in which Man's life is led.
> The right hand track to sacred Virtu tends,
> Through steep and rough at first, in rest it ends;
> The other broad and smooth, but from its Crown,
> On rocks the Traveller is tumbled down.
> He who to Virtue by harsh toils aspires
> Subduing pains, worth and renown acquires:
> But who seeks slothful luxury, and flies
> The labour of great acts, dishonor'd dies (Guthrie, 1987, p. 158).

According to Pythagoras, the only way to attain wisdom is to purify and harmonize oneself. A student's life was, therefore, rather austere and entirely engaged in the practice of various disciplines designed to assist with learning and contemplation. In addition, Pythagoras was very strict in determining who would be admitted to his inner school, saying, "Not every kind of wood is fit for the making of a Mercury" (Theosophy, 1925, p. 50).

Series of Tests and Trials Prior to Admission

Pythagoras did not accept a student without first examining him or her and putting the prospective student through several trials. First he would inquire about students' relationships with parents and kinsfolk. He surveyed their laughter, speech or silence, their desires, their associations and conversations. He would ask what they did during leisure, and what gave them grief or joy. He observed their body language. Pythagoras looked at the students' modesty. He tested other qualities, for instance, whether they were

astonished by the show of any immoderate desire or passion, and how they were affected by anger or ambition, friendship or discord.

In addition students seeking admission first participated in the Pythagorean gymnasium in which aspirants played games suitable to their ages. This gymnasium was peculiar in that no boasting or displaying of strength was permitted as it was at facilities in other schools. Rather, groups of courteous and distinguished-looking people walked and played, with Pythagoras at times joining in their talk and games in order that he might be able to form a better idea about the quality of each participant.

A story is told about the kind of trial a prospective student might be subjected to. Often students were required to spend a night in a lonely cavern located at the edge of town which was alleged to be haunted. Those whose strength and courage were insufficient, and those who either refused altogether to enter or escaped before morning were deemed too weak for initiation.

Another test is discussed in a publication by the Theosophical Press (1925):

> The would-be disciple found himself in a dismal prison cell with nothing but a slate and orders to solve the meaning of some Pythagorean maxim or symbol like, "Why is a dodecahedron confined in the sphere, the symbol of the universe?" Many hours he would spend in his lonely cell with only water and a piece of dry bread for food. Finally he would be removed to a room in which novices were assembled, there to prove his victory or his failure. If successful in proving the symbol, he would be greeted with applause and honored by all, but if he had not succeeded in this, he would be further tested by being tantalized and ridiculed without mercy, [all] the while being implored to impart his discoveries. The master stood by, observing the youth's attitude and expression. Some would weep, others rave, still others would give sarcastic replies and yet others would, in a state of rage, dash their slates to the ground, uttering insinuations against the school, the masters and the novitiates. Then Pythagoras would quietly inform them they had also failed in their test of self-respect, and they were asked not to return to the school, as respect for the school and its masters was one of the elementary virtues. Then the candidate, ashamed of the

> way he had acted, would retire, though often he would become an enemy of the school, as did the expelled student Cylon, who later excited the people against the Pythagoreans, bringing about their downfall (pp. 50-51).

Those students strong enough to withstand everything with firmness were welcomed into the congregation. The candidate was therefore self-accepted, chosen by his or her own powers of self-control, silence, temperance and courage.

Becoming a Novice

For the first few years of their relationship with the school, Pythagoras did not draw close to the student but continued to watch his or her stability and genuine studiousness, and to see whether the student was averse to glory and ready to despise popular honors. At this level the student was called a novice. Novices were admitted to a five-year probationary period during which they were allowed to attend lectures but could not speak. This coincided with the first rudiment to wisdom taught by Pythagoras: "to learn to think, unlearn to prate." This practice was thought to help the novice learn to better contemplate the deity. During this probation, the student's property was held in common. Also during probation the student could hear Pythagoras but couldn't see him (Pythagoras taught from behind a veil). During this trial period of enforced silence, the novices were called acousmatici, or "listeners." Once successful, they passed into a more active phase and were called *mathematici*, or "students." These members could hear Pythagoras lecture in person, and were encouraged to search into the principles of things, and not just to accept a statement without analysis (Gutherie, 1987).

Even while a student was still a novice, Pythagoras continued to test her in order that he might help the pupil correct and amend habits and faults. Another reason for testing was so that Pythagoras could determine if the novice could hold his counsel, not

speaking of what she had heard. If, after a thorough survey Pythagoras still approved of the novice, he would then direct his attention to a study of the student's facility in learning as well as her ability to follow what was said and to undertake the disciplines with temperance and love. Those who were adapted to receive the wisdom he possessed were finally received as disciples.

Any student who didn't make it through all this was invited to step down and sent away with double what he had come into the program with.

The Accepted Student

After being admitted as disciples, students were separated into several classes according to individual merit. Pythagoras believed that people, by their attainments, are arranged in a hierarchy, and that they vary enormously in their receptivity to philosophy. To him some people seemed little more than children, and required the same loving attention, while others he saw as little short of gods. Consequently, Pythagoras reserved different degrees of teaching for different levels of students. Therefore, participation in his school featured distinct levels.

Three kinds of lectures were given at Crotona. The objective lectures studied such questions as "What are the islands of the Blessed?" or "What is the Oracle at Delphi?" The practice lectures studied what should or should not be done, and considered questions of practicality like how to raise children. The most extended lectures concerned religious issues such as the proper place of sacrifices.

Within his school, Pythagoras communicated to each student only that part of wisdom which he believed to be appropriate to the recipients' nature. An example was his treatment of Abaris the Scythian who entered the school at an already advanced age. Pythagoras did not compel him to go through the normal period of silence or long lectures or other trials, but considered him fit as an immediate listener to his doctrines.

Daily Routine at Crotona

The daily routine at the school, though austere, allowed ample time for meditation and study. The day began with a solitary walk in the woods to compose the soul. This was followed by a period of group study during which students discussed various doctrines and disciplines. Next was a period of exercise and attention to the health of the body. Students raced, wrestled with one another or used weights. After a modest noon meal, the students dealt with community affairs. Late in the afternoon came another walk, but this time in pairs or small parties to allow students to discuss what they had learned. After washing, the students had supper in groups of no more than ten, performing ritual libations and observing the dietary laws of the sect. After supper they sat for lectures, the youngest reading the text chosen by the eldest. After another group walk, the day ended with another ritual libation and a recitation from Pythagoras' *Golden Verses* by the eldest student.

To aid the memory, before going to sleep a Pythagorean recounted the events of the day to see what he had accomplished and what he had done poorly. In the morning he took time to plan his next day in an orderly and productive fashion.

Iamblicus describes a special blessing students received from their teacher just as they were going to sleep. According to Iamblicus, Pythagoras liberated his students from unhappy feelings, purified their intellects and also rendered their sleep quiet and their dreams prophetic by playing and singing certain odes and songs to them as they drifted off. Again, when they rose from sleep, Pythagoras was said to have cured his charges of heaviness with certain songs and modulations by striking the lyre or singing to them. Pythagoras used music as a form of medicine to cure mortal ills and to aid in purification, for he believed that music contributes greatly to health when used in an appropriate

manner. He actually arranged for his disciples mixtures of certain diatonic, chromatic and enharmonic melodies through which he led the passions in a contrary direction when they had gotten out of alignment through rage, sorrow, pity, pride, etc.

Pythagoras' Family

Pythagoras was sixty when he married Theno, a young woman of great beauty and one of his disciples, the daughter of a Crotonian named Brontinos. Theno entered into the life and work of her husband and, after his death, was said to have become the central figure in the Pythagorean Order and an authority on the doctrine of numbers. To these two were born three sons and four daughters. Stanley in his *History of Philosophy* states that after the death of Pythagoras, Theno married a disciple named Aristaeus who was apparently worthy to succeed Pythagoras as teacher and to raise his children. Upon the death of Aristaeus two of the sons of Pythagoras, Mnesarchus and Telanges, governed the school and became renowned teachers themselves (Theosophical Press, 1925).

Death of Pythagoras

Apollonius of Tyana tells us that from childhood, Pythagoras aroused envy. So long as he conversed with all who came to him, everyone liked him. But when he later restricted his discourse to his disciples, the general public's good opinion of him was altered. People became indignant at his preferring some citizens over others, and they suspected his disciples of being hostile to the community. In the end, the school of Crotona was destroyed by students rejected from the inner school (Guthrie, 1987; Theosophical Press, 1925).

One record reconstructed by the Theosophical Press (1925) states that a certain aristocrat named Cylon who had been rejected from the inner esoteric school because of his ignorance and ineptitude became full of rage and anger and began to stir the

townspeople, spreading false rumors and calling into question the ceremonies and rituals of the religious group. Because this man had high standing in the community he was able to create strong opposition within the Senate and among the townspeople. A decree was ordered banishing Pythagoras. The teacher managed to escape but he died in Metapontum not long afterwards. A fierce persecution was instituted against his followers, many of whom were killed while others were banished from the area.

Another version of the end of the school states that Pythagoras' death occurred at the hands of an angry mob of townspeople who, joining resentful students, set fire to the house where he was meeting with his students. Pythagoras and a number of students were killed, and the school gradually waned from want of the focus of the teacher (Heninger, 1974).

Since the time of his death Pythagoras has been revered and, in some respects, has been made into a demi-god. He was called "divine," and eventually was referred to simply as "that man." Homer said of him, "I, to pronounce his name, the absent, fear; So great is my respect and he so dear" (Theosophical Press, 1925, p. 113).

Personal Accomplishments and Influence

The school at Crotona was short-lived. With its destruction perished much of the teaching and science of the Pythagoreans, for their knowledge was not written down but passed on in the oral tradition, from mouth to mouth. Disciples who were in foreign lands at the time of the death of their teacher, fearing the philosophy might be entirely lost, brought together certain commentaries and collected certain writings of what some of the older Pythagoreans remembered about their teacher. But when these students died, they are believed to have left their collections to their wives or children with strict instructions not to give them to anyone outside the family (Theosophical Press, 1925).

It is questionable whether Pythagoras actually left any writings. Some say that he wrote at least three works: "On Education," "On Statesmanship" and "On Nature." Iamblicus said, "there is nothing pertaining to human knowledge which is not accurately discussed in these writings" (Heninger, 1974). Unfortunately these works have not survived; some suggest that at his death Pythagoras left his writings with one of his daughters, charging her not to share them with anyone outside the family. However a compilation of Pythagoras' sayings, the *Golden Verses* remains as an aid to understanding Pythagorean philosophy.

Above all Pythagoras was revered for the example he embodied of a great teacher. He has been called the "teacher of teachers." Pythagoras had great success as a lecturer. The image which remains of him, reconstructed by the poet Ovid, emphasizes his powers of persuasion. A great reputation grew up around him, and he won many disciples, both men and women, from the city itself, as well as from territories throughout Italy, Greece and Sicily.

Many of the teachers who came after Pythagoras quoted him or referred to him; most admired him and many adopted his philosophy as their own. Plato was the most important of his students to pass on some of his traditions and teachings. There is some evidence that the idea for Plato's Academy was inspired by the school at Crotona. Aristotle also expressed an interest in Pythagoras and even wrote an essay "On the Pythagoreans" which unfortunately has not survived (Guthrie, 1987).

In later centuries the teacher/orator Cicero was vocal in his praise of Pythagoras. A few centuries later Apollonius focused much of his attention on Pythagoras and even wrote a *Life of Pythagoras*. Later Plutarch celebrated the teacher, and Iamblicus, the most noted Neopythagorian scholar, wrote a number of books on Pythagoras and his

philosophy. Additionally, many of the early church fathers—notably Clement of Alexandria and Augustine—held Pythagoras and his teachings in high esteem, enlisting his name and philosophy regarding number symbolism in their interpretations of scripture. Pythagorean ideas continued to be discussed down the centuries by Christian thinkers and applied in the realm of sacred architecture by groups of medieval masons. In the twelfth century the ancient teacher became a primary focus of the Cathedral school of Chartres in France (Guthrie, 1987).

Interest in Pythagoras was renewed during the Renaissance with the discovery of many ancient classical writings. The serious minded, including Erasmus, were charmed by the principles behind his science and philosophy which provided the humanists with both a scientific and divine orientation for their own philosophies (Guthrie, 1987). In each case, those who respected the understanding of this first great teacher adapted some part of his educational philosophy as his own.

Pythagoras' Educational Legacy

The Samian "lover of wisdom" has been acknowledged as the first great teacher in a chain of great teachers which continues today. The most important legacy he left was the understanding that the pupil is not *tabla rasa* but possesses innate knowledge. The primary agent in learning is the student himself. A teacher's actions are not the sole agency assisting the student's self discovery. Though the student requires the outside stimulation of scientific questioning, the primary purpose of the teacher is to stimulate the student to discover that which is within himself while acting on him in such a way as to not override the primary agency for which the pupil is responsible—his own interior teacher (O'Meara, 1989).

Educational activities at Crotona—the long walks, the group discussions balanced with periods of meditation, even the periods of physical exercise which served to keep the mind and body toned, the time spent listening to healing tones and chords—were all designed to aid the student in the process of reflection and assimilation of what he was learning. The intense tests and initiations were designed to provide a way for the student to measure his own state of mind and heart. Learning was up to the student, who was encouraged to undertake various disciplines to enhance his own ability to reflect on and assimilate experience. The disciplines, initiations and instruction given at Crotona were intended to guide the individual in the practical assimilation of experience to reach his own wisdom, to find his truth within himself.

This recognition of the power of the individual learner to attain wisdom by personal striving has been echoed over and over by earth's best teachers down through the centuries. We find these ideas reflected most strongly in Plato and then in the work and practice of each of the teachers studied in this research. Each one's personal philosophy and practice has been founded on this first principle. While many have expanded on it and some have modified it with further understanding, this one idea has remained embroidered in the fabric of our concepts about the way we learn (though it has at times been denied by repressive educational systems). Today it has surfaced once again in many of the "modern" educational theories.

Pythagoras also set other standards which have been adhered to in large part by later teachers:

1. Discipline is needed for students to learn and grow. Certainly the example of Crotona is an extreme one, yet many of the world's best teachers have also

recognized the importance of setting a standard and insisting that students follow it until they have themselves become the example for others to follow.

2. Individual students differ in the level of their attainment and wisdom. Recognizing this, Pythagoras established an esoteric and an exoteric aspect to his school. Before assigning a student to any level of education, Pythagoras undertook a thorough, even painstaking, study of the individual, scrutinizing his understanding, moral fiber, personal harmony and commitment to the pursuit of learning in order to determine the educational experience right for them. This is the first example of the individualized instruction which has continued in the practice of virtually all great teachers studied in this research.
3. Pythagoras set a high standard for teachers to follow, and because he demanded much of teachers, he expected students to respect them.
4. In Crotona we find the first historical record of a community of learners. In this community we see how powerful is group interaction and discussion in helping the individual reflect on, expand on and assimilate personal experience.
5. In contrast, we also find in Pythagorean educational practice a serious respect for the need of the individual for time for solitary contemplation and reflection on experience. At Crotona such time spent in meditating, in taking long walks, in reflecting each night before sleep and in listening to healing music was considered essential to learning.
6. The exoteric outer school at Crotona was the first recorded example of an adult and community education program, with the educational facility taking center stage in the lives of community members. At Crotona the school even welcomed political controversy and provided a forum for the interchange of political views.

7. Pythagoras was a strong advocate for the idea of lifelong learning. Students of all ages were welcomed and encouraged to participate in the educational programs at Crotona. For Pythagoras the purpose of life was to continually strive to know more and thereby to become more. All the activities he promoted in his school were provided toward this end.

   Pythagoras once commented that it seemed absurd for one to know that learning is the most advantageous thing in one's life, to wish to possess wisdom, and yet to be unwilling to bestow the necessary time and pain in the exercise of it. We take care of our bodies which will one day die, he noted, but that which has the possibility of staying with us until death and even beyond, we ignore. This attitude has also been reflected by all the great teachers who followed after him.

8. Pythagoras practiced non-discrimination regarding personal attributes such as sex or race. In fact he was quite vocal in his recognition of the power of women to attain to enlightenment. Where he did discriminate was in the area of a student's personal level of striving. Here he demanded proof of intent from each and every student. Students were regularly tried and tested to discover their worthiness to continue under the direction of the faculty at Crotona. Anyone who lacked true desire to attain to personal perfectionment relative to their level of attainment was invited to take their place in a less rigorous environment. Many were so eliminated from the school, and the resentment of those deemed less fit finally led to the end of the institution itself.

In one other area Pythagoras set the standard for many of the great teachers who followed after him. Unfortunately in his life we see depicted the sad end of many who have set high standards in education. Pythagoras was persecuted and ultimately gave his

life for being a visionary in this field. Though he set some of the highest standards for educators, standards which are becoming re-popularized today, particularly in adult education, he lost his life at the hands of the very people he lived to serve. In this he has been followed by a host of great teachers who have either been killed, have fled for their lives or in some other way have received criticism and condemnation for their convictions.

SOCRATES AND PLATO

Merely recalling the names of Plato and Socrates brings instant and complete admiration in most educational circles. As Alfred North Whitehead put it, it seems that all of Western history is a series of footnotes to Plato. This biography discusses the united contributions of Socrates and his most famous student, Plato. The two seem inseparable. Socrates is known to us because Plato took the time to write down the story of his teacher. Everything we know of Socrates was written by Plato, and to some extent, Plato took the liberty of giving his personal philosophy of education through the mouth of Socrates. There is no way to know where Socrates' thinking stops and Plato's begins. Thus this chapter will present the two teachers as one educational phenomenon.

Life of Socrates

Socrates was born in Athens ten years after the defeat of the Persians. He spent all of his seventy years in that city. He participated in the rise of the city and was blamed in part for her rapid decline.

Socrates was born in 470 BC. Plato tells us that Socrates' father Sophroniscus was a statuary or stone-cutter, and that he was careful to give his son the customary elementary education in the gymnasium as well as in music (Taylor, 1951). Socrates' mother, Phaenarete, had given birth to another son named Patrocles from a previous marriage. She was known to be a skilled midwife. Socrates married a woman named Santhippe with whom he had three children. He lived frugally but was financially independent due to a small inheritance and state subsidies paid out to all Athenians (Jaspers, 1957).

Even from his childhood Socrates was something of a phenomenon both physically and mentally. Both Plato and Xenophon characterize him as physically robust with great powers of endurance, and suggest this as a reason for his excellent record as a fighting man. But, according to his contemporaries, Socrates was "as ugly as a satyr and as gentle as a saint" (Thomas & Thomas, 1941, p. 6). Aristophanes compared his walk to the strut of a waterfowl and noted his habit of rolling his eyes. Plato and Xenophon both mention the breadth of his nostrils and the stubbiness of his nose (Taylor, 1951). When he was forty-seven Socrates became the butt of burlesques by the famous comic poets, Aristophanes and Amipsias. Two years later another comedian, Eupolis, also did a caricature of him (Taylor, 1951). One of his ablest students defended his teacher by comparing Socrates to the trick statues sold in the market place of Athens, suggesting that while the teacher might have the exterior of a clown, when one opens him up they will surely find there the image of a god (Lewis, 1981).

Another of Socrates' oddities was referred to as a mysterious voice or "super-natural sign" which manifested itself sporadically in him, producing a private oracle which gave directions, some positive and others resulting in "bad luck" (Taylor, 1975; Clarken, 1988). Socrates seemed to have access to knowledge which he said came from this voice as it gave him guidance. He would obey the voice even when he did not understand it. Throughout his life this voice spoke to him and gave him directions where his reason could not (Clarken, 1988).

Mentally Socrates was also an oddity. The Oracle at Delphi claimed that Socrates was the wisest person (Clarken, 1988). Socrates was modest about his own abilities. In fact, he claimed to be ignorant. In his *Apology* he told how, after the declaration of the Oracle, he set out to find someone wiser than himself. But in his dialectical meetings

with those thought to be the wise men of his day—politicians, poets, artisans—Socrates found that they were all blinded by their own false knowledge which became a barrier between themselves and the truth. Then he began to believe that he was wiser than they because he was aware of his ignorance:

> And I am called wise, for my hearers always imagine that I myself possess the wisdom which I find wanting in others: but the truth is, O men of Athens, that God only is wise; and by His answer he intends to show that the wisdom of men is worth little or nothing. He is not speaking of Socrates, he is only using my name by way of illustration, as if he said, "He, O men, is the wisest, who, like Socrates knows that his wisdom is in truth worth nothing" (Socrates in Clarken, 1988, p. 5).

Socrates claimed that he was not a gifted orator. But his words belie him, since his abilities as a speaker were praised by Gorgias, Protagoras and Phaedrus. He was compared to Lysias, one of the most successful speech writers of his day. Some researchers have pointed out that Socrates used the device of irony which he borrowed from speakers before him. He also used other standard rhetorical devices, revealing strong familiarity with the practice of public speaking in his day (Seeskin, 1987).

Philosophy of Socrates

Socrates followed Pythagoras in teaching that, because the soul is immortal and has lived many times, what we call learning is really recollection. He believed that when one learns or discovers the truth, the experience is one of recognition rather than revelation; rediscovery rather than discovery. According to this theory, knowledge already lies latent within the soul. Perhaps the soul looked on pure truth before birth, and the memory of it was obscured by the entry of the soul into the body. Or, if the soul had lived before, it had already learned many things. There is nothing to prevent the soul, once having recalled one thing, to recall all the rest.

Because of his philosophy of learning Socrates came to believe that teaching in the traditional sense was "impossible." Socrates felt that knowledge couldn't simply be poured into a student by a teacher. The student must look within for answers to questions. Perhaps for this reason, Socrates founded no institution or school. He developed no program of education and no system of knowledge. He did not address remarks to any particular assembly. "I always address the individual" he says in the *Apology*. To him education was conversation that aroused and touched another's inner-most soul. Socrates believed that truth only opens up during dialogue with another individual. Teaching, to Socrates, was initiating dialogue (Jaspers, 1957).

Though he didn't believe in teaching, Socrates did acknowledge a place for the teacher in the learning process. The teacher's job is to use dialogue to aid the learner to become aware of what is already inside of himself. Truth is in the mind, says Socrates in the Theatetus, and like the embryo in the womb, it must be delivered. The deliverer is like the midwife who can help bring on labor, allay the pain, and enable the delivery. Socrates felt that, as a teacher, he was like this midwife who looked after souls as they labored to learn (Lewis, 1987).

A teaching style in vogue at the time was popularized by the Sophists, self-proclaimed educators who attempted to teach ambitious young men how to succeed in the business of life. The philosophy of Socrates and his student Plato was a reaction against their methods.

The Sophists were not interested in the study of natural science, but of popular skill. They taught social effectiveness. The Sophists didn't teach those who sought wisdom, but rather men who aspired to political office. From their teachers these politicians learned the "tricks of the trade"—skill in public speaking and an under-

standing of how to sway audiences and how to gain votes. The Sophists were popular because of their assumption that ordinary people could become educated, and by so doing, could become effective citizens, and could even affect decisions within the political arena.

The Sophists didn't settle in one location or establish schools or academies. Rather they continually traveled from city to city searching for new students. Plato complained that this behavior showed lack of civic responsibility. Nonetheless, the Sophists were able to make money at teaching. And though their practices and basic philosophy seemed the polar opposite of the more serious teachers of philosophy, their presence did help to popularize intellectual inquiry among the Greeks.

Socrates and his prime student Plato stood in opposition to the practice of the Sophists. They disapproved of the goal of preparing people for public life in the here and now. Rather, these more serious teachers were concerned with the education of the soul, that it might be prepared for a happier afterlife.

One thing can be said about the Sophists: at least they taught in an organized way. They were efficient in their methodology; even when teaching their students how to confuse their political opponents, they were careful to in no way confuse their paying students. While Socrates, on the other hand, rarely traveled and did not accept fees for his work, he did confuse students, so much so that this became his trademark (Clarken, 1988).

The Socratic Method

To Socrates, discovery was not a sudden flash of illumination. It was something which must be prepared for, something which the soul must earn (Seeskin, 1987). One teaching method popular at this time was "demonstration." In demonstration, a teacher

presented, in a systematic way, principles held to be true and primary. Once these were accepted by the student (often on the authority of the teacher), the student could go on to gather new information to add to his understanding.

Socrates hardly ever used this method of demonstration. In the Socratic method of dialogue, true and primary principles are the outcome of an intellectual process, and never the starting point of the discussion. With his method, truth is what participants seek out, and the starting premises are not truths but things to be examined, to be overturned.

The Socrates reflected in the writings of Plato asked questions all the time. The center of every Socratic session consisted of Socrates asking questions and demanding answers. Socrates asked questions of everyone he encountered in life: friends, receptive youths, poets, men of letters, politicians, craftsmen, ordinary Athenians and foreigners. If the interviewee declined to answer, Socrates imagined what he might have said and held a question-and-answer session with him anyway.

Socrates found pleasure in irritating the proud and self confident until they admitted their real ignorance, a condition he felt was necessary for learning to occur. Throughout his interactions with people, Socrates proceeded to confute all their wisdom with his foolishness. He tore down their arguments with a series of unanswerable questions. By so doing Socrates was forcing people to re-examine the knowledge they took for granted. He believed that one must be able to admit one's ignorance before he can learn something new. Socrates, by using this method, was asking people to reveal something about their characters. Such forthrightness required honesty and courage as much as it did logical skill. Most of Socrates' respondents lacked these traits (Seeskin, 1987; Santas, 1979).

Socrates' Interaction with Students

There were times when questioners did not enjoy being questioned. One student who accused Socrates of being a "sting ray" quipped, "My mind and lips are literally numb" (Buchanan, 1981). Nicias says,

> Whoever comes into contact with Socrates and talks with him face to face, is certain to be drawn into a discussion with him. And no matter where the discussion begins, he is carried round and cannot stop until he is led to give an account of himself, and of the manner in which he now lives his life and the kind of life he has lived up to this point. And once he has been led to do that, Socrates will not let him go until he has thoroughly and properly put all his ways to the test (Seeskin, 1987, p. 2).

Socrates mixed and talked with all types of people. Day in and day out he went to the same places, talked to the same people, raised the same questions with a mixture of success and failure. Socrates would go anywhere—into the agora, the gymnasium, wresting schools, festivals, dinner parties, courtyards of great houses. He would choose his antagonist, fix the subject, get the attention of the audience, invite his opponent to speak his mind freely and without fear, elicit an opinion from him. Then he would proceed to counter-punch the man and his opinion, mixing philosophical points and arguments with sarcasm and personal insults. In the end, when it was clear that the opponent would never recover from the ordeal, Socrates would suggest that everyone go home and start in again another time.

Most of his contemporaries did not appreciate Socrates' teaching methods, especially this method of questioning. Reactions included exasperation, anger, resentment, and even fear. What upset the people of Athens was what they felt was the destructive cross-examination of the concepts and principles that the Athenians lived by (Taylor, 1951). Socrates refuted prominent and lesser Athenians on the very things they

were supposed to know. He attacked the most fundamental principles of Athenian life, such as the Greek ideals of moderation, courage, justice, piety and wisdom. And in the end, Socrates was executed for "corrupting the youth" with his continued questioning of the most important principles which underlay the Athenian way of life.

Death and Influence of Socrates

One morning in 399 BC, as Socrates came into the marketplace, he found an indictment posted up against him which something like this:

> *Socrates is guilty of a crime, first for not worshipping the gods whom the city worships, but introducing new divinities of his own; next, for corrupting the youth. The penalty due—death* (Thomas & Thomas, 1941, p. 8).

The chief instigator against Socrates was a leather merchant by the name of Anytus who held a personal grudge against the teacher for advising his son to give up the tanning business and devote himself to the study of philosophy.

Socrates was permitted to chose exile as an alternative to death, but the teacher had no desire to escape. According to Plato, in his final address Socrates said, "Let us face death as we have faced life, courageously. . . . I have been overtaken by death, my accusers by wickedness. . . I submit to my punishment and to theirs" (Thomas & Thomas, 1941, pp. 8-9).

On the last day of his life a number of students visited their teacher in prison. He comforted them saying, "When you lay me down in my grave, say that you are burying my body only, and not my soul" (Thomas & Thomas, 1941, p. 9). Socrates' jailer burst into tears. Plato acknowledged that "the rest of us, too, could no longer forbear, and in spite of ourselves our tears were flowing fast . . . . Socrates alone retained his calmness, saying, 'be quiet, then, and let me die in peace'" (Thomas & Thomas, 1941, p. 9). Socrates died after drinking hemlock.

If Socrates was so disliked by Athenians that they executed him, why has he become such a model for later educators? One reason is that he was greatly admired by those he taught, especially Plato. In addition, Socrates was respected because he was more than a theorist. He lived according to his educational ideals. To him education was a spontaneous process requiring neither a formal institution nor an organized student body. Despite the nonformal methods of Socrates, after his death a number of his students opened schools claiming Socrates as their source of inspiration. The method which bears his name came alive with his death. Even early Christian church fathers, though opposed to the influence of "pagan" thought, revered Socrates and his dialogue. Believing that he had been a true "martyr," they mentioned him in the same breath as Christ (Jaspers, 1957). Through the Middle Ages his name lost its radiance but was rediscovered in the Renaissance when he was once again revered.

Socrates' Student, Plato

Plato was Socrates' most famous student. Born of aristocratic origins (c. 428 BC), Plato's mother descended from Solon's brother and his father was from the line of the King of Codrus (Jaspers, 1957). Plato met Socrates in 408 B.C. and studied with him until the teacher died in 399 B.C. It does not appear from Plato's own writings that he was particularly intimate with Socrates, and he cannot have been more than twenty-nine years old when he saw the teacher for the last time.

In about his fortieth year Plato is said to have left Athens to study with Pythagoras at Crotona. Plato was perhaps the only Pythagorean whose work and teachings are known today. Traveling to Syracuse, Plato met Dionysius I and became friends with his brother-in-law, Dion, who later became his follower (Jaspers, 1957). After leaving Italy Plato traveled to Egypt, Cyrene, Judea and to the banks of the Ganges. It was said that his

mind became a treasure house of the world's wisdom (Thomas & Thomas, 1941). But it was Socrates to whom Plato remained devoted all his life.

Plato returned to Athens in 386 to start his Academy, which he patterned after Pythagoras' school in Crotona. Here he immortalized the mental prowess of his master, Socrates, presenting Socratic ideas in the form of dialogues though the mouth of his teacher. He gave us a fair picture of Socrates but little of himself, so that it is hard to tell when Socrates leaves off and Plato takes over.

When Plato was sixty (c. 368) Aristotle, then twenty, joined the Academy and continued as Plato's primary student for the next twenty years, until Plato's death in 347 B.C.

Plato's Philosophy

Plato believed that there exists an ideal world in which everything is true and pure. As a corollary he believed that the world in which humans live on earth, the phenomenal world, is but a poor representation of this ideal world. The world we live in is in a continual state of becoming, as those who live in it strive to become more congruent with the ideal world, which is perfect. Plato shared with his teachers Pythagoras and Socrates a belief in reincarnation. He held that individuals can know this ideal world because at death they return to it. Some of what they experience there can be recollected upon their return to incarnation. The individual carries the memory of the ideal with her always, and this memory can be recollected under the right circumstances.

In an effort to illustrate his theory of the ideal world, Plato constructed his allegory of the cave. His premise is that while one is in the phenomenal world, one doesn't perceive the true images of things, but rather the illusions, or shadows, of things. Through education one can come to know the true nature of things and progress toward the light of knowledge (Lewis, 1981).

In Plato's cave people are sitting as prisoners, chained and facing the wall of the cave, not able to see the light of the sun, which is outside their experience. They are able to see only the shadows of whatever passes by. The people, though they don't realize it, are being held in "chains" not by any outer force, but by the force of their own illusions. Occasionally a prisoner will become free of his chains and begin to move toward the entrance to the cave. Upon seeing the intense brightness of the sun (the light, or truth, of the ideal world) he will be blinded and will have to hide his eyes. Repeated exposure to the light (truth) will help him become accustomed to it. Once accustomed to its brilliance, the freed man will prefer the true light to the murky shadows of the cave (Lewis, 1981).

According to Plato, mortals who are uneducated and who derive all that they know through their senses are like the chained prisoners in the dark cave. Learning begins to release people's chains, making these learners progress toward the light of knowledge. As they progress toward this light, they are learning to rely not so much on their senses, by which they can see only images, but they are able to conceptualize the real truth of things. Finally, after many decades of learning, they will be able to see the sun itself, which for Plato was the allegorical equivalent of the light of truth that illumines his ideal world (Lewis, 1981).

Naturally the brightness of the forms that exist in the ideal world, which Plato called the "forms of the good," are so satisfying that those able to reach this level of awareness will want to continue forever to savor learning and philosophy in the brightness of this light. But some—the philosophers and teachers—must return to the sensory world of the cave in order to help lead other captives out of their self-imposed darkness.

In the *Republic* Plato put forth his concept of the perfect community which he attempted to pattern after a community he believed exists in the world of ideals. Plato conceived of a state which is ruled by three social classes:

1. the rulers—the philosopher kings and legislators of the state—who were to be men and women of wisdom trained in philosophical reasoning.
2. the warriors, or men and women of courage who defended the state from foreign enemies and citizens who broke the law.
3. the artisans, who were the masses. Their obligation would be to exercise self-control over their appetites and to hold their bodies ready for obedient service. They would be required to obey the laws and abide by the rules. These artisans would manufacture all the goods for the state.

Plato believed that each person was born with inherent qualities which he equated with the metals gold, silver and brass or iron. Birth did not determine which qualities one would inherit, so a gold parent might give birth to a silver child or a brass parent might give birth to a gold child. These inherent qualities related mainly to mental development and ability. Those who were of brass were relegated to the artisan class, silver to the warrior class and gold to the ruling class (Plato, 1986).

All three classes had a duty to work for the common good, and each person was to stay within his or her own class for life. For just as you would not give to a carpenter the work of a cobbler and vice versa, so you would not give to an artisan the work of a warrior or ruler (Plato, 1986). Plato, believing that the greatest burden upon men was the constant struggle between these classes, designed his educational system to keep people from class conflict by restricting them to their given classes.

All children in Plato's state were to be raised in common. There were no families per se for citizens of Plato's State; children and wives were held in common. He also promoted selective breeding; in order to breed the best children, the ruling class would mate only with those who had their same attainment.

Children would be reared and educated by the state. The first course of instruction was in music and gymnastics. This instruction was to promote inner harmony and outer fitness. Plato considered music essential in the development of each citizen and the maintenance of the state. "Music—and to Plato music meant all harmony, whether audible or not—is the underlying principle which keeps the world from falling into disjointed chaos. It is the soul of the universe. . . ." (Thomas & Thomas, 1941, p.12). Besides physical gymnastics, Plato's school for citizens would offer opportunity for mental gymnastics; children would compete with each other in the exchange of ideas.

Plato believed that by the time the youth reached twenty years of age the state would be able to assess their development to determine which students appeared to be incapable of further education. These students would be weeded out and relegated into the lowest class to become, for instance, farmers, laborers or business people. Those who were left after the lower classes were weeded out were given instruction in the sciences, i.e., arithmetic, geometry and astronomy. When they reached the age of thrity there would be a second weeding out and those who were deemed incapable of further instruction would be assigned to the warrior class (Thomas & Thomas, 1941).

Only those of superior mental ability would be permitted to continue their education in philosophy. These would be groomed to become the philospher/kings, rulers and legislators in the ideal State (Thomas & Thomas, 1941).

In analyzing Plato's concept of the ideal world state and it's means of educating the populous, one begins to note some conflicts between his ideal and some of the other educational concepts he advocates. The problem with Plato's educational system is that once a young adult has been "classed," there is no way that that individual can make a creative leap beyond his class. This leaves one in doubt as to whether Plato believed that every person has the innate capacity to transcend himself, to fulfill his current level of understanding or ability to perform and then to move beyond his own and other's preconception of his potential.

Additionally, his system of rulership presupposes that no one outside of the virtually arbitrary group called "rulers" is qualified to rule. Plato sets rational intelligence as the standard for those in the gold class, and ignores other forms of intelligence like intuition or social intelligence also important in those who lead.

Socrates and Plato: A Comparison

Plato's early life and writings were very much influenced by Socrates. Plato's beginning works reflected Socrates' thinking, and perhaps ideas that came to him as Socrates was speaking, but which Socrates himself never uttered. As time passed the words of the teacher appeared to reflect the original thinking of the student. In time Socrates became a secondary character, then finally disappeared altogether in *Laws* (Jaspers, 1957).

Plato and Socrates are distinct in some aspects. They approached life in two utterly different ways. Socrates walked the streets of Athens verbally proclaiming his message while Plato lived in seclusion, away from the evils of society.

> Socrates was bound to Athens; Plato remained an Athenian but was on his way to becoming a cosmopolitan; he was capable of living and working outside of his native city. Socrates philosophized in the immediate

> present, Plato indirectly, through his works and the school he founded. Socrates remained in the market place, Plato withdrew to the Academy with a chosen few. Socrates did not write a line, Plato left a monumental work (Jaspers, 1957 p. 121).

On their darker sides, the two philosophers shared an acceptance of homosexual attraction between adult males and their young male students that most would not agree with today. In his *Symposium* Plato creates an argument for homosexual love for boys. He suggests that some men are meant to pursue heavenly love and some earthy love. Those who look to heaven are more attracted to boys than to women. Why? Because boys are mentally keener, more beautiful, thus closer to the realm of perfection. According to Plato, loving boys is a means of aquiring wisdom. But also necessary to the pursuit of perfection, according to Socrates and Plato, is the exercising of restraint.

> We start by gazing upon and being overwhelmed by beautiful boys. From this we can go on to contemplate beautiful souls and pursuits (like the fascination of the quest for knowledge). As we do so, we start to realize that it is not the particular beautiful thing which attracts us, but the element in which they all participate, the Form of Beauty or the Good. So, finally, having restrained ourselves in the physical (genital) realm, we come to be rewarded by what is almost literally a philosophical orgasm. As in the physical world, at the moment of climax we get a real sense of oneness with everything (Ruse, 1988, p. 181).

While early Greeks accepted homosexual relationships between men and boys, the later Greek cities wrote laws to protect boys from these affairs. Some scholars have wondered if, when Socrates was put to death for "corrupting the youth" he might actually have been accused of having relations with young boys. In his writings Plato goes to great lengths to portray Socrates exercising restraint in his relationships with boys (Dover, 1978), perhaps in an effort to clear his teacher's reputation. Plato openly admits to his own attraction to boys, though he leaves the reader with the impression that he also perferred to practice restraint (Ruse, 1988).

Educational Legacies of Socrates and Plato

1. Socrates and Plato accepted Pythagoras' idea that the true teacher resides within the self, and that the role of the teacher is to help the student extract (recollect) wisdom from within. Learning was for both of these teachers entirely a process of recollection. One learns by contemplating the within. The corollary to this philosophy is the belief held by Socrates and Plato that the soul incarnates a number of times, so he already knows many things. Socrates especially saw no point in trying to fill a student up with knowledge; he would rather draw the student's own innate wisdom out from him.

2. Socrates so believed that his role was to act as a midwife—to assist in giving birth to the best of what was inside of his students—that it caused him to question the entire need for the teacher. If all a teacher does is to help one remember what is contained in one's self, is that really teaching? Thus Socrates initiated a debate that carried into the Middle Ages and even continues to this day: can any man teach another? His response was a resounding "no," while Plato's was a weak "maybe."

3. Socrates introduced the concept of the teacher's place in encouraging critical thinking. This became his method of challenging students to discover knowledge. Thus he gave us a method of helping the student to remember what lies inside: the method of inquiry, or the Socratic method. As pointed out, this can be a very useful method of engaging the mind in beginning to seek answers, rather than expecting the answers to be always forthcoming from the mind of the teacher. The teacher guides the student through the process of discovering truth, stimulating him to think through a series of questions. In the case of the Socratic dialog, the

student needs the teacher to engage him thus. This, according to Socrates, is the best usefulness of a teacher. But when misused or over-used, this method can also become an endless round of badgering. It can become discouraging for the student who can't produce answers as quickly as the teacher wishes. And it also presupposes that it is through the intellect that a student will know truth and ignores the student's ability to come up with his or her intuitive understanding of truth through contemplation without the necessity of endless questioning.

4. Plato's allegory of the cave is an excellent illustration of the power of one's personal experience in learning. It reminds us that people are bound (chained) to their level of perception (cave) by what they have seen and experienced (shadows on the wall) and the way they interpret and analyze what they experience. Even when someone tries to tell an individual the "truth," it will remain irrelevant to the person until such time as he or she has a personal experience with that truth. The person may accept it because it came from the mouth of one who is respected (i.e., the teacher), but it will remain just another illusion, theory or concept—the shadow of the real concept—until the person's experience bears it out.

5. Though Socrates is often thought of as the first teacher to encourage lifelong learning, he and Plato both follow Pythagoras in believing that learning takes a lifetime. But while we can see in his practice that Socrates encouraged people to continually transcend their level of understanding, upon examining Plato's ideal educational institution one notes that he did not leave room for adults in his system to grow beyond their established place (class) in life. Presumably, if these adults continued to challenge themselves, they might so accelerate that they could no longer be confined to the box in which they were placed in their youth. Plato

makes it clear that, in his community, in order to avoid conflict, no one could move from one class to the next. But where could a lifelong learner go to expand himself? This is a major flaw in Plato's educational plan, and one which also has important implications for educational models.

6. Plato's real lasting influence came from the Neo-Platonic movement founded in the third century by Plotinus. Platonism became Neoplatonism, and the influence of this movement lasted for over a thousand years. In the Renaissance, the Florentine Academy honored Plato as the man who was both philosopher and priest. Later Kepler and Galileo credited their interest in the modern mathematical science of nature to Plato. And in the new world the dialogues of Plato provided for Ben Franklin a model for how men should discourse with one another that helped lay the foundations of American public life.

7. Plato's educational theories have had enormous impact, as many educators have tried to inculcate parts of them into their systems. But several aspects seem to conflict with what he taught in his allegory of the cave, that the goal of learning is to eventually crawl out of the cave of limitation into ultimate freedom. His own educational design seems limiting as compared with this illustration. The concepts of the necessity of staying within one's class, and of selective breeding, suggest the creation of what some might term a "power elite" society. Throughout history examples abound of those who have tried to prevent certain classes of people from being able to access the best training, or from being educated at all. When we look at his system, it appears that Plato lacks a belief in people's natural ability to learn, to grow and to become better than yesterday's best. Perhaps Plato was too tied to his desire for perfection in the physical world, preferring

perfection to the natural process of trial, error and re-trial necessary to attaining a better state.

8. Plato's Academy left its own legacy. During Plato's lifetime he became a link in a chain of philosophers who got their names and calling from Pythagoras. In Plato's academy, philosophy became a way of life, a living process. The Academy became a meeting place for independent thinkers from all over Greece. They came to engage in "dialogues." It is likely that the Socratic dialoges are idealized versions of the conversations that took place at the Academy. The school remained influential for over one thousand years, until AD 529 when it was forcibly closed. But the Academy also became the center for many forms inappropriate to the Platonic spirit.

> . . . an utterly un-Platonic spirit triumphed immediately after Plato's death. Speusippus and Xenocrates introduced a dogmatization in which all independent philosophizing was lost. Aristotle left and founded his own school based on free research but abandoning the Platonic spirit. In later generations, the so-called Academic Skeptics even transformed the freedom of Platonic thinking into a lifeless dogma. Yet the school preserved an extraordinary mobility and the power to produce outstanding philosophers of many different kinds (Jaspers, 1957, p. 172).

ARISTOTLE

While Aristotle's teacher Plato looked for eternal principles using an intuitional method, Aristotle is remembered as the great rationalizer. He is the author of the scientific method practiced by institutions of higher learning in every quarter of the world today. As Plato's most famous student, Aristotle agreed with his teacher in some concepts, but deviated from him in significant ways. Aristotle's path took him into realms of scientific observation practiced in an effort to discover truth—not the truth of an ethereal ideal realm, but the truth that can be known through studying the manifestations of the physical realm. Aristotle developed the formal logical processes still in use today. His students used them to investigate a variety of disciplines including ethics, metaphysics, psychology and literature. Because of the legacy left by this teacher and his students, Aristotle is credited with designing the basic liberal arts curriculum used in higher education today.

Life of Aristotle

Aristotle was born in Stagira, Macedonia around 384 BC. His father was a well-known physician in the court of Amyntas II, king of Macedonia. He belonged to an ancient medical sect which expected its members to pass on their knowledge of medicine to their sons, as no texts existed in those days. Most likely from his youth Aristotle was headed for a medical career (Friedman, 1968).

From early childhood Aristotle was trained for a life of mental discipline as well as physical comfort. When he reached the age of 20, Aristotle applied for matriculation

at Plato's Academy. He was accepted, but his presence created quite a stir among Plato's students. Aristotle was an aristocrat, and he never forgot it. Aristotle was:

> Suave, dapper, graceful, soft-spoken, gentle, polite, the very model of. . . ethical propriety. Indeed he was somewhat of a fop. He spoke with an affected lisp, and he paid more attention to his clothes. . . than was becoming for a sincere lover of wisdom (Thomas & Thomas, 1941, p. 21).

The future philosopher was an outstanding student and displayed intellectual versatility. But the Academy's most brilliant student could not get along with his teacher. Aristotle was deeply impressed with Plato's teaching that knowledge must come from within the learner as a result of self-examination and experience. So until he had torn apart every idea and analyzed it he would not accept his teacher's theories (Friedman, 1986). Plato and Aristotle quarreled constantly, but always adored each other. Plato's appreciation for his student is revealed in the statement he once made that his school consisted of two parts: the body of his students and the brain of Aristotle (Thomas & Thomas, 1941).

Like many other students at the Academy, Aristotle also attended the other great educational institution of Athens, the school of Isocrates (Monroe, 1911). But he remained active in Plato's Academy for 20 years. He expected to be chosen to head the school after Plato died, but because he was a foreigner—not a native of Athens—the trustees of the Academy passed over him in favor of an Athenian. Bitter, Aristotle left Athens in search of a way to practice his philosophy.

His first job was to tutor Alexander the Great when the boy was just thirteen. Alexander's father was King Philip of Macedon, a barbarian of superior intelligence but little education. Philip wanted his son to grow up a refined philosopher (Friedman, 1986). However, the court atmosphere was unfriendly toward philosophy.

> Alexander was the untamed cub of a ferocious lion. In fact, the entire court was like a jungle of snarling beasts. Quarrels, duels, debaucheries, assassinations—these were the order of the day. Olympias, the wife of King Philip, bordered on the verge of insanity, and Philip and Alexander were not far removed from that irrational borderland. At one of the royal banquets Philip tried to stab Alexander because the boy had insulted him. And Alexander, not to be outdone, made a murderous assault upon his father. Fortunately. . . the attendants succeeded in tearing them apart (Thomas & Thomas, 1941, p. 23).

This was the household into which Aristotle was to bring "sweet wisdom." His efforts never did pay off, and eventually Alexander abandoned the high philosophy of his teacher for the ways of his father. Aristotle returned to Athens a sadder politician and a wiser philosopher. From then on he avoided political life and concentrated on his studies.

Aristotle's Lyceum

Upon his return to Athens, Aristotle engaged in a research enterprise, hiring one thousand assistants to collect material for a comprehensive encyclopedia of philosophy and science. He made voluminous scientific observations which formed a catalog of rather unorganized facts (Thomas & Thomas, 1941). The inadequacy of Aristotle's scientific knowledge was not due to an inadequate mind, but the absence of good scientific instruments (Friedman, 1986). But the philosopher didn't spend nearly as much of his energy being a researcher as he did teaching. Aristotle soon opened a rival school, the Lyceum, across from the Academy where he gathered students around him. In the morning he offered technical courses to his advanced students and in the afternoon he delivered popular lectures to the general public (Thomas & Thomas, 1941). He lectured within a variety of fields such as psychology, metaphysics, ethics, and literary criticism (Deighton, 1971). In fact, most of the works which survive him are his lectures at the Lyceum, as his published writings have been lost.

Though we do not have much information about how Aristotle taught, we do have a picture of Aristotle as a lecturer. At fifty Aristotle was bald and somewhat potbellied. He still dressed very carefully, and though he was "keen-eyed and sharp-tongued" (Thomas & Thomas, 1941, p. 25), he still talked with that boyish lisp as he guided, cajoled and satirized his audiences into paths of wisdom (Thomas & Lee, 1941). Restless by nature, he was unable to sit still while teaching, especially in the morning when the classes were small. Aristotle paced up and down among with his students, expounding his views and answering their questions. This is actually how the institution got nicknamed the "Peripatetic School," or the "School of Strolling Philosophers" (Friedman, 1986; Thomas & Thomas, 1941). Ultimately the institution became known much more as a center for research than it did for turning out practical legislators and statesmen (Monroe, 1911).

Aristotle's Educational Philosophy

While Plato and Socrates focused on the realm of ideals, Aristotle's realm was the physical. As Arthur Jackson, Ph.D. graduate of Boston College, states it:

> The transition from the Dialogues of Plato to the lectures of Aristotle may be compared to leaping from the peaks of the Himalayas to the sands of the Sahara. In the universe of Platonic discourse we leap from mountain to mountain through the rarefied air of wisdom. . . . The Aristotelian experience is a step by step trek through a desert in which every fact and implication is explicitly subjected to the unrelenting spotlight of rational analysis (Jackson, 1973, p. 49).

Aristotle stood with Plato in his belief that the end of education is the securing of happiness for a community of citizens. For Aristotle wisdom—the contemplation of truths—constituted the ideal life; it equaled happiness. It was an activity that was performed as an end in itself and not as a means to another end. Man was capable of a

life of contemplation because he had an element of the divine within him (Elias & Merriam, 1980).

According to Aristotle, the aims of education are ethical and political. In his *Politics* Aristotle recommended that the state's legislators develop an educational policy to provide each citizen with the greatest opportunity to achieve his own happiness and at the same time to furnish the state with citizens competent to aid in the preservation and improvement of the state. Aristotle recommended that all citizens study moral philosophy and politics when they reached a proper age, because one should not only act virtuously from habit but should also know the rules of right conduct (Deighton, 1971).

Aristotle's famous doctrine of Golden Mean is reminiscent of an eastern teaching on the Middle Way taught by another of the great teachers, Gautama. When one follows the Golden Mean one doesn't either over-do or under-do things. In sharing, one would be neither too extravagant nor stingy. One won't be foolhardy, or cowardly or brave. Such balance as is found in the Golden Mean is the royal road to happiness.

> The happy man, the virtuous man, is he who preserves the golden mean between the two extremes of ignoble conduct. He is the man who steers the middle course (Thomas & Thomas, 1941, p. 31).

Aristotle's process of education emphasized both moral and intellectual virtue; neither can be excluded. Although moral virtues are a very important part of the educational process, Aristotle held that they are not its ultimate goal. Intellectual virtue is the primary purpose of education, for such virtue perfects the intellect, man's highest faculty, according to Aristotle. Moral virtue is an indispensable prerequisite for the acquisition of intellectual virtue. Thus the student striving to master a given subject must maintain discipline over his passions throughout all of his intellectual efforts.

Aristotle concurred with the other Greek teachers that music is an important and powerful agent in education. He advocated using it for its "purgative" power and for the training of character. By learning to take part in the right kinds of music, students can be led to take pleasure in having the right feelings and developing good character, and to feel pain at the opposite (Monroe, 1911).

Aristotle's concept of how students learn is similar to that taught by Pythagoras, Socrates and Plato. Aristotle agreed that the pupil is the primary cause of his own acceleration in wisdom, and that he is able to acquire knowledge by his own efforts. The pupil is not simply passive in this process, as a piece of clay might be; for if he were, no growth in knowledge would occur. But Aristotle believed that the process of self-education is laborious and time-consuming. The difficulty is that the mind of the student at first only potentially knows that which it sets out to acquire. "It is like a sheet of paper on which no word is yet written, but many can be written" (Spangler, 1964, p. 60).

Though in Aristotle's philosophy the student is acknowledged as the direct cause of his own learning, the teacher is proclaimed as the indirect cause, and an extremely useful one. For Aristotle, as for no other great teacher before him, the teacher becomes the most important part of the learning process. He becomes an essential ingredient in it. This is because Aristotle saw the student as imperfect, a being with potential but needing the intercession of a teacher in order to mature toward perfection. The teacher represents perfection, at least in the subject area of interest. According to Aristotle, the only time the student will succeed is when he can be directed by a teacher.

The teacher is necessary because the student only potentially knows what he is seeking to learn. He has the potential to learn it, but potency alone will not result in actuality. The growth into actual knowledge or skill must always be brought to actuality

by an agent who has internalized that knowledge. Aristotle used the example of a student striving to become a musician: one who is potentially a musician becomes actually a musician by learning from a teacher who is actually a musician. Though the student is aware of what he wants to know as potential knowledge, only through an agent can he internalize knowledge.

Learning is best accomplished through the example of one who has gone before and already become learned. Thus the teacher becomes, for Aristotle, essential to the process of learning. The teacher performs his role by preparing the sensed environment necessary for learning. The teacher knows the process, the steps and stages toward attainment; he knows what is required of the learner at each stage, and provides it for him within his sensory world.

For the teacher to be such an important ingredient in the student's growth, Aristotle recognized that the teacher needs to also be striving for perfection. He cannot assume to teach what he has not become. He should always be attending to his moral character and to mastering the skills he would teach. The instructor cannot help his students understand the proper causes of things unless he possesses this knowledge himself, and knows each step required for its mastery. This is especially true in the area of the intellect. Since the purpose of the instructor is to lead students to intellectual virtue, to the virtue of wisdom, the teacher must himself attain to intellectual virtue.

The role the student must play in this relationship is one, initially, of believer. The student must believe in the teacher. As Aristotle expresses it, ". . . the learner should take things on trust . . ." (Spangler, 1964, p. 62).

The reason the student begins by believing is that learning is a gradual process. Aristotle believed that learning is a process which is slowly generated within the student.

The student is imperfect in the beginning and slowly matures to perfect knowledge, and then only because she is guided by another who is perfect, i.e., by the teacher.

The problem with the teacher predominating is that it ignores the indivudial's power to learn from within. Aristotilan educational theories displace the inner teacher with the external teacher. This demands that students place their trust outside of themselves rather than within themselves.

Aristotle taught that all learning proceeds from preexisting knowledge. This means that the teacher must begin by teaching what the student already knows. Whether the teacher is trying to persuade by means of formal demonstration (formally validating arguments whose premises are necessary), or using a less formal method, the premise of his argument must be initially accepted by his listener (Spangler, 1964).

The pupil must move into the unknown (that which he seeks to know) by means of what he knows. The instructor points out what the student already knows and understands about a certain premise, and then leads him step-by-step from principles he already knows to conclusions hitherto unknown to him.

For Aristotle, this is best accomplished through induction, deduction or the syllogism. In the inductive process one clarifies a universal truth by first presenting several examples of the premise in terms the student already understands. In this case he arrives at universal principles by way of individual instances. The deductive process in teaching is one in which a particular problem is solved by knowledge of the general principle applicable to it. In this case the teacher presents known truths, or principles, and then shows the applicability to particular instances. A syllogism is a form of deductive reasoning in which a formal argument consists of a major and a minor premise

and a conclusion, as in "every virtue is laudable; kindness is a virtue, therefore kindness is laudable."

Death and Lasting Influence

Aristotle never found the peace and recognition he longed for in Athens. When Alexander the Great died, the Athenians' long-felt but hidden hostility against Macedonian sympathizers surfaced. They wanted to rid themselves of any remaining Macedonian influences. Aristotle, who had remained loyal to his first pupil and his family, suddenly became a target. The townspeople accused him of being a pro-Macedonian spy. Threatened with arrest, Aristotle left the city to avoid the fate of Socrates. Though he managed to escape, he died only a year after his departure. He was sixty-two.

Aristotle developed no systematic educational theory. Actually he wrote little on learning theory, educational theory or higher education, although his *Politics* include a cursory and incomplete discussion of a policy for state education.

Some educational researchers claim that Aristotle has had no real influence on educational theory until quite recently (Monroe, 1911). They find that whatever Aristotle offered originated not with him but with Pythagoras and Plato; that later schemes of education were Greek, not Aristotelian.

> There was indeed a Latin version of the *Politics* as early as the thirteenth century, and it had considerable influence upon contemporary political thought; but we look in vain for traces of its educational teaching. The medieval scheme of education was Greek, not Aristotelian, in its origin. It goes back through the Neo-Platonists to Plato himself, and through him to the Pythagoreans, and it was already fixed on traditional lines before the revival of Aristotelian study (Monroe, 1911, p. 203).

Others claim that Aristotle had tremendous influence on our educational theories, that his ideas appear in thousands of our textbooks on teaching and educational psychology (Friedman, 1986). In modern times it is clear that Aristotle's Politics has served as a channel through which some of his educational theories have surfaced.

One thing is clear: Aristotle's thoughts about learning moved the debate over whether anyone can teach another to a new level. When it was picked up by Augustine and Aquinas in the middle ages the debate raged even stronger.

Aristotle's Educational Legacy

1. Aristotle is considered to be the first to apply scientific principles to education. He contributed a scientific method to the search for truth and was the first to develop practical scientific methods for experimentation and study. The scientist in him refused to accept mere theories. He had to question, to define, test, and observe. The urges for logical structure and classification, stronger in Aristotle than they had ever been in a major educator before, made him the first real orderer of the universe of thought. His research activities and those conducted at the Lyceum were the most extensive undertaken in history. Though there were numerous mistakes (as pointed out by modern researchers), considering the equipment available by that date, the work was remarkable. The manuscripts accredited to Aristotle numbered between four hundred and a thousand (Friedman, 1986) though most were probably student manuscripts.

   What effect has this scientific approach to education had on educational practice? The power of the human spirit to comprehend truth on its own has been compromised. What can be lost is the unique contribution of the individual. Inventions and new discoveries can't happen if we only accept what a teacher can

tell us. Too much concentration on doing things according to a prescribed system derived by someone else denies the power of insight, of the individual to put things together in a unique way.

2. Aristotle's method of instruction in his institution became the model for other institutions of higher education through the nineteenth century. Aristotle is credited with the invention of formal logic. His institution developed what is considered the first real library. His students systematically investigated the sciences, biology in particular. Their teacher lectured within a variety of fields such as psychology, metaphysics, ethics and literary criticism (Deighton, 1971). Even the study of natural philosophy is said to have sprung from his mind, and he is credited with having laid the foundation for our scholarly vocabulary in the humanities.

   Aristotle's systematic approach to curriculum design became the basis for the curriculum which formed the foundation for subsequent institutions of higher learning from the time of the University of Alexandria up to the beginning of the 19th century.

3. Aristotle's devotion to the rational process put the action of learning, for the most part, outside of the learner. As part of his rational for this, Aristotle noted the differences between innate and learned abilities. He used the example of learning to play the flute as his example, pointing out that one cannot learn to eat, to reproduce, to see or to desire; these are innate. But no one is born knowing how to play the flute, or how to become an athlete or a temperate or courageous man. By this example, Aristotle is noting the difference between one's ability to do

something and his ability to learn to do it. The ability to learn is innate; the other ability comes only with practice (Deighton, 1971).

Aristotle focused on man's cognitive ability, which he saw as man's power to know things that are particular instances of universal classes. This theory hones in on man's ability to grasp the intelligible structure, or form, of things. To Aristotle this intellectual comprehension is analogous to the process of sensation. Thinking is analogous to perceiving; it is a process in which the soul is acted upon by that which is capable of being thought. The thinking part of the soul is passive in that it must be acted upon by some force from without (Jackson, p. 78).

We can understand his theory better when we realize that for Aristotle, education is a process for developing two forces within man: his desires and his rational powers. As Aristotle put it, " . . . [in] the work of education we learn some things by habit and some by instruction" (Spangler, 1964, p. 24). Habit relates to the power of the desires; instruction involves the rational faculties. The process of learning, according to this theory, must be entirely other-directed (Spangler, 1964).

In this reasoning we begin to see the beginning of the denial of the power of the individual to experience truth through insight totally apart from his desires or his intellectual processes. This is a weakness in Aristotle's thought. Aristotle took knowledge from the *inborn* and discoverable to the world *exterior* to the individual but discoverable through observation and rationality, and then he denied the validity of the former. This was the beginning of the rationalistic, or realistic, school of philosophy. Ultimately, the denial of the ability of the individual to "know" without the help of a teacher or rational process has a

profound effect on how a person is able to grow, and what he or she can ultimately become. If becoming is the result of learning, and the process becomes other-directed, the student can logically "become" or actualize only what he can find someone else to sponsor (to teach), to provide, as the steps and stages for his growth within that arena.

4. Perhaps the teacher's most important legacy is that he changed for centuries the role of the teacher. With Aristotle, the teacher became much more important to the process of education than he had ever been before. While his predecessors had celebrated the student as the prime element in learning, Aristotle preferred the teacher.

When education becomes outer-directed, a guide becomes essential. The teacher must present the sensible aspects of the world which the learner must assimilate. The teacher, by such presentations, guides the learner's natural desire to know toward the scientific possession of a particular discipline. He not only presents facts, but demonstrates their connections, guiding the learner from prior knowledge to new conclusions which the learner can grasp (Jackson, 1964).

In Aristotle the importance of the teacher nearly completely overtakes the role of the student. Though he gave lip service to the student as the true source of learning, when we examine the totality of Aristotle's beliefs, we find that the student's internal processes give way to outer processes supplied by the teacher. With the Aristotelian method, learning loses its intuitive quality and becomes a much more scientific process.

When the teacher becomes primary, the result can be that the student becomes very much outer-directed. This can affect the way a teacher interacts with

students. When teachers think they are responsible for learning, they concentrate on their ideas. When they realize that the learner does all the real work of learning, their attitude becomes very different. They are there to prepare learning "environments"—intellectual, emotional, physical. Even the way they present themselves—tone, expectations, philosophy of learning—is a type of environment. They really do become like Socrates' midwife: they get all things ready for a birth that is really accomplished by only one person—the student

The educational philosophy that emerged out of ancient Greece began with Pythagoras, whose teaching methods were based essentially on a process in which the individual was supremely responsible for all aspects of his growth, including his thoughts, his actions, his emotions, his reactions to others, his ability to assimilate new data, and his ability to pass his tests, whether mental, emotional or physical. In Pythagoras' school the instructors were those who had already progressed through the stages of learning. They remained nameless. The teacher was entirely secondary to the student who was the shining star of the educational institution. With Aristotle we hear little of the progress of his students. Aristotle projects himself as the star, and those who have applied his educational philosophy have done the same with the role of teacher.

CONFUCIUS

Confucius has been called the greatest educator in the history of humankind (Smith, 1983). Revered as "The First Teacher, the Sagest of the Sages" (Ware, 1955) he inspired throughout all of China a love for national custom and polite life which spread throughout the Far East. A firm believer in the perfectibility of all men, Confucius gave common people a chance to share in the discovery of knowledge which, until then, had been the providence of the nobility. He was a great synthesizer, translating the essence of ancient Chinese culture into an educational legacy to be shared by all Chinese.

Life of Confucius

Confucius was born in Lu in Northeastern China in 551 or 552 BC. This was a time when all the world was being marked by change: the downfall of Lydia, Media and Babylonia, and the establishment of Persia; the release of the Jews from their seventy-year captivity and the rebuilding of the Temple. It was the time of the rise of the great teachers of Greece (Pythagoras was teaching in Greece and in just a few years Socrates would be born) and India, which experienced the birth of Gautama's new Buddhism.

Confucius is the Latinized form of Kung Fu Tze, or Master Kung. His family name was Kung and his personal name was K'iu. His father was Shu-leang Ho, Governor of Lu. At the age of seventy he married a beautiful young girl of twenty named Cheng-tsai. After his father died, when the lad was only three, Confucius was reared by his mother on only the amount of money that could be earned from a strip of land awarded to the widow by the government. Confucius had to work at various manual

trades, and he hunted and fished for his food. When later in his life an exalted personage was amazed at the teacher's numerous talents, Confucius said, "When I was young I was of humble condition; that is why I had to learn to do many things" (Do-Dihn, 1969, p. 26).

From the age of fifteen Confucius devoted himself to learning. History records frequent references to bouts of meditation where he would forget whatever he was doing in the eager pursuit of knowledge. He also sought political office, but as a statesman he had little success. Finally later in life he devoted himself solely to the role of private teacher.

At age nineteen Confucius married a girl from the Kienkuan family who was chosen for him by his mother. She bore him a son who was named Li, or "carp," in honor of the Duke of Chou who presented the family with a carp after the birth (Alexander, 1890). Later Confucius also fathered a daughter.

Philosophy Of Confucius

Education is at the core of the Confucian philosophy. For Confucius education had a practical purpose. The study of the nature of things and the acquisition of knowledge was merely a means to an end, not an end in itself. For Confucius the end of all education was the development of a virtuous personality.

The Chinese word for education, *zhiao-yu*, reveals the Chinese attitude toward the teaching-learning process. The compound means "to guide, counsel, teach, or educate". The second character can be defined, "to give substance, to nourish, nurture, lead, or help grow". (Smith, 1983, p. 18).

In China education was seen as a two-fold activity. Of primary importance was the transmission of knowledge from one generation to the next. Confucius felt that it was

important to study the contributions of others who had gone before. Even he claimed to have drawn all of his knowledge from men of the past, saying, "I have no inborn knowledge. I love antiquity and I search for it assiduously" (Do-Dihn, 1969; Alexander, 1890). He taught that one who will not go back and understand all that has gone before will have a tendency to live in a world of his own creation. One who lives in his own separate world may be considered mad; he may go off on tangents and pursue fruitless and dangerous pathways. To be of real value to society, one needs to study the past as a process for solving current problems. Hence to be fully educated, one must first acquire a knowledge and understanding of that which has already been accepted.

A second dimension of the educational system in China was the idea of the school as a place where one learns values, morals and ethical priorities (Smith, 1983). Confucius, like the Greek teachers and like many modern psychologists, believed that man was born with a natural goodness and that only those who were unhealthy or of unsound intellectual development could not benefit from learning or formal schooling.

Many have tried to make Confucius into a religious teacher. However in his scheme of life, only a small corner was reserved for religion. Confucius was neither agnostic nor irreligious. He was respectful of the religion of his forefathers. He spoke of heaven as an all embracing providence, regarding himself as its instrument on earth. He respected spiritual beings and he worshipped them with sincerity and reverence. But Confucius was not a religious teacher. He made no claim to heavenly descent or divine revelation. For Confucius, the proper study of mankind was man, not God. As he stated, "Know then thyself, presume not God to scan. The proper study of mankind is man" (Wu-Chi, 1955, p. 143).

Confucius had a humble opinion of himself as a teacher. In the east a professor or teacher will constantly self-evaluate his or her behavior and teaching. When once asked if he possessed knowledge he replied, "No. But, when a man of humble condition questions me, even if he be stupid, I explain everything to him from beginning to end, omitting nothing" (Do-Dinh, 1969).

Confucius' humility may have been spurred on by an encounter with the famous Chinese teacher Lao-tse. When Confucius was just beginning his teaching career the old master was the archivist or keeper of the royal treasure. Confucius had the opportunity to meet with him and eagerly questioned him about the past. After some discussion between the two, Lao-tse rebuked the new teacher,

> I have heard it said that a good merchant carefully conceals his goods and acts as if he had nothing, and that a perfect sage makes himself appear a fool. Put aside your arrogant manner and your insatiable desires, your affected demeanor and your excessive ambitions. None of that is of any use to you (Do-Dihn, 1969, pp. 43-44).

After the meeting Confucius was unable to speak. Finally he confided to an associate:

> I know that the bird flies, that the fish swims, that animals walk; but animals can be taken with the net, fish with the line, birds with an arrow attached to a cord. As for the dragon, I know nothing, except perhaps that he ascends to heaven carried by the clouds and the wind. Today I saw Lao-zu. He is like the dragon (Do-Dihn, 1969, pp. 43-44).

Confucius believed that the success of any student very much depends upon the quality of his teacher (Smith, 1983). He further taught that learning consists not simply of accumulating facts, but also of gathering knowledge for the guiding of one's conduct. To Confucius the word *hsueh*, which translates as "to learn" or "to study," meant the study and imitation of moral exemplars (Dawson, 1981). To him, the main object of

learning was the imitation of models, and an important aspect of the teacher's role was to be a model and to provide an example.

Confucius had some specific ideas about how a teacher should behave. First and foremost, he felt that a teacher should always renew himself. "If a man keeps cherishing his old knowledge, so as continually to be acquiring new, he may be a teacher of others" (Smith, 1983, p. 43).

A teacher must store up knowledge, learn without being satisfied and instruct others without becoming weary. He must continually develop new knowledge. A teacher who does not educate himself cannot educate others. However, just reviewing old knowledge without increasing new knowledge is being too conservative. A teacher needs to improve civilization by having an independent point of view and actively renewing himself.

Confucius left a few statements indicating what he thought about himself as a teacher:

> At fifteen I applied myself to study; at thirty I was solidly established; at forty I no longer doubted; at fifty I knew the decree of heaven; at sixty I understood what I heard; at seventy, following the inclinations of my heart, I did not transgress the rule (Meyer, 1967, p. 39).

> I silently accumulate knowledge; I study and do not get bored; I teach others and do not grow weary—for these things come naturally to me (Dawson, 1981, p. 9).

The teacher, though he is urged to work hard to keep up with the student, is not inherently superior to the student. Confucius admonished his students to qualify even the instruction of their teacher with their own insights, maintaining that they should not yield even to the teacher.

Confucius was an excellent model for both students and teachers in China. As one observer put it,

> There are four qualities from which the Master was entirely free: he had no prejudice, no willful insistence, no obstinacy, and never saw things from his own point of view alone. He had a reputation for being flexible, always acting after careful consideration of the circumstances, so much so that he was called "the timely sage" (Smith & Smith, 1989, p. 10).

In fact, Confucius has been called China's most notable sage, even though he modestly disclaimed the title of sage, saying, "How could I dare to consider myself to be a sage or an authoritative person? It can just be said that I learn without relenting, and teach without tiring of it" (Hall and Ames, 1987, p. 259). Even so, in China the word sage still refers to Confucius.

Sage or *sheng* means "to communicate with, to commune with, to be conversant with, to penetrate, to connect" (Hall & Ames, 1987, p. 257). It derives semantically from *erh*, the Chinese word for "ear." In this way it is related to *t'ing*, "to hear." The ear aspect emphasizes the listening quality of the sage. A sage is one who knows the nature and condition of someone or something by listening, by attuning his ear. Communication involves the act of attunement, or listening. The sage was perceived as primarily aural in his communication. Confucius' aural sensibility is reflected in his self-description "at sixty my ear was attuned" (Hall & Ames, 1987, p. 257). On the other hand, sage has also been translated as "one who manifests and discloses," as in "to sound, or voice." (Hall & Ames, 1987, p. 258). So sage also means "to communicate, to connect, to penetrate through." In this aspect the sage is closely associated with the power of speech. Confucius was described as painfully attentive to what he said and how he said it.

Confucius believed that learning should continue until death; that it is an occupation of a lifetime. The constant learning to which Confucius was devoted was aimed at self-improvement as the prerequisite to achieving improvement in others. To Confucius learning was such a part of life that it was like breathing. In fact, Confucius

was aware that learning can occur unconsciously through the unthinking imitation of one's neighbors, so it was extremely important to have the right acquaintances.

Confucius is credited with being the earliest teacher in China to accept the principles of universal educational opportunity. As a consequence of his example the ideal of a nation-wide educational system was set before the Chinese long before other cultures had this conception.

Confucius' School

Confucius opened his school when he was twenty-two years old. Though many of China's royalty sent their sons to study with Confucius, he also accepted into his school the sons of ordinary people, many of whom could not afford the more elite private institutions. Each student paid according to his means. If they couldn't afford to pay money, the students brought items of exchange such as wine, silk, foodstuffs, or wood for fuel. He never refused to instruct anyone: "From the bringer of a bundle of dried meat upwards, I have never refused instruction to anyone" (Dawson, 1981, p. 17; Do-Dihn, 1969, p. 30).

Confucius was very democratic in his treatment of students. He believed that in teaching, there should be no class distinction. Regarding whom he would admit to his school he said,

> I admit people's approach to me without committing myself as to what they may do when they have retired. Why must one be so severe? If a man purify himself to wait upon me, I receive him so that if one who has good intention comes to ask for something, we should receive him without worrying about his past conduct, and at the same time we should not interfere with what he is going to do in the future. This is the manner of a sage and also the manner of an ideal teacher (Smith, 1983, p. 43).

The ages of his students also varied. One of his senior disciples was only nine years younger than Confucius, whereas another was forty-eight years younger. Even some sets of fathers and sons attended his school together (Wu-chi, 1955).

The core curriculum at his school consisted of music, mathematics, drawing, calligraphy, archery, and ethics. Later Confucius added history, literature, and political economy (Smith, 1983). As a teacher, Confucius did not try to answer all his students' questions. Sometimes he merely raised questions and required the students to find the answers themselves. He said, "If I hold up one corner of a square and the student cannot work out the other three by himself, I won't go any further" (Smith & Smith, 1989, p. 7). Regarding learning the master said,

> I cannot compel understanding in him who does not endeavor with all his heart to understand. I cannot teach proper speech to him who does not make an effort to speak.
>
> If someone does not say, 'How is it to be done? How is it to be done?' What can I do for him?" (Do-Dinh, 1968, p. 30-31)

One device Confucius invented to assist students to learn he called the *Book of Songs*. This book consisted of songs and poems that Confucius gathered from historical Chinese sources. It became a repository for the cultural values of the nation. Confucius insisted that his students study the songs and learn them. He used this book as a source for building vocabulary and to improve written and oral communication skills. He used its images and metaphors to impart the essential background needed by any diplomat or would-be statesman. Confucius would become very concerned when students did not master the *Book of Songs*. He once said to Po-yu: "Have you mastered the Book of Songs. . . . Being a person and not doing so is like standing with your face right to the wall" (Hall & Ames, 1987, p. 66).

Interaction with Students

Confucius' method of instruction was personal and informal. The success of Confucius as a teacher lay in his fellowship with his pupils. His respect for the individual was absolute. To Confucius, every person contained materials for studying life. He taught his disciples,

> When I walk with two others, I always receive instruction from them. I select their good qualities and follow them, and avoid their bad qualities.
>
> In the presence of a worthy man, think of equaling him. In the presence of a worthless man, turn your gaze within (Dawson, 1981, p. 46).

Confucius saw abundant potential in each student, and in each he sought to develop the total man. His approach was different for each student, as each represented a unique challenge. His aim was not to teach certain subjects, but rather certain students. He fully understood the differences between pupils. Perhaps this was because Confucius measured each student before he started to teach them. Like a modern psychologist, he would relax the student and ask him to state his ambitions freely and without reserve. He was a good listener, hearing without interruption or comment until he understood the advantages and weaknesses of each person. He then designed the student's instruction accordingly (Smith and Smith, 1989, p. 7).

Confucius believed that a teacher should love his students as well as their intellects. The master certainly loved his students. Once, when Confucius was away from his students employed in another land, he thought of them and cried, "If only I could return! If only I could return! My disciples are ardent but negligent. They cultivate virtues with elegance and perfection, but they do not know how to balance them" (Do-Dịnh, 1969, p. 76). On another occasion he observed that each of his disciples

excelled in different virtues, even surpassing himself, but that all of them lacked the capacity to relate and harmonize them. This was when Confucius' version of the "Happy Medium" or "Golden Mean" was born. This teaching about living a balanced life was the one thread that ran through all his teachings. Once, when conversing with Tseng Tsan, the Master said, "Tsan, there is one thread that runs through all my teachings." "Yes," answered Tseng. After the Master left, the disciples crowded around Tseng Tsan to find out what the golden thread was that wove together the Master's ethical teachings. "Our Master's doctrine, said Tseng, "is simply this: *chung* and *shu*. *Chung* is made up of the components of "middle" and "heart." What it means is that, with one's heart in the very center, neither to the left, nor to the right, one will be able to achieve *chung*, which is faithfulness to one's self, to one's own nature, and to humanity. Only then can one be faithful to one's fellow men, as shown in the virtue of *shu*. *Shu* means "as one's heart," or "to do to others as your heart prompts or urges you;" "to cherish the other's heart as if it were one's own" (Wu-chi, 1995, pp. 148-149).

"Living up to one's word" is another major concept in Confucian teaching. The concept is equivalent to "plighting one's troth" and close to "doing one's best." Confucius was pleased when one of his disciples declined to take an official post, saying "I do not think that I am yet able to live up to this" (Hall & Ames, 1987, p. 60).

Confucius' popularity lay chiefly in his ability to cultivate personal relationships with his pupils. An example of this was when he made fun of a student named Tzu-lu. Once, when Tzu-lu was playing martial music on his lute, the jumbled notes jarred the tranquillity of the classroom. The Master complained, "What business has the lute of Yu to twang at my door!" (Wu-chi, 1955, p. 132). News of this slighting remark spread so fast that Tzu-lu's fellow students began to show him less respect than was due a senior

member of the school. Seeing this, the Master immediately counterbalanced the unhappy effect with a compliment: "Yu has climbed to the hall, though he has not yet passed into the inner chamber" (Wu-chi, 1955, p. 132).

The student named Yen-Hui was the most dear to Confucius. Of him the Master said, "I have not yet heard of anyone who loves learning as he does. . . . Never listless when spoken to—such is Yu-Hui" (Wu-chi, 1955, p. 135).

This student was quiet and reflective. He listened attentively to the lectures for the whole day without making any show of his intelligence by raising hair-splitting arguments about what he heard. As soon as the session was over, he would engage in deep contemplation until he was able to expound on and to illustrate the teaching. He was diligent and hard working. His inborn intelligence and industry, as well as his great love of learning, made him the best scholar in the school.

Hui was the epitome of virtue. He never repeated a fault and never lost his temper. According to his Master, while others might "hold out for a few days or a month at most, but no more," (Wu-chi, 1955, p. 135) for three months Hui was able to keep his heart free from any thought that deviated from the true path of virtue. Hui was also very poor. He lived in an alley with only a bamboo bowl for his rice and a gourd cup for water. The Master said of him, "No ordinary man could have endured such misery. Yet mirth never failed Hui" (Wu-chi, 1955, p. 135).

The master was inconsolable when Yen Hui died in his prime. Confucius reflected, "Alas! I have seen him advance, but never have I seen him halt in his progress" (Wu-chi, 1955, p. 135).

Confucius also had his "black sheep." Like the student Jan Chiu who collected oppressive taxes from the people and branded another pupil a "mean little fellow".

(Wu-chi, 1955, p. 138). And Tsai Yu, a student of literature who was careless about the conventions. Tsai Yu rebelled against the Master's insistence on the three-year period of mourning after the death of a parent. Tsai would also fall asleep in Confucius' lectures, incurring the Master's great displeasure: "Rotten wood cannot be carved, nor can a wall of dried dung be trowelled. This Yu—what's the use of my denouncing him any more?" (Wu-chi, 1955, p. 139).

In the latter part of his teaching career Confucius admitted that time and experience had changed his perspective about students: "In my early dealing with men I used to listen to their words and take their deeds on trust. Now it is my custom to give ear to what they say, and then keep a watchful eye on what they do. It was my experience with Tsai Yu that brought about this change" (Wu-chi, 1955, p. 139).

Death and Lasting Inflluence

In the final years of his life Confucius lived quietly in his home town of Lu. He spent his time reading, studying and teaching a small group of students. He felt disappointed when he reflected on the fact that his ambition of assisting in the governing of the Empire had never been realized. Just before his death he expressed his disapointment: "Alas, there is no one who understands me" (Lamper, p. 81). One morning he reported having a dream in which he heard the words, "The great mountain must collapse, the mighty beam must break and the wise man wither like a plant" (Jaspers, 1986, p. 52). When an alarmed student tried to console him the teacher said, "No wise ruler arises, and no one in the Empire wishes to make me his teacher. The hour of my death has come" (Jaspers, 1986, p. 82). He lay down and eight days later died at the age of seventy-three.

When Confucius died his students mourned for three years, as they would have for a father. They took turns watching over his grave. They left after three years, except for one student who had been particularly devoted. Tzu-kung stayed at his teacher's graveside for another three years (Li Fu, 1976; Alexander, 1890).

In the judgment of his students, Confucius had incomparable wisdom and virtue. They described him as "unattainable as the heavens approached on a ladder. . . " and "insurmountable as the sun and moon that hang high in the firmament. . . " (Wu-Chi, 1955, p. 140).

Confucius was one of those people who, during his lifetime, seemed to have made no epochal achievement and whose greatness was not recognized or even discovered by his contemporaries. It was not until long after he had passed that the real impact of his life and teaching began to be felt.

Some three thousand men had the honor of sitting at the sage's knee (Smith, 1983). Many were later to distinguish themselves in the government or in the arts. Neither Confucius nor his pupils were aware that, sitting in his back yard beneath a leafy apricot tree, they were inaugurating the first and greatest private school in Chinese history.

Will Durrant wrote of his influence:

> The history of China might be written in terms of that [Confucian] influence. For generation after generation the writings of the sage were the texts of the official schools. . . . The stoic conservatism of the ancient sage sank almost into the blood of the people and gave to the nation, and to its individuals, a dignity and profundity unequaled elsewhere in the world or in history. With the help of this philosophy China developed a harmonious community life, a zealous admiration for learning and wisdom, and a quiet and stable culture which made Chinese civilization strong enough to survive every invasion, and to remold every invader in its own image. . . . And today, as then, no better medicine could be prescribed for any people suffering from the disorder generated by

> intellectualist education, a decadent moral code and a weakened fiber of individual and national character, than the absorption of the Confucian philosophy by the nation's youth (Durant in Li-Fu, 1976, pp. 3-4).

One of the master's most learned students, Yen Hui, made a touching statement about the effect a great teacher can have on a student. He spoke of the sage's wisdom as too alluring to be withstood:

> The more I strain my gaze up towards it, the higher it soars; the deeper I drill down into it, the harder it becomes. One moment it appears before me; the next it is behind. Step by step the Master skillfully lures me on. He has broadened my mind with culture and curbed my conduct with ceremony. And now, even though I want to stop, I cannot. After having exhausted all my abilities, I seem to see something stand out in front of me, sharp and clear, but while I long to pursue it, the way is closed (Wu-Chi, 1955, p. 140).

Confucius has molded the character of the Chinese people. Their outlook and mentality have been immensely colored by his ideas. Dynasties have risen and fallen, but Confucius' ethical system has been sustained in spite of these changes, the one enduring influence in Chinese life.

Confucius' Educational Legacy

1. Confucius inspired the people of eastern Asia to pursue the intellectual in the same way that Jesus inspired the people of western Europe to pursue the spiritual. And he has received from them the same kind of homage. Confucian philosophy has been at the core of the Chinese culture for over 2500 years. Confucius inaugurated the first and greatest private school in Chinese history. He did it because from his youth he was filled with an insatiable passion for learning, and so he wished to dedicate himself to helping others fulfill their desires for understanding. During his life he taught over three thousand students, but over

the centuries the legacy of his school has passed from those original three thousand to the entire Orient.

2. In Confucius we see a recognition of students' accountability for learning balanced with the teacher's solemn responsibility to embody what the student is pursuing. Learning is the responsibility of the student. Confucius knew that the student is the one who can make the choice to learn. To this end he demanded two things of his students: an intellectual curiosity and a willingness to work. All of Confucius' training was aimed at teaching men to think for themselves, for he knew the dynamic power of the self-motivated individual.

3. Confucius agreed with the Greek teachers that the reason a person should strive to grow in wisdom is to become a worthy person. He concurred with the Greeks that the point of living is to attain personal satisfaction, family happiness, social harmony, national unity and international peace. These can only be achieved through the perfection of each one's personality as regards his moral development. The path toward this perfection was to be found in education and learning.

Self-realization is the essential goal of learning. It is arrived at by personal striving. Confucius taught that a wise man is concerned about his own self, for it is the internal being that is the true guardian of one's wisdom. As Confucius used to say, the farther one goes out from himself, the less he is likely to know (Ulik, 1947). For this reason the teacher required students to set forth their goals for life as a prerequisite for learning; knowing the end from the beginning would give a calmness and purpose to learning.

4. For Confucius, knowledge for the sake of knowing things was an unreasonable idea. The study of the nature of things (science) and all other subject matter was merely a means to an end—the perfecting of the soul. Today Confucuis would likely be critical of teachers who deliver facts but offer no time for reflection on learning, or for interior analysis.

5. The function of the teacher is to help form the perfect personality of his pupil, and to guide him to become a moral, rightous person. In Confucius there is a causal relationship between virtue and knowledge. The goal of education is to gain an understanding of the virtues and to teach people how to conduct themselves properly.

6. For Confucius, as it was for Aristotle, the teacher was seen as an essential ingredient in education, but for very different reasons. While Aristotle put the teacher first because of his mastery of the subject matter, Confucius placed the teacher above the student, not so much for his wisdom or his ability to impart knowledge, but for the example he could offer the student. Confucius believed in the power of the personal example of the teacher, preferring teaching through doing to the proclamation of words. To him the practice of virtue was more important than merely paying lip service to it.

7. For the teacher to play such a prominent role in the education of others, the teacher must constantly strive to perfect himself. Only after so doing is he qualified to teach. The teacher must embody what he teaches; it is his moral duty to do so. He must offer himself as an example of what the students can become. For this reason he must always renew himself by constant study and self improvement.

8. Confucius' was a student-oriented approach He taught students, not subjects. To him the key to the success of a teacher is in the relationships he developes with students. He conceived of five kinds of relationships: king and minister, father and son, brother and brother, friend and friend, and husband and wife. The relationship between teacher and pupil was not included, as Confucius regarded this relationship as transcending them all.

> Whatever subject the teacher may happen to instruct, he should be something of the Good Shepherd, sweetly inculcating in his pupils a healthy outlook on life. The wisdom of life cannot be taught in a classroom but must radiate from the personality of the teacher to the heart of the pupil. This is what Confucius called "wordless teaching" or teaching by personal example (Shu-kai, 1966, p. 2).

9. Confucius stands with all the great teachers previously discussed in a belief that learning should be a lifelong pursuit. The fact that he had sons and fathers in his school is testimony to his acknowledgment that the perfectionment of the self can take a lifetime.

10. Confucius was a democratic spirit long before the concept of democracy made its way to the Orient. He believed that a teacher should love all students democratically, without concern for their class in life or for what they may do in the future. His ideal was that everyone should have an equal opportunity to receive an education.

    But the sad reality of the state of Confucianist thought in the past century is that, for a time Confucius was deliberately and systematically cast into oblivion by certain non-democratic forces in China. Confucianism has faced the most violent attack known in the history of China. The Chinese communists, in their desperate attempt to destroy the traditions of China, vehemently denounced Confucianism

as a relic of the feudal past. But despite the brutal attack on the heart of Chinese educational tradition, the memory of Confucius has not died. After decades of control and indoctrination, millions of Chinese still cling to their culture, still remain attached to their heritage, and still lift their hearts to Confucius, though for many this is done in silence. For them Confucius continues to live; he is living in the depths of their minds and souls.

Confucius' legacy is as valid today as it was 2500 years ago, and in many respects his ideas are even more valuable at the present time for both eastern and western educational practice. They have stood the test of difficult times.

SIDDHARTHA GAUTAMA

Life of Gautama

Siddhartha Gautama was born around 560 BC. Much of what is known of him comes from his first biographers, the second-century Sanskrit poet Ashvaghosa and Mahavstu (Snelling, 1991; Ling, 1973). According to Indian records, Gautama descended from the noble family of the Sakyas who shared in governing the small state of Kapilavastu near the principality of Kosala. This is why Siddhartha is sometimes called "Sakyamuni," a reference to his being "the sage of the Sakya people." He was born into the Gautama clan. His personal name in his youth was Siddhartha (Akira, 1990).

The Gautama clan inhabited the summits of the Himalayas. Siddhartha's father was one of the leaders of the Sakyas. As the time approached for his wife, Maya, to deliver her young prince, she headed out to return to her native village of Devadaha. During the journey she gave birth in a grove at Lumbini. According to legend, after Siddhartha was born, the sage Asita came down from the Himalayas and predicted that the child would have only two choices in life: he would either become a king and unite the world as a universal ruler, or he would leave home and become a Buddha. The baby's mother died seven days after his birth, so Siddhartha was raised by his aunt Mahaprajapanit Gautami. Gautami and his father took every precaution to protect the boy from experiencing anything unpleasant, fearing that he might leave them on a spiritual quest as the sage had prophesied.

As a child Siddhartha enjoyed an excellent education and worldly happiness due to the wealth of the aristocratic family. He was contemplative in nature. As he grew to manhood he was married early to his cousin Yasodhara with whom he eventually had a son named Rahula. But all his happiness and contentment was shattered when, at age twenty-nine, Siddhartha became conscious of the basic facts of existence. He saw old age, sickness and death and realized that he, too, would someday grow old and die. His reaction was extreme; leaving his wife and newborn son, the prince headed for the forest to seek his salvation in enlightenment.

Teachers and Students in India

The Vedic religion, which had long been the religion of the people of India (popular from before 1000 BC through 500 BC and beyond), supported a strong educational tradition which offered various types of schools including private schools established by *gurus*, or "venerable ones" (Martin, 1911). Many of these were one-room, one teacher educational centers surrounded by huts in which the students lived. These forest colleges which flanked the Ganges stressed the virtue of contemplation and attracted many students (Mayer, 1967). It was common for students to reside in a retreat environment with their teachers' families, leading lives of outward simplicity in order to concentrate on inner growth. At that time students were a fluid group, moving easily from one teacher to another (Akira, 1990; Carrithers, 1983).

Such periods of study were very popular among young people from good families. The typical aspirant went through four stages of learning: while still young he was accepted as a student by a teacher with whom he studied the Vedas. Upon completion of these studies, he often returned home to marry and become a householder. When his sons had grown into adults, he would let them take over the household so he

could retire to live in the forest and perform religious rites. Finally the most devoted would abandon even their forest homes to wander until their deaths.

Another route to illumination took some students directly into the forest to wander and practice asceticism. These monks did not marry or live with families, but devoted themselves to controlling and limiting their desires, practicing yoga, and performing other religious practices. Such ascetics and sages insisted on discovering truth first hand. They wanted to know, not just to learn, the realities of life. Not content to hear them from the mouths of their teachers, they sought direct experience with truth. They were not interested in intellectual achievement. Knowledge to them had to be realization; it could not be known just by thought, it had to be known in word and action as well.

Gautama's Asceticism

As Gautama embarked upon his journey to seek enlightenment, he first practiced austerities under the most famous religious teacher his day, Arada Kalama, a master of meditation (Akira, 1990). Arada taught him how to attain the state of "nothingness." But enlightenment eluded Gautama. He then attached himself to another teacher, the famous Udraka Ramaputra, who taught him to strive for an absolutely quiet mind (Akira, 1990). Again experiencing no progress, the young aspirant became discouraged. Emerging from one last trance, he realized that through all his strivings he had not attained the enlightenment he had been seeking; he had not even attained peace. His mind was still buffeted by everyday problems.

As a final resort the prince left the company of his teachers and went off by himself into the forest to practice the most grueling forms of asceticism. He spent his nights on a bed of thorny limbs. He burned in the heat of the midday sun and suffered cold at night; he starved himself.

> All my limbs became like the knotted joints of withered creepers, my buttocks like a bullock's hoof, my protruding backbone like a string of balls, my gaunt ribs like the crazy rafters of a tumble-down shed. My eyes lay deep in the sockets, their pupils sparkling like water in a deep well. As an unripe gourd shrivels and shrinks in a hot wind, so became my scalp.... The hairs, rotting at the roots, fell away from my body when I stroked my limbs (Snelling, 1991, p. 21).

For six years he racked his physical body trying to attain enlightenment beyond the physical. He reduced his food intake until he was eating only one grain of rice a day. His body became so emaciated that he could reach into the cavern of his stomach and feel his spine.

One day Gautama realized that instead of progressing he was going backwards. He had reached a dangerous brink. He could no longer meditate; in fact, he realized that he was dying. "What useless anguish of mind and body. What a waste of time and effort! I have spent six years like a man trying to tie the air into knots!" (Mitchell, 1989, p. 38). It was through this experience that Gautama learned to place wisdom above meditation, becoming convinced that meditation by itself would not lead to the discovery of truth (Akira, 1990).

His next act seemed blasphemous to his aesthetic friends: Gautama began to eat food again in order to regain his strength. As he emerged from this last trance a young woman named Sujaha offered him a bowl of milk and rice (Akira, 1990). His friends forthwith abandoned him. He remained alone for a long time, sitting under the fig tree. One night, as he meditated beneath the tree, a great awakening came to him. All at once he received a vision and a wisdom by which all became clear. He understood everything about himself, and also about the plight of beings in the world. He saw how people become caught up in their lust for life; how they stray from body to body in a

never-ending chain of rebirths. He understood what suffering is, whence it comes and how it can be overcome (Jaspers, 1957).

Decision to Teach

Particularly poignant is the story of how Gautama decided to become a teacher. For several days (scriptures vary between seven days and five weeks), Gautama continued to sit at the foot of the tree which has come to be known as the bodhi tree, referring to the tree of his enlightenment, or *bodhi*. He began to contemplate his life. He had attained to the wisdom which he had sought; now what would he do with himself? In the fullness of his new-found wisdom Gautama determined that he would keep silent. He felt that his new wisdom would be considered too foreign in a world where people were so deep in ignorance as to appear asleep. He reasoned that no one would understand him, so why go through the trouble to develop a message and teach it. Besides, he had attained wisdom through much personal effort and sacrifice and in complete solitude. How could he expect common people to desire to attain as he had? And if they desired it, would they have the inner strength and determination to endure as he had?

Buddhist sutras record that, once he had made his determination to remain silent, Gautama entered a period of inner struggle. So strong was his urge to forgo any communication with the world that, as legend has it, the god Brahma himself had to intervene, speaking to him directly, pleading with him to preach about his new-found wisdom. The god's argument spoke to the enlightened one's compassion: he begged Gautama to consider creatures who had "only a little dust in their eyes," promising that once the people heard his message they would respond well and gratefully. According to legend, as he was contemplating his decision, Gautama was attacked by the Buddhist

"devil's advocate" Mara, who tempted him to enjoy his nirvana and to bring his stay on earth to a close, claiming, "No one will understand you anyway (Carrithers, 1983, p. 82).

Finally, despite his hesitation, despite his fear of being unable to translate the inexpressible into words, despite the realization that he might experience persecution and that his ideas might be entirely rejected, Gautama decided to become a teacher. His decision was based on his compassion for a world in darkness. Touching the earth with his hand in what is called the "earth-touching" or "fearlessness" gesture, the new teacher declared "I have the right to be doing what I am doing. I shall not be moved" (Percheron, 1982).

Gautama's Educational Philosophy

While for centuries Gautama has been called by the title of "Buddha," the word is actually a generic title, similar to the title "Christ" or "Messiah," but not confined to one individual. A series of enlightened teachers have long been recognized by the people of India by the same title. According to Hindu tradition, the first Buddha was Dipankara. Between him and Gautama were several other Buddhas. According to tradition, each Buddha's mission was to remind people how to attain salvation through the ancient wisdom teachings (Ling, 1981; Martin, 1911; Monroe, 1911).

In his personal philosophy of education Gautama adapted the Vedic tradition of the search for truth. Gautama's own experience had taught him that ignorance is the root cause of suffering; he believed that the way to salvation from this suffering lies through wisdom, or insight.

Gautama was not particularly esoteric but more practical in his outlook. His doctrine consisted of only a few tenets. First was his teaching on the four noble truths: 1) life involves suffering; 2) the cause of suffering is desire; 3) elimination of desire leads

to a cessation of suffering; and 4) the elimination of desire is the result of following the Noble Eightfold Path. This eight-fold path involves: right seeing, right thinking, right speech, right action, right way of living, right effort, right mindfullness and right meditation (Monrore, 1911).

Gautama's teaching is reason-oriented (Yu, 1981). His kind of reason we might call insight. Self-knowledge is all important to his philosophy. Gautama's emphasis is on finding out for oneself through direct experience. The type of knowledge he and his students sought was Vedic in that it was direct, first-hand knowledge about which there could be no argument. A book containing Gautama's teachings, *The Dhamapada*, explains that as long as truths are known only in the intellect, they have no life. They must be discovered and proven in the depths of being. (Radhakrishnan, 1988).

To Gautama the way to enlightenment is through self knowledge, knowledge of every aspect of the self, including what the self is and what the self is not. To achieve this kind of knowledge, Gautama believed, one must be free of attachment to anyone else's conception of truth, free to experience life's lessons first hand. To this end he endeavored to make all students independent, claiming no authority over them except that of a teacher or adviser (Monroe, 1911). In his community, therefore, the teacher carved out a democratic way of life, and chose not to exercise the kind of strong authority over his students that other teachers did (Yu, 1981).

This kind of freedom from dogma is enshrined in Gautama's words to the Kalmas, a people who lived in the vicinity of the town of Kesaputta:

> Mark my words well, O Kalamas. Do not believe anything on the basis of mere hearsay, thinking that it must be true because you have heard it for a long time. Do not believe traditions merely because they are old and have been handed down through many generations. Do not believe anything on

> account of mere rumors which people bandy about without using their powers of reasoning. Do not believe anything just because it accords with the testimony of your scriptures. Do not believe anything on the basis of supposition or mere inference. Do not believe anything because presumption is in its favor. Do not believe anything just because it agrees with your preconceived notions. Do not believe anything on the mere authority of your teachers and priests, just because they may be pleasing speakers or have charming personalities or claim the respect of the people (Mitchell, 1989, p. 142).

The practical nature of Gautama's philosophy can be summed up with a saying from the Dhammapada: "The Buddha can only tell you the way: it is for you yourself to make the effort" (verse 276). This understanding of learning through direct experience led to Gautama's concentration on moral discipline. The teacher saw ignorance as bound up with passion. To remove ignorance it is necessary to lead a strictly moral life. Good conduct and intuitive insight are inseparably united. Gautama didn't prescribe codes and conventions, laws and rites, but encouraged each person to maintain a moral and virtuous life. The way to be happy, he said, is to have a good heart and mind which shows itself in good deeds (Radhakrishnan, 1950).

School of Wandering Buddhists

Gautama began his teaching mission in Benares. His first students were the five aesthetics with whom he had originally studied. Eventually his entire family joined him. For forty years he wandered through the territories of northeastern India. He taught using every available method of instruction: he used lectures, stories, parables and maxims; he used dialogue and simple conversation. He avoided speaking in the formal language of Sanskrit but used the common vernacular. He used colorful language with concrete images, and he made use of commonly-held ideas from Hinduism.

Many students began coming to him. His movement grew and became a notable force in Indian society. Throughout most of the year, hundreds, then thousands of his

saffron-robed students walked through the villages and cities of northern India. Only during monsoon season did he and his followers not travel; instead they took advantage of the heavy rains to rest in a forest retreat and to teach those who lived in nearby cities and villages.

Gautama's students were Brahmins, monks, hermits, outcasts and repentant sinners. The teacher also welcomed lay disciples who remained with their families and carried on their trades (Ling, 1973). His school differed from other schools in that there were no distinctions of caste in his order. One of the sacred texts records his sentiments:

> As the great streams, O disciples, however many they be. . . when they reach the great ocean, lose their old name and their old descent, and bear only one name, these four castes. . . in accordance with the law and the doctrine. . . forsake their homes and go into home-lessness, lose their old name and old paternity, and bear only the one designation: "Ascetics who follow the son of the Sakya house" (Yu, 1981, p. 13).

In an unusual move for his time, after some persuasion Gautama allowed his foster mother and aunt to establish an order of nuns. Despite restrictions, many women were active, and some became famous for their understanding of the teaching and for their personal attainments.

The Buddhist order was called the *sangha*, which means "harmonious order." In his day political groups and trade guilds were also called *sanghas* (Akira, 1990; Yu, 1981). Gautama adjured his students to go out and wander, serving people out of compassion for them.

The occasions of Gautama's discoursing with his students were called "sessions of teaching " and they were recorded in *sutras*. To say that he preached sermons (terminology used by Westerners to describe his discourses) is misleading because it suggests a wholly passive role for the hearers. In Gautama's sessions, students frequently

interjected or raised questions, or supplied answers to questions raised by their teacher (Ling, 1973, 1981).

Karl Jaspers (1957) gives a detailed look at a day in the life of Gautama's community of students:

> They wandered far and wide, in poverty and chastity, tonsured and clad in yellow monk's robes. . . . They lived by begging, carrying bowls into which the people put food as they passed through the villages. From the very start the communities had their rules and regulations, their leaders and disciplines. They were joined for periods of time by lay companions, including kings, wealthy merchants, nobles, famous courtesans. All were generous with their gifts. The monastic communities came into possession of parks and houses where large throngs who wished to receive the doctrine could be lodged during the rainy season . . . . (p. 34)

> The rainy season obliged them to spend three months in the house with its vast halls and storerooms, or by the lotus ponds in the adjoining park. The rest of the year was spent in wandering. On their wanderings the monks were lodged by the faithful or slept in the open. When groups of monks met, an immense hubbub arose. When [Gautama] was about to appear, someone hushed them, for he was a lover of peace and quiet. In carriages or on elephants they came—kings and merchants and nobles . . . . Each day Buddha himself took up his beggar's bowl and passed from house to house. Throngs of disciples followed him everywhere, and lay companions accompanied the procession, some in wagons bearing provisions (p. 35).

Death and Lasting Influence

The memory of Gautama's death at age eighty was preserved by his followers. The date was 480 BC. He became ill after eating food prepared by a devoted disciple. The story of this last journey is recounted in one of the longest Pali texts, the "Sutra of the Great Decease" (Ling, 1973). Toward the end of his life Gautama ventured for the last time into the forest. He asked his students to make him a bed between two trees, placing his head to the north. "I am tired," he said to his favorite student as he lay down to rest. He addressed his students, giving practical advice for their ongoing missions:

> Under my teachings, brothers should respect each other and refrain from disputes; they should not repel each other like water and oil, but should mingle together like milk and water. Study together, learn together, practice the teachings together. Do not waste your mind and time in idleness and bickering. Enjoy the blossoms of enlightenment in their season and harvest the fruit of benevolence (Kyokai, 1966, p. 12).

Gautama's teaching mission was strikingly successful. His teachings evolved into a world religion which until recently reigned over the Far East and mainland South-East Asia, the most populous areas of the globe, finally finding its way into the West (Carrithers, 1983). It made its way into the common life of towns and villages all over Asia, especially in Ceylon and South East Asia (Ling, 1973). Karl Jaspers (1957) has noted,

> The spread, transformation, and ramification of Buddhism are one of the great themes in the religious history of Asia. Only once consciously fostered from above, by the initiative of a powerful ruler (Asoka), the vast spread of Buddhism was on the whole a quiet, forceful process.
>
> In the texts we breathe a unique atmosphere, never encountered elsewhere in the world, which was wafted deep into Asia. A new metaphysic and way of life became an element of Chinese and Japanese existence, brought a new gentleness to the peoples of Tibet, Siberia, Mongolia . . . .
>
> But a strange thing happened. In India, which produced Buddhism, it died out. Moved by an overpowering instinct, India remained Hindu, choosing to live in castes, with the old gods, in a philosophically conceived totality, and here Buddhism vanished (p. 46).

Why has this teacher been so universally recognized? Perhaps because his doctrine was explicitly directed toward helping people understand characteristics we all hold in common, such as our capacity for pleasure and suffering, and our ability to overcome both through self- knowledge.

It is important to point out that during his lifetime Gautama was not regarded as a god or a superhuman as he is today in many quarters. Buddhist scholar Hirakawa Akira (1990) explains,

> During Sakyamunibuddha's lifetime, his disciples were inspired by his impressive personality, but they still viewed him as a human being. It was after the Buddha's death that he was gradually divinized and viewed as superhuman. The Buddha was called Tathagata (the "Thus come One" or he who had completed his practice and arrived at enlightenment), Arhat (worthy), Samyaksambuddha (he who has attained supreme enlightenment) and other honorific names, making a list of ten titles (pp. 58-59).

Gautama claimed no religious role for himself. He never claimed to be the chosen revealer of divine truth, nor was he regarded by the early Buddhists as a savior. In fact, as one modern Buddhist writer put it,

> The Buddha exhorts his followers to depend on themselves for their deliverance, since both defilement and purity depend on oneself. One cannot directly purify or defile another.
>
> Clarifying his relationship with his followers and emphasizing the importance of self-reliance and individual striving, the Buddha plainly states: You yourselves should make the exertion. The [Buddhas] are only teachers (Dhammapada, v. 276, Ling, 1973, p. 116).

Gautama's final teachings adjure his students to hold fast to their own best selves:

> Be ye lamps unto yourselves, betake yourselves to no external refuge. Hold fast to the truth as a lamp, hold fast as a refuge to the truth. Whosoever shall be a lamp unto themselves, looking not for refuge to any one besides themselves, it is they who shall reach the top most height (Martin, 1911, p. 55).
>
> Behold now. I exhort you, brethren: work out your own salvation with diligence (Martin, 1911, p. 55).

Gautama's Educational Legacy

1. In a Buddhist sutra we find this question posed to Gautama by a student: "Suppose that a samama or a brahman should reach some good state [of mind], then he should tell no one else about it. For what can one man do for another?" Gautama's life was the answer to that question. His was the example of the one who, though he has attained to great understanding, dedicated his life to helping others reach their own attainment. He did this by many compassionate means, but primarily by being true to his experience and reaching out to make the way to such experience clear to others.

2. Gautama believed that truth must not be known only in the intellect. It must be known deep within oneself because that one has proven it to be true by direct experience. Personal experience in learning is imperative. He endeavored to make each student independent of him, for the teacher cannot accomplish learning for the student. The teacher can only embody the way, embrace the person in the state of becoming, and give him or her the steps to follow. Gautama stands with most of the great teachers in proclaiming the individual as solely responsible for his or her assimilation and experience of knowledge.

   Gautama invented many stories and parables to illustrate the level of striving a student should possess. Here is one example:

   > Once upon a time there was an earnest seeker of the path that leads to enlightenment named Sadaprarudita. One day a voice from heaven came to him saying, "Go straight toward the east. Do not think of either heat or cold. Pay no attention to worldly praise or scorn. Do not be bothered by questions of good or evil. Just keep on going east. In the far east you will find a true teacher and will gain enlightenment."

Sadaprarudita was very pleased to get this definite instruction and so he immediately started on his journey eastward. Sometimes there was no path going in that direction, but he pressed on, sleeping where night found him in a lonely field or in the wild mountains. Being a stranger in a strange land, he suffered many humiliations. Once he sold himself into slavery, selling his own flesh to keep from being hungry. But at last he found the true teacher.

In the east there is a saying: "Good things are costly." Sadaprarudita found this to be true in this case, for even after he had found the true teacher, he encountered many difficulties in reaching his presence. Sadaprarudita had no flowers to offer the teacher and no money with which to reward him. He tried to sell his services but could find no one to hire him.

At last Sadaprarudita reached the presence of the teacher. Then he discovered a new difficulty: he had no paper on which to take notes of the master's teachings. He also had no brush and no ink. Then he punctured his wrist and took notes in his own blood. In this way he secured the precious truth (Kyokai, 1966, pp. 142-143).

3. Though the individual is responsible for his or her attainment to wisdom, Gautama understood that people learn by making mistakes. Therefore he was known for his great compassion. Gautama represented the compassionate teacher. Stories are told in ancient Buddhist lore of how Gautama would go to any lengths and stoop to any level to help someone learn a lesson. The legend proclaims that the teacher would actually change his physical form to accommodate the natural environment of someone in need. We know that he was in the habit of changing his method of teaching, his speech and demeanor, so that what he said to a person was said in the most natural way for that person to receive it. To Gautama each student was unique, and so he communicated to each in a unique manner.

4. Gautama stands with Confucius as one who believed that the point of learning is to attain to moral perfection as much as is possible. To this end he proclaimed the

path of personal striving and discipline. The teacher is the guide to the disciplines, but it is up to the student to embrace the disciplines and to have faith that they will lead him in the right direction.

5. Gautama, like Confucius, was a democratic teacher. While other teachers of his time limited their activities to their immediate disciples, Gautama held open meetings where anyone could come and listen to him. Like Pythagoras, he accepted lay students who remained with their families and carried on their trades. He rejected entirely the caste system of ancient India and refused to categorize the monks according to these assignments.

6. It interesting to note that when one reviews the records of Indian history, it appears that there were a number of other teachers popular at the same time in India. Gautama's teaching is not that different from the others. What is different is the profound way in which Gautama actually lived and experienced everything he preached. His personality was possessed of an unusual impressiveness. That same spirit has impressed itself upon all of the world over time.

7. Gautama's teaching was strikingly successful. It prospered throughout the subcontinent of India for more than 1500 years, and in that time it changed and diversified at least as much as Christianity did during its first 1500 years. By the thirteenth century AD, when the power of Buddhism was broken in its original home, it had long since spread to Tibet, Central Asia, China, Korea, Japan and Sri Lanka, and it was making its way into South-East Asia. More recently these teachings have made their way to the west. Today Gautama is recognized in every quarter of the world as an educator of tremendous depth and understanding.

JESUS

Search for the Historical Teacher

A study of Jesus the teacher provides a challenge to the modern scholar. For centuries sources of information about Jesus have consisted almost exclusively of the canonical gospels Matthew, Mark, Luke and John. These texts actually tell us very little about Jesus' personal life, his education or his educational philosophy. What they do review has to some degree been exaggerated and altered by church councils and various writers and editors through the centuries.

A major effort has been undertaken during the last two centuries to discover the historical Jesus. Fortunately much new material has been uncovered that sheds light on the person of Jesus. Ancient manuscripts from the East, from Egypt and the Mediterranean which have surfaced in this century are extremely helpful in broadening our view of this great teacher. These sources, along with many other discoveries, have altered our perceptions of Jesus and his students in untold ways. They are invaluable aids in a project such as this one, and have been taken into account where applicable to enlarge our understanding of Jesus as teacher.

The first students to write about Jesus wrote a book which contained only Jesus' sayings exclusive of stories about him, a sort of handbook and guide for new Christians of the first century. Scholars have called this document "Q", short for *quelle*, which means "source" in German (Mack, 1993). As the early Christian church spread, groups in different locations began to wonder what kind of life Jesus must have lived. Some began to think of him in the role of a sage, while others thought of him as a prophet. Attention

shifted from interest in his sayings to interest in his person. Some sought to set him apart as a special person, even as more than human, as had been done to the memory of Pythagoras and Gautama before him. Eventually such interest produced a host of stories about the teacher which took the form of the narrative gospels.

The writers of the narrative gospels used "Q" as a major source for their own work, but embellished the sayings with stories that reflected their particular view of Jesus' life as well as the political atmosphere which surrounded the early church. Mark was the first to write such a narrative, and subsequent writers used "Q" and Mark as their sources for further versions. Certain of these narratives were added to the Bible as the four canonical gospels, but the sayings gospel "Q" was lost to history sometime late in the first century. Modern researchers believe they have rediscovered the "Q" gospel, and in it they are coming to know a different Jesus than the one we find in the gospels. Burton Mack (1993) comments in *The Lost Gospel: Document Q*,

> The remarkable thing about the people of Q is that they were not Christians. They did not think of Jesus as a messiah or the Christ. They did not take his teachings as an indictment of Judaism. Instead, they thought of him as a teacher whose teachings made it possible to live with fervor in troubled times. Thus they did not gather to worship in his name, honor him as a god, or cultivate his memory through hymns, prayers, and rituals. They did not form a cult of the Christ such as the one that emerged. . . . None of this is reflected in the sayings gospel Q (p. 4).

Archeologists have discovered many other ancient writings in ruins, caves, and old monastery libraries that continue to add to our understanding of the life of Jesus. Two notable sources are the Dead Sea Scrolls from the ancient library at Qumran and the Coptic-Gnostic library at Nag Hammadi.

The Dead Sea Scrolls were discovered in 1947 in caves along the walls of the Wadi Qumran. The manuscripts date from three centuries before the birth of Jesus to

about the time Mark was writing his Gospel, around 70 AD. The scrolls consisted of the library of a branch of the Essene community; it appears the community hid their library out of fear during the rule of the Romans. The library at Nag Hammadi, a town in upper Egypt where thirteen papyrus codices were found, contained more than fifty treatises. This library was the collection of a group, assumed to be Christian Gnostics, who lived during the first two centuries after the birth of Jesus. The scrolls were apparently placed in safe hiding in the hope that one day they would be discovered.

Jesus' Youth

For a teacher as revered as Jesus, it's remarkable how little is known about his life. The date of his birth has not yet been universally accepted, but we know it was not Christmas day, 1 AD. The event appears to have taken place during the months of March or April sometime between 8 BC and 4 BC. The location is presumed to be Bethlehem of Judea. His Hebrew name was Yeshua, the silent "a" on the end signifying that he was a Galilean.

Jesus' father Joseph practiced carpentry in the small town of Nazareth. His mother, Mary, was born in Nazareth and was educated in the Jewish temple there. According to scripture, Jesus came from a noble and illustrious line which began with the Old Testament figure Abraham and continued through Isaac and Jacob to David the King, then through Solomon to Jacob, who fathered Joseph (Mt 1:1-17).

Jesus was born during a trip taken to Bethlehem in order that the family might pay their required taxes. The famous story of his birth tells how the couple was without shelter, having been turned away by various inn keepers, and so the child was born in a humble stable. The story also relates how many important personages attended the child

during the early days of his life, including three of the Persian Magi, or wise men who had predicted the birth of an important personage at that geographical location using their science of astrology. Jesus' birth aroused such attention that then ruler King Herod became threatened by it, assuming all the attention was directed toward a prophesied future king and therefore rival to his throne. As the family was returning to Nazareth, Joseph was led in a dream to escape into Egypt where the family resided for three years until the death of Herod in 4 BC. In the interim the ruler ordered the murder of all the male babies in the area who were two years old or younger in order to ensure that Jesus would not survive to overthrow his reign (Mt 2:1-16).

Jesus' Education

No existing records describe the education of Jesus. He is generally thought to have lived in Nazareth with his parents studying carpentry with his father, as would have been customary for a youth of his day. However, we do know something about the education a typical Jewish boy might have undergone. Instruction would have begun very early in life. The mother was always the Jewish boy's first teacher. She would have related the stories of the Jewish patriarchs and prophets, warriors and poets. The father was responsible for teaching the knowledge of the law. As soon as the child could speak, he would have begun to learn scriptures, short prayers, sayings and psalms. At age five or six he would have begun to attend one of the Jewish schools called "The House of the Book." There he would have been taught by rabbis (Hinsdale, 1895).

There is one reference in the gospels to Jesus' wisdom as a child. At the age of twelve the youth participated in the Jewish Passover held at the Temple of Jerusalem. The Gospel of Luke records that during this trip, Jesus remained in the temple in order to mingle with the scholars there. After listening to them discuss the weighty matters of

religion, Jesus began to discourse with his elders. According to the text, all who heard him were "astonished at his understanding and answers." His parents had begun their journey home without him; when they went back to get him they were met with his retort, "Wist ye not that I must be about my Father's business?" The boy returned to Nazareth with his parents, and the only other Gospel reference to his youth is again from Luke who says, "And Jesus increased in wisdom and stature, and in favor with God and man" (Lk 2:41-52).

According to B. A. Hinsdale in *Jesus as a Teacher* (1895), twelve was an important age for boys in the Jewish community. This was the age when Moses left the house of Pharaoh's daughter, Samuel heard the voice of God and Solomon gave his first judgment. This was the time that a Jewish boy was expected to begin working for his own support, when he would be allowed to join the army, and could even be promised in marriage. Hinsdale points out that, because of the extensive early education of Jewish youth, it might be expected that Jesus would have had some facility with the finer details of the Jewish faith. Josephus, famous Jewish historian of the time, said that he too, when he was fourteen, was commended by the high priests for his understanding of the law.

A few references outside of the traditional Jewish or Christian archives suggest that Jesus may have gained some of his wisdom from his travels abroad. There is a very strong British tradition that Jesus traveled with his uncle, Joseph of Arimathea, a well-to-do merchant, to the Isles, and that he attended school at one of the forty Druid universities there. Other records indicate that Jesus may have received a broadened education through travels to Egypt and India later in his youth. According to manuscripts written in Pali which have been kept at the Himis monastery in Leh, Ladakh (former location of the Palace of the Dalai Lama), Jesus visited the east after his twelfth birthday,

remaining there teaching and studying until age twenty-eight. In India he was called "Saint Issa" (Dobson, 1974; Lewis, 1955; Douglas, 1952).

Wandering Itinerant Teacher

About the age of thirty, according to Jewish sources and Christian scriptures, Jesus suddenly appeared on the scene in his home country, entering public life as a teacher and preacher to the Jewish people. The first recorded event was his baptism. According to Matthew (3:16), when Jesus was baptized by his cousin John the Baptist, a dove alighted on him. Thereafter Jesus gathered around himself a number of students, including twelve close disciples and at least seventy others. He attempted to return to his home town of Nazareth to teach, but like Pythagoras, was rejected there. He then went to Capernaum, where the mother-in-law of his disciple Peter lived. He stayed there for some time, continuing to teach. Scriptures report that Jesus had an ability to heal the sick, and so as he taught he also healed a number of people, and his celebrity grew very great.

Jesus never established a school with a philosophy, doctrine or special method of interpreting the Law. The teaching of Jesus was entirely unsystematic and nonformal. He held no regular classes, gave no formal lectures, had no logical divisions of his thought. Someone asked a question and he answered it. He walked through a field of grain and taught a lesson. He met a woman at a well and discussed things of the utmost importance to her.

Jesus' primary role was that of a traveling itinerant teacher. This teaching style was characterized by a teacher/disciple relationship of a very personal nature. Generally itinerant teachers wandered from city to city looking for students. During this era the summoning of disciples had become common in the Mediterranean. "The dynamics of

summons and response accompanied the social identity of a teacher from the fifth century BC onwards in Greco-Roman literature and culture," comments Robbins (1984) in *Jesus the Teacher* (1984). In fact, says Robbins, the "tradition of the teacher and his disciples provides the base for the development of the cultural and literary traditions" (p. 88).

As early as the writing of Plato's *Apology*, Socrates described the habit of some teachers of seeking young men to join up with them. It was common for these early teachers to travel around gathering disciples who sought their wisdom and hoped to attain virtue by their association. A wide variety of itinerant teachers were active throughout the Mediterranean world, producing a well-established cultural tradition of traveling teachers and disciples. According to the gospels, Jesus first called two brothers, Peter and Andrew and then another set of brothers, James and John, early in his ministry (Mt. 10:1-4). He also called others. In all twelve men opted to enter into a teacher/disciple relationship with Jesus (Mk 3:13, Lk 6:12-16).

What would make men leave their homes, families and livelihoods to study with someone they had just met? From extant records it is clear that Jesus had a distinctive and dynamic personality. He was vigorous, aggressive and challenging. There was a special power in Jesus and his daring ideas. Using strong language, he never minced matters. There was a force and a vitality about him that amounted to magnetism.

Teaching the Multitudes

Aside from his intimate disciples, Jesus was well-loved by thousands of others who attended his discourses. We know from Mark's gospel that when Jesus began to teach he caused a great stir, and "his fame spread abroad throughout all the region round about Galilee" (Mk 1:28). When the young teacher entered Capernaum, "many were gathered together, so that there was no longer room for them, not even about the door"

(Mk 2:2). His popularity so grew that once, at a lake, Jesus spoke from a boat, "because of the crowd, lest they should crush him" (Lu. 8:22); again, when his family came to speak with him, "a crowd was sitting about him," so that they could not reach him. Indeed, Mark says that "a great multitude from Galilee followed him, and from Judaea; and from Jerusalem, and from Idumaea, and from beyond Jordan: and they about Tyre and Sidon, a great multitude, when they had heard what great things he did, came unto him" (Mk 3:7-8).

Jesus' students were no special class of folk. They were anyone and everyone who would listen. Though all were welcomed and a variety came to listen, Jesus leaned chiefly toward the disenfranchised of the Roman empire—the poor, the outcasts, those considered sinners. As he explained, "They that are whole have no need of the physician, but they that are sick: I came not to call the righteous, but sinners to repentance" (Mk 2:17). This inclusiveness of Jesus, his lack of awareness of boundaries that typically hemmed people in, was one of his most characteristic qualities.

One gauge of the greatness of Jesus as a teacher was his accessibility. Men and women came to him at all hours of the day and night. And they came in secret: Nicodemus, the rich young ruler, the centurion, the Pharisees, children, harlots, officials. Students showed up when he walked, when he rested, when he sat down to eat.

Jesus also gathered a group of students who represented a radical break with the traditional teacher/disciple relationship. Several women were also part of his larger group referred to as the "seventy." Some had inherited property and they used it in part to support Jesus and his disciples. These included "women looking on afar off, among whom was Mary Magdalene, and Mary the mother of James the less and of Joses, and

Salome; (who also, when he was in Galilee, followed him, and ministered unto him;) and many other women which came up with him to Jerusalem" (Mk 15:40).

We tend to picture these women as providing services, like cooking, for the teacher and his disciples. But the fact is that these women were students in the full sense of the word. In the story of Martha and Mary in Luke 10:38-42, Mary is depicted sitting at Jesus' feet receiving personal instruction in the law. This makes it clear that the teacher considered her qualified for instruction. The Gnostic gospels are full of stories about Jesus' female students, and even the canonical gospels show Jesus defending the insight and deeds of women (Pagels, 1979).

Teaching Methods

Jesus' method of teaching can be characterized by adaptation. Jesus adapted his speaking to whatever group he faced at the moment, discoursing with the public differently than with his intimate disciples. The recently-discovered *Gospel of Philip* (57:28-58) contains this verse about Jesus' adaptability: "Jesus. . . did not appear as he was, but in the manner in which they would be able to see him. He appeared to them all. He appeared to the great as great. He appeared to the small as small. He appeared to the angels as an angel, and to men as a man" (Butcher, 1994, p. 102). Jesus didn't wait for his audience to come to him. He went to them. He abandoned the synagogues, traditional place for teaching, and went to where the people were, out in the open air. As a wandering itinerant Jesus taught in all kinds of circumstances: on a hillside, in a boat, along a highway, inside a home.

When he spoke Jesus focused on the experience of his hearers who were farmers, fishermen, shepherds, travelers and housewives. As Matthew points out, his teaching was pragmatic. The truth of his teachings was to be judged by the test of its practical value.

By concentrating on the human dilemma, Jesus taught people that their destiny was at stake in their ordinary, creaturely existence; in their domestic life, their economic reality and even in their social interactions. Jesus placed the point of contact with truth in the everyday world of human experience.

Jesus did not use a scholarly or technical language such as we find in philosophical writings of the time. When he talked about Jewish law or the scriptures, the teacher used words and images that would have been well known to his audience. Jesus expressed the most profound thoughts in the simplest language. He used a wealth of illustrations from nature and the mundane things of people's ordinary lives. His language was also extreme-extravagant, his figures of speech crammed with energy. A tremendous vigor, an exuberant vitality, surged through his words (Fosdick, 1947).

Metaphors, similes and paradoxes abound in his work. He employed sharp paradoxes and extreme exaggerations: "It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the Kingdom of God" (Mt 19:24). "Everyone who exalts himself will be humbled, and one who humbles himself will be exalted" (Mt 18:4). In Jesus' words a man with a log in his eye tries to pick a cinder out of his brother's eye (Mt 7:3). One asks for bread and is given a stone (Mt 7:9); he asks for fish and is given a snake (Mt 7:10). In the words of Jesus men strain out little gnats and gulp down big camels (Mt. 23:24).

Jesus' favorite rhetorical devise was the parable. Jesus' parables closely resembled the Jewish parables in vogue at the time. It was common in those days that, when people observed something they thought was worth contemplating, they would express it in parable or fable. While to most teachers the parable was a persuasive technique, to Jesus it was a fine art, and he was truly its master. When listening to Jesus'

parables one's ordinary perceptions are greatly tested. Full of puzzles and enigmas, they defy everyday logic and challenge understanding.

John Donahue (1988) gives insightful commentary on Jesus' use of this device: "At its simplest the parable is the metaphor or simile drawn from nature or common life, arresting the hearer by its vividness or strangeness, and leaving the mind in sufficient doubt about its precise application to tease it into active thought" (p. 19).

Donahue notes that Jesus' parables had a poetic and metaphoric quality. Metaphor comes from the Greek word *meta* meaning "across" or "over," and *pherein*, which means "carry or bring." It involves the transference of things proper to one reality over to another. The parables follow a pattern of orientation, disorientation, orientation. They present a paradox, a seeming absurdity, which conceals deeper truth: "whoever shall save his life shall lose it: and whosoever will lose his life. . . shall find it" (Mt 16:25). The fundamental message of Jesus's parables is that things are not as they seem. Ultimately the parable points beyond what is expressed to what is beyond expression. In metaphor two discrete elements are united by a point of comparison. The listener experiences a certain shock to the imagination which directly conveys a vision of what is signified.

Disciples and the Esoteric Method

Jesus used two methods of teaching: one, a popular method used in speaking to large audiences. Here he used concrete illustrations and told stories and parables. But like Pythagoras before him, Jesus also reserved an esoteric method for teaching his closest disciples. To them he presented more difficult matters. When he taught the twelve disciples and also the other seventy, Jesus gave more indepth explanation of his parables and teachings. He also taught them things which they were instructed never to reveal to the outer circle, as we can see in Mark 4:11-12, "Unto you it is given to know

the mystery of the kingdom of God: but unto them that are without, all these things are done in parables." And in John 21:25 we get the sense that the official canonical gospels only reveal a glimpse of the complete teachings of Jesus: "And there are also many other things which Jesus did, the which, if they should be written every one, I suppose that even the world itself could not contain the books that should be written."

Even though they were closer to their master, often even Jesus' disciples did not understand their teacher. For both the inner and outer circles, the parables served to provoke thought and encourage reflection. But despite their proximity to their teacher, the disciples were as bewildered as the rest by Jesus' parables. Instead of taking the moment of instruction to seek answers from within, the disciples insisted on being told what the difficult teachings meant, begging Jesus to explain them. Once Peter actually rebuked his teacher. We note the frustration in Jesus as he responds to Peter, "Are you also yet without understanding?" (Mt 15:16).

A Company of Friends

Ultimately Jesus' closest disciples became more than mere students. They became his dearest companions. They became his cabinet, his counselors, his friends. When life became too hurried and hectic, Jesus took them away "to a desert place," where they could "rest awhile" (Mk 6:31). He carried their personal needs upon his heart, saying to Peter, "I have prayed for thee" (Lk 22:32). Even when Judas gave him the traitor's kiss in the garden, Jesus asked him, "Friend, wherefore art thou come?" (Mt 26:50).

Jesus poured his heart out to those disciples. Their faith in him grew because of his faith in them; their gratitude to him was matched by his thankfulness for them. Sitting at table in the upper room, Jesus said to them, "I have desired to eat this Passover with you before I suffer" (Lk 22:15), and as the meal ended, his grateful affection overflowed: "You are those who have continued with me in my trials" (Lk 22:28).

William Burnham, author of *Great Teachers and Mental Health*, reflects on the gift of friendship engendered by this teacher/student relationship:

> Teaching is the giving of a great transcendent gift, namely, the gift of knowledge and wisdom. Gifts can only be given . . . between friends. As Robert Louis Stevenson has pointed out, we are willing to receive presents only from our friends. This conception of a gift as merely something between intimate friends seems to apply to this function of teaching as it was looked upon by Jesus. Only to his intimate friends would he impart instruction in regard to the more difficult problems of life and work; only to them give the greatest gifts (p. 58).

That all warmly felt the impact of Jesus' friendship is clear. In John's Gospel these words pour from Jesus' lips, "Henceforth I call you not servants . . . but I have called you friends" (Jn 15:15).

Jesus' Philosophy of Education

What can we learn about Jesus' philosophy of education from his use of parables and from his dealings with the multitudes and his close disciples? Jesus did not simply teach people truths of folk wisdom they had already heard from others, nor was he interested in giving his hearers new information; he was interested in giving them a new way of looking at information. He was not even interested in increasing their knowledge; he was interested in increasing their understanding.

In effect, throughout all of his teaching, Jesus challenged old ways of thinking and acting and tried to teach people to discover the truth that resides within them. What mattered to Jesus was the inner illumination of the individual. Like the great teachers before him, Jesus put the emphasis distinctly on training the individual to do his or her own thinking.

A primary theme in Jesus' teachings provides another clue to his belief about how the individual learns and processes knowledge: the coming of the kingdom of heaven and what men must do to prepare for it.

An ancient Jewish tradition purports that when one prays, one is taking upon himself what was called "the kingdom of heaven." This was not a physical kingdom nor a political regime. This kingdom was a metaphor for a state of consciousness. To the Jews this kingdom existed in the mind and heart and had nothing to do with their state of entrapment under Roman rule. Jesus employed this term in this same sense, and in fact, finding and becoming one with this kingdom became the major focus of his discourses. To Jesus the work of one's lifetime was to discover this kingdom and bring it into complete realization within one's self (Flusser, 1987).

The Canonical gospels Matthew, Luke, and Mark verify that Jesus often spoke of the coming kingdom. Mark makes it clear that the disciples thought of this kingdom as a future happening and expected it to come as a cataclysmic event in their own lifetimes. Jesus told some of them they would live to see "the kingdom of God come with power" (Mk 9:1), though he also indicated that it was already at hand.

With recent discoveries of ancient texts, new light has been shed on Jesus' use of the term "kingdom." When the people asked their teacher directly when the kingdom would come, Jesus' answer indicated that his idea of this kingdom was far from physical. His response as recorded in the *Gospel of Thomas*: "If those who lead you say to you, 'Look, the kingdom is in the sky,' then the birds will arrive there before you. If they say to you, 'It is in the sea,' then the fish will arrive before you." Jesus continues, "It will not come by waiting for it. It will not be a matter of saying 'Here it is' or 'There it is.' Rather the kingdom of the Father is spread out upon the earth, and men do not see it" (Pagels,

1979, p. 128). This is very similar to the answer we find in the canonical Gospel of Luke: "The kingdom of God cometh not with observation: neither shall they say, Lo here! or Lo there!" (Lk 17:20). Jesus' view of the immediacy of this kingdom is consistent with an ancient Jewish text which reads,

> For this commandment which I command thee this day, it is not hidden from thee, neither is it far off. It is not in heaven, that thou should say, who shall go up for us to heaven, and bring it unto us, that we may hear it, and do it? Neither is it beyond the sea, that thou shouldest say, Who shall go over the sea for us, and bring it unto us, that we may hear it, and do it.? But the word is very nigh unto thee, in thy mouth, and in thy heart, that thou mayest do it (Deuteronomy 30:11-14).

It's clear that Jesus believed this kingdom to be a point of consciousness where liberation occurs not through events in history, but through internal transformation. To Jesus this kingdom is one's own reality. In fact, Jesus' most definitive statement on the kingdom implies as much: "The kingdom of God is within you" (Lk 17:21).

Several statements attributed to Jesus in the texts from Qumran and Nag Hammadhi amplify this interpretation. In the *Gospel of Thomas* Jesus is quoted as saying,

> The Kingdom is inside of you, and it is outside of you. When you come to know yourselves, then you will be known . . . But if you will not know yourselves, you dwell in poverty and it is you who are that poverty.
>
> When you make the two one; and when you make the inside like the outside and the outside like the inside, and the above like the below. . .then you will enter the Kingdom (Pagels, 1979, 128-129).

Jesus' concentration on the kingdom as a type of consciousness was the primary element that set him apart from other Jewish teachers of the time. His goal as teacher was not that his students would rely on him or his interpretations in making their

decisions. Nor was it that they should search the scriptures to discover truth. Jesus believed that a person's own truth, garnered from a search of his or her own conscience, was their only true and valid wisdom. The place of the teacher was to be the example of one in contact with their inner truth, who was fearless in defending it. Jesus was the superb example of one who spoke with the authority of his own conscience.

To observe this in Jesus's method, one has only to note the number of occasions when Jesus refused to give in to the disciples' demands to have the parables or the mysteries explained to them. According to the *Gospel of Thomas*, Jesus insisted that students must validate their own experiences for themselves. He refused to answer their questions, directing them instead to their inner selves, to discover the resources hidden within (Pagels, 1979; Butcher, 1994).

In one amusing incident recorded in the *Gospel of Thomas*, the disciples asked Jesus to tell them what to do. They questioned him and said to him, "Do you want us to fast? How shall we pray? Shall we give alms? What diet shall we observe?" Jesus would only comment, "Do not tell lies, and do not do what you hate . . ." (p.135). As Elaine Pagels (1979) notes, Jesus' ironic answer turns them back upon themselves: "Who but oneself can judge when one is lying or what one hates?" (p. 135).

Learning from One's Own Inner Teacher

Jesus appeared to share with psychotherapy the belief that the psyche hears within itself the potential for liberation or destruction. As Pagels (1979) points out, few psychiatrists would disagree with the saying attributed to Jesus in the *Gospel of Thomas*: "If you bring forth what is within you, what you bring forth will save you. If you do not bring forth what is within you, what you do not bring forth will destroy you" (p. 126).

With this understanding of Jesus' belief that wisdom comes forth from the self, we are better able to understand some of his comments which imply that the ultimate end of learning is to overcome completely the need for the outer teacher. The purpose for accepting the authority of a teacher is to so well learn from him or her as to eventually outgrow the teacher altogether. The disciple who comes to know himself can discover what even the teacher cannot teach. According to *The Testimony of Truth*, the student becomes a "disciple of his [own] mind" by discovering that his own mind "is the father of the truth" (Pagels, 1979, p. 132). And then, according to Jesus, the disciple can go forth and perform even greater works than did his or her teacher (Jn 14:12).

In one of the most interesting passages from the Gnostic texts, Jesus is portrayed asking his disciples, "Compare me to someone and tell me whom I am like." Simon Peter said to him, "You are like a righteous angel." Matthew said to him, "You are like a wise philosopher." Thomas said to him, "Master, my mouth is wholly incapable of saying whom you are like." In answer to this Jesus addressed Thomas, "I am not your master. Because you have drunk, you have become drunk from the bubbling stream which I have measured out" (Pagels, 1979, p. 130). Elaine Pagels (1979) provides an insightful interpretation of the passage: Peter and Matthew represent an inferior level of understanding about the role of their teacher. "Thomas, who recognizes that he cannot assign any specific role to Jesus, transcends, at this moment of recognition, the relation of student to master. He becomes himself like the 'living Jesus,' who declares, 'Whoever will drink from my mouth will become as I am, and I myself will become that person, and the things that are hidden will be revealed to him'" (p. 130).

Death of Jesus

In the end Jesus' great popularity may have added to his downfall. At age thirty-three, during a stay in Jerusalem, Jesus was confronted by the Jewish leadership and the High Priests who became enangered because he had openly rebuked them in his discourses. Jesus was captured by the Sadducees, handed over to the Romans, and sentenced to death by Roman procurator Pontius Pilate. He suffered a gruesome death through crucifixion and was left to die hanging on the cross. After his death, Jesus' cousin Joseph of Arimathea and his student Nicodemus took his body down from the cross and placed it in a seplicur.

According to Christian scripture, three days later Jesus appeared to some of his close disciples, his body having been resurrected. The book of Acts (1:3) reports that Jesus continued teaching his inner group of disciples for several days after his resurrection, the group meeting in the upper room of the home of one of his students. According to the Gospels, shortly afterwards Jesus ascended into heaven in clear view of a number of witnesses. Upon the ascension of their teacher, several of his close disciples became empowered to undertake their own teaching missions.

This version of Jesus' passing is contradicted by first and second-century writers who state that Jesus remained a number of years on earth after his resurrection, and that he continued to teach certain select disciples. The belief in a post-resurrectional teaching appears to have been widespread (Mead & Russell, 1984). Church Father Irenaeus asserts the Jesus lived for at least twenty years after his resurrection:

> On completing His thirtieth year He suffered, being in fact still a young man, and who had by no means attained to advanced age. Now, that the first stage of early life embraces thirty years, and that this extends onwards to the fortieth year, every one will admit; but from the fortieth and fiftieth

> year a man begins to decline towards old age, which our Lord possessed while He still fulfilled the office of a Teacher, even as the Gospel and all the elders testify; those who were conversant in Asia with John, the disciple of the Lord, [affirming] that John conveyed to them that information (Roberts & Donaldson, 1981, pp. 391-92).

This view is supported by third-century Gnostic text *Pistis Sophia*, which states, "It came to pass, when Jesus had risen from the dead, that he passed eleven years discoursing with his disciples and instructing them . . . " (Mead and Russell, 1984, p. 1). Other works of that period also confirm the idea of a long interval of teaching after Jesus' resurrection and ascension (Legge, 1964).

Lasting Influence

Jesus came on the scene with a simple appeal which eventually altered the shape of the world. His influence has been remarkable. Jesus spent his life in relative obscurity, barely noticed by the world outside of his own Jewish community. He had influence on a small group of twelve close students, another group of about seventy students, and a nondescript multitude. But something about Jesus' instruction and understanding of human nature has allowed him to speak to "everyman" for generations.

Jesus, who is traditionally thought to have taught for no more than three years, has now become the most well-known teacher in earth's history. More has been said about him than about any other teacher before or since. Mostly he is known because of the religion that sprang up around him. After Jesus' death his followers declared their belief that their teacher had come as the promised messiah to the Jewish people. Hence they began to call him Jesus the *Christ*, which was Greek for "messiah." But, though Jesus was its founder, he is only one component of the Christian religion. Overlaid upon his ideas have come concepts and policies which were devised later as the church became a political force. In some ways Jesus' real life activities have remained in obscurity as the

records of his life have been edited and rewritten down the centuries. Even Jesus' concept of the kingdom as consciousness has largely been lost to subsequent generations. As Karl Jaspers (1957) pointed out, when the world didn't end with the coming of a new political kingdom, as the members of the early church believed it would, the use of the term kingdom was changed to reflect a belief in a future coming kingdom in the apocalyptic sense.

The beauty of Jesus' personal message and wisdom has lived on and continued to grow. His parables have facilitated the communication of myriad spiritual messages over the last two thousand years without ever becoming exhausted of their brilliance. His message of a simple promise of dignity for those who have been denied respect, and of the possibility of personal attainment, continue to hold out hope to people everywhere.

Jesus' Educational Legacy

1. In the history of education, Jesus stands at the mid-point between the old world and new. He took the best of the old rhetorical tradition—it's powerful oratory, its use of rhetorical devices, its disciple/student relationship—and proved to be their master. But his educational philosophy went far beyond the old and became a thrust of new potentialities for learners.

2. In Jesus we note a respect for both halves of the disciple/teacher relationship. In his role as teacher, Jesus exemplified the path of the self-enlightened. He was the embodiment of the kingdom he believed existed for all: the consciousness of truth. In Jesus truth had a powerful spokesman, fearless before those who would muzzle the heart and mind and voice of that conscience in anyone who would speak it. As a teacher, he was there to give instruction about how a student should live his or her life, but always encouraging the student to finally become

the example for himself. In Jesus the student and the teacher became two halves of a whole; like the Greek Alpha and Omega or the Chinese Tai Chi, in him the two eventually become one.

3. Jesus' greatest legacy as a teacher is that he showed all how to contact the place inside where one can truly learn from one's own inner teacher. Within his religious tradition that inner teacher was recognized as God. Jesus contacted and learned to communicate with that inner teacher, and he opened the door for any and all who wished to follow after him. And this is the miracle of Jesus' gift: that today millions maintain a teacher/student relationship with Jesus himself. Like Saul of Tarsus who began his relationship with Jesus after the master's death, multitudinous numbers of people who have never set eyes on a physical Jesus declare their allegiance to him as their teacher. They still come to him at night and in the secret places of their hearts. They still ask him questions and he still answers them, sometimes with sweet words and hope; other times in the paradoxes of their everyday lives. And for each the opportunity still exists for the dual experience of having the teacher, and of becoming the teacher.

AURELIUS AUGUSTINE

Augustine's influence seems to have been inexhaustible. Countless educators and philosophers have been influenced by his ideas. Aurelius Augustine is recognized as the one who brought to the moral and religious tradition of the church an appreciation for the aspect of liberal education handed down from the Greeks which he saw as an important component in Christian education. His educational philosophy is important because it stimulated and guided the development of Christian humanism, which ultimately became the educational ideal of Western Europe (Deighton, 1971). Augustine was a prolific writer and is credited with voluminous large works as well as informal letters and sermons. Although many deal with church doctrine, much is to be gleaned by educators from Augustine's understanding of how students learn and the place of the teacher in the acceleration of a student's learning.

Life of Augustine

Augustine was a provincial country boy born of Roman parents on November 13, 354 AD in Thagaste, a small Numidian town in the Roman province of North Africa. Thagaste was a crossroads for trading in what is now eastern Algeria at Souk-Ahras. Augustine's father Patricius was the curial, or lesser official, of his town. He died in 371 when Augustine was only a teenager beset with adolescent problems. His mother Monica was left to raise two sons and a daughter alone.

Though his father was a pagan, Monica imbued Augustine's early years with Christian impressions which never completely vanished from his consciousness, though in his youth he wandered far afield from the faith. She enrolled him in the catechumens

and throughout his wayward youth poured forth prayers and tears that God would enlighten her son.

Augustine's formal education consisted of classical training in his native city and later in Madaura and Carthage. He completed the three stages of Roman education which consisted of elementary school, grammar school, and in preparation for a life of public speaking, the school of rhetoric. A highly sensitive and bookish boy, Augustine later looked back on his school days as a miserable experience, valuable only as training for the conflicts, injustices, and disappointments of adult life. He felt he had largely educated himself by reading great authors (Chadwick, 1986). At seventeen he began his studies in logic, music, mathematics and astronomy at the university in Carthage.

There, while pursuing his liberal studies with eminent success, he was lured by rebellious companions into a life of indulgence which he later graphically described in his Confessions. During this period, while leading the licentious life of a pagan, Augustine entered into relations with a woman to whom he remained faithful, though not constant, until the two parted company in 385. She bore him a son, Adeodatus, in 372 (Walsh, 1991).

At nineteen, after reading Cicero's exhortation, *Hortensius*, Augustine awakened to the philosophical life and a desire for knowledge that would lead him from superficial understanding to the essence of truth. He became consumed with the love of wisdom and in search of such he hastened to the Scriptures. But he was disappointed with its simplicity. He was looking for something deeper. He joined the Manichaeans hoping he would find there greater understanding of the truth for which he longed (Garvey, 1973).

The Manichaeans taught a metaphysical and religious dualism consisting of two primary principles: God, the cause of all good; and matter, the cause of all evil

(Walsh, 1991). During his nine years of adherence to the Manichaean doctrine, Augustine had become troubled by major discrepancies and sharp inconsistencies. He questioned members of the sect for explanations but was told that Faustus, the leading Manichaean teacher, held the answers. Augustine finally met Faustus and was impressed with his speaking abilities and charisma, but private discussions yielded unsatisfying answers to his questions. Augustine became disillusioned with the sect. Overwhelmed and disappointed, he despaired of ever finding the truth and turned to the New Academy, whose most famous member was Carneades.

The philosophy of the New Academy was characterized by skepticism. Adherents believed that it is impossible for man to discover even a grain of truth and that probability, in the realm of knowledge, is all man can hope to attain. The "old" Academy of Plato taught that it is impossible to acquire truth through the senses, but the New Academy doubted even the possibility of obtaining it through the intellect (Garvey, 1973).

When Augustine was around thirty two years old Monica followed him to Milan in an effort to convince him to marry the woman who had fathered his child. He chose neither marriage nor continence. His moral, intellectual and spiritual struggle continued.

Soon after, an African named Pontitian came to visit Augustine and his friend, Alipius. At the time Augustine was thirty-two years old. Seeing a book of St. Paul's epistles on the table, Pontitian began to talk about St. Anthony. Surprised to find that neither man had heard of the saint, Pontitian explained that two men had been converted to the Christian life by reading the life of this great saint. After Pontitian left, Augustine went for a walk in the garden. He struggled with his desire for chastity as contrasted with the memory of his licentious ways. Throwing himself on the ground under a tree he cried

out, "How long, O Lord? Wilt thou be angry forever? Remember not my past iniquities!" (Walsh, 1991, p. 267). At that moment Augustine heard the voice of a child sing to him, *Tolle lege! Tolle lege!* ("Take up and read, take up and read.") (Walsh, 1991, p. 267). Augustine returned to the house and opened the epistles of St. Paul. His eyes first alighted on the passage, "Not in rioting and in drunkenness; not in chambering and impurities; not in contention and envy; but put ye on the Lord Jesus Christ, and make not provision for the flesh in its concupiscences" (Ro 13:13-14 in Walsh, 1991, p. 268). He then showed the passage to Alipius, who read the next line, "Him that is weak in faith, take unto you" (Ro 14:1 in Walsh, 1991, p. 268). Alipius applied this to himself and joined Augustine in his conversion to the Catholic faith. Together they told Monica, who rejoiced and praised God. Augustine was baptized on Easter-eve in 387 AD. His friend Alipius and his beloved son, Adeodatus, who was about 15 years of age, were also with him that day (Garvey, 1957, Walsh, 1991).

Augustine's Teaching Career

Around 380 Augustine opened a school of rhetoric at Carthage, but the unruly conduct of the pupils and his disillusionment with the Manichaeans induced him to leave Africa. In 384 he opened another school in Rome, a private school for the teaching of rhetoric. He gathered together in his home a few students who had come to know him. However, a trend was growing in Rome for young men to sit at the feet of a teacher for a period of time and then transfer to another to avoid paying teacher's fees. Unhappy with this practice, Augustine moved from Rome to Milan. His appointment to the Imperial Chair of Rhetoric in Milan brought him to the peak of his secular career (Howie, 1969).

As a master of rhetoric, he was well respected by Ambrose, the Bishop of Milan. Augustine also respected Ambrose and desired to know him, not as a teacher, but as a

person of great learning and reputation. He listened to his sermons at first for their eloquence, but soon they began to make an impression upon him. At about this same time Augustine found the Neo-Platonists with their view of the transcendence of God and the concept of emanation (Walsh, 1991).

Until this time, Augustine had been searching for truth in the physical, material realm. The Platonists taught the search for immaterial truth. Through them he was able to take the leap from a focus on simple bodily existence to a more philosophical life.

At the time of his conversion Augustine was established as a master of literature and rhetorical style. Had he gone on to fulfill the secular career of which he dreamed, his name might been have lost to posterity. However, his conversion proved to be a turning point in his career. Augustine withdrew the service of his tongue from the speech market. He realized that he could no longer offer eloquence for sale to the highest bidder, but he was compelled to use it freely in the cause of truth. Thus, he gave up his secular office of public orator and devoted himself to preparation for the exercise of more rewarding service (Howie, 1969).

Augustine's Monastic Learning Communities

For a seven-month period between his conversion and baptism, Augustine stayed at a small country estate at Cassiciacum. This period offered him a time of respite and recreation following the tension of his 15 year struggle with himself.

Augustine had drawn to himself a few close friends and pupils, among them his mother, Monica; his son, Adeodatus; and his brother, Navigius and Alipius. The four spent their days partly in practical tasks and partly in intellectual ones as they altered between active physical work on the estate and philosophical discussions. Here, in secluded peace, the friends met each day in earnest discussion of the questions of truth.

Their medium was the world of classical culture. The philosophical debates which took place here were recorded by a stenographer and have come down as the Cassiciacum dialogues. They were published under the titles *Against the Academics*, *Of the Happy Life* and *Of Order*. These, the earliest of Augustine's writings, are a demonstration of the Socratic method of teaching in which the teacher puts questions to students who individually respond to them.

Conducted in the meadows under the blue sky of the Milanese countryside, or in the bath-house when the weather was cold, these discussions also provide an excellent practical demonstration of group learning. Subjects of discussion arose out of participant interest. The informal setting encouraged everyone to join in. Even Augustine's mother, who otherwise was concerned with household affairs, participated. Augustine would express spontaneous delight when one of his young pupils revealed some fresh thought. In his writings Augustine illustrated his observation that these external conversations were merely a reflection of an internal process that went on within the minds and hearts of his students. Augustine's outer questions served as a catalyst to an inner dialogue that was carried on within the student, and often thinking on the subject continued long into the night after the discussions had ceased (Howie, 1969).

After his baptism Augustine returned to Africa. He traveled with his mother and a few friends to Ostia. His mother died there in November of 387. For a short period Augustine returned to Rome, but in 388 he moved permanently back to Africa where he spent the rest of his life.

For three years he lived in Thagaste where he converted his father's house into a religious-philosophical community. He served God through "fasting, prayer, good works, meditating upon His law and instructing others by his discourses and books"

(Walsh, p. 268). In his community, all property was held in common, and he claimed no personal ownership of anything for himself. His fame for asceticism and learning made him so much sought after that he was made a priest and assistant to Valerius, Bishop of Hippo, in 391 (Deighton, 1971; Walsh, 1991).

Upon ordination Augustine was reassigned to Hippo. Alipius and some of his students accompanied him and helped him set up a monastery in the house adjoining the church. There he continued teaching in the style of his previous community, basing it on the principles and ideals he had established at Thagaste. In the small clergy-house which he established at Hippo, there was no systematic teaching, nor did he demand any in the monasteries which he encouraged. During this time he devoted whatever time he could spare from his ecclesiastical duties to combating heresies and to literary pursuits (Garvey, 1957; Walsh, 1991).

In 395 Augustine succeeded Velarius as Bishop of Hippo. During his thirty-five years as Bishop he continued his opposition to heresies and wrote letters and sermons in defense of the faith. It was during this sojourn in Hippo, a relatively insignificant post, that Augustine began to exert a world-wide influence. When Alaric and the Vandals plundered Rome, pagans accused the Church of ruining their city and blamed it for the calamities that came upon the empire. They contended that because the Roman people had forsaken the old gods, those gods had forsaken them. The faith of many Christians was shaken. Augustine wrote *Of the City of God* to answer their charges and as an expression of his political ideals. In this work Augustine alleges that, since the time of Cain and Abel, there have been two states of existence, the worldly state of materialism and sin (Cain's), and the divine state of being pleasing to God (Abel's). In the first, people build communities that wage war and follow a life of licentiousness. In the

second, people build communities of faith and encourage each other to live according to God's will. For Augustine, these two cities represented the perpetual antagonism between church and state (Ulrich, 1947 ; Jaspers, 1962).

Augustine's power within the church grew to such an extent that he began to influence its doctrine and dogma. After his conversion Augustine turned against all the pagan ideas he had previously believed in. He dedicated his life with renewed fervor to overthrowing heretics and what he considered to be heretical ideas. Unfortunately, some of the doctrines he is credited with creating for the church actually hampered the progress of learning and knowledge. The most infamous of Augustine's doctrines became the cornerstone of Christian theology—the doctrine of original sin.

Augustine's doctrine of original sin was offered to answer the question of what happens to babies when they die. The church taught that these innocents go to hell if they die before they are baptized. Why? Some within the church argued that this was an incorrect teaching, that a just God would not treat the innocent so harshly. Some in the church believed in the preexistence of the soul, and some still believed in reincarnation. Origin of Alexandria is the most well known of the early Church fathers to teach reincarnation. Ultimately church hierarchy overturned this belief and anathematized Origin and his writings. Augustine had likely believed in reincarnation in his youth (reincarnation was an accepted tenet of the Manichaeans). Those who still accepted reincarnation would have argued that if children went to hell at death, it was because they had sinned in a previous life.

Though at one time in his life Augustine might have been able to accept this logic, after his conversion he could no longer tolerate such thinking. Determined to come up with an explanation for why tiny babies would go to hell upon their death, Augustine

reasoned that it was due to the fact that their ancestors had sinned. The babies were born sinful, not because they had sinned in a previous life, but because their ancestors, Adam and Eve, had sinned.

When Adam and Even bit into the apple, said Augustine, their sin was so strong that it affected their offspring. Somehow that sin has been passed down to every one of their descendents. Augustine argued that Jesus brought redemption from this original sin because he was the only man born free of this sin. How? Because he wasn't created out of the union of man with woman. It didn't matter to Augustine that neither of these concepts came from Jesus: Jesus never claimed a special birth; this was invented centuries after Jesus lived. Or that Jesus never taught this doctrine of original sin. This entire concept was invented by Augustine out of the fabric of his own mind.

Augustine created other doctrines. He also invented the doctrine of predestination The idea of predestination purports that even before a person is born, God has determined how far that person will go in life, what they will be like, what opportunities they will have and when they will die. This doctrine was long held by the Church but it has since been retracted. Each of these doctrines became a powerful force within the church, but the doctrine of original sin has had the most profound influence on later generations.

Such thinking places severe limits on person's desire to learn. Why bother to become a lifelong learner if God has already predetermined how much you can expand your horizons? Augustine's involvement in the politics of the church and his ambition to ascend in the ranks of power blinded him to the devastating effects of any dogma that would control or limit the potential of learners. Though he had personally had the opportunity to try out various philosophical attitudes before he became a Christian, now he would limit, by establishing absolutes in the form of doctrines, the ability of

individuals to go directly to the source of wisdom to get their own understanding. Ultimately church doctrine had the effect of halting personal communion with wisdom. Original sin inhibits direct communion because it makes people feel unworthy; this unworthiness allowed the priests to become the intercessors. Within a short period of time the priests took all knowledge to themselves and the people lost their direct contact with truth.

Augustine's Educational Philosophy

Only three of St. Augustine's works deal specifically with educational theory. The first of these, *The Teacher (De Magistro)*, deals with the problem of communication between teacher and pupil. It is based on dialogues he had with his son in which they discoursed on the processes of learning and teaching. The second is *Christian Education (De Doctrina Christiana)* and the third is *The Instruction of the Uninstructed (De Catechgizandis Rudibus)*. Of the last two, the former deals with the problem of the Christian curriculum, the latter with the principles of teaching to be observed by the Christian teacher when he instructs those who come to seek an understanding of the faith (Howie, 1969). Augustine also left a prolific library of writings on religious and philosophical matters.

Augustine was very taken with the philosophy and practice of Plato and the ancient Greeks. He tried to inculcate them into his life as much as his Christian faith would permit. He shared with Plato the desire to know the essence of truth. But his primary concern was with the problem of his own destiny and, because the knowledge of truth is essential to happiness, he sought truth with a vengeance, hoping to find therein personal happiness. To Augustine, essential to the process of finding truth was discovering one's true self (Gilson, 1983). He stands with most of the other teachers in

his belief that happiness is man's primary goal and desire; happiness is the attainment of one's chief good. But for Augustine the chief good is to be found, not within man, but in God. In Augustine's doctrine, the realization of wisdom—the aim of philosophy—is always associated with happiness (Bourke, 1984; Nash, 1969).

Augustine's theory of knowledge and wisdom is best understood within the context of Plato and Plotinus who believed that all reality is gleaned from the eternal. Augustine differentiates between wisdom and knowledge as two distinct functions of man's reasoning. Wisdom to him is "the intellectual understanding of eternal things" while knowledge is "the rational knowledge of temporal things" (Howie, 1969, P. 11). Wisdom can be attained only by intellectual inquiry, whereas knowledge is available from sense perception. Wisdom is acquired through higher reason and knowledge is acquired through lower reason. Wisdom is that attribute of man's soul that enables him to understand eternal truths, while knowledge prepares the soul to understand temporal things (Bourke, 1984; Nash, 1969).

Acquiring wisdom requires three attributes: study, faith and good morals. It is necessary to apply oneself through deep thought and investigation to obtain understanding. For Augustine, "To become wise is not simply to acquire knowledge but to grow in virtue. The culmination of a life of faith, continuous searching, and good behavior, lies in the grasping of wisdom itself" (Bourke, p. 57). To receive wisdom one should live a virtuous life. In this way God will draw that one closer to him and will shed the light of wisdom upon him. The search, or the process of striving to learn, is the key. By searching for truth one strives to become closer to God. One cannot get close to God living a licentious life; this would be akin to tugging on the hem of God's garment and

pulling God down to one's consciousness. But God can illumine and raise up the virtuous soul closer to the truth.

Augustine modified Plato's concept of the realm of pure forms so that it would fit within the Christian teaching on divine revelation (Gilson, 1983). Plato taught that opinions are the result of sensory experience in a changeable world, but that true knowledge transcends sensory experience and partakes of eternal ideas such as beauty, justice, freedom, etc. These forms are unchangeable in their truth so they cannot be derived from the world of the senses which is changeable. For Plato, the recognition of these forms was via recollection from past existence.

Augustine rejected the notion of preexistence espoused by Plato and Pythagoras as being an illusion of the memory or a false remembrance, akin to the material of dreams. He never accepted Plato's concept that true ideas are inherent or innate within the soul. Instead he spoke of an inner illumination that comes to the seeker from "God, the sun of souls" (Chadwick, 1986, p. 49). His "doctrine of divine illumination" supposes that no one may acquire wisdom by himself, that it always appears as the Creator's gift (Chadwick, 1986). It is only through the agency of God's help that wisdom can be produced in man. God puts wisdom into the waiting heart. How God does this is a mystery, but Augustine attempted to illustrate it through an analogy of the sun: just as the suns rays expand outward and illumine objects, so God sends out his light to illumine our consciousness. This illumination is not temporal or of the senses; it does not involve facts. It is rather a sense of discretion which infiltrates the deeper levels of the personality (Chadwick, 1986).

For Augustine, learning occurs when the learner, upon being offered an idea by a human teacher or some experience, evaluates it as having a certain level of truth. He

literally transcends the sensory world and experiences the truth of the experience in the interior:

> For Augustine, this ability of man to attain transcendent truth in this everchanging world of sensory experience is proof of man's essentially spiritual nature and his relation to God. Only a spiritual soul which is related to an immutable and eternal God could perceive immutable and eternal truth. Therefore in its ability to evaluate the truth of that which has been presented to it, the mind must be illuminated by the wisdom of God who is the source of truth. God is seen as the interior teacher in the light of whose wisdom a man can judge the truth of ideas (Jackson, 1973, p. 113).

Augustine leaves no question about his belief that there can be only one teacher—unchangeable truth, eternal wisdom—who resides in the interior man. The external teacher is not the source of his learning; this and his interior standard of measurement are provided by his interior teacher.

Augustine expounded upon the insufficiency of words to communicate true knowledge. He used this as a way of proving that teachers do not really change the minds of their listeners. Unless the learner already knows the meaning of the words he is hearing, he will not understand them. Therefore, if he understands, then the teacher has not taught him anything; the student has simply brought what the teacher has said to remembrance within him. The learner has taught himself while being guided by the teacher. In Augustine's own words,

> But when teachers have made use of words to explain all those branches of learning which they profess to be teaching, even those dealing with virtue and wisdom, then those who are known as pupils reflect within themselves whether what has been said is true, contemplating, that is, that inner truth according to their capacity. It is then, therefore, that they learn. . . . But men make the mistake of calling people "teachers" when they are not that at all, because there is generally no interval of time between the moment of speaking and that of knowing, and because their coming to

> learn from within follows quickly upon the suggestive force of the speaker's words, they think that they have learned externally from him who spoke those words (Augustine in Jackson, 1973, p. 110).

This illumination of the mind that Augustine speaks of is a sense of discretion that penetrates deeper levels of the personality (Chadwick, 1986).

What can a teacher do, then, for a student? Augustine believed in and advocated an authentic place for the external teacher. The teacher guides the learner in his search for truth. Augustine felt strongly that acquiring knowledge through learning requires personal involvement and a deep desire to learn The teacher doesn't impart knowledge from his mind into his pupil's mind; the teacher rather stimulates introspection within the learner so that he, in effect, becomes his own teacher (Howie, 1969). The primary activity of the teacher is to stimulate the learner to remember what he has forgotten, or to investigate what he has not understood. The teacher reminds the student to attend to certain things, giving him food for thought, pointing out distinctions and similarities. He recognizes the readiness of the student to learn, and helps him to build confidence in his search for truth, offering praise and encouragement along the way (Bodin, 1983).

For Augustine the best method for guiding the learner's reasoning process is through engaging him in dialog, through questioning him.

> This external teacher should never lose sight of the fact that he is limited to forms of assistance such as those mentioned above. He should be fully cognizant that at no time is he the direct cause of knowledge in the other who learns from the truth which teaches [him] within as he listens to words from without. If the teacher forgets his role and acts as though he is transmitting knowledge, the student is motivated to believe that storing up what he had heard is the same thing as storing up knowledge. He will fail to make the necessary distinction between what he knows and what he believes, doubts, opines, and so on (Bodin, 1983, p. 99).

Augustine was not in favor of rote memorization or what he called "hateful chanting" (Howie, 1969, p. 13).

> Under the promise of reward or the threat of punishment, his pupils may commit his words to memory, but at best they know only the sound of the words and do not necessarily gain any clear idea of their meaning; rote memorizing is a mere mockery of education, which must be vitally concerned with the development of understanding (Howie, 1969, p. 14).

Augustine gives a definitive statement of the starting point and final aim of education. Learning must begin with an exploration of the self; it culminates in an understanding of the nature of God: "Inquiry has a double objective—God and my soul" (Howie, 1969, p. 5). According to Augustine, persistent self-questioning is the only method of true education. External teachers and formal instruction play only a minor part. Learning is accomplished by the personal activity of the learner through an inner, voluntary movement of the mind (Howie, 1969).

In his dialogue *The Teacher*, Augustine postulates that teaching and learning are not two separate activities, but one. In the educational process, the teacher and learner become inseparable. Both teacher and student teach and learn from each other. Teaching/learning is a mutual exchange. Together the teacher and student can experience divine illumination as they share mind-to-mind. Truth is communicated through an intangible, indescribable experience of the interaction of mind with mind, for only mind can know mind. The ultimate power of mutual understanding between friends, he believed, is brought about by a common participation in divine reason (Bodin, 1983). When we speak with another as teacher to student,

> we see immediately in that interior light of truth. . . our hearer, if he also himself sees those things with his inner and pure eye, knows that of which [we] speak by means of his own contemplation, but not through [our] words. . . but by means of the things themselves which God reveals within the soul (Bodin, 1983, p. 63).

The teacher can kindle or inspire this deep desire for learning only if he has divine love for his students (Howie, 1969). The teacher must meet his student with the love of a mother, a brother or a father. And this love must be reciprocal, culminating in a close meeting of minds. They must "have their dwelling in each other" (Howie, 1969).

Through this relationship the teacher becomes the learner as he acquires new insights into familiar concepts through the reaction he draws forth from his pupil. This love of the teacher must be adapted to the individual temperament of each student. "The same medicine is not given to all, although to all the same love is due" (Howie, 1969, p. 13).

Death and Lasting Influence

Augustine's last years were full of strife. Genseric, King of the Vandals, invaded the African provinces. The siege of Hippo lasted 14 months. Most of that time Augustine was seized with a fever. His physical strength waned, although his intellectual faculties remained until the end. On August 28, 430, at the age of 76, Augustine resigned his spirit, saddened by the spectacle of the Vandals destroying his whole life work (Chadwick, 1986). The teacher had lived all but five years of his life in Roman North Africa. Centuries after his death he was canonized as a saint by the Roman Catholic Church.

Augustine lived during the decline of and shortly before the end of the Western Empire. The Roman Empire still existed with its temples and works of art, its rhetoric and philosophy, its public games and theaters. Africa was a relatively rich province. But

decay was everywhere. Amid the political and economic decline of the Western Roman world, it is as though Augustine, at the last moment, laid the foundation for an utterly new future. He was the last great figure of Western antiquity.

The ideals of Christian culture through the 12th Century were inspired by Augustine's *On Christian Doctrine*, which developed his views about the relationship of the liberal arts, sciences and literature to understanding religious truth.

> Augustine's vision of the Christian intellectual placed classical culture at the service of Christianity, helped to preserve ancient learning by building it into a new edifice, and brought about an inherent intellectualization within Christianity . . . The history of medieval education was decisively affected even in so obvious a thing as the organization of the arts curriculum of the early universities (Deighton, 1971, p. 424).

Augustine shaped Christian education and Christian intellectuality to the extent that the Christian Renaissance in literature, art, music, poetry and philosophy would doubtless not have taken place without his ideal of the educated Christian who is open to any and all things which can lead him or her to truth (Deighton, 1971).

Augustine's Educational Legacy

1. Though Augustine lived at the end of the Roman world, his thought became the foundation for learning throughout the Middle Ages. He taught and wrote at the point in history when the world of classical paganism was ending and that of mediaeval Christianity was just beginning. He took the best of Greek thought and interpreted it within a Christian context, overlaying the best of Hellenic educational philosophy with the theories that came through the Hebrew Prophets and fathers of the early Christian church (Jackson, 1973). It was this fusion of Christian belief and Greek philosophical concepts that merged to form Christian neoplatonism.

2. Augustine promoted the classical liberal arts tradition which became essential to the curriculum of all schools in Christendom.

> The curriculum of these schools included the triuium (grammar, rhetoric, and logic) and the quadrivium (arithmetic, geometry, music and astronomy). Though for many these liberal arts were taught in a mechanical fashion and subordinated to the aims of providing skills for reading and understanding the Bible, there is ample evidence that a love of learning was nicely balanced with a love of God (Le Clerg in Elias & Merriam,1980, p. 16).

3. Another of his legacies was his strong belief that learners are their own best teachers, and that learning requires intense effort on part of learner. He called for an inner fervor for learning. In one who loves to learn, the desire for this activity will increasingly possess his soul and drive him toward wisdom.

> The whole love of the desiring mind, that is, of the mind desiring to know what it does not know, is not the love of what it does not know but rather of what it knows; on account of this existing knowledge it conceives the desire to add to its knowledge (Augustine in Howie, 1969, p. 11).

4. To Augustine God is the power that allowed preachers to preach and teachers to teach. He is also the force that draws the learner into the interior being for an understanding of truth. Teachers enable rather than transmit knowledge, and are secondary to God, who is the true source of all knowledge. In this way the teacher is rather like Socrates' midwife who elicits associations in students' minds from which they give birth to ideas.

5. Augustine is the last great teacher to fully believe this idea of divine illumination. His beliefs fit well within the accepted Christian doctrine and so were promoted throughout the Middle Ages until another teacher, Thomas Aquinas, came to challenge them.

Dr. George Howie, Augustine's biographer, considered whether Augustine's ideas are relevant to a modern scientific world which admires external proofs more than the simple intuition of the soul. He concluded,

> It may be argued that his principle is totally in conflict with modern scientific method, although it is by no means certain that the scientist does not work by what may be called faith, intuition or the exercise of imaginative thinking, which illuminates his path well ahead of his experimentally isolated and verified conclusions. At any rate, Augustine's theory agrees well with the conviction of the best teachers in every age that new leaning is built on existing experience, that it is most productive when founded on interest specifically directed toward some clearly defined goal (Howie, 1969, p. 12).

THOMAS AQUINAS

Thomas Aquinas is considered by some to be the greatest and most influential philosopher of the Middle Ages (Deighton, 1971). Yet he led a very simple life which centered around the university where he taught. He lived at a turning point in European history when universities had just been newly established, the teachings of Aristotle had made their way into Latin culture, and religious life was "moving away from the age of the Fathers to the sophisticated intellectual age of the schoolmen" (Deighton, 1971, p. 250). Aquinas' main contribution was taking ideas expressed by Augustine (in Platonic language) and altering them to conform with the rational theories of Aristotle. Thomas Aquinas entered the University of Paris, then the scholastic center of the Western world, as a student and later became one of its most influential teachers (Winston, 1962). Ultimately he had bestowed upon him the title "Doctor of the Church" and was declared patron saint of all universities, colleges and schools.

Birth and Early Education

Records of the life of Thomas Aquinas are rare. He was born into the family of the Counts of Aquino somewhere between 1220 and 1227 AD. His father, Landolfo, was a knight, and his mother, Theodura, was of Norman descent. He was one of eight or nine children, having three brothers and four or five sisters. His home was the family castle of Rocca Secca situated on the mountain above the fertile plain of Campagna Felice and the town of Aquino in the Kingdom of Sicily. The kingdom was ruled by Emperor Frederick II and was located on the southern boundary of the Papal States which were controlled at that time by Pope Honorius III (1216-1227) and Pope Gregory IX (1227-1241) (Donart, 1978; Walsh, 1991).

Much of what is known concerning Thomas' life comes from his earliest biographer, William of Tocco, who wrote the Life in 1323 AD. As was characteristic of writing of the period, the author created fictional, innocent tales within the biography to impart an essential truth about the character of his subject (Donart, 1978). It is therefore difficult to ascertain which are true incidences in the life of Thomas Aquinas and which are fictitious.

At the age of five Thomas was taken to Monte Cassino Abbey which was run by his uncle Landulfo Sinibaldo. As an oblate in the Benedictine Order, Thomas was in service to the community but not under any vows. As was customary at the time, children were not required to remain and take final vows, and were not invited into the novitiate until their early teens. Until he was thirteen Thomas lived at Monte Cassino were he was schooled in reading, writing, arithmetic and the basics of science (Donart, 1978; Walsh, 1991).

Thomas appears to have loved the Benedictine Rule. Besides poverty, chastity and obedience, the Rule required manual labor, the recitation of the psalms and the study of the holy scripture. Requirements for each day included celebration of Mass and periods of silence and meditation. The disciplined life fit the student in Thomas well. He gained good study habits, a well-trained memory, the ability to read profound material with understanding and a mastery of the standard works of reference. His later scholarship exemplified the success of his early instruction (Donart, 1978).

In 1239 Thomas' father withdrew him from the monastery and sent him to Naples where he studied art and science at the Faculty of Arts at the University of Naples. Thomas studied there for five to seven years and mastered traditional logic, rhetoric, theology, the sciences and Aristotle's philosophy of nature (Donart, 1978; Walsh, 1991).

Upon finishing his studies it was assumed that Thomas, with his imposing stature and massive build, would walk in the footsteps of his father and older brothers and become a soldier. But he flatly refused. His family then agreed to allow him to take a degree in theology with a view to becoming a bishop. For those of noble birth the Church was considered a great career, providing social prestige, money and honor.

But Thomas wasn't interested in prestige and money. While studying in Naples, he often visited a nearby church run by members of the Dominican Order of Preachers. He was attracted to their philosophy and had become intimate friends with several of the friars. At nineteen he was received and clothed in the habit of the order (Walsh, 1991). In taking the Dominican habit, the young man dashed a family hope. His mother, Theodura, was outraged that he joined a Mendicant order instead of becoming a member of the Benedictine order. Theodura pursued Thomas to convince him to return home, but before she could catch him the Master-General of his Order, John the Teuton, anticipating the family's opposition, sent Thomas away to Bologna. There he attended a General Chapter, and then left to study at the University of Paris, the educational center not only of France but of the whole Christian world.

His mother, frustrated that Thomas had been moved from each place before her arrival, remained undaunted. She sent letters to the Pope urging His Holiness to "rescue her son from his madness." The Archbishop of Naples promised to do what he could to prevent the Dominican order from accepting Thomas.

Theodura finally requested Thomas' elder brothers, who were serving in the emperor's army at Tuscany, to capture their brother. They caught him near Sienna as he journeyed to Paris and took him to Rocca Secca and then to the castle of Monte San Giovanni two miles away.

Thomas was kept in confinement for two years. Only his sister, Marotta, was permitted to visit. His mother came to him once with tears in her eyes. "Remember, my son, you are descended from princes. Frederick Hohenstaufen is your cousin." "He is an infidel," Thomas replied.

Giving in a little, his family brought him books to read; it was never their intent to make him suffer. Surely Aristotle's *Metaphysics* and Peter Lombard's *Sentences* couldn't defeat their purpose. And his brothers brought him another gift they hoped would make him recant—a beautiful prostitute.

> It was a cold day when the young woman was brought to him. Thomas was busily stirring the fire in the hearth, and it was across the flames that he beheld her face. To whom could it belong but to a salamander, a magic spirit of lust who would bring only evil in its embrace? He drew a fagot from the hearth and shook it at the visitor. She withdrew in haste (Bacon, p. 72).

Although a literal prisoner at the hands of his family, Thomas benefitted from his captivity. He prayed and studied, learned a great portion of the Bible by heart, wrote a treatise on the fallacies of Aristotle and transcribed an extract of one of Aristotle's writings on logic (Winston, 1962; Walsh, 1991, p. 29).

Finally, Thomas having defeated all the schemes and wearied the obstinacy of his persecutors, his family finally gave up. In the fall of 1245 he was released and allowed to continue on his way to Paris (Winston, 1962; Elrington, 1937). One tale recounting the end of his imprisonment (likely fictitious) proposes that Marotta fell into sympathy with her brother and arranged for him to escape. "They came with a basket and a rope. And they lowered him to the ground in the pitch of the night. Then they wished him Godspeed" (Bacon, p. 72).

Studying under Albertus Magnus

Upon his return to his order, it was decided that Thomas would complete his studies under Albertus Magnus. In the fall of 1245 he traveled to Paris to the convent of Saint James, then the most prominent scholastic convent in the order, located at the center of the University. It was here that Albertus Magnus was a professor in the school of theology (Chenu, 1964).

As a teacher Albertus was considered extraordinary in many ways. During his lifetime he was given the appellation "the Great." He was a "walking and talking summary of medieval culture" (Bacon, p. 73). He was quite wealthy and had accumulated a large library of traditional Christian authors including Augustine, Boethius and Anselm. Albertus had also acquired and read the newest translations of Aristotle and was a devotee of experimental and observational science (Donart, 1978). To his colleagues he was *Doctor universalis* and *Doctor expertus* as well as the interpreter of Aristotelian ideology (Weisheipl, 1974).

The influence of Albertus Magnus upon Thomas was undoubtedly deep and profound. The young and budding genius in Thomas was exposed to the greatest erudition the 13th century had to offer. Instruction by Albertus no doubt expanded Thomas's knowledge and encouraged his growth (Weisheipl, 1974).

In 1248 Albertus was authorized by the Dominican general chapter meeting to direct the first *studium generale* in Cologne. Thomas accompanied Albertus from Paris to Cologne. Schools in Cologne were filled with clerics from various parts of Europe who were eager to learn and discuss. Thomas was not immediately appreciated by either his peers or his professors. His silence and bulky appearance earned him the nickname, "the dumb Sicilian ox" (Walsh, 1991, p. 29).

Although it is not known what Albertus thought of his young pupil at this juncture, it is assumed he saw potential in the young man (Weisheipl, 1974). If nothing else Thomas appeared to have an abundance of common sense. At first Albertus gave Thomas small tasks of annotation or exposition. Then he persuaded him to overcome his bashfulness and participate in at least one debate.

> For Aquinas was still generally known only as one obscure and obstinately unresponsive pupil, among many more brilliant and promising pupils, when the great Albert broke silence with his famous cry and prophecy; "You call him a Dumb Ox; I tell you this Dumb Ox shall bellow so loud that his bellowings will fill the world" (Chesterton in Donart, 1978, p. 11).

In total Thomas spent six or seven years of intensive study under the direction of his mentor, Albertus Magnus. He assimilated a great portion of the knowledge of his teacher and later recast it in the mold of his own thinking (Gilson, 1979). Thomas and Albertus became close friends and together restored Aristotle to an elevated position in the philosophy and education of the time.

Parisian Schools

Thomas Aquinas lived in an age of dramatic cultural and educational change. Prior to the thirteenth century, education had been conducted by monastic orders for the biblical understanding of the members of holy orders. By the mid-1200s many different types of people began traveling to the scholastic centers of Paris, Bologna, Oxford and Cologne, and they were arriving in record numbers. They came to learn, not about the monastic life, but about culture and tools for their careers. In 1257 there were 30,000 students enrolled at the University of Paris—more students than townspeople (Thompson in Blimling, 1995).

The streets were teaming with students who overtook whole quarters of the city and made them their own. Several of the new schools banded together in a "university" of programs of study, becoming a corporate society within the city. The University became a prominent, independent entity with its own political and social jurisdiction (like having its own police force) which was accepted by the citizens as long as it did not interfere with the rights of the greater community (Chenu, 1964).

> From the rue du Fouarre to the abbey of Sainte-Genevieve, the schools lined up, nearly covering the ridge along the rue Saint-Jacques where Albert the Great and Thomas Aquinas would soon have a school of their own, open to all corners, and formally accepted as part of the University body in whose rights and scholastic programs and public demonstrations it would share. . . Professors and students formed themselves into corporations in order to protect their rights and to secure their privileges . . . (Chenu, 1964, pp. 16-17).

Teaching at the University of Paris

By 1252 Thomas had finished his studies. At that time Albertus was asked to choose one of his students to assume the position of Teacher of Theology as a Bachelor at the convent of Saint-Jacques at the University of Paris. Albertus chose Thomas.

During the 13th century the entry level instructor of theology was called a *Sententiarius* or one who lectured on the "sentences," which were texts intended to explore the mysteries of faith. Besides lecturing, the *Sententiarius* also responded to objections in the theological disputations, which were public debates.

As a *Sententiarius* Thomas expounded upon the Scriptures and the *Liber Sententiarum* of Peter Lombard for a period of four years. He also wrote commentaries on the *Sentences* as well as on Isaiah and the Gospel of Matthew (Walsh, 1991). During this time he was apprenticed to the master holding the Dominican seat of theology at the University of Paris. He was working toward and preparing for the day he would become

a master theologian. One requirement was to participate at least five times in public disputations so that the other masters could evaluate his competence (Weisheipl, 1974).

The times were difficult and the religio-political scene was turbulent. The Mendicant orders, of which the Dominican was one, were being attacked in Paris by nobility and scholars alike. Public disputations were held questioning their right to exist; papers were distributed declaring them to be "ministers of antichrist" (Weisheipl, 1974, p. 93). The furor against the mendicants reached its apex in 1255-1256, when towns-people were incited to physical violence against the friars. Masses of people surrounded them as they walked through town, shouting insults, throwing filthy straw upon them, hurling stones, etc. The priory had to be guarded around the clock by royal troops (Weisheipl, 1974).

Through it all, every day Thomas taught all the religious of Saint-Jacques, for Theology was a mandatory course. He also taught numerous lay and secular students. Disputations were attended by University dignitaries and the Bishop himself. Thomas became increasingly famous for his style of teaching which rearranged subject matter in a manner that made it more comprehensible. He also used new methods of proof and presented unique arguments for his conclusions (Donart, 1978; Weisheipl, 1974). But when he taught,

> . . . he arrived in full battle array, for error was multiplying. He had to confront it on all sides, and first in the attack of Guillaume de Saint-Amour and the seculars, who denied the mendicant Friars the right to teach and presented these 'false apostles' ever on the move, these 'uncommissioned adventurers,' as the precursors of Antichrist. There was a first debate on academic freedom, one of extreme importance, one in which the very existence of the two new Orders, Preachers and Minors, was at stake. . . (Maritain in Donart, 1978, pp. 12 -13).

Thomas was personally affected by the quarreling. In 1256, when he was directed to become Regent Master of Theology and to take the chair held by the Dominican Preachers, he encountered tremendous external as well as internal resistance: External forces opposed him because he belonged to a mendicant order; also, he was only thirty-one years old and the professorship required a minimum age of thirty-five; and he was accused of heresy because he preached using the pagan, Aristotle, as his model. The Church had taken a conservative stance, allowing only Masters to study Aristotle and that they had to do in private (Maritain, 1958). Throughout the process many boycotted Aquinas' lectures, disputations and sermons. In the end it took papal intervention to clear the way for Thomas to ascend to the Regent's chair.

Upon his acceptance of the position, Thomas went through an internal struggle. He felt inadequate to the task and begged God for greater understanding. He also prayed that God would give him the theme he should use for his inaugural address.

> Then he fell asleep and dreamed. He seemed to see an old man, white haired and clothed in the Dominican habit, who came and said to him: "Brother Thomas, why are you praying and weeping?"
>
> "Because," answered Thomas, "they are making me take the degree of master, and I do not think I am fully competent. Moreover, I cannot think what theme to take for my inaugural lecture."
>
> To this the old man replied: "Do not fear: God will help you to bear the burden of being a master. And as for the lecture, take this text, 'Thou waterest the hills from thy upper rooms: the earth shall be filled with the fruit of thy works" (Ps. 103:13). Then he vanished, and Thomas awoke and thanked God for having so quickly come to his aid (Weisheipl, 1974).

Thomas received his Doctor's Chair in Theology in the spring of 1256. His duties as Regent Master were to lecture, discuss and preach. During this time he began writing

his *Summa contra Gentiles.* He held the doctor's chair for three years, after which time one of his senior students succeeded him.

Between 1259 and 1268 Thomas lived in Italy. He was made a preacher general and taught in a school of selected scholars attached to the papal court. Since the court followed the pope, Thomas traveled to, taught and preached in many small Italian towns. In 1266 he began his most famous scholarly work, the *Summa theologiae.*

Philosophy of Education

In his inaugural lecture he used the passage from Psalms to describe his educational philosophy. In it Aquinas compared teachers with the mountains from which stream water. Teachers, he said, hold an eminent position comparable to mountains which are watered from above for three reasons: their elevation from the earth, their splendor in illumination, and their protective shelter against harm.

> Thus just as mountains are high above the earth, so teachers condemn earthly matters and aspire to heavenly things alone. Mountains are the first to be illuminated by the rays of the sun, so teachers of Sacred Scripture are the first to receive mental splendor by participating in divine wisdom. And just as mountains protect the valleys, so teachers defend the faith against errors. Therefore teachers should be elevated in their lives so as to illumine the faithful by their preaching, enlighten students by their teaching, and defend the faith by their disputations against error (Weisheipl, 1974, p. 102).

Aquinas also spoke of the status of listeners as comparable to the earth made fruitful by the streams in three ways: its lowliness, firmness, and fecundity. "Thus the listener should be humble in receiving sacred doctrine, firm in discriminating between right and wrong, and fruitful so that the good listener may promulgate many words of wisdom from the few that are heard" (Weisheipl, 1974 p. 102).

Thomas Aquinas spent seventeen years teaching at the University of Paris (1252-1259 and 1269-1272) and at the Papal Curia in Italy (1259-1269) (Deighton, 1971). During this time he wrote and lectured but none of his works treats in an exhaustive manner the principles of education (Maritain, 1958).

Aquinas agreed with Augustine that God is the inner teacher of the soul and that truth comes from God. However, Aquinas parted with St. Augustine in making Christ the inner teacher who guides man every time he speaks the truth (Deighton, 1971). Philosophically Aquinas departed from Augustine in his understanding of man's nature. In this Thomas followed Aristotle who believed that nature is "an intelligible and dynamic inner principle of orderly movement, tendency, and finality" (Deighton, 1971, p. 251). Aquinas modified this Aristotelian principle to assert that "God illumines as a creator, giving man his own light by which to see, to know and to guide himself" (Deighton, 1971, p. 251).

For Thomas Aquinas, man's personal experience is his best teacher and guide. Aquinas proposed that the universe enters man's mind as his principle teacher and arouses his intellectual nature. He agreed with Augustine that to learn one cannot be ignorant, that acquiring knowledge begins with one's prior knowledge (Deighton, 1971). There are some things which Aquinas believed could only be learned by doing and which could not be taught, such as moral virtue. Further, he taught that teaching and learning are limited to what can be communicated by language or other human signs or what can properly proceed from one mind to another (Deighton, 1971, p. 256).

Thomas believed the role of teacher to be auxiliary to the process of learning. As a doctor and his medicine can aid the body's natural ability to heal, so the teacher aids the mind's ability to learn. "The teacher causes knowledge in the learner by reducing him

from potentiality to act" (Jackson, 1973 , p. 139). Man has within himself the capacity to perceive events, form opinions, and reach inductive conclusions about why things happen as they do. "This is discovery, the unaided progress to the knowledge of the unknown on the basis of the known and under the guidance of the light of the intellect and its principles" (Deighton, 1971, p. 156). To Thomas the process of instructing involved giving aid to this process of discovery (Goodchild, 1986).

To teach, one has to believe in the natural ability of the student to understand. The teacher must begin his instruction at the position and disposition of the student, from the point of view of a beginner (Pieper, 1986). The teacher is able to aid the student in two ways, first by conveying the meaning of the conclusion and its relation to the premises, and second by helping him grasp the order of the process of reasoning (Deighton, 1971).

For Aquinas, teaching occurs when the hearer is reached, not with mere words, but with the understanding of the truth and validity of the message and why it is so. Sometimes small steps in comprehending must be taken to guide the student until he or she awakens to the full truth and meaning.

For Thomas, teaching is a twofold process of the intellect, which is both active and contemplative. The contemplative mind attunes to higher consciousness to draw down truth and the active mind transmits this truth to another. One cannot be a real teacher without this two-fold experience. A teacher who does not contemplate the mysteries of life and receive understanding presents hollow material to students and is a fraud. And one who receives but cannot put it into words to convey to others is no teacher at all. "Thus, the more intensively and the more passionately a man engages in these two activities, the more he is a teacher" (Pieper, 1962, p. 94).

The style of Thomas' teaching was mainly that of the disputation, or disciplined opposition, similar to the practice of modern debate. "To every *disputatio legitima* there belong question, answer, thesis, agreement, negation, argument, proof, and concluding formulation of the result" (Magister Radulfus in Pieper, 1986, p. 79). In a disputation, one not only listens but also engages in the discussion by taking a position and defending it. It is the process of questioning which the disputation provides that inspires learning.

Thomas returned to Paris in 1269. Held in high esteem by Louis IX, he was consulted on various matters of state. He had such a reputation that the university deferred to him in a matter upon which there was tremendous controversy—the question of whether after an accident the Blessed Sacrament remains holy. Thomas meditated upon this question and his reply was written in the form of a treatise which still exists today. His decision was accepted not only by the university but also by the whole Church. During this time Thomas assumed a leadership position in the philosophical struggles going on at the time.

After Easter of 1272 Thomas was recalled to Italy and was commissioned to establish a new study-house at the University of Naples. During this time his meditations were so profound that he often lived in a state of abstraction. His food bowl could be removed from the table and replaced numerous times without him noticing. He could be in the presence of the King or Cardinal and blurt out exclamations of revelation, unaware of where he was. His companion, Reginald of Piperno, assumed the role of personal attendent, guiding and protecting him during his reveries (Maritain, 1958).

On December 6, 1273, while celebrating Mass in the chapel of Saint Nicholas, Thomas received such a powerful divine revelation that he refused to write or dictate any more. Reginald questioned him about finishing the *Summa theolgiae*, with its thirty-eight

treatises, three thousand articles and ten thousand objections (Maritain, 1958). In response Thomas said, "The end of my labors is come. All that I have written appears to be as so much straw after the things that have been revealed to me" (Walsh, 1991, pp. 29-30). He never finished *Summa theologiae*.

Death and Lasting Influence

A year later, as Thomas was summoned by Pope Gregory X to the Council of Lyons to reunite the Latin and Greek churches, he fell ill on the way. He asked to be taken to a Cistercian abbey at Fossa Nuova near Terricina. On entering he leaned on the wall with his hand and said: "This is my rest for ever and ever: Here will I dwell for I have chosen it" (Maritain, 1958, p. 55). Thomas endured his month-long illness with patience and humility. The monks of St. Benedict carried wood for a fire for him because they believed no beast of burden was worthy to carry his load. When he saw them performing this service for him, he raised himself saying, "How does it happen that holy men are bringing me wood?" (Maritain, 1958, p. 55).

Some of the monks asked Thomas to explain the *Canticle of Canticles* which he expounded upon but did not live to finish. He passed in the early hours of March 7, 1274 when he was about fifty years old.

Just fifty years after his death, on July 18, 1323, Thomas Aquinas was canonized as a saint by the Catholic Church. Canonization is usually a long process involving detailed investigation "that the given life was one of unusual, heroic 'rightness' expressing a paradigmatic emanation of superhuman, divine force and the final return into this divine Source" (Winston, 1962, p. 11). Yet Thomas Aquinas seems to be the first one canonized for being a theologian and teacher. Forty-two witnesses testified at his canonization hearing that he was pure of heart, given to the simple life and the ideal of poverty, but none reported extraordinary feats or acts of penance (Winston, 1962).

His body was taken in 1368 by the Dominicans to Toulouse, where it still lies in the cathedral of Saint-Sernin. In 1567 Pope Pius V declared that Thomas was a Doctor of the Church, and he subsequently became a veritable institution. In 1880 Leo the XIII declared him the patron of all universities, colleges and schools, and in 1918 he was incorporated into one of the great law books of history, the *Codex Juris Canonici*, which directed that the priests of the Catholic Church should receive their theological and philosophical education according to the method, doctrines and principles of Thomas Aquinas (Winston, 1962).

Thomas Aquinas had been a popular teacher.

> According to Bernard Gui, God graced his teaching so abundantly that it began to make a wonderful impression on the students. For it all seemed so novel—new arrangements of subject-matter, new methods of proof, new arguments adduced for the conclusions; in short, no one who heard him could doubt that his mind was full of a new light from God (Weisheipl, 1974, p. 69).

> In his defense of the mendicant orders, Thomas had led the first fight for academic freedom—his ability to present Aristotle in an unorthodox manner—which he ultimately won (Donart, 1978).

But for all his innate ability and popularity as a teacher, it is odd that not one of his pupils stands out as a tribute to his success. Upon Thomas' death there was not one who could preserve the master's heritage with persuasiveness (Winston, 1962). Rather his authority as a teacher grew in the fourteenth and fifteenth centuries through the agency of the Catholic Church.

Aquinas' Educational Legacy

Thomas Aquinas left several legacies for later educators. Primarily he can be credited with intellectualizing education, even within the spiritual domain. Secondarily,

and this is tied to the first, he is the primary party responsible for challenging and overturning Augustine's hold over educational thought through the Middle Ages. Thirdly, he brought Aristotle's philosophical thought out of moth balls and popularized it, creating a revolution in educational thought that is still being felt today. Finally, he left a legacy of education based on active experience as the primary source of learning. These changes had ramifications in the field of education and led to different educational approaches within the Church that eventually affected secondary education (Dever, 1993).

1. The intellectual high point of medieval Christian thought is founded in the educational and philosophical system of Thomas Aquinas. In his educational theory Thomas relied on classical literature, most especially upon the philosophical writings of Aristotle. By so doing he built on a decidedly intellectual approach to education that had at its basis the classical liberal tradition.

   Aquinas "preferred the intellect to the 'heart' as an organ for arriving at truth." (Durant & Durant in Dever, 1993). To Aquinas, man is made up of rationally-formed matter. In a dramatic split with traditional views, Aquinas taught that the soul is a product of this rational form, not a spiritual one. To him the soul is not a separate substance added to the body as one thing is added to another, but it is rather the rational organization of the individual substance. It's nature is known through its activities, including the formation of intellectual concepts through which the individual comes to know things. Thus a man has the power—in his intellect—to grasp the intelligible structure of what is known.

In this scenario, experience becomes the most effective teacher and guide. "The universe that first enters man's mind is his prime teacher, awakening his intellectual nature to its most basic responses" (Deighton, 1971 p. 255).

2. St. Thomas Aquinas did not entirely disagree with Augustine's teachings. He did not deny that all truth comes from God and is even governed by God. But he pointed to the next obvious question: how is God present in His creatures and how is He the source of their activities? Thus Aquinas determined, in contrast to Augustine's feeling that he is a spiritual creature, that man is an intellectual creature, which to Aquinas meant that he possesses the ability within his own nature to know and to speak the truth. Does God, acting as the divine light of truth, illumine every man that comes into this world? Yes, assuredly, and here St. Thomas was at one with St. Augustine. But God, as a creator, has given man his own light by which to see, to know, and to guide himself. This, then, is the very point where Thomas rebuilt the Christian view of the world and of man in the spirit of the Aristotelian notion of nature. (Deighton, 1971)

> The difference between Augustinian and the Thomistic. . . centers upon the contrast between Augustine's intuitive and aesthetical approach to learning (endorsed by the Franciscans) and Aquinas' rational approach (favored by the Dominicans). . . . Simply stated, one important difference concerned the fundamental procedures of acquiring knowledge: a priori, or from cause to effect on the part of the Augustinians; and a posteriori, or from effect to cause generally favored by the neoaristotelians and Aquinas. The Neoplatonists—represented by Franciscans and Augustinians—accepted the position that universals are subsistent in the form of ideas and exist prior to sensation, while the Thomists. . . argued that all acquired knowledge exists first in the senses; anything resembling pre-existent knowledge is, in fact, the power of the intellect to abstract. (Dever, 1993).

3. Aquinas choose to employ the philosophy of Aristotle in the service of Christian theology, even while realizing that such a position would inevitably lead him to

clash on some points with Augustine and those who agreed with him. The Franciscans were frankly shocked at the accent on reasoning in Aquinas' system, and "the triumph of Aristotle over Augustine in the Thomist philosophy seemed to them the victory of paganism over Christianity" (Durant & Durant in Dever, p. 977).

Why choose Aristotle? Because for his purposes Aquinas needed a philosophy which would deny the basic tenants of Augustine: the existence of innate ideas, the need for a special illumination of the human intellect by the divine, and the conception of the soul as a substance independent of the body. He found all of this in Aristotle. But Aquinas' use of the old master did not mean that he accepted the teacher just as he was. No, Aquinas was perfectly content to modify Aristotle to fit with the demands of his Christian faith.

> Saint Thomas transfigured Aristotle without deforming him, not contenting himself with restoring his true meaning against the alterations of commentators, with completing and correcting him wherever he makes a mistake or hesitates, but working the miracle of disengaging from the historic Aristotle—such as into himself at last Theology changes him—a pure Aristotelian form much more purely Aristotelian (Maritain, 1958, p. 43).

Had he lived a century earlier, Aquinas' synthesis of Aristotle with Christianity might very well not have been achieved, for only in the thirteenth century was there a massive influx of Greek and Arabic philosophy into the West. The twelfth century only knew the logic of Aristotle. It was when his natural philosophy became accessible to the West that scholars came into direct contact with his complete philosophical system which presupposes no divine revelation. Aristotle was first presented to the West by Arabic commentators who interpreted him as

denying divine providence, creation, and the immortality of the individual soul. This picture did not immediately endear him to the religious thinkers of the Christian West. However, during the thirteenth century Christian authors began to make direct translations of the original Greek available, and his prestige rose until Aristotle became "the Philosopher" for the medieval scholastics (Jackson, 1973).

4. Thomas was the consummate teacher. He flung his full energies and talent into the role. A primary reason he entered the Order of Preachers was his passion for teaching. For Aquinas teaching is not limited to giving public talks on the results of his meditations. To him teaching in the real sense can take place only when the learner is reached, not because of some personal charisma but rather when the truth of what has been said reaches the hearer. Real teaching takes place only when its ultimate result is achieved: when the hearer is "taught." Being taught means to perceive that what the teacher has said is true and valid, and to perceive why this is so (Winston, 1962). Thus teaching to Augustine, while it proceeds from the perspective of the hearer, must fulfill itself when what has been taught has been recognized as the teacher understands it (Winston, 1962).

> Teaching, says Thomas, is one of the highest manifestations of the life of the mind, for the reason that in teaching the *vita contemplativa* and the *vita activa* are joined—not just patched together superficially, not merely connected "factually," but united in a natural and necessary union. The true teacher has grasped a truth for itself, by purely receptive contemplation; he passes it on to others who likewise desire to partake of this truth. The teacher, then, looks to the truth of things; that is the contemplative aspect of teaching. It is also the aspect of silence, without which the words of the teacher would be unoriginal in the primary meaning of that word, would be empty talk, gesture, chatter, if not fraud. But the teacher simultaneously looks into the faces of living human beings—and he

> subjects himself to the rigorously disciplined, wearisome labor of clarifying, of presenting, of communicating. Where this communications does not take place, teaching does not take place (Winston, 1962, p. 93).

The more intently a person engages in these two activities—the power of silent meditation and study, and expressing his awareness to students—the more he is a teacher.

Aquinas explicitly addressed the question of one man teaching another in two separate works. Aquinas' concept is an attempt to retain the Christian core of Augustine's theories while substituting an Aristotelian view of nature for that of Plato and Plotinus (Jackson, 1973). " . . . one person is said to teach another inasmuch as, by signs, he manifests to that other the reasoning process which he himself goes through by his own natural reason. And thus, through the instrumentality, as it were, of what is told him, the natural reason of the pupil arrives at a knowledge of things which he did not know" (Jackson, 1973, p. 136).

Aquinas also agreed with Augustine in his belief that the pupil as the primary cause of his own learning, but that God allows this learning to occur:

> Now, the light of reason by which such principles are evident to us is implanted in us by God as a kind of reflected likeness in us of the uncreated truth. So, since all human teaching can be effective only in virtue of that light, it is obvious that God alone teaches interiorly and principally, just as nature alone heals interiorly and principally. Nevertheless, both to heal and to teach can still be used in a proper sense in the way we have explained (Jackson, 1973, p. 139).

> The teacher does not cause the intellectual light in the disciple, nor does he cause the intelligible species directly; but he moves the disciple by teaching, so that the latter, by the power of his own intellect, forms intelligible concepts, the signs of which are proposed to him from the outside (Jackson, 1973, p. 144).

DESIDERIUS ERASMUS

Desiderius Erasmus, a giant of the Christian humanist movement of the Renaissance, became an internationally known educator and scholar with the publication of several books which became well known throughout Europe. Erasmus was the first to use the printed word as a tool for the education of the masses. He believed in widening education for the benefit of all people in an effort to help individuals contact the divine and gain their own understanding so they could make decisions without the need for external interpretation by the Church. "His whole life was committed to a synthesis of the best of classical learning with a reformed Christian piety" (Tracy, 1972).

Life of Erasmus

The best known man of letters of the Northern Renaissance was the son of Gerhard bon Praet. The child was called Gerhard Gerhards, or "son of Gerhard." It was not until he had reached puberty that became known as Erasmus. His father was the ninth son in a family which fastened on him as the one who should enter the priesthood. Gerhard, Sr. was living with a view to marriage with a woman named Margaret, whom history has reported to have been various things including a royal lady, a physician's only daughter, a kitchen wench and a Mother Superior. His family so harassed him that he left Margaret while she was pregnant and took off for Rome, supporting himself there by copying manuscripts. Eventually the family sent him word that Margaret had died. In grief the man became a monk. Upon returning home he discovered the deception, but remained faithful to his vows and never returned to Margaret, though he did help support the child.

A storm of calumny was directed at Erasmus during his life for being the illegitimate child of a priest. At that time the union of a priest with a woman was considered a greater sin than the union of two unmarried lay persons, and the illegitimate child suffered under a heavier stigma. In later life Erasmus changed the date of his birth numerous times. The older he became the earlier he put the year of his birth; he made himself appear older in order to make his contemporaries believe that he had been born before his father took orders. When he selected the year 1466, he may have appropriated the birth year of his brother, Peter, who was just three years older (Smith, 1923).

Erasmus' Education

The boy's education began in his fifth year at the school of Peter Winckel of Gouda. Studies revolved around reading and writing Dutch. At about nine years of age Erasmus and his brother transferred to the famous school at Deventer. Both his parents died, probably of the plague, his mother in 1483 his father the following year.

Deventer was a large school. At its height it provided instruction for 2,200 boys. The boys sat on the floor around a teacher who dictated a Latin text, translated and commented on it, and heard his students recite the previous day's lesson. Deventer was the intellectual center of the land; more books were printed there than anywhere else in the low countries. Students lived in a community under a regimen like that of monks, where they were required to participate in fasts and vigils, with reading and prayer interspersed with long periods of silence. The day was completely filled with a routine of appointed tasks, meals and exercise from four in the morning when they rose, until eight or nine at night. According to Erasmus, "A great part of the school was employed in dictating, repeating, and saying by heart some silly verses" (Smith, 1923, p. 10). The discipline was tough. The boys paid fines for breaches of the rules. They were

encouraged to spy on one another and on the younger masters. In later years Erasmus wrote of the school, "Deventer was a school still in the age of barbarism" (Monroe, 1911, p. 495). Our young scholar recorded two encounters with superiors at Deventer:

> [There was a teacher] to whom I was dear above the others, for he said he had conceived some great hope for me. He watched me all the more, and at last wished to find out whether I would be patient of the rod. He accused me of an act I had never dreamed of, and caned me. That business shook from me all love of studies, and so depressed my young spirit I was not far from wasting away in grief. In any case a quartan fever followed on my sorrow. When he at last realized his error, he accused himself among his friends: "I had almost completely destroyed that young talent before I realized it" (Tracy, 1972, p. 27).

In a second incident, the Prefect of the Brethren of the Common Life tried to exorcise Erasmus. He forced the boy, already in tears, to look upon a crucifix. "Do you confess that He has suffered for you?" he demanded. "Obey my advice and look to your soul, unless you wish to perish forever with this world." Erasmus also recalled other incidents of "exorcisms and incantations," "terror and blandishments" and "horrifying reproaches" he endured at the hands of his early teachers (Tracy, 1972, p. 27).

Entering the Monastery

Upon returning to Gouda in the autumn of 1486, Peter and Erasmus found that the estate left by their father had gone to waste, and that one of it's guardians had died. The other pressured the two to enter a monastery. Erasmus wanted nothing to do with the idea. A campaign therefore ensued to tempt the boys into making the move. A swarm of monks was introduced. Finally an old school friend, Cornelius Woerden, lighted upon perhaps the only reason that would have worked on Erasmus: the boy's love of letters. The friend told an attractive tale of opportunities for study, of several houses in the congregation that possessed copies of Cicero, Terence and Sallust. This finally tipped the

balance for the young scholar. The brothers both entered the monastic life, though not in the same cloister. In later life Erasmus recalled, "You know I was pushed into that manner of life, more than inducted into it, by the stubbornness of my guardians and the wicked urgings of others" (Tracy, 1972, p. 32). He would have preferred to enroll in a university but, in 1487 he entered the Augustinian monastery at Steyn, said to possess the finest library of classical literature the country could boast of.

It was about this time that Erasmus had had enough of being taunted with having no name. He determined to create one for himself. Having entered now upon his novitiate, he was allowed to take a new name. He began to be called Brother Desiderius, which means "desired one." He later amended this Latin name with its Greek equivalent, Erasmus, which means "well beloved" (Hubbard, 1908). With his famous caustic wit he later wrote to a friend,

> Two parents are the rule; no parents the exception; a mother but no father is not uncommon; but I had a father and never had a mother. I was nursed by a man, and educated by monks, all of which shows that women are more or less of a superfluity in creation. God Himself is a man. He had a son, but no daughters. The cherubim are boys. All of the angels are masculine, and so far as Holy Writ informs us, there are no women in heaven (Hubbard, 1908, p. 57).

His years in the cloister were passed mostly in reading the classics and in studying fine art. But Erasmus was revolted by monastery life and proved to be a master at finding ways to get out of anything he didn't care for. After only one year he disgarded the monks habit, though he was ordained as a priest some years later. Producing a medical certificate, he was excused from observing the prescribed fasts. He hated the typical monks—their food, their way of life, their lack of intellect. He hated their preference for

gluttony. Once he printed in a card, "If I owned hell and a monastery, I would sell the monastery and reside in hell" (Hubbard, 1908, p. 59).

> . . . Herein we see one of Erasmus's most salient characteristics: he would not bind himself to anything or anybody . . . even God's service he refused to undertake for long. An inner urge constrained him to be free and subject to no one. He never whole-heartedly accepted the guidance of those set over him in authority; he did not feel that he owed allegiance to any court, to any university, to any profession, to any monastery, to any church, or to any town. And just as he preserved his intellectual freedom intact, so all his life long did he quietly but obstinately defend his moral liberty of action. Erasmus was fanatically independent, though by no means a rebel or a revolutionary (Zweig, 1934, p. 34).

Although Erasmus believed that men devoted to Christ should be joyful, he claimed never to have found a monastery where the monks were not sad. In spite of supplications, warnings, and even threats, once he left the monastery later in life, he never returned to it's service.

Teaching Career

As luck would have it, the Bishop of Chambray came to the monastery on his way to Paris. He needed a secretary. Because Erasmus had become proficient in Latin and Greek, the head of the monastery recommended him for the job. As the two rode away on horseback Erasmus lifted up his heart in a prayer of gratitude. He said it was the first feeling of thankfulness that he had ever experienced. The Bishop of Chambray introduced Erasmus to a mode of life which consisted of traveling, receiving honors and hospitality. When they finally arrived in Paris, the two settled down to literary work. Shortly the work was complete, and the Bishop proposed going home. But the secretary had already collected quite a little circle of pupils about him, and so elected to stay on in Paris. While there he continued to study the literature of ancient Rome and the language of the ancient Greeks (Hubbard, 1908).

From his earliest years, Erasmus had a passion for learning. He said he was carried away as if by some secret spontaneous impulse. He was hungry for knowledge; he pined for further instruction and more intellectual society. While at Paris Erasmus apparently received some financial help from the Bishop, but was forced to eke out much of his substance by taking pupils; his reputation provided him with as many as he wanted. To his students Erasmus seemed the bearer of a new liberty of the mind, a new clearness, a purity and a love for the simplicity of knowledge. He wanted mankind to be set free from fear and disaster by being set free from its own ignorance; he hoped for a world in which intelligence, common sense, good manners, tolerance, and forbearance should dominate the scene instead of violence, ignorance, prejudice and greed.

He once commented on the job of the teacher:

> I admit that your vocation is laborious, but I utterly deny that it is tragic and deplorable, as you call it. To be a schoolmaster is next to being king. Do you count it a mean employment to imbue the minds of your fellow citizens . . . with the best literature and with the love of Christ and to return them to their country honest and virtuous men? In the opinion of fools it is a humble task, but in fact it is the noblest of occupations" (Smith, 1923, p. 303).

Christian Humanism

One of Erasmus' favorite students was a young Englishman by the name of Lord Mountjoy. When the young man returned to England, his tutor went with him. Thus Erasmus had the opportunity to spend time in England. In London he met on an equal basis with many intellectuals. He dined at the house of the Lord Mayor of London, and he was invited to lecture and teach at Cambridge, Oxford and London. While there he established intimate friendships with John Colet and Sir Thomas More. So impressed was he with England that he wrote an old friend:

> I never liked anything so much before. I have met with so much civility, and so much learning, not hackneyed and trivial, but deep, accurate, ancient, Latin and Greek. When I hear my Colet I seem to be listening to Plato himself . . . . What has nature ever created more gentle, sweet, or happy than the genius of Thomas More? (Ferguson, 1991, p. 41).

Erasmus, More and Colet eventually became the nucleus of what became known as the Oxford Reformers. Both More and Colet were established in London during this period and their humanistic circle included members of the London legal community, the royal family, bishops and aristocratic families. These three men had a profound and lasting effect on each other; many important ideas of the Renaissance budded, grew and matured through their interactions.

The specific form of humanism Erasmus and his friends devoted themselves to was Christian humanism. Believers asserted that the ancient Greek classics would serve to strengthen Christian beliefs and moral practice. This brand of scholars was encouraged to study the three original languages (Latin, Greek, and Hebrew), to learn the rules of grammar and rhetoric and to receive a general education which included history, geography, and culture in order to better understand the Bible. Their broad aim was to give training in virtue and letters which would equip men to live an active Christian life. For Erasmus, "All studies, philosophy, rhetoric, are followed for this one object, that we may know Christ and honor him. This is the end of all learning and eloquence" (Ferguson, 1991, p. 51). His whole life became committed to a synthesis of the best of classical learning with the reform of Christianity.

Erasmus valued the classics for more than just their benefit to moral development. He believed they were the key to understanding culture. Further he believed that even though the ancients may have been heathens, their moral principles were Christian ideals

of justice, sanctity, sincerity, truth and fidelity. He saw and appreciated the positive contributions the ancients could make to the Christian faith. To Erasmus Plato "was a theologian, Socrates a saint, Cicero inspired, and Seneca not far from Paul" (Ferguson, 1991, p. 53). In order for Christians to obtain the maximum moral benefit from the classics, Erasmus gave careful instructions as to how they should be used to promote piety and morality.

Over time, Erasmus became the acknowledged leader of the Christian humanist movement. He came to dominate much of the European discussion about religion, classical scholarship, biblical and patristic studies, education, and moral and political commentary. Because he maintained such a powerful position of leadership, Erasmus gave the new learning credibility, and more than any other single person created an atmosphere in which humanism could flourish (Trevor-Roper, 1984).

Educational Philosophy

Erasmus was preoccupied from a young age with the same complex of issues: the reform of education by a return to the classics, the reform of Christian morals by a return to reverence for the scriptures, and the moral amelioration of society by means of both (Tracy, 1972). He believed that learning supports morality, arguing that morality must be based on genuine understanding, and that learning naturally leads to moral action. His remedy for society was to lift the standard of religion through enlightening Christianity with a study of the ancients. Education, along with writing, was his vehicle for accomplishing this task.

Another major concern for Erasmus was educational "legalism," or the effort to ensure salvation through the meticulous observance of external rules for food, dress, vigils, etc. Just as he believed that the right kind of education could foster a new esteem

for the gentle qualities of human nature, he also believed that the wrong kind of education—with a multitude of rules and strictness—would surely produce men of a harsh and violent temper. He well remembered his own education and the yoke of discipline he bore as a student (Tracy, 1972).

In place of discipline Erasmus proposed a greater reliance on spontaneity. Quintillion had taught that the best pupils would be anxious to learn of their own accord, and need only be given free rein to do so. Erasmus believed that teachers should lay aside their canes and preachers their threats of hell fire. He wanted men to be freed from constraint; he trusted that in an atmosphere of freedom, the gentle rather than the brutal qualities of human nature would prevail (Tracy, 1972).

Erasmus established himself as a leading international scholar through the publication of several books. His early works included *De Ratione Studi* first published in 1497, and the *Apophthegmata*, or *Sayings of the Ancients*, which tells stories of ancient writers (Socrates, Aristippus, Diogenes, Cicer, and Demosthenes) along with moral conclusions which allowed Erasmus to introduce all kinds of material of his own.

Three years later the *Adagiorum Collectanea* came into print. This book was a collection of about eight hundred proverbial sayings drawn from the Latin authors of antiquity. A glance through an index of *Adagia* reveals phrases that are still on our lips today: there's many a slip twixt cup and lip; leave no stone unturned; God helps those who help themselves; the cart before the horse; a rare bird; to have one foot in the grave; sleep on it; call a spade a spade; to break the ice; ship-shape; to look a gift horse in the mouth. Following each proverb was a detailed explanation of the saying. Also included was the source of the proverb along with a list of people who had borrowed or adapted the saying (McConica, 1953).

Commentators ascribed the progress of learning and the reform of university curricula in the sixteenth century to the influence of the *Adagia.* In that age of rhetorical address, a knack for quoting examples and citations from ancient literature added greatly to any composition. Use of these authorities was considered essential to any argument. Scholars depended upon an array of classical allusions for their arguments; for them a convenient manual of effective quotations was a labor-saving device of priceless value (Smith, 1923).

Erasmus also wrote the satire *In Praise of Folly* in which he let loose a revolution against all kinds of authorities. His *Colloquies* became one of the most widely used schoolbooks of the sixteenth and seventeenth centuries throughout Europe. The series of dialogues was first written for his pupils as a form of polite address in the Latin tongue to help them acquire use of the language. In the Protestant countries, it was spread abroad because it attacked monks, abuses and superstitions. It was even required by statute to be taught in many English grammar schools. But the Catholic University of Paris forbade the use of the book in 1528, and it was condemned in 1594 at the Council of Trent (Monroe, 1911).

Later Life and Death

In terms of the continuous development of Erasmus's education reform program, little can be said of the last decade of his life. He never ceased to advocate new directions in schooling and in piety, nor did he slacken in the work of editing texts. But at some point in the 1520s he began to feel that history had passed him by.

As a scholar Erasmus had won the recognition of his contemporaries. But because he had attacked the corruption and superstition in Catholicism, he was disliked by the clergy, though the church had bestowed honors on him. He was invited by

Henry VIII to come to England and join the new religious regime, but English Catholicism was not to the liking of Erasmus. The Protestant reformers first expected him to be their friend, but he refused to join the new movement; it was for him too irrational. In addition, he knew the value of the university in the Greek-Roman-Christian heritage and was afraid of contributing to its disintegration. What Erasmus desired was to reform the church, not destroy it or divide it.

By this time a great deal of criticism was being hurled against him; monasteries where he had once been welcomed now feared to have him come near, lest he contaminate their members. It was rumored that warrants had been issued for his arrest. He was invited to go to Rome to explain his position, but he declined to go. Instead he headed for Switzerland, the land of liberty. At Basel he stopped at the house of Froben, the great printer and publisher, and determined to abide there.

For several years before his death Erasmus made no confessions and very seldom attended church services. He said, " I am much more proud of being a printer than a priest" (Hubbard, 1908, p. 75).

Lasting Influence

Erasmus has become known as the greatest scholar of the humanist period. He was also one of the first great liberals in Western culture. Erasmus became the greatest elucidator, critic, educator, and teacher of his day, and not a teacher of his generation alone, but also of subsequent generations, for the men of the enlightenment, the freethinkers, the encyclopaedists of the eighteenth century, and many an educator of the nineteenth century were siblings to his mind. John Colet said of him, "There was something about the Dutch scholar which made one feel intuitively that one stood in the

presence of a mental giant, who was certain to leave a lasting impression on the minds of coming generations" (Lamper, 1959, p. 155).

His books were acceptable to popes and princes of the Church, to kings and dukes alike; they brought to their author the highest of honors. Thanks to Erasmus, the man of letters for the first time became something to reckon with. Erasmus supplied Sir Thomas More the germ of his "Utopia," for he pictured again and again an ideal society where all would have enough and none suffer from either want or surplus. Erasmus and More are the only names in all the host of humanists which have remained household words all over the globe (Hubbard, 1908).

Erasmus' Educational Legacy

1. Erasmus has been called the "poet-laureate" of the Christian humanist movement. In him is embodied their fundamental belief that the individual can make a contribution toward the perfection of the world; that progress can be achieved at all levels of society by means of enlightenment. Their dream was a powerful magnet which attracted the best intellects of the epoch from every land. And it proved a powerful force. For the first time since the break up of the Roman civilization an all embracing European culture was coming into being, mainly through the instrumentality of Erasmus and his Christian reformers. For these humanists the one single road which would lead to achieving their dream was education. They had total confidence in the power of education to improve human nature. This attitude is nowhere more evident that in Erasmus' works.
2. In all his activities Erasmus pointed to the importance of education for all people from their earliest years. He believed that the wisdom of the sages and the grace of the Gospels should shape the soul from birth. He proposed that the classics as

well as the Bible should be taught to men—and women—of all walks of life all their lives. This attitude reflects his desire to bring mankind in touch with the divine without priestly intervention. By such inner soul searching and through searching the ancient scriptures, Erasmus believed that people would be able to come to their own understanding and decisions, and to express their own thoughts freely without aid of the interpretation of the Church.

3. Such a synthesis of Christian and pagan thought as Erasmus envisioned had been attempted before by Augustine and Aquinas. Erasmus' was a fresh approach. His purpose for a widened education was not to bolster theology, but to reform it. All these thoughts he held in common with other humanists of his day. But in his methodology for dispensing education, Erasmus was way out ahead of the pack. Erasmus honestly believed that the individual and community could attain to a higher level of culture through the spread of education specifically through the writing and studying of books. Though he also enjoyed the system of tutoring in vogue at the time, his primary method of instruction was through the written word. A tremendous believer in the power of printed knowledge, Erasmus celebrated the capacity of human nature to become more noble by means of reading.

4. Erasmus was perhaps the first educator to rely primarily on this one method of instruction. For him the great tool of education was the printing press. "His incense was the odor of printer's ink" (Bainton, 1969, p. 5). No man labored so arduously to bring learning abreast of technology. He firmly believed that by printing knowledge for the common people to read for themselves, he was multiplying his contribution to a new society in a way which no educator had ever

done before. Our Renaissance man knew his worth to his age, and he said so in a letter written to a friend:

> Point out to my lady how much more credit I shall do her by my learning than the other divines whom she maintains. They preach ordinary sermons; I write what will live forever; they, with their silly rubbish, are heard in one or two churches; my books will be read by all who know Latin and Greek in every country in the world; such unlearned divines abound everywhere, men like me are scarcely found in many centuries (Smith, 1923, p. 32).

FRANCIS BACON

The Christian humanism of Erasmus continued to grow and gain popularity into the Renaissance. Europe saw the establishment of numerous higher educational institutions along with reforms in secondary schooling. Education was high on the list of interests for those involved in government and commerce. Scholars and their writings abounded. From 1400 to 1600 humanistic education was adopted throughout Europe and its effect is still being felt today.

Much of the work of the humanists involved the reintroduction of the thoughts of the ancients. Their works were read and translated into every language. Their ideas for education were adopted as educational institutions proclaimed them as their models. And a generation of scholars who were Erasmus' contemporaries managed to harmonize ancient educational and ethical values with Christian doctrine.

But to some late Renaissance intellectuals the success of the humanists seemed an unhappy fate. Francis Bacon was among those who noted that Renaissance Europe had become so closely attached to the ancients as to have taken on their characteristics. Ancient philosophy had, in fact, become a straightjacket which was holding back progress. A new cry began to be heard, a cry for a unique educational experience where men could study not only the ideas of the past but practical perspectives, modern languages and modern comparative history. Montainge and Gilbert joined Bacon and others in criticizing the humanists for caring more for ancient theories than modern realities (Deighton, 1971).

Francis Bacon's criticism of the humanists went far beyond any of the others of his time. From the young age of twelve years Bacon envisioned an entirely new plan for education which included a new type of college, new ways of conducting research and an entirely new body of knowledge resulting from utilizing new techniques for learning. Not looking to the old, calcified knowledge, admiring it as a thing of beauty, but the creation of new knowledge that would utterly change civilization "for the relief of man's estate"—this was his dream. He dedicated his life to the fulfillment of this plan and though most of his ideas were not enacted during his lifetime, within twenty years of his passing they had been acclaimed and adopted and his new way of learning was well established.

Life of Francis Bacon

Francis Bacon was born in London, England on January 22, 1561. He was raised by two of England's brightest: Sir Nicholas Bacon, Queen Elizabeth's Lord Keeper of the Seal, and Lady Ann Bacon, sister-in-law of Lord Burghley. Sir Nicholas had inherited the office that was held by Sir Thomas More, and was noted to have had the same kind of wit as his predecessor (Stuart, 1932). Ann Bacon was a woman of unusual learning, well read, with classical training and a penchant for the Calvinist faith. She was known for her scholarship and abilities at various languages including Latin and Greek. Francis, their youngest, was rather frail and solemn. His father wanted the boy to become a diplomat in the service of the Queen and so taught him the worldly ways of the court. His mother encouraged his earnestness and piety. Elizabeth, the Queen, who often met with the family and stayed at their home in Gorhambury on several occasions, was impressed with the boy's intellect; their close but troubled relationship began when Francis was very young.

Education

Francis' elder brother was Anthony Bacon. The two young men entered Trinity College Cambridge at when Francis was only twelve years old. There he studied all the sciences in the traditional medieval curriculum (grammar, rhetoric, dialectic, arithmetic, geometry, astronomy and music as well as the philosophies—moral, natural and metaphysical) for three years (Pelton, 1996).

It was while Francis was at Trinity that he began to put together his scheme for the reforming of all knowledge. His college experience left him with a distaste for traditional philosophy and a dislike for Aristotle in particular. Commenting on this event his biographer Spedding wrote "I believe it ought to be regarded as the most important event of his life; the event which had a greater influence than any other upon his character and future course" (Farrington, 1949, p. 24). The event is remarkable not only because the man came to his life's calling so young, but also because of his reasons for disliking Aristotle which he later described in numerous of his works: Francis criticized Aristotle for being barren of the production of works for the benefit of mankind and for being, in all practicality, entirely useless.

At Cambridge Francis was taught never to examine, never to question. Students trained at the university, Francis later wrote,

> "learn nothing there but to believe." From the sea of knowledge rose the classic Pillars of Hercules, boundary beyond which man durst not venture. To those with ambition to pass the Pillars—in Bacon's phrase to sail *plus ultra*—the University offered no compass. The one tutor who might have helped young Francis on his journey was Everland Digby, who wrote treatises attempting to classify the sciences. But Digby was noisy. He told rude jokes on the master of his college. . . [and] did not pay his bills. The University expelled him (Bowen, 1963, p. 37).

Francis and Anthony left Cambridge without waiting to take their degrees. At age fifteen Francis became a member of Gray's Inn and from that time on he was destined for a career in the law. The other significant event of that year was his commission from the Queen to be part of the retinue of Sir Amyas Paulet, Ambassador to France. At fifteen he "first kissed her Majesty's hand as a servant" (Bowden, 1963, p. 37), an incident that held high significance for him, for from then on, for virtually the rest of his life, he was bound to the service of the English court.

For two and a half years Francis was a part of the French court. There he learned the ways of the nobility and studied the French language. And there he encountered a new type of learned man among whom new ideas circulated. Men from the legal and public professions, as well as poets, philosophers and musicians, had begun to gather for discussions with King Henri III, and Francis attended their meetings. He described them as a philosophical *academie* (Pelton, 1996; Martin, 1992) and as being a major force for subtle changes that were beginning to happen in learning on the continent. While there Francis also invented a new method of writing in cipher which he used in his service to the Queen (Anderson, 1948).

Quite suddenly Francis was called home due to the death of Lord Bacon. Upon returning to England the lad found himself without much in the way of an inheritance; this financial burden followed him the rest of his life. He did have 300 English pounds and a place at Gray's Inn where Nicholas Bacon had resided. Gray's Inn, at the time of Francis' residence, was part of the best legal university in Europe. The four Inns of Court were societies of students and practicing lawyers, each with their own buildings, libraries and regulations. It was during his sojourn at Gray's Inn, from seventeen until he took his

first official position in 1584, that Francis had time to think through his plan for the redressing of the problems of education and learning. At the time he wrote

> I confess that I have as vast contemplative ends as I have moderate civil ends: for I have taken all knowledge to be my province; and if I could purge it of two sorts of robbers, whereof the one with frivolous disputations, confutations and verbosities, the other with blind experiments and aricular traditions and impostures hath committed so many spoils, I hope I should bring in industrious observations, grounded conclusions and profitable inventions and discoveries, the best state of province" (Stuart, 1932, p. 22).

So it was that while in his outer life Francis studied for a career in the law, his inner life took on the quality of a philosopher as he became absorbed in designing a new plan he would later call the "Great Instauration," or the great restoration, of learning.

During this time Francis also exercised his talent in play writing. Francis took part in writing a revel which was performed at Gray's Inn on Christmas Day, 1594. A prince from an imaginary realm was coming to visit and six addresses were written (all by Bacon) to be presented to this Prince. In one Francis gave expression to the conception that was growing in his heart:

> I will wish unto your Highness the exercise of the best and purest part of the mind, and the most innocent and meriting conquest, being the conquest of the works of nature. And to this purpose I will commend to your Highness four principle works and monuments of yourself. First, the collecting of a most perfect and general library, wherein whatever the wit of man hath heretofore committed to books of worth, be they ancient or modern, printed or manuscript, European or of the other parts, of one or other language, may be made contributory to your wisdom.
>
> Next, a spacious, wonderful garden, wherein whatsoever plant the sum of divers climates, out of the earth of divers moulds, either wild or by the culture of man brought forth, may be with that care that appertaineth to the good prospering thereof set and cherished: This garden to be built about with rooms to stable in all rare beasts and to cage in all rare birds; with

> two lakes adjoining, the one of fresh water the other of salt, for like variety of fishes. And so you may have in small compass a model of universal nature made private.
>
> The third, a goodly huge cabinet, wherein whatsoever the hand of man by exquisite art or engine hath made rare in stuff, form or motion; whatsoever singularity change and the shuffle of things hath produced; whatsoever Nature hath wrought in things that want life and may be kept; shall be sorted and included.
>
> The fourth such as still-house, so furnished with mills, instruments, furnaces, and vessels, as may be a palace fit for a philosopher's stone" (Farrington, 1949, pp. 35-36).

These ideas, garnered while Bacon was still a teenager, became the first draft for "Solomon's House," a passage that appeared in his later work, *New Atlantis*. At the time he proclaimed that the idea for this new form of college and the new type of learning that would go on there had become "so fixed in my mind as it cannot be removed" (Farrington, 1949, p. 36).

Political Life

Bacon began his public life in 1584 when, with the help of his uncle Lord Burleigh, he gained a seat in Parliament. He played an active part in debates and developed into a remarkable speaker, making a considerable impression by the power of his oratory. He took great pains with his speeches and throughout his life wrote extensively on the art of public speaking (Urbach, 1987; Wallace, 1943). Ben Johnson once wrote of his friend,

> . . . there happened in my time one noble speaker who was full of gravity in his speaking; his language. . . was nobly censorious. No man ever spake more neatly, more presly, more weightily, or suffered less emptiness, less idleness, in what he uttered. No number of his speech but consisted of his own graces. His hearers could not cough or look aside from him without loss. He commanded where he spoke, and had his judges angry

> and pleased at his devotion. No man had their affections more in his power. The fear of every man who heard him was lest he should make an end (Wallace, 1943).

Though Bacon loved political life, he was never as successful as he wanted to be during the reign of Elizabeth. Though she admired Francis, the Queen never promoted him within her court as she could have. One reason given for her ambivalence was that Francis once opposed her on a point of taxation, and the Queen was greatly displeased by the stand he took against her. Although he maintained some small posts during her reign, Francis had to wait until Elizabeth was succeeded by James I before he became recognized as a major contributor to the court.

Once James was in office Bacon became one of the King's most important counselors. He was knighted in 1603. In 1607 he was made Solicitor-General; then in 1613 he became Attorney-General. Soon he was made Privy Councillor (1616) and in the next year he took the position his father and Sir Thomas More had held before him: Lord Keeper of the Great Seal. Finally he overtopped his father to become Lord Chancellor (1618). Through this time his dignities continued to increase from being knighted, to being made a Lord, to becoming Baron Verulam of Verulam, and finally to being made Viscount St. Alban.

Educational Philosophy

During his busy public life Bacon continued to pursue his educational vision. In the preface to *De Interpretation Naturae* he wrote:

> Believing that I was born for the service of mankind, I set myself to consider what service I was myself best fitted to perform. Now if a man should succeed, not in striking out some new invention, but in kindling a light in nature—a light that should eventually disclose and bring into sight all that is most hidden and secret in the universe—that man (I thought) would be benefactor indeed of the human race. . . . For myself I found

> that I was fit for nothing so well as the study of truth, as having a mind nimble and versatile enough to catch the resemblances of things (which is the chief point) and at the same time steady enough to fix and distinguish their subtler differences; as being gifted by nature with desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to reconsider, carefulness to dispose and set in order; and as being a man that neither affects what is new nor admires what is old, and hates every kind of imposture. So I thought that my mind had a kind of familiarity and relationship with truth (Edwards, 1967, p. 237).

The driving force of Bacon's educational philosophy was his alarm at the lack of progress that could be discerned since the time of the ancients in so many branches of science. Though they had been enjoying a high reputation, Bacon could see only the shallowest understanding among the ancients. He saw no practical benefits that had come to humankind from the philosophy of the ancients. Rather it "has the characteristic property of boys: it can talk, but it cannot generate; for it is fruitful of controversies but barren of works" (Urbach, 1987,p. 13).

> Are we the richer by one poor invention, by reason of all the learning that hath been this many hundred years? The industry of artificers maketh some small improvement of things invented; and chance sometimes in experimenting maketh us to stumble upon somewhat which is new: but all the disputation of the learned never brought to light one effect of nature before unknown (*In Praise of Knowledge* in Urbach, 1987, p. 13).

Bacon was looking for improvement in man's lot, not (as he accused his humanist colleagues) of "a couch wereon to rest a searching and restless spirit" (Edwards, 1967, p. 237). He wanted instead "a rich storehouse for the glory of the Creator and the relief of man's estate" (Edwards, 1967, p. 237). He saw himself as a pioneer whose destiny was to make a decisive break with the past.

In many of his writings we find Bacon making the sharpest attacks upon Plato and Aristotle. Aristotle he calls "a wretched sophist, his logic a manual of madness, his

metaphysics a superstructure of cobwebs erected on a small foundation of fact" (Farrington, 1949, p. 64). And of Plato he wrote:

> Let Plato next be summoned to the bar, that witty detractor, that swelling poet, that deluded theologian. Your philosophy, Plato, was but scraps of second-hand information polished and strung together. Your wisdom was a sham which you achieved by an affectation of ignorance. You tempted the minds of men by vague inductions, but were never able to bring them beyond these uncertainties. But at least you had the merit of supplying topics for the table talk of men. . . When, however, you falsely asserted that truth is,as it were, the native inhabitant of the human mind and does not come from outside in order to take up its abode there; when you turned out minds away from observation and away from things. . . when you taught us to turn our minds inward and grovel before our own blind and confused idols under the name of contemplative philosophy, then truly you dealt us a mortal injury (Farrington, 1949, pp. 64-65).

Aristotle, in his book *Metaphysics*, said that he regarded the process of discovering knowledge as being finished; that everything had already been invented. Plato's position appeared to be the same (Farrington,1949). To Bacon this opinion is exactly what had spelled doom to the material and mental progress of mankind thousands of years earlier. The whole history of philosophy was to him a wandering in the wilderness, and he cried out for educators to wake up and begin giving the world something useful.

> Francis Bacon believed that a relationship existed between knowledge and practical activities, maintaining that neither intellectual nor material progress was possible until theory and practice came together. It was his belief that knowledge should be pursued for the purpose of helping the individual to better his or her environment and that nothing should be scorned, no matter how practical or familiar it seemed to be. Thus, Bacon cleared the way for the application of science to everyday living—food, clothing, and shelter—not only for enhancing the comfort of living but also for enlarging the intellectual life (Carver, 1979, p. 1).

Francis Bacon dived into his Great Instauration in which he outlined his plan for restoring man to his lost mastery over the natural world. It took him most of his life to

write the entire Instauration, and parts of it were never fully completed. It consisted of six parts: a complete classification of the existing sciences; the principles of the new art of interpreting nature—a new inductive logic—to provide a reliable guide to the invention of new arts and sciences; the collection of empirical data and the conducting of experiments; a series of examples illustrating the successful working of the new method; a list of the generalizations that could be derived inductively from the study of natural history; and the new philosophy set forth as a complete science of nature.

He began with the publication of his "Arts of Teaching," the *Advancement of Learning*. Bacon's purpose in *Advancement*, he said, was to ". . . excite other men's wits [rather] than to magnify my own; I was desirous to prevent the uncertainness of my own life and times, by uttering rather seeds than plants. . . I have only taken upon me to ring a bell to call other wits together. . . . " (Seligman, 1930, p. 382).

In this work Bacon makes a strong plea for organized teaching in schools and colleges and laid down the modern concept that rather than having to go through a uniform curriculum, students should be permitted a choice of studies adapted to their needs. He begins by offering a defense of learning and then making a general review of learning as it has been practiced. He then catalogs the branches of knowledge showing how each is deficient. Here he proves his youthful claim, "I have taken all knowledge to be my province," for truly he covers all the sciences known to his time. *Advancement* also sets out his ideas on science and shows him to be a true prophet of our modern era.

This *Art of Teaching* was not written in English because Bacon believed that Latin would remain the language of choice. This was probably a mistake, and Bacon must have realized it, because thereafter he wrote his ideas into a number of books and essays trying various ways to communicate them.

His plea in his *Instauration* was for a great renewal—a restoration—of science to its proper place. He seemed to believe that not so many thousands of years ago man had had dominion over nature (Farrington, 1949), and he had confidence that man could once again acquire this knowledge. He proposed a new approach to science which was based on use of inductive reasoning.

> He recognized the essential simplicity of the core principle of all natural science that concepts must be consistent with facts, and that once in hand this validated knowledge of the world was an immensely powerful tool in solving practical problems. Bacon also recognized that science is a human endeavor and therefore subject to human weaknesses. He pointed out that the accumulation of data requires training, resources and time. . . . The Baconian formula for "doing" science was essentially that of induction: prying hidden generalizations out of inchoate observations and experimental results (Mathewson, 1995, p. 1).

Later Life and Death

Though he achieved high reputation in later life, it all came toppling down when, in 1621 Lord Bacon was impeached from his office and sent away from the court in disgrace. Sir Edward Coke, Bacon's archrival, accused him of taking a bribe. At first Francis claimed his innocence, writing to the Marquis of Buckingham, "I know I have clean hands and a clean heart, and I hope a clean house for friends and servants. But Job himself, or whosoever was the justest judge, by such hunting for matters against him as hath been used against me, may for a time seem foul, specially in a time when greatness is the mark and accusation is the game" (Farrington, 1949, p. 156). But later Bacon agreed not to challenge the accusation. Though he had been in a position of considerable influence, at that moment in history he seemed to have no powers of influence over the King. Bacon was imprisoned for only a few days, let go, given a pension and sent to spend his last years at Gorhambury where he had spent happy days with Lady Anne and

Lord Bacon. There he spent the last five years of his life writing the rest of his plan for the advancement of education and science.

One of the last books to be completed was the one Francis had dreamed of all his life. The *New Atlantis* contains his vision of what the new college could become. All of his life he had hoped to actually receive funding to manifest his enterprise with a band of teachers who thought as he did. In his private notes he cogitates on how he would make it physical: "Foundation of a college for Inventors. Two galleries with statues for Inventors past and spaces for Inventors to come, and a library and an Inginary (engine room?). Allowance for travelling, Allowance for experiments ; Intelligence and correspondence with the Universities abroad" (Sturt, 1932, p. 116).

As author Mary Sturt points out, this college lived in Bacon's mind all his life and it appeared in its grandest form in the *New Atlantis*. In this book Bacon describes the college of science he called "Solomon's House" which he dedicated to the study of the works and creatures of God. His idea was not just laid out on paper; throughout his career he continually asked James I to allow him to create professorships of science at Oxford and Cambridge, to found a great college where men could pursue experimental science and to allow him to set up learned societies for research (Sturt, 1932).

None of these proposals were adopted during Bacon's life, which ended quietly in 1626 after he caught a cold experimenting with the effects of snow on a chicken. However, several of Bacon's proposals were taken up soon after he was gone.

Accomplishments and Influence

The Royal Society, of which the grandson of James I, Charles II, was an enthusiastic patron, was essentially a Baconian institution, as were numerous learned societies that sprung up in England and the Continent, all claiming England's great prophet as their mentor.

In the end Bacon's own claim that he was only laying a foundation and ringing the bell to call others into the battle proved true. Such a work as he laid out could only be done by many hands and brains. Bacon himself was never a scientist. He never had the chance to teach in the college classroom he envisioned or to collaborate with other minds in the laboratories of Solomon's House. His teaching consisted of working with a group of the best writers, poets and artisans of his day, and of writing volumes of books which become the foundation for the reform of learning at the end of the Renaissance.

His students included hundreds who read his works in England and Europe and became so enchanted with his designs that they leapt to try them out. The Royal Society was established twenty years after Bacon's death and it claimed him as its chief prophet. Abraham Cowley, the immensely popular poet of the day, wrote this "Ode to the Royal Society:"

> From these and all long errors of the way,
> In which our wandering predecessors went,
> And like th'old Hebrews many years did stray
> In deserts but of small extent,
> Bacon, like Moses, led us forth at last.
> The barren wilderness he past,
> Did on the very border stand
> Of the blest promised land,
> And from the mountaintop of his exalted wit,
> Saw it himself, and shew'd us it (Farrington, p. 17).

The author of the first *History of the Royal Society*, Thomas Sprat, acknowledges:

> . . . one great man, who had the imagination of the whole extent of this enterprise, as it is now set on foot; and that is the Lord Bacon; in whose books there are everywhere scattered the best arguments that can be produced for the defense of the experimental philosophy, and the best directions that are needful to promote it . . . that if my desires could have prevailed . . . there should have been no other Preface to the *History of the Royal Society* but some of his writings (Farrington, 1949, p. 18).

Within twenty years, despite his ruined reputation at the end of his life, Lord Bacon's written teachings had swept Europe. For people all over Europe Bacon was like a trumpeter, calling men to action, urging them to turn with united force against the status-quo, to storm and occupy the castles and strongholds of Nature and "extend the bounds of the human empire, as far as God Almighty. . . may permit (Bacon in Sills, 1968, p. 495). In the words of Thomas Fowler, one of Bacon's biographers, "He stood like a prophet on the verge of the promised land, bidding men to leave without regret the desert that was behind them, and enter with joyfulness and hopefulness on the rich inheritance that was spread before them (Edwards, 1967, p. 239).

Educational Legacy

1. Bacon has been affectionately referred to as "the great English teacher" (Farrington, 1949, p. 176). The educational influence of Bacon was general rather than specific. He discovered a mine that has enriched our modern way of learning as well as our lives, our work, our thinking and especially our technology. But as one individual, he was unable, as Paul Monroe, editor of the Cyclopedia of Education (1915), points out, to work out all its veins.

> His immediate service is to education in the broad sense of the term rather than to the school. Thus, broadly speaking, Bacon initiated the greatest reform movement in education following the Renaissance, viz. "sense-realism." His followers reconstituted the curriculum and revolutionized school methods; he helped to make modern science and modern philosophy possible; he substituted nature for dialectic disputation. . . . He substituted induction for deduction in the study of nature, thus giving education the sense basis; and in the spirit of philanthropy he started the ideal of pansophism (q.v.), that all knowledge might be unified for dissemination among men.

> These wonderful innovations were not effected without the assistance of the scientific geniuses and the practical schoolmasters of the period, such as Bruno, Copernicus, Da Venci, Galileo, Kepler, Grotius, Boyle, Mulcaster, Ratke, and Comenius. But Bacon was the philosophical inspiration of the modern scientific movement. His greatness consists in his formulation of the scientific problem, his provision of the means for its solution, and his now fulfilled prophesies of the results. Bacon has provided the mottoes for modern contributions to universal scholarship, from Kant to Sandys (pp. 315-316).

2. The idea that gripped Francis Bacon from boyhood was a simple one: that knowledge ought to bear fruit in works, that science ought to be applicable to industry, and that scholars, educators, scientists and all learned men ought to organize themselves, as a sacred duty, to improve and transform the conditions of life. This idea, which took Bacon a lifetime to write down on paper, received such development from his hands and those who came after him as to forever alter the course of human history. In the process he changed the way we think and gave thinking and learning a practical purpose—the relief of man's estate.

3. Of his own accomplishments Bacon wrote:

> I have held up a light in the obscurity of philosophy which will be seen centuries after I am dead. It will be seen amid the erection of temples, tombs, palaces, theatres, bridges, making noble roads, cutting canals, granting multitude of charters and liberties for comfort of decayed companies and corporations; the foundations and institutions of orders and fraternities for nobility, enterprise and obedience; but, above all, the establishing of good laws for the regulation of the kingdom, and as an example to the world (Bacon in Monroe, 1915, p. 316).

BENJAMIN FRANKLIN

Benjamin Franklin is the epitome of the American ideal—the self-educated, self-made man. Though he came from humble beginnings, Franklin's wealth and fame stand as testimony to both his character and his ability to incarnate his own belief that anyone can grow by applying the principles he taught. His benevolent ambition led him to start discussion groups and vocational and technical schools. In fact, he is credited with having initiated the adult education movement in America. He provided for the education of orphans and free blacks and established the first library, the first American hospital, and the first fire insurance company (Cohen, 1953). He brought to common American stock the format for learning used by the learned societies of Europe. Franklin educated the nation through his *Autobiography* and *Poor Richard's Almanac*, two of the most widely read literary pieces in America.

Life of Ben Franklin

Benjamin Franklin was born on January 6, 1706, the fifteenth son of Josiah and Abiah Franklin. His family were New Englanders of old English Protestant stock—men and women of practical industry. As the boys grew up, all of Benjamin's elder brothers were apprenticed to trades. But upon Benjamin fell another mission. Because his son showed early signs that he might make a good scholar, Ben's father farmed his son out at age eight to the grammar school, intending to sacrifice him as the tithe of his sons to the service of the church.

Self-Education of Ben Franklin

The truth was that the child had undertaken his own education years earlier when he taught himself to read. "I do not remember when I could not read," recalled Benjamin in his *Autobiography*. "From a Child I was fond of reading, and all the little Money that came into my Hands was ever laid out in Books" (*Autobiography* in Ulrich, 1947, p. 428). Thus began the self-education of a man whose formal education consisted of one year at the Boston Latin Grammar School and a brief tenure at George Brownell's business school where he failed arithmetic. Franklin's love of books and knowledge, and by logical extension his career in the printing industry, combined with a puritanical bent for self-discipline and a gift for keen observation, made it possible for Franklin to evolve into a most versatile shaper of the American character and destiny (Blinderman, 1976).

Another type of education met the youth when his first attempt at achieving literary fame landed his brother in jail. Franklin had become apprenticed to his brother James who owned a print shop and had begun America's second newspaper, *The New England Courant*. As he carried out his duties for his brother, Franklin secretly began to write his own articles under the pseudonym of Silence Dogwood. Dogwood introduced himself as the widow of a rural preacher and proceeded, after initial bows and polite formalities, to criticize the privileged classes, the clergy, the collegians and the government.

Soon James Franklin was hauled into court because the articles' numerous attacks had gravely offended members of the community. James was put into prison and ordered to discontinue publication, and it was decided that Benjamin should be given charge of the newspaper. Franklin was only seventeen years of age when he became the publicly acknowledged head of the paper (though he secretly signed papers acknowledging James as its rightful owner).

In 1730, at age twenty-four, Franklin became the owner of his own printing shop. In September of that same year he married Deborah Read. They were married for 44 years and had two children, Francis and Sarah. The high regard he had for his wife, "Debbie," his "Dear Child," was evidenced in his many letters to her, and his comment in the *Autobiography*, ". . . we throve together and have ever mutually endeavored to make each other happy" (Woody, 1931. p. 17).

From his first newspaper Franklin went on to successfully run a number of businesses and, in service to his community, to found several institutions which had a major impact on the developing independent nation. His success in community building went hand-in-hand with his success in building his own personal fortune which, though not colossal, was indeed large for the eighteenth century. Through these early experiences in organizing and fundraising, Franklin learned techniques which he used throughout his life in building institutions. He relates that, when he felt the impropriety of presenting himself as "the proposer of any useful project that might be supposed to raise my reputation above that of my neighbors," he quickly put himself "out of sight, and stated it as a scheme of a number of friends, who had requested me to go about and propose it . . ." (Cohen, 1953, p. 166).

By not only giving good advice, but being faithful in taking it, Franklin's business enterprises prospered. He was able to engage the support of a number of fine business-men to promote his printing interests throughout the colonies and the world. By 1748, just eighteen years after he became sole owner of his print shop, he was able to dispose of the business to David Hall, his partner, and retire from active work with a comfortable fortune (Woody, 1931). He was then just 42 years old.

Promoting Self-Education in the Colonies:

America's Adult Education Enterprises

Early in life Franklin had great faith in adult education as a means of providing education for all people. He certainly recognized its power to bring citizens together to solve the nation's problems peacefully. To test his belief in the educational value of discussion groups, when he was only twenty-four years old, Franklin became the founder, guide and inspiration of the Junto, a "club of mutual improvement," which started with eleven original members. It was sometimes called the Leather Apron Club due to the printers, shoemakers and mechanics who were liberally represented. The American Historical Review suggests that Franklin got this inspiration from the learned societies of the English Free Masons. The idea, a testiment to Franklin's self-active philosophy, was a test of his belief in the educational value of discussion groups in which both conservatives and liberals could explore the issues of the day: morals, politics and natural philosophy. The aim of the Junto was to seek out truth for truth's sake, to encourage men to love mankind and to promote scientific and philosophical discussions and scientific investigations. The members also set aside days to engage in the pleasure of picnics, songfests and declamations (Woody, 1931; Blinderman, 1976).

Franklin says of this endeavor:

> We met on Friday Evenings. The Rules I drew up required that every Member in his Turn should produce one or more Queries on any Point of Morals, Politics of Natural Philosophy, to be discussed by the Company, and once in three Months produce and read an Essay of his own Writing on any Subject he pleased. Our Debates were to be under the Direction of a President and to be conducted in the sincere Spirit of Enquiry after Truth, without Fondness for Dispute, or Desire of Victory. . . And the club continu'd almost as long [4 years] and was the best School of Philosophy, and Politics that then existed in the Province; for our Queries which were

> read the Week preceeding their Discussion, put us on reading with Attention upon the several Subjects, that we might speak more to the purpose; and here too we acquired better Habits of Conversation, every thing being studied in our Rules which might prevent our disgusting each other (*Autobiography* in Ulrich, 1947, p. 431).

The Junto continued on in this form for another thirteen years. In the golden years of the club, Franklin suggested that each member should become the leader of a new club. Thus several other such learning institutions like The Vine, The Band, and The Union came into existence (Woody, 1931). In 1743 Franklin wrote a new proposal "for promoting Useful Knowledge among the British Plantations in America." As a result the Junto became The American Philosophical Society in 1744. It was modeled after the Royal Society in England. Franklin remained an officer the rest of his life.

America's First Subscription Library

Franklin's account of the establishment of the first subscription library in the colonies is both charming and instructive:

> At the time I established my self in Pennsylvania, there was not a good bookseller's shop in any of the colonies to the southward of Boston. . . Those who loved reading were obliged to send for their books from England. The members of the Junto had each a few. We had left the alehouse where we first met, and hired a room to hold our club in. I proposed that we should all of us bring our books to that room, where they would not only be ready to consult in our conferences, but become a common benefit, each of us being at liberty to borrow such as he wished to read at home. This was accordingly done, and for some time contented us.
>
> Finding the advantage of this little collection, I proposed to render the benefit from books more common by commencing a public subscription library. I drew a sketch of the plan and rules that would be necessary, and got a skillful conveyancer, Mr. Charles Brockden, to put the whole in form of articles of agreement to be subscribed; by which each subscriber engaged to pay a certain sum down for the first purchase of books and an annual contribution for increasing them. So few were the readers at that

> time in Philadelphia, and the majority of us so poor, that I was not able with great industry to find more than fifty persons, mostly young tradesmen, willing to pay down for this purpose forty shillings each, ten shillings per annum.
>
> On this little fund we began. The books were imported. The library was open one day in the week for lending them to the subscribers, on their promissory notes to pay double the value if not duly returned. The institution soon manifested its utility, was imitated by other towns and in other provinces, the libraries were augmented by donations, reading became fashionable, and our people having no publick amusements to divert their attention from study became better acquainted with books, and in a few years were observed by strangers to be better instructed & more intelligent than people of the same rank generally are in other countries . . . (Cohen, 1953, pp. 165-166).

This project was truly the mother of all such library enterprises in America. Franklin's subscription libraries continued to increase, improving the conversation of colonists and making common tradesmen and farmers as intelligent as most gentlemen from other countries. These libraries no doubt contributed to the spirit which brought about the American revolution. Sydney George Fisher, author of *The True Benjamin Franklin*, praises Franklin for providing inspired young men with "an education which was not altogether an inferior substitute for that furnished by our modern institutions endowed with millions of dollars and officered by plodding professors wearied by years of exhaustive study" (in Blinderman, 1976, p. 15).

To Franklin, the library afforded him the opportunity to obtain for himself a substantial education. He speaks of his studies:

> . . . for which I set apart an hour or two each day; and thus repaired in some degree the loss of the learned education my father once intended for me. Reading was the only amusement I allowed my self. I spent no time in taverns, games or frolicks of any kind. And my industry in my business continued as indefatigable as it was necessary (*Autobiography* in Ulrich, 1947, p. 432).

The Academy of Philadelphia

During his life Franklin gathered to himself a definite philosophy of education. We see it reflected in the way he pursued his own education, and in the avenues he provided for the education of others. Based on his understanding that people can take charge of their own learning experiences and educate themselves so long as the tools they need are close at hand, he continued throughout his life to put his efforts into building industrial schools, technical schools and other institutions (Thorpe, 1893). Aware that the expanding colonies would need skilled craftsmen, technicians, businessmen and agriculturists, Franklin envisioned the establishment of an academy in Philadelphia that would train young people for gainful employment. An excellent fund raiser, Franklin solicited the help of wealthy and influential Philadelphians to incorporate an academy and oversee its activities. A group of twenty-four trustees was appointed, the money was raised, and the Academy opened in 1751. The Academy eventually became the University of Pennsylvania.

Franklin had definite ideas about how the school should be run:

> The academy had to be properly housed on property surrounded by meadows and orchards. To interest the students in learning, there was to be a liberal expenditure on maps, books, and scientific apparatus. To insure that the students would have good health, he recommended temperate diets, exercises, including running, leaping, wrestling, and swimming. Since most of the graduates would not go to college, Franklin outlined a practical curriculum that would include all that is useful and ornamental. The students would benefit from arithmetic, accounting, geometry, astronomy, English grammar, writing, public speaking, and histories of mechanics, natural philosophy, and agriculture. Latin and Greek would be useless for terminal students but Franklin included the classics for those who desired them (Blinderman, 1976, p. 12).

Franklin the Teacher

Ben Franklin was America's first teacher of the self-tutorial method. He was a proponent of independent study and by his example many were influenced to pursue their own learning enterprises. His discussion clubs and library epitomized the ideal of self-education. They embodied the best of what all teachers have known—the student is his own best teacher—and provided vehicles for the individual's self-directed learning.

Today in the field of adult education there is more talk about the "facilitator" than there is about the teacher. In Franklin's clubs, the role of "teacher" was played by the moderator or president. The classroom was replaced by the meeting room. In graduate seminars in universities across the country today, professors ask students to do independent research and bring their papers to the table for discussion among the group of students. Franklin did the same. Participants in his clubs were responsible for writing an opinion paper on a topic of personal choice, usually in the area of morals, politics or natural philosophy. It was then discussed by the entire group. His was an organized, leaderless classroom. Each week someone presented a paper and a question and answer session ensued. The presenter was essentially the teacher for that week. Socratic discussion was brought to its ultimate utility in these discussions.

Franklin's self-education methods were the first American example of mass education. The oral tradition and the one-on-one relationship between teacher and pupil segued right into teaching via mass communication—the printing press. This device enabled all people, not just the elite of society, to be educated. Throughout his career as printer and writer Franklin was well aware of his responsiblity as teacher in this new medium. Poor Richard was the farmer-sage of the oral tradition in print.

Franklin's essential educational principle was to seek virtue. At the age of twenty-two he outlined his "first principles" in "Articles of Belief and Acts of Religion," his first elucidation of self-education in morality. According to Thorpe (1893) "The whole effort [is toward] his notion of education; that man by self-application could attain, through the results of personal experiment, perfection in almost any art" (p. 133).

Franklin believed the common man of moderate abilities could produce change and accomplish much in the service of mankind if he would first formulate a good plan, refrain from extraneous activities to divert his attention and focus his energy on the attainment of that plan. Striving, not perfection, was the requirement.

For his own, and later other's, perfection of virtue, Franklin devised a course aimed at breaking old bad habits and replacing them with good ones. Through experimentation he discovered that simply wishing to exemplify certain virtues wasn't enough to affect change. While not paying attention, an old vice could resurface because of habit. Therefore he contrived a methodology to rectify the situation:

> [He] established a chart of virtues and methodically recorded his transgressions with "a little black spot." Each week he concentrated on one virtue. By devoting attention to each virtue for one week he could finish the "course" in thirteen weeks and complete four courses in one year. These virtues, which Franklin proudly observed, produced in him an even temper and cheerful conversation that made him popular even with younger acquaintances (Levy, 1991, p. 358).

Franklin's virtues consisted of thirteen: temperance, silence, order, resolution, frugality, industry, sincerity, justice, moderation, cleanliness, tranquility, chastity and humility.

Influence and Accomplishments

After retiring from his business affairs, Franklin devoted most of his energies to large scale public undertakings like establishing the Pennsylvania Hospital, the first of its kind in America, as well as creating the first chartered fire insurance company. During this time Franklin performed his famous experiments with electrical fire, advanced his theory of electrical phenomena, and invented the Franklin stove.

A child of the Age of Enlightenment, Franklin was a freethinker. His *Poor Richard's Almanac*, which averaged 10,000 copies a year for twenty-six years, was the vehicle Franklin used to teach his deeply held beliefs and principles. His *Autobiography's* serious mission was nothing less than the education of a new nation, using his own life and mind as its model. Its message for governing one's life by rational action became not only a staple of American popular culture but a conduit through which that culture was passed to other parts of the globe. It was influential in Japan at a time when the modern Japanese character was forming, and parts of it later made their way into the famous *McGuffy Readers* (Forde, 1992).

Benjamin Franklin saw education as paramount, especially the model of self-education he strove to embody within himself. The Junto, the subscription libraries, his *Almanac* and *Autobiography* are monuments to Franklin's self-active method. Another monument to the thinker survives in the words he expressed in the epitaph he wrote for himself at age twenty-two:

The Body of B Franklin Printer,
(Like the cover of an old Book, Its contents torn out
and stript of its Lettering & Gilding)
Lies here, Food for Worms.
But the Work shall not be lost;
For it will (as he believ'd) appear once more,
In a new and more elegant Edition Revised and corrected, by the Author.

Franklin's Educational Legacy

1. When he was sixteen years old Franklin resolved "to do for the future all that lies in my way for the service of my countryman" (Cohen, 1953, p. 115). Helping people reach understanding was his way of serving them. Franklin was well aware that many people "have frequently resolved and endeavored" to improve themselves "but in vain, because their endeavors have not been properly conducted." To him it seemed that expecting "people to be good, to be just, to be temperate, etc., with out shewing them how they should become so, seems like the ineffectual charity mentioned by the Apostle, [saying]...'be ye fed, be ye warmed, be ye clothed,' without shewing them how they should get food, fire, or clothing'" (Cohen, 1953, p. 119).

2. To discover Franklin's educational philosophy one need only look at his education. Born and bred in poverty and obsurity, he emerged into a state of affluence with a reputation that allowed him to assist our nation in its moment of greatest need. His own path was shaped by an early career as a printer, and his educational philosophy was also shaped by the press. Franklin knew from personal experience that one doesn't need an expensive school or formal classroom to discover what is important in life. Franklin was the self-educated man, and he sought to help others to follow his lead by providing the tools they needed to take charge of their own educations. So he provided as many means for their education as he could—books, libraries, businesses, newspapers, learned societies, discussions and disputations—for those who would use them.

3. Though he taught himself the language of statesmen, Franklin's greatest joy was to speak as the friend and guide to the common man. He was able to share his

ideas across the land and the sea. His *Poor Richard's Almanac* was the only publication regularly read in thousands of homesteads, and its philosophy became household conversation. His *Almanac* has since been translated into virtually every language and reprinted four hundred times.

4. Franklin's *Autobiography* is one of the most widely read documents in American literature. Americans have cherished its story of the glory and failings of Franklin's path of self-improvement. In it Franklin undertakes to teach an emerging American nation about the relationship between wealth and virtue, his kind of utilitarianism and his vision of a democratic society, all in an effort to educate and elevate American culture. Franklin has taught millions of people such homely truths as:

> He that goes a-borrowing goes a-sorrowing.
>
> Experience keeps a dear school, but fools will learn at no other.
>
> It is hard for an empty sack to stand upright.
>
> He who by the plow would thrive himself must
> either hold or drive (Slosson, 1921, p.77).

5. In Franklin's educational programs we see the prototype of what was to become the American adult education system. He facilitated learning in adults, believing education to be a life-long process. Through the printed word he brought to the masses an understanding that previously had been reserved for the cultured and elite. His belief that a democracy can only work if the people are well educated likely prompted his determination to provide a means of learning for all members of the new independent nation.

ALFRED NORTH WHITEHEAD

Alfred North Whitehead is considered one of the most sensitive, original, and systematic minds of the first half of this century (Kline, 1963). He taught for fifty-three years on two continents, yet his thinking has influenced philosophers of the twentieth century worldwide (McGuire, 1976). He was trained in the rigors of mathematics, but used its principles to formulate first a philosophy of science and later a philosophy of metaphysics. His primary interest after mathematics, however, was education (Lowe, 1985).

Life of Alfred North Whitehead

Alfred North Whitehead was born February 15, 1861, at Ramsgate in the Isle of Thanet on the east coast of Kent, a rural district of southern England, not far from Canterbury. His father, Alfred, was a teacher at Chatham House Academy, so he was born in the headmaster's quarters on Chatham Street. Alfred's grandfather was also a teacher and administrator. In his *Autobiographical Note*s Alfred North Whitehead remembered: "They were, both of them, most successful schoolmasters, though my grandfather was by far the more remarkable man" (Lowe,1985, p. 13). His father, who later became an Anglican minister, was also a good preacher. "My father," Whitehead wrote, "was a natural orator, equally at home in the pulpit or at a mass meetings either of townspeople or of countrymen (Lowe, 1985, p. 25).

Alfred North's mother was the daughter of William Buckmaster, a successful military tailor. Alfred North never gave his mother the same level of recognition as he did his father. In his writings there is no counterpart to his memories of his father; she is not

even mentioned. There is some evidence to suggest that his mother was quite unimaginative, having some wit but little sense of humor. Alfred North defended his mother in private, however, saying, "She always did her duty as she saw it" (Lowe, 1985).

Alfred's father made a good enough salary that he was able to give his son a classical education. His father was Alfred's teacher for much of his early education. His father tutored him in the traditional education of the time: multiplication, fractions, decimals, plane geometry; Latin beginning at age 10 and Greek, which was a prerequisite for matriculation at Oxford and Cambridge, at age 12. Of his memory of those days Alfred North wrote:

> Holidays excepted, my recollection is that daily up to the age of nineteen and a half years, some pages of Latin and Greek authors were construed, and their grammar examined. Before going to school pages of rules of Latin grammar could be repeated, all in Latin, and exemplified by quotations (Whitehead in Lowe, 1985, p.41).

Although Alfred North wasn't an exemplary student of classical languages, he developed an interest in math. His studies of this subject continued for years. By the time he went to Cambridge, he told Lucien Price, "For a boy of nineteen I was a good mathematician" (Lowe,1985, p. 52). He ultimately became a mathematics teacher at Cambridge.

In September 1875 Alfred left his father's tutoring to spend five years at a public school that had recently attained a very good reputation—Sherborne in Dorsetshire, one of England's oldest schools. Public schools in England at the time were for the education of the rich and upper middle classes. Sherborne was typical, with a schoolhouse and seven boarding houses, averaging thirty boys in each and run by housemasters on their own money.

Outside the classroom there was not much contact between the boys and their teachers. To avoid teacher misuse and abuse of students, a system was designed for student governance of the boarding houses. Older young men earned the privilege of being "Prefect," or head of the house, according to their intellectual competence. Younger boys were assigned to older ones as "fags" and served their elders by shining their shoes, cleaning their rooms, preparing snacks, running errands, etc. Every year the headmaster appointed one of the seniors to be Head Prefect, or head of the school.

Prefects were responsible for running the house activities and helping to create and enforce the rules. They were also in charge of giving disciplines. This system was created to instill in the top students a sense of responsibility which would prepare them to hold meaningful and important positions in British society (Lowe, 1985).

Whitehead, third in his class, but possessing strong character and leadership qualities, was chosen Head Prefect for his final year at Sherborne, 1879-80. As with most young men who held the post, Whitehead matured very quickly during that period. The position helps one to learn "the light touch in giving orders, habits of courtesy and moderation, and appeals to fair play, 'good form,' loyalty, and the good of the group" (Lowe, 1985, p. 49).

One task as Head Prefect was particularly unpleasant for him—that of flogging another. Flogging, or caning, was the accepted form of punishment for certain offenses in English schools at the time. During his term as Head Prefect a young boy was given to Alfred to be caned for stealing money from another. Whitehead spoke with the headmaster about his reticence to use caning as a form of punishment and was told, "Either you must thrash him in the presence of the school or I must expel him" (Lowe, 1985, p. 64). Since expulsion could destroy a young man's career, especially if he hoped to get into a

university, Whitehead complied. Years later Whitehead reminisced about this incident to some of the Junior Fellows at Harvard, saying that this was one of the most disagreeable things he had ever had to do (Lowe, 1985).

For recreation, Sherborne students played athletic games, i.e., football, cricket, fives (handball), bowling, etc. School masters weren't involved in the play or the supervision; the boys taught themselves and ran the competitions. Motivation for play was intrinsic self-enjoyment. This experience likely contributed to Whitehead's later educational view of the need for student self-determination, to allow students to choose to investigate that which appealed to them rather than that which was teacher imposed.

Although he was not an award winning athlete, Whitehead was captain of the football team and in his senior year, captain of the cricket team. Holding these posts guaranteed that he would be made Captain of the Games, giving him responsibility for all games at Sherborne. Between this and his job as Head Prefect, Alfred North was keep quite busy during his senior year.

While at Sherborne Whitehead took and passed the entrance exam for Trinity College, a part of Cambridge University. He was awarded a scholarship. During his school years at Trinity, the only lectures he attended were in mathematics. Although Cambridge did have a general education requirement of math, the classics (Latin and Greek) and divinity, Whitehead's previous education was enough to exempt him from further study in these areas. In this way he was able to focus all his energy and attention in his area of specialization—mathematics.

On May 17, 1884, Alfred North Whitehead was elected as a member of the elite discussion club, the Cambridge Conversazione Society, a group commonly known to outsiders as "the Apostles." Although it originally may have had twelve active members,

at the time of Whitehead's tenure, there were six. Qualifications for membership were intellectual originality, honesty and an open mind. Active membership included some undergraduates, some recent Bachelor of Arts (as Whitehead was when elected) and some Fellows of Trinity. Membership was for life, but active participation lasted anywhere from one to twelve years. Resigning active status, an "angel" would "take its wings" and become an honorary member, able to come to meetings, but not compelled to do so.

Meetings of the Society (as it was called by members) were held every Saturday beginning at about 10:00 p.m. Members would gather in the quarters of the one who had volunteered to host it at the previous meeting. The host would present a paper of his thoughts and beliefs on a topic previously chosen.

> His paper usually set out his convictions and the reasons for them; at a minimum, it laid out ideas for discussion. After reading his paper, which usually took about twenty minutes, the host called on each of the others in an order settled by drawing lots, to stand on the hearth rug facing the circle of his "brothers" and say exactly what he thought, holding nothing back (Lowe, 1985, p. 113).

The purpose of the Apostles was to give opportunity for free expression of thoughts and opinions about topics not discussed as part of the curriculum at Trinity. The method of exchange was not debate, but rather candid discussion of ideas. A basic assumption among the Apostles was that when a few close friends were perfectly frank with each other, the clash of their opinions would facilitate the kind of learning from others which is supposed to occur in the discussion of ideas (Lowe, 1985).

At the end of each meeting a new moderator or host for the next week was chosen. That one gave the group four topics that he would like to write about and the group picked the one of most interest. Topics were usually philosophical and the politics

of the day were avoided. Questions posed for introspection and earnest discussion included, "Is it now as it was in the beginning?" or "What about telepathy?" or "Is self-love the immediate motive of all action?" or "Is one life enough?" (Lowe, 1985, p. 113).

The Apostles was a secret society. What was said during meetings was not to be repeated to nonmembers. As in most secret societies, there were rituals and an exclusive language. Whitehead reports that his membership in this group had a wonderful influence on him (Lowe,1985).

Teaching in England

Upon graduation in early 1884 Alfred became a Fellow of Trinity and was hired, by a stroke of good fortune, to teach mathematics. When Whitehead was an under-graduate, individual classes did not require exams, but at the end of three years of study, students were required to take a comprehensive exam called the Mathematical Tripos. One who passed in the top percent of the class was assured a prominent career, so most students hired a coach to help them prepare. Cambridge deplored this practice and sought ways to undermine it, so they started an "experiment;" they hired top graduates to lead study sessions. In the spring of 1884 Whitehead was employed to tutor one of these classes. He continued in this position into the fall of 1884, when several members of the mathematics department died, retired or left for other employment. Whitehead was asked to temporarily fill one of the vacancies as Assistant Lecturer. In the spring of 1885 his appointment was renewed for the following year and his career was off to a running start. It would keep him at Trinity for twenty-five years. He told Lucien Price that but for the vacant lectureship he "would probably have taken a teaching position in a Public School and never have gone much further" (Whitehead in Lowe, 1985, p. 148). In 1887 Whitehead earned his M.A. from Trinity.

In 1890 Alfred North Whitehead was wed to Evelyn Willoughby Wade, daughter of Captain A. Wade, Seaforth Highlanders. From 1891 to 1898 four children were born to the couple: North in 1891; an unnamed boy who died at birth in 1892; Jessie in 1893; and Eric Alfred in 1898. All of them served in World War I and Eric was shot down and killed in March 1918. To him Whitehead dedicated *An Enquiry Concerning the Principles of Natural Knowledge* in 1919.

The couple had a house, the Mill House, in Grantchester, a depressed tenant farming village in Fen. Alfred North interacted with the locals mostly during political seasons of Parliamentary campaigns. He frequently spoke in public outlining his Liberal views. It was not uncommon for the vigorous crowd to ply him with rotten eggs and oranges.

The Mill House was an ideal habitat for Alfred North Whitehead and his family. It was filled with books, for Jessie and Evelyn were avid readers. North was given a carpentry shop out back and a tutor in the craft. There he was able to seclude himself to work on mathematical problems. The house also had several guest rooms which were used frequently by the English elite of the era.

> Grantchester was close enough to Cambridge for Evelyn to hold a little salon. The Mill House was also ideal for houseguests. She started an album in which they signed their names. These included Forsyth, Walter Raleigh and his wife, G.E. Moore, Henry Head, the French mathematician Emile Borel. . . The Mill House became one of the centers of the University's intellectual life. Whitehead's talk was often about general ideas, of a semiphilosophical character. Hours spent with him and Evelyn were never dull. But guests might have to do without simple comforts. E.T. (later Sir Edmund) Whittaker had been a pupil, and was now a colleague on Trinity's mathematical staff; LadyWhittaker remembered: "When my husband and I went to lunch at the Mill House we had to be content with hard chairs outside the kitchen window and to have our plates of suet pudding passed out to us. When the meal was finished the three

> children were made to rest in hammocks for the sake of their digestion but we were not offered any hammocks." Dinner, of course, was formal; a dressing gong was sounded twenty or thirty minutes before the dinner bell (Lowe, 1985, p. 205).

In 1905 Whitehead received his Doctor of Science degree from Trinity College. Until 1910 he continued to teach mathematics, serve on committees, including the Education Committee, which debated questions on curriculum and educational policy, and pursue his personal research. Committee meetings were often battles, but Alfred North was not one to engage in attacks. Rather he was an adept strategist and was often a calming influence.

In early 1910 Cambridge was rocked by the Forsythe scandal. This mathematics lecturer and fellow of Trinity College fell in love with a married women. She, having been emotionally abandoned by her husband, chose to elope with her newfound love. The moral atmosphere that prevailed at the time demanded Forsyth's resignation. The Council of Trinity readily accepted the resignation, despite the protests of some Council members (Whitehead included) and many Fellows who were not on the Council. Whitehead stormed out of the meeting very angry in an uncharacteristic manner. In April Whitehead handed the Council his resignation letter. After 25 years of teaching mathematics, he resigned his Lectureship, but retained his Fellowship, which his years of service had earned him the right to keep for life.

> Whitehead said that he left Cambridge "chiefly from a desire to preserve by a change to the more varied life of London the necessary freshness for my work." I asked Whitehead for his explanation of the move, he answered, "I was in a groove in Cambridge."
>
> Year after year he had been teaching the same courses in applied mathematics to the same sort of students. He was too smart not to know that whatever creative ability he had was not in applied mathematics. I think he dimly felt that he had a kind of unused genius which in

> Cambridge would go on being unused, stultified, never felt out and discovered for what it might really be. What he clearly felt was that he had some capabilities for which there was no scope in Cambridge (Lowe, 1985, p. 317).

The Whiteheads moved to London in the summer of 1910. Alfred North had not yet sought other employment so they lived on his Fellowship stipend. During this year he finished writing and had published *Principia Mathematica*, Volume One (Volume Two was published in 1912, Three in 1913 and Four was abandoned). In 1911 he was hired as a Professor of Applied Mathematics at Imperial College of Science and Technology at University College of London. He retained a position there for fourteen years, becoming a Senator in 1919 and the Dean of the Faculty of Science in 1921.

From 1914 through 1918, England and the Whitehead children participated in World War I. Alfred North's youngest son Eric Alfred was killed in battle in 1918. Both the national tragedy of the death of a whole generation of youth and the personal tragedy of his son's death likely caused Professor Whitehead to introspect about the meaning of life and our individual parts in it. Bertrand Russell wrote about his teacher and friend, "The pain of this loss had a great deal to do with turning his thoughts to philosophy and with causing him to seek ways of escaping from belief in a merely mechanistic universe. . . . The tragedy of 1918 may have been a cause of his eventually working out his own system" (Lowe,1962, p. 221).

Raised an Anglican, Whitehead had considered conversion to the Roman Church prior to marrying his wife. There are some stories about him seeking answers from the aged Cardinal Newman prior to proposing to Evelyn. Whether he actually met with the Cardinal and received satisfactory answers no one knows, but we can presume that not all were sufficiently answered because after his proposal he became an agnostic for a quarter of a century. Then, with Eric's death he developed a theistic philosophy:

> He conceived of God, the supreme monad, not as omnipotent Creator but as eternally with the temporal world, systematically interacting with it in two ways. God's "primordial nature" is the source of all possible values, "it is", he wrote, "the acquirement by creativity of a primordial character." God's "consequent nature" receives, transforms, and keeps forever the monads that have perished in the temporal world; thus God grows with the world, is always in process (Lowe, 1985, p. 5).

> If I may risk putting Whitehead's position in a nutshell, it is this: we are already immortal. But we must not suppose that this is merely a fancy way of saying that a man lives after his death in the books he has written or the houses he has build. What is meant concerning the future is the difficult notion, beyond our imaginations to conceive, that a quality, derived from the man's life and purified in the harmony of God's experience, contributes good to the world for evermore. More precisely, every occasion in the life of every temporal creature has this immortality in God and thence in the temporal world. Whitehead himself wrote, "This immortality of the World of Action, derived from its transformation in God's nature is beyond our imagination to conceive" (from Immortality in Lowe, 1962, p. 107).

His philosophy was turned toward science as well as metaphysics during these years. A lecture series entitled, "The Concept of Nature" was published in 1920, and in 1922 he wrote a paper on "The Principles of Relativity with Applications to Physical Science," a commentary on the need to change some points of Einstein's theory of relativity which even Einstein himself couldn't understand.

Teaching at Harvard

In 1924 at sixty-three years of age, just as Whitehead was ready to retire, he received an invitation from Harvard University to join their philosophy faculty. The letter was handed him by his wife on an afternoon which was dismal without and within. He read it as they sat by their fire, then handed it to her. She read it, and asked, "What do you think of it?" To her astonishment he said, "I would rather do that than anything in the world" (Price, 1954, p. 10).

The invitation was not entirely a surprise. A friend had suggested the possibility of the Harvard offer to him a few months earlier. Whitehead wrote to his friend:

> If the post should be offered to me, I should find the idea of going to Harvard for five years very attractive. The post might give me a welcome opportunity of developing in systematic form my ideas on Logic, the Philosophy of science, Metaphysics, and some more general questions, half philosophical and half practical, such as Education . . . I do not feel inclined to undertake the systematic training of students in the critical study of other philosophers . . . If however I should be working with colleagues who would undertake this side of the work, I should greatly value the opportunity of expressing in lectures and in less formal manner the philosophical ideas which have accumulated in my mind (Kline, 1963, p. 10).

Harvard offered Whitehead the appointment under the assumption that, although he was sixty-three, he would not retire at the customary age of sixty-five. His contract was for five years. They had been following his work and realized he wasn't finished and needed time to expand upon his ideas.

> At Harvard it was expected that he would write but not do much teaching. He did both. His lectures came thrice weekly, and instead of allowing his students a twenty-minute conference, he gave them a whole afternoon or a whole evening. "From that inspiration a man comes back with a changed tone." And the traffic was two-way, for Whitehead felt that he needed contact with young minds to keep his own springs flowing. "It is all nonsense," he said, "to suppose that the old cannot learn from the young" (Price, 1954, pp. 10-11).
>
> Upon coming to Harvard, Whitehead continued his work in philosophy and education.
>
> He had developed a project, in outline, for revising American educational theory and practice, and in 1925 he offered a brief sketch of what he had in mind (*Science and the Modern World*, Ch. 13, "Requisites for Social Progress:"). Earlier, in 1922, he had published a pamphlet, *The Rhythm of Education*, which offered another suggestion. The ideas involved are radical departures from the standard thinking of that date, and of the

> present and they are grounded firmly in Whitehead's highly technical speculative philosophy. Unfortunately, Whitehead himself never completed his projected work and left most of its application to be filled in by later scholars (Brumbaugh, 1982, p.1).

Whitehead actively taught for thirteen years, retiring at seventy-six. He remained another ten years before his death at eighty-six. "During most of this time he gave little impression of age: though senior to all of us, he was in all daily doings completely contemporary and a vigorous sharer in the community of thinking that constitutes a 'department.' One of us said of him, 'Whitehead is the youngest man I know!'" (Kline, 1963, p. 7).

By the 1930s Whitehead had become an institution at Harvard. His personality exuded a particular force and his ideas permeated everything. An atmosphere of reverent awe surrounded the philosopher.

In keeping with the tradition of Mill House, Professor and Mrs. Whitehead opened their apartment on Memorial Drive to students and scholars for discussion.

> For at least thirteen years beginning midway in the 1920's and lasting into the 1930's, one heard of "evenings at the Whiteheads," one night a week of open house to students, although anyone was welcome. These entertainments were of the simplest; conversation, hot chocolate to drink, and cakes to nibble. The students helped make and serve the chocolate, the conversation was their own, skillfully encouraged by host and hostess. In fine, the evenings were theirs, not the Whiteheads'; they began coming timidly in pairs for mutual protection, then by the half dozen. They were asked to bring their girls, and brought them. Finally they came by the score, from sixty on up to ninety-eight on an evening. So here was a salon in the eighteenth-century French meaning of that term, brought off in an academic town with young men and women on cookies and hot chocolate. But there was also decanted that heady vintage which exhilarates but does not inebriate, conversation with the Whiteheads, and that means both Whiteheads, for he himself once said, "By myself I am only one more professor, but with Evelyn I am first-rate" (Price, 1954, p. 11).

One graduate student explained his first experience visiting the Whiteheads:

> I was too terrified to go. . . As I was ducking away with my paper, he stopped me and asked where I had done my undergraduate work. On hearing that I had studied at Boston College with the Jesuits, his gentle clerical face lighted up. "Ah, yes. All the world knows and admires the Jesuits. But, oh, dear me! You must be frightfully shocked at my muddled philosophy. Your teachers were such clearheaded men, and I am in perpetual *terror* of clearheaded men" (Brennan, 1941, p. 49).

Mrs. Whitehead recounted the experience of their weekly open house:

> For nine years, after we came here to stay, we used to have students in, one evening a week. First and last, the number of boys and girls who went through our rooms would have run into the hundreds. They came from all sorts of homes, including the farms and what you would call something next door to a slum, and yet I tell you that the gentleness of their manners, their good taste, and really good breeding was virtually invariable. That was in the brave days of the Volstead Act, when people, and especially older people, were filling up before they ever started out to dine. And yet in all that time only one drunk came, and he, if you please, a scion of Boston blue-blood! At the other extreme was a boy who turned up from New York, the East Side. About halfway through the evening he stretched himself, sighed, and said, "Isn't the world wonderful?" . . . "What do you mean?" I asked him. "Why," said he, "a few weeks ago I was rolling barrels in the streets of New York, and now here I am amidst luxury and all these books." (Well, of course, our apartments down by the river were never anything special.) What he meant was that this was his first time in such surroundings—but not his last! He became one of Alfred's most brilliant pupils, and has done very well (Price, 1954, pp. 348-349).

The size of the open house was restricted after Alfred North's retirement in 1937. But people still came to visit, some from different parts of the world. Despite his advancing age and deafness, his mind was still active and his philosophy deeper. Dialogues with three or four students often revealed more sides of his personality and discussion of ideas was more specifically his own (Price, 1954).

In 1898 a young man sat for an entrance scholarship at Cambridge. The youth was Bertrand Russell and his examiner was Alfred North Whitehead. Although another applicant scored higher, Whitehead thought Russell was more talented and recommended him. There is some debate as to whether Whitehead burned all the grades or rather used his powers of persuasion in committee, but either way he got Russell the scholarship.

Thus began a lifelong relationship, first as teacher and student, then as friends. It would be a mistake to assume that the teacher-pupil relation between Whitehead and Russell rapidly changed into that of friends, colleagues, and then collaborators. "Whitehead," he wrote, "was amazingly kind, but was too much my senior to be a close personal friend until some years later" (Lowe,1985, p. 224).

Several years later Russell turned his dissertation in to Whitehead to evaluate from a mathematical perspective and to Henry Sidgwick to evaluate from a philosophical perspective. If they thought highly of his piece Russell thought he would devote his life to philosophy, especially mathematics. If they did not think highly of it, then he thought he would study economics and pursue a practical career which was more agreeable to his well-to-do family.

Russell wrote to Alfred's wife that he had had "a rather depressing talk with Whitehead. . . He wouldn't say a word directly as to my merits or demerits, but only criticized definite points. He said however that Ward and Sidgwick were more dissatisfied than he was so I drew the blackest inferences" (Lowe, 1985, pp. 227-228).

The next day Bertrand Russell was made a Fellow of Trinity. Mrs. Whitehead wrote him a note of congratulations and asked if he had been doubtful. Bertrand wrote this comment on the note, "I learned afterward that Mrs. Whitehead had scolded Whitehead for giving me a bad time" (Lowe, 1985, p. 228). In his published account of the incident, Russell continues:

> Whitehead defended himself vigorously. He said it was the last occasion on which he would be able to speak to me as to the pupil, and that, after the praise that he knew I was to get, I might have paid too little attention to his entirely justifiable criticisms (Lowe, 1985, p. 228).

In fact Whitehead did praise and compliment him after his election as Fellow. The two went on to collaborate on the *Principia Mathematica*, and to grow in friendship and respect for one another. Whitehead once introduced Russell to a Harvard audience as "Plato's Lost Dialogue" (Brennan, 1941). In his *Autobiography* Russell wrote of his admiration for his mentor's mathematical genius (Brennan, 1941).

Whitehead's Philosophy

"In England, Whitehead was regarded only as a mathematician, but America would discover him as a philosopher." So wrote Bertrand Russell (in Lowe, 1985, p. 2). In actuality, Whitehead had become distinguished as a philosopher of physics while in London, and that is what attracted Harvard to invite him to become a professor of philosophy. "But it is quite true that he was educated to be a mathematician and held no other professional position until, at an age when he could have retired, he came to America. In the next nine years he wrote books which showed that Harvard had acquired the most powerful systematic thinker philosophy had seen since Hegel" (Lowe, 1985, p. 2).

> For the next decade he developed his well-known "organismic" approach to philosophy, often described as a "process" philosophy. This was a unique approach to metaphysics which many have viewed as in harmony with the contemporary evolutionary and scientific understanding of reality. Whitehead expounded a philosophical interpretation of the cosmic process that was characterized "by change, dynamism, inter-relationships or organic inter-penetration, the presence of heights and depths of 'importance,' and the quality of tenderness and love." This unique approach to philosophy would have far-reaching effects, particularly in the

> area of theology, where it was most influential on the work of such scholars as Hartshorne, Ogden, Cobb, Williams, Meland, Pittenger,Wieman, and many others (Hill, 1990, p. 92).

Whitehead contemplated the mysteries of life and realized that many were resolved by mathematical principles. He relayed the idea that advances in civilization were made when earlier civilizations made mathematical connections. He imagined the moment when our ancient ancestors first recognized the relationship between a quartet of clouds and a quartet of mammoths (Brennan, 1941). This first metaphysical insight led to a practical mathematics. In another lecture Whitehead told of watching a mother squirrel who decided to move her babies from inside his house to a flat rock outside. She ran back and forth dragging each one. "But when the last infant had been safely set down, the mother squirrel seemed distraught. Anxiously she ran back and forth several times between the empty nest inside the house and the rock outside where her children were waiting for her. Why was she so distressed? 'Because,' said Whitehead, 'she could not count'" (Brennan, 1941, p. 59).

From his lifelong love and devotion to mathematics, Alfred North Whitehead perceived order and harmony in the universe and in man in much the same way that Pythagoras did. From this order he derived a philosophy which caused him almost overnight to be considered one of the eminent original thinkers in metaphysics. His wife described his thinking with this metaphor:

> His thinking is a prism. It must be seen not from one side alone but from all sides, then from underneath and overhead. So seen, as one moves around it, the prism is full of changing lights and colours. To have seen it from one side only is not to have seen it" (Price, 1954, p. 16).

For Whitehead, one-sided seeing is "half-truth"—"There are no whole truths, all truths are half-truths. It is trying to treat them as whole truths that plays the devil'" (Price, 1954, p. 16).

Educational Philosophy

In *The Aims of Education*, Alfred North Whitehead elucidated his theories of what formal education is meant to accomplish. This can be summarized in one sentence, "The basic general aim is to produce men who possess culture and expert knowledge in some specialized field" (Latshaw, 1980, p. 138). This proposition can be broken into three basic aims: the attainment of culture, the acquirement of expertise, and the cultivation of a unique individual. The first two are ultimately subordinate to the third.

For Whitehead culture is not simply viewing and appreciating objects of art, but rather the "appreciation of the structure of ideas, a selective process whereby data may be arranged so that a value judgment may be made about them" (Latshaw, 1980, p. 138). Further Whitehead believed that "education is the art of the utilization of knowledge" (Latshaw, 1980, p. 138).

Inert ideas are those which are not relevant within the experience of the individual. They are "ideas that are merely received into the mind without being utilized, or tested or thrown into fresh combinations" (Whitehead,1936, p. 2). To Alfred they are deadly in education. As Whitehead himself put it, "Knowledge does not keep any better than fish. You may be dealing with an old species, but somehow or other it must come to the student just drawn out of the sea and with the freshness of its immediate importance" (Hill, 1990, 100).

Imagination is the antidote to inert ideas. It causes progress because imagination runs ahead of realization. For Whitehead "Education is an 'imaginative consideration of

learning' wherein imagination illumines the facts and enables learners to envision new worlds and new possibilities. In education, therefore, Whitehead calls for faculties whose learning is 'lighted up with imagination'" (Hill, 1990, p. 100).

Useful ideas solve problems or help us comprehend great truths. Ideas should be tested not only for their truthfulness and validity but also for their usefulness. The focus on applicability and validation of principles should be at the core of instruction across the curriculum.

The more one becomes a specialist, the more one is able to appreciate the structure of ideas in the area of specialization. For Whitehead, specialization brings with it greater responsibility. Therefore, he believed that the education of a specialist needs to be religious, not in the denominational sense, but rather in the philosophical sense. A religious education is related to the concepts of duty and reverence. According to Whitehead, "Duty arises over the potential control of events. . . . Where knowledge could have changed the issue, ignorance is vice" (in Latsaw, 1980, p. 139).

One of the advantages of being an expert is the expression of personal style, or the unique manner in which one applies one's training. Since amateurs are focussed on establishing excellence in knowledge and technique, they are unable to emit personal style. The expert, however, is so fluent in the material, that its expression has become a habit and the benefits of style flow forth. Style is necessary to grasp the power of beauty and the structure of ideas. As a result, the expert hones in on the essence of the material without deviation into tangential issues.

The realization of personal style may be regarded as paramount in attaining individual uniqueness, the third and primary aim in Whitehead's paradigm. No teacher

can compel this; it is self-determined and self-realized. Teachers can guide self-development, however, by being alive with dynamic thoughts.

The means to attain the aims of education Whitehead categorized as three elements: literary, scientific and technical. The literary aspect involves language acquisition, both for basic communication and field specialization. The scientific aspect involves critical thinking and logical thought, the ability to apply to specific principles general ideas. The technical element involves the practical aspect of doing, or putting theory into practice. The first two elements will find expression in the third.

For Whitehead, thoughts are of two kinds: theoretical and practical. The desire to understand concepts and meaning is theoretical while the desire to obtain predetermined ends, i.e., problem-solving, is practical. Although Whitehead conceived of theoretical ideas at a higher level than practical, theory is useless unless applied. As Whitehead explained it, "Many people (who were thinking practically) had observed an apple falling from a tree, but Newton thought about the phenomenon both theoretically and practically and the result was the body of laws of mechanical physics" (in Latshaw, 1980, p. 141; McGuire, 1976).

In his day, many debated the mind-body/thought-action relationship, often viewing it as antithetical. Whitehead believed in holism, the interconnectedness of thought and action in education. He wrote, "I lay it down as an educational axiom that in teaching you will come to grief as soon as you forget that your pupils have bodies" (Hill, 1990). He also believed in the emotional component of education. For Whitehead, "genuine knowledge is 'always accompanied with accessories of emotion and purpose.' The true learning experience, then does not consist in merely learning verbal phrases, but in the 'clashes of emotion and unspoken revelation of the nature of things'" (Hill, 1990).

Whitehead saw a need to address both the thinking and feeling aspects of his students. From his understanding of the order and harmony of the universe, Whitehead abstracted the concept of rhythmic cycles. For him everything has a rhythm which makes life predictable. Night follows day, winter follows fall, the ocean rises and falls as tides, etc. Education is no different in that, when properly addressing the cognitive and affective needs of students, it follows a rhythmic pattern.

For Whitehead the rhythmic pulsations of education are expressed in three stages: romance, precision and generalization. In romance, the student recognizes his ignorance of the subject matter and is excited by the adventure of learning. Novelty of material makes it the easiest stage in which to maintain student interest. "The problem of the educator is that romance is relative to the cognitive territory already possessed by the student and will vary from student to student and from time to time in the life of each" (Hunt & Webster, 1982, p. 334).

In precision, the student focusses on detail, discipline and analytical thought. It is the phase of academic rigor. For precision to be uplifting and not stultifying (causing "soul-murder") the passion of the romance stage must carry over into precision. In romance the material is apprehended; in precision it is comprehended. According to Whitehead:

> In this stage we do not merely remain within the circle of the facts elicited in the romantic epoch. The facts of romance have disclosed ideas with possibilities of wide significance, and in the stage of precise progress we acquire other facts in a systematic order, which thereby form both a disclosure and an analysis of the general subject matter of the romance" (Hunt & Webster, 1982, p. 334).

In generalization, the passion of romance is combined with the detail of precision to form a synthesis. For Whitehead, generalization is "a return to romanticism with

added advantage of classified ideas and relevant technique. It is the fruition which has been the goal of the precise training. It is the final success" (in Hunt & Webster,1982, p. 334). This is the time to apply the principles and formulas learned in precision, moving from passive absorption to active application. To avoid inert ideas it is imperative to use ideas through generalization (Hill, 1990).

Application of this concept is multi-dimensional, with stages overlapping and interpentetrating. "It is critical to note that the three stages of mental development are not sharply distinct, static mile posts to be traversed in a sequential manner. Rather they are aspects of a continuum of experience with constant interplay" (Hunt & Webster,1982, p. 335).

In its most global form, the three stages are applied to the three levels of schooling. Primary/grammar school is meant to interest students in learning through the romance of the material. High school is a time for precision and accomplishing mastery of principles. College then is the point of generalizing from specific information to greater global issues.

> Elementary education, he said, should stress romance—eliciting students' interests and their sense of idealism. Precision, emphasized at the secondary school level, enables students to internalize the disciplines that give meaning to experience. Finally, he argued, at college during the stage of generalization, students using their interests, idealism, and knowledge begin to control and alter the world (McGuire, 1976, p. 70).

Besides the global application of the rhythm of cycles, Whitehead believed in the continual repetition of these cycles. Each term as well as each lesson should follow the pattern of romance, precision and generalization.

> Each lesson in its minor way should form an eddy cycle issuing in its own subordinate process. Longer periods should issue in definite attainments, which then form the starting-grounds for fresh cycles. We should banish the idea of a mythical, far-off-end of education. The pupils must be continually enjoying some fruition and starting fresh—if the teacher is stimulating in exact proportion to his success in satisfying the rhythmic cravings of his pupils (Whitehead,1936, pp. 30-31).

Education for Whitehead is for self-education (Cans, 1984), to guide an individual's self-development (Norgate, 1932). It should begin and end in research, that which stimulates initiative and ends in encouraging it. "For the whole aim is the production of active wisdom' (Norgate, 1932). Like Pythagoras, Whitehead believed in lifelong learning.

> I would be inclined to require universal education up to, say, the age of sixteen; then, between sixteen and nineteen, infuse it with the elements of practicality. After that there would need to be the widest possible access to opportunity for further study, both in institutions and outside of them, as by university extension lectures, so that people could satisfy their curiosity about all sorts of subjects and find their special aptitudes. Their reading, too, would be enlivened by personal association with the lecturers. I would make some of this advanced education compulsory, and keep up the process of education to the age of ninety (Whitehead in Rusk, 1969, p. 340).

In his teaching style, Whitehead was somewhat like the "absent-minded professor:"

> "In ten thousand years, men may go to the moon," the lecturer said. His topic was cosmology; the audience, a Harvard philosophy class. The lecturer was competent: he was Whitehead. True, his estimate erred a bit on the conservative side. Less than thirty-five years after that class meeting, two American astronauts walked on the moon (Brennan, 1941, p. 47).

Whitehead believed that a teacher's job was to make the class glad to see him when he arrived. Because he was devoted to his students and to their constant growth he succeeded in fulfilling that role. He never lost contact with "everyman" and as such retained a hold on his students. His discourses were difficult in both concept and vocabulary, but Whitehead guided his students over the rough terrain, encouraging them to scale the heights of his attainment (Kline, 1963). Bertrand Russell said of his teacher:

> Whitehead was extraordinarily perfect as a teacher. He took personal interest in those with whom he had to deal and knew both their strong and their weak points. He would elicit from a pupil the best of which a pupil was capable. He was never repressive, or sarcastic, or superior or any of the things that inferior teachers like to be. I think that in all the abler young men with whom he came in contact he inspired, as he did in me, a very real and lasting affection (Brennan, 1941, p. 61).

As a teacher Whitehead was rather easy-going. He often used a combination of lecture (taken from his most recently published manuscripts) and spontaneous reflection, which allowed students to see the creative process in action. At times he would gaze out the window and return with an idea to draw a diagram on the blackboard. He engaged his students in amiable chats and told stories about life in England (Brennan, 1941).

As a seminar lecturer Whitehead was not as successful.

> Whitehead's Giffords were a fiasco. The previous Gifford lecturer had been Sir Arthur Stanley Eddington, an old spellbinder who held an audience of six hundred fast to their seats from the beginning to the end of his series. Whitehead began with the same number, but only half a dozen endured to the close.
>
> But Whitehead's classroom lectures were entirely enjoyable. . . . Occasionally three or four Radcliffe students would come to sit in on a lecture, but Whitehead mildly disapproved of this practice. "By the by," he mused plaintively, pausing to gaze out the nearest window, "if there are any persons present who are not registered members of this course, perhaps they might sit another time toward the back of the room, where I cannot see them" (Brennan, 1941, p. 51).

In the classroom Whitehead practiced what he preached about the rhythmic cycles in learning. For him teaching involved transmitting motivation, precise symbolic presentation and eventual generalization. It also involved being with students in some shared present time (Brumbaugh, 1982). He instilled in his student's a desire to learn and to communicate that learning. He believed his students should grow in attaining insight and critical thinking, not in accumulating facts through rote memorization. By presenting his students with clearly stated instructional objectives and the space to test their ideas, he gave them freedom to grow. For him, reality is becoming and only by connecting theoretical ideas to practical living can the goal of education—self-actualization—be realized.

Though he lived in America for only twenty-three of his eighty-six years, Whitehead had a profound effect on American students. "He became known as an incredibly benign sage" (Lowe, 1985, p. 2).

> He was then teaching at Harvard, and I remember how he used to walk through the Yard: a little apple-cheeked man, his shoulders much bent, an umbrella often held across his back; his head down, but his clear blue eyes up. I cannot describe his face or recall any printed photograph or sketch that does justice to it. I can only confirm what Edmund Wilson wrote when he introduced Whitehead (as "Professor Grosbeake") into his early novel, *I Thought of Daisy*: that when you looked at him you felt that you were seeing a real face, in comparison with which others looked like mere masks. The general impression given by Whitehead's presence, I should say, was one of kindness, wisdom, and a perfectly disciplined vigor. Both his conversation and his writings showed a wonderful combination of urbanity and zest, rather like the tone of Plato's dialogues. He loved to follow the minds of young people, and when you came to him to talk about his philosophy, the meeting always began with the eager question, "Tell me what you've been doing" (Lowe, 1962, p. 5-6).

Whitehead was never pretentious as a teacher or otherwise. His wisdom gave him the air of authority but he never acted on that authority. When he expressed fresh ideas as clear thoughts students hung on his every word. Yet he himself doubted his clarity and

actually spoke of the dangers of clear thinking. "Whitehead divided philosophers into two classes, clearheaded and muddled. Whitehead included himself in the second. 'There is danger in clarity,' he would say, 'the danger of overlooking the subtleties of truth'" (Brennan, 1941, p. 49).

There were times when Whitehead acted like an absent-minded professor. On one occasion he hosted a guest at his home. They decided to go outside and both approached the coat closet; Whitehead, arriving first, took his guest's hat from the shelf, assuming it to be his own. When they returned he replaced the hat on the shelf where it remained until his guest was ready to leave. This time the guest beat him to the closet to reclaim his property. Whitehead, unaware there were two hats, walked to the location of his hat, thinking it had mysteriously moved from where he had previously put it (Brennan, 1941).

On the occasion of his last class at Harvard,

> . . . there was something a little different. Whitehead, after he acknowledged the student's applause with a charming little nod and smile, remained seated at his desk looking out the window. His chauffeur, who came every day after class to call for him, waited tactfully in the rear of the room. I hung back, for I wanted him to autograph my copy of *Science and the Modern World,* the sort of thing he always cheerfully did for students. But when I approached him he was standing up, staring unsmiling over the heads of the last departing scholars. (The desk in the lecture room in Emerson Hall was on a raised platform.) I heaved up my book before him, open to the title page, and made my request. Without looking at me, he took his pen and very carefully inscribed "Alfred North Whitehead" over his printed name, gave the book back to me, and once more stared gloomily over my head into space, mouth grim, eyes unseeing. His eyes—they were blue—seemed to look from caverns, and the light had gone out of them. It was the Other Whitehead (Brennan, 1941, pp. 67-68).

Death and Lasting Influence

Whitehead continued as a Senior Fellow at Harvard after his retirement in 1937. On December 30, 1947 he died in his apartment near the Harvard Yard. Whitehead spent fifty-three years teaching. During that time he likely influenced thousand of young scholars to walk the adventurous path of lively thought and philosophical ideas.

> He was a great man, as Perry said, and an unforgettable teacher. In some way, hard to define, Whitehead influenced us all for the good. No one was ever the worse for taking a course with him, and most were better. If he did not inspire us to follow in his footsteps, he gave us all the sense of a unique presence, intellectual and personal (Brennan, 1941, p. 67).

Whitehead wrote several addresses and essays on a systematic philosophy of education which have been widely quoted and studied (Hill, 1990).

> The comprehension and appreciation of Whitehead's work has been relatively slow; but gradually, throughout the last three decades, understanding of it has spread and deepened. No definite school has developed, however. Rather, Whitehead's philosophy has influenced the thought of an increasing number of scholars. This, I think, is as he would himself have preferred it (Leclerc, 1961).

Whitehead's Educational Legacy

1. Whitehead is a renowned philosopher. His organismic process theory, where reality as God and reality as the individual "becoming" is one which has challenged man's understanding.

> The characteristic feature of process is creativity. Creativity is not an external agency with its own specific purpose; the only type that Whitehead recognizes is self-creation or self-realization. Creativity is the ultimate notion of the highest generality at the base of actuality. All actual entities share with God this character of self-causation or creativity. Each creative act is the universe incarnating itself. This is the creative advance of nature. . . (Rusk, 1969, p. 333).

2. Whitehead has provided a modern interpretation of the Pythagorean understanding of order, harmony and the interconnectedness in the universe. For him, things are not arbitrary and it is by faith in reason that we trust in order and harmony, through which science has been made possible.

> Consider how all events are interconnected. When we see lightning, we listen for thunder; when we hear the wind, we look for the waves on the sea; in the chill autumn, the leaves fall. *Everywhere order reigns;* so that when some circumstances have been noted [we] can foresee that others will also be present. The progress of science consists in observing these interconnections and in sharing with a patient ingenuity that the events of this ever-shifting world are but examples of a few general connections or relations called laws. To see what is general in what is particular and what is permanent in what is transitory is the aim of scientific thought (Whitehead in Kuntz,1984, p. 17).

Although Whitehead was a strong proponent of a timeless order and tradition, he did not eschew change. In fact he embraced it as necessary to meet the future. For Whitehead, "The art of progress is to preserve order amid change, and to preserve change amid order" (Whitehead in Kuntz,1984, p. 14).

3. Whitehead's concept of the rhythm of cycles by which we learn answers both the cognitive and affective needs of the individual. It gives structure to the overall educational process, the term and the lesson. Whitehead asserted "if the rhythm of education can be introduced into the life of the student, information and skills will be acquired incidentally and without noticeable effort. Thus, it is more important to develop a curriculum designed to promote the rhythm of education, than to cover any particular material" (Hunt & Webster,1982, p. 339).

4. Whitehead agreed with the ancients about the concept of dominating knowledge by wisdom. For him, "mastery of knowledge, which is wisdom, is the most

intimate freedom obtainable" (Whitehead, 1936, p. 46). Wisdom is not acquired by impartation of a teacher or philosopher. "The only avenue towards wisdom is by freedom in the presence of knowledge. But the only avenue towards knowledge is by discipline in the acquirement of ordered fact. Freedom and discipline are the two essentials of education" (Whitegate, 1936, p. 47).

Whitehead's philosophy of the rhythmic cycles of learning are geared toward providing the base for motivation to acquire knowledge, gain mastery over fact, and exhibit freedom in postulating generalizations to effect change in the world. His method encourages imagination and fresh ideas, generated and conveyed by teacher and learner alike.

5. Whitehead's concept that inert ideas are deadly to education is revolutionary. In effect, ideas that sit on a shelf or have little meaning within practical reality, decay by their very lack of use.

> In the history of education, the most striking phenomenon is that schools of learning, which at one epoch are alive with a ferment of genius, in a succeeding generation exhibit merely pedantry and routine. The reason is, that they are overladen with inert ideas. Education with inert ideas is not only useless; it is, above all things, harmful—*Corruptio optimi, pessima.* Except at rare intervals of intellectual ferment, education in the past has been radically infected with inert ideas. That is the reason why uneducated clever women, who have seen much of the world, are in the middle life so much the most cultured part of the community. They have been saved from this horrible burden of inert ideas. Every intellectual revolution which has ever stirred humanity into greatness has been a passionate protest against inert ideas (Whitegate, 1936, p. 2).

As a way of nurturing imagination, making ideas practical, building a bond with his students, Whitehead implemented a form of the residential college wherever he taught. In the middle ages when universities were growing and there were

more students in a city than natives, housing became an issue. Often professors would take students into their homes. Evenings were filled with discussion and informal debate. From this the residential college grew, where colleges supplied the housing while students and faculty lived under the same roof to provide an environment for optimal, enlightened exchange. Open houses with the Whiteheads simulated this experience. There has been a movement within this country for the past fifteen years towards restoring the residential college and just this sort of experience for learners.

6. In his essay *Universities and their Functions* Whitehead sums up his educational beliefs:

> Education is discipline for the adventure of life; research is intellectual adventure; and the universities should be homes of adventure shared in common by young and old. For successful education there must always be a certain freshness in the knowledge dealt with. It must either be new in itself or it must be invested with some novelty of application to the new world of new times. Knowledge does not keep any better than fish. You may be dealing with knowledge of the old species, with some old truth; but somehow or other it must come to the students, as it were, just drawn out of the sea and with the freshness of its immediate importance. . . The only use of knowledge of the past is to equip us for the present. The present contains all that there is. It is holy ground; for it is the past and it is the future. . . (in Rusk, 1969, p. 342-343).

NADIA BOULANGER

The twentieth century has not produced a greater teacher of music composition than Nadia Juliette Boulanger (1887-1979). Affectionately known to her students as the "tender tyrant," Nadia was a small, energetic, dignified but unassuming woman whose great personal magnetism, combined with extraordinary rigor and passion, enabled her to become the central figure in the lives of an astonishing number of the great and near great emerging musical talents of her age. Her influence was such that she has been characterized as a one-woman musical United Nations, encouraging growth and obliterating ignorance among music students of the USA, Europe and beyond (Walters, 1981).

Little of what we know about her is from her own lips or pen. She resisted interviews and was suspicious of the impulse of writers and critics to formulate her musical ideas into an intact statement (Campbell, 1984). But volumes have been said about her from those who admired and loved her. Music was the root of her life and work and although she was an outstanding, performer, conductor and a composer, her greatest gift lay in her ability to inspire others to pursue excellence in this art. Toward the end of her life she declared, "Living in the realm of music is such a source of joy to me that I was determined to share it in my teaching with all the means in my power" (Spycket, 1987. p. i).

Life of Nadia Boulanger

In 1874 the sixteen-year-old Princess Raissa Mychetsky, a Russian music student, met the French voice teacher and conductor Ernest Boulanger, then fifty-nine, in

St. Petersburg. Three years later they were married and settled in Paris. Thus it was that Nadia, the second of three daughters, was born to an already distinguished musical family on September 16, 1887. Her grandmother, father, and mother were all professional musicians (Brown, 1982). Nadia's older sister, Juliette died in infancy, and Nadia's younger sister, Lili, was born in 1893. While Lili's life did not span a quarter century, she nevertheless achieved solid musical distinction, largely due to her sister's expert coaching.

Nadia attributed the success of her early musical training to her mother who dominated her music career. "She had the courage to make me learn," Nadia recalled (Campbell, 1984, p. 41). In 1900 at age thirteen Nadia entered the Paris Conservatoire; her professional musical career began in 1904 as a church organist.

In the years that followed before World War I she distinguished herself as a performer and composer. Encouraged by her mentor, friend and concert partner, the virtuoso pianist Raoul Pugno, she presented herself as a candidate for France's prestigious musical composition competition, the coveted Prix de Rome, in 1906 and again in 1907, but without success. In 1908, despite the fact that she was the youngest of ten candidates and the only woman, and despite the controversy and antagonism she stirred up for an apparent infraction of the rules, she was awarded second prize. Some felt that she had been unduly hindered because she was a woman.

In 1910, when her fragile, gifted sister decided to devote herself to composing, Nadia resolved to become her teacher. Clearly she felt her sister's talent was worth some sacrifice of her own personal ambitions. Their efforts were crowned with supreme success when in, 1913, nineteen-year-old Lili became the first woman to win the Prix de Rome competition. Both sisters reveled in the triumph, and were looked upon as prodigies who had come to upset accepted norms and customs (Spycket, 1987).

Two personal tragedies followed: the sudden death of Nadia's mentor and champion, Pugno, during their trip to Russia in 1914; and the death of her sister in 1918. From that time on Nadia dedicated herself to preserving her sister's memory and promoting her works. Until then, Nadia had continued to compose prolifically, but, as she confessed to her subsequent teacher, Faure, a few years later, "If there is anything of which I am very sure, it is that my music is useless" (Campbell, 1984, p. 31). Holding firm in this conviction, and sensing that her true gift lay in imparting knowledge and inspiring others, Nadia initiated her life long career as a music teacher.

In 1920 Nadia began teaching harmony at the Paris Conservatoire, and later that year she succeeded Paul Dukas as teacher of music history at the Ecole Normale. Never before had a woman held such positions. Her teaching created a sensation, for her students discovered that she had a genius for musical analysis. Very soon it became necessary to limit enrollment in her classes. But the following year, 1921, became Boulanger's *annus mirabilis*, the year in which her career took on a truly new dimension (Kendall, 1976). In that year the Ecoles d'Art Americaines were inaugurated at Fountainebleau, where the School of Music was housed in the Louis XV wing of the chateau. Boulanger's first assignment was to teach harmony to ninety of America's most brilliant music students. In the process she revolutionized the dry, arduous discipline of music theory (Spycket, 1987). From a few initial contacts began, a trickle at first, and then a steady flow of talent through her classes that lasted for more than half a century. They came from America, then from all over the world. Eventually in addition to her classes at Fountainebleau School she began to hold private sessions at her Paris Apartment, 36 Rue Ballu.

Interaction with Students

A list of her students and close associates reads like a *Who's Who* of twentieth century music:

> In the '20s she had influenced Copland, Thomson, Carter, Elwell, and Chandler. As children, Jean Francaix and Yehudi Menuhin had become students. Douglas Moore spent a season in 1920 studying organ with her. Roy Harris, Walter Piston, Roger Sessions, and Melville Smith were familiar on Rue Ballu. The '30s brought scores of other students to her: Marc Blitzstein, David Diamond, Peggy Granville-Hicks, Irving Fine, Elie Siegmeister, Louise Talma, Arthur Berger, and Robert Russell Bennett. Not all were Americans. Ruth Slenczynska, Israel Citkowitz, and Alexei Haieff were students at the time. There were dozens more from many backgrounds. The American Conservatory in Fontainebleu was becoming an important bridge between American musicians and the French interpretation of piano, organ, and string music (Campbell, 1984, p. 44).

Aaron Copland met Boulanger through a chance encounter in 1921 when he was twenty one. Nadia had a reputation as a educational phenomenon, but she was a woman. Ultimately Copland's curiosity proved stronger than his prejudice, and he attended one of her classes at Fountainebleau. He was completely won over by the way she dissected the score of Boris Godounov and never missed another of her classes that whole summer. Moreover, he went so far as to risk his own reputation by studying privately with her. When Copland returned to America Nadia helped launch his career by asking him to write a symphony which brought him to the attention of Serge Koussevitsky, the new conductor of the Boston Symphony. Never wavering in his attachment to her, Copland became Nadia's most effective "public relations" man in the United States (Spycket, 1987). Copland wrote in 1960 this description of his beloved teacher:

> [She emitted] a kind of objective warmth. She had none of the aesthetic intensity of a Martha Graham nor the toughness of a Gertrude Stein. On the contrary, in those early days she possessed an almost

> old-fashioned womanliness, one that was quite unaware of its own charm. Her low-heeled shoes and long black skirts and *pince-nez* glasses contrasted strangely with her bright intelligence and lively temperament (Campbell, 1984, p. 5).

Igor Stravinsky came into Boulanger's life and career in the early 1920s. They became close friends. What most appealed to Boulanger in Stravinsky's music, she reflected later, was the fact that it satisfied her mental faculties, and yet at the same time touched her heart (Kendall, 1976). Throughout their careers they taught and lectured together, and she often directed the first performance of his new works.

Other internationally famous musicians such as Maurice Ravel, Darius Milhaud and Arthur Honegger were frequent visitors to her apartment on Rue Ballu.

Salon Teaching

By the 1930s her apartment had become "an established axis the of music world" (Campbell, 1984, p. 39). Its turn-of-the-century furnishing would change little in the succeeding fifty-five years. The Cavaille-Coll organ took its prominent place along with two grand pianos, an Erard and a Steinway. To some it was a Mecca to which students made pilgrimages (Spycket, 1987). Modern scores lounged on booksheleves next to the rarest madrigals. On Wednesdays students might experience Bach, Beethoven, Mahler or Schonberg. At the conclusion of these sessions, Nadia's mother would serve tea and cakes. Nadia's "club" of students was affectionately called "the Boulangerie." Her studio was a musical crossroads. The environment she created there changed little during her fifty-five years of teaching.

> It was a parlor museum of art, portraits, books manuscripts, and mementos of her father and sister. There were cherished photos and gifts from Faure, Gide, Debussy, Stravinsky, and Saint-Saens. In [later] decades, works and autographs of Marc Chagall, Paul Valery, Francis James, Georges Rouault, Renoir and de St. Exupery were added (Campbell, 1984, p. 40).

Virgil Thomson described the early lessons he attended in Paris in 1921:

> In her fourth-floor apartment at 36 Rue Ballu she gave, still gives, private lessons in all the chief musical branches—piano-playing, sight-reading, harmony, counterpoint, fugue, orchestration, analysis and composition.
>
> And there, of a Wednesday afternoon, took place weekly gatherings of pupils (strictly by invitation) at which the most modern scores of the time (by Stravinsky and Schonberg and Mahler) were analysed and played on the pianoforte, and the rarest madrigals of the Renaissance (by Monte-verdi, Luca Marenzio and Gesualdo di Venosa) were sung in class. . . .
>
> The lessons take place with the teacher at the piano, the student in a chair at her right. She reads the score before her silently at first, then little by little begins to comment, spontaneously admiring here and there a detail of musical syntax or sound, expressing temporary reservations about another. Suddenly she will start playing (and perfectly, for she is a fabulous sight-reader) some passage that she needs to hear out loud or that she wishes the student to hear as illustration to her remarks.
>
> Sometimes, you would be summoned for a lesson at 7 am; Mlle Boulanger had already been to Mass by then. If no pupil was to follow—and in 1947 the hectic pace of pre-war life had not yet been re-established—your lesson could last for two hours. I could never guess in advance what the next lesson would have in store for me. Sometimes the whole time would be spent on a single harmonic articulation. Sometimes you would progress (always from the music) to Rubens, Valery, Kafka, cookery, or the importance of the swimming pool to the American way of life (Kendall, 1977, pp. 58-59).

It was at one of the Wednesday classes that the Princess de Polignac, an American-born heiress of the Singer sewing machine fortune, fell under Boulanger's spell. Following her husband's death in 1901, Winnaretta Singer-Polignac had constructed an enormous Greek Revival mansion, the Hotel Singer-Polignac, which featured a mirrored music room—the grand salon—with seating for two hundred. By the time the two women met, the Princess had already commissioned a number of works by

major composers. In sponsoring Nadia to offer public performances in the mansion, the Princess was continuing her role as patroness.

> The princess' salon functioned as a training ground from which Boulanger launched an international career as a choral and orchestral conductor at a time when women were generally excluded from the educational and occupational avenues that led to careers in conducting (Brooks, 1993, p. 420).

Teaching Philosophy and Style

Nadia Boulanger was not aware of traditional educational theories because she was never trained in a formal institution. In fact, as Harold Schoenberg noted, "she had no preconceived notions about teaching, music or life. She was interested in one thing: getting the most out of the pupil. To achieve this, she demanded discipline and integrity from the student" (Campbell, 1984, p. 5). She belonged to no particular school, subscribed to no singular style or "ism." To Nadia these were merely tools. Her practice evolved while working with hundreds of the best musicians in the world over a period of sixty years. Even without formal training, Nadia was without question one of the most powerful teachers of our time.

She insisted on "the perfection of the musical vocabulary of the past as assurance for freedom in the artist's future" (Campbell, 1984, p. 33) She always aimed to instill in the student a solid background which she considered essential (Campbell, 1984). In a rare written statement about her musical philosophy published in *Le Monde Musical* (May, 1919), Boulanger states: "If we put from us the works of the Past, and deny ourselves the emotions they diffuse, we are in fact denying the possibility of survival to contemporary art" (Kendall, 1976, p. 112).

Her teaching began with an emphasis on the acquisition of basic skills and techniques of musical detail. Her goal was to equip the student with strong technical

abilities so that he could transcend those and find a unique, personal expression, through the medium of music, of his deepest emotional, philosophical and spiritual convictions.

Even without formal training in educational theory, Nadia Boulanger was perfectly attuned to what the best teachers have always known about their trade: students have within them their own understanding, and it is the teacher's purpose to draw out from the student rather than to try to instill something within them; to search for that which is natural and inherent within, rather than to create something artificial.

One distinguishing aspect of Nadia Boulanger's teaching was her recognition of the individuality of the student. She explained,

> I have many students. No one is a representative because you cannot compare Markevitch or Copland, Lennox Berkeley or Mile. . . It is what they are that gives them their place. You cannot compare one nationality to another, or one epoch to another... They are, each of them, fortunately, individuals completely . . .
>
> I would be very sorry to present a model. I find that the very defect of all teaching (Walters, 1981, p. 242).

Boulanger held that this quality of individuality was an immutable characteristic in the development of a musician. To make this understanding practical she carefully and continually analyzed the learner's abilities. Her long-time pupil and personal assistant Annette Dieudonne explains:

> In her first meeting with a new pupil, Boulanger began with a test of aural abilities—pitch recognition and memory. She sat at a piano and asked the pupil, at a second piano, to replay the pitches and melodic patterns which she played. Then, with the pupil beside her at the first piano, she began a procedure in which, in effect, she changed roles with the pupil. She informed him that she would play the role of a pupil and he the teacher; then she commenced asking him questions about all aspects of music theory, history and literature. From the quality of the student's responses,

> she was able to evaluate his level of musical preparation and then propose a point at which they might begin work together (Walters, 1981, pp. 243-244).

Boulanger also understood the importance of the student-teacher relationship. In her relationships she saw her role as servant and counselor. She strove to suggest, to awaken curiosity and to help the student to make judgments. As teacher she acted as a guide while recognizing that it is the personal effort of the student which is of paramount importance.

Her interaction with her students was so personal and involved so much of her own giving that she was very careful when selecting her students. Her criteria for selection of students was based in large part on her evaluation of a potential student's character. Annette Dieudonne explained that to Boulanger "a student's personality may be even more important than his talent; Boulanger believed that flexibility, character, and idealism may permit even a less gifted student to come to do great things" (Walters, 1981, p. 250).

Nadia expressed it best—

> It is important to remember that the greater the gifts, the greater must be the character, the power of the work, the conscience, the moral and spiritual value of him to whom they were given. I know "For unto every one that hath shall be given and he shall have abundance" (Matt. 25:29), but this is not achieved without great labor and patience (Campbell, 1984, p. 85).

> It is one thing to be gifted and quite another thing to be worthy of one's own gift (Campbell, 1984, p. 70).

> . . . bad character is rather nice and interesting. But when you have no character, no inner quality, I mean when somebody has no inner energy, has no inner enthusiasm, is unaware, is unpresent, what can you do? You can do nothing.

> Somebody who is wrong, who is wild, who is badly brought up, who is savage, you can help him. He has an inner energy, he has an inner strength, and that you cannot give him, nor can you take it away. But you can help him to have the other, which will bring logic, a construction, in all that he is (Kendall, 1977, pp. 74-75).

> Genius without character is nothing; character without genius is nearly everything.

While giving a course at the Ecole Normale, Boulanger commented, "I like the rebellious student better than a good student who is passive" (Walters, 1981, p. 250). She also believed that a student's desire is everything.

> One can know everything, go everywhere, do everything, but without desire. I would rather have a student with strong desires. Then I have something to work with. I must then discover his rhythm of effort. My own terrible pace may not be his way (Walters, 1981, p. 251).

For her, a person without imagination was not worthy. "One is either bored to death with life or one is continually amazed by it" (Kendall, 1977, p. 59-60). There had to be a fire burning inside a student before she would work with him, for she had little patience for dull, apathetic or boring people. "The art of music is so deep and profound," she explained, "that to approach it very seriously only, is not enough. One must approach music with a serious rigor and, at the same time, with a great, affectionate joy" (Kendall, 1977, p. 60).

Her attitude toward the discipline she dispensed made her an extremely tough task-master. Her motto, if she had had one, would have been "discipline and devotion." She was capable of being

> . . . hard, even cruel, to students who take their work lightly or who fail to commit themselves to it. This is why she has little time for students who frequently arrive late or tired, or who are unduly nervous or timid. For one thing she knows full well how demanding the career of a professional

> musician is, and therefore how vital sleep and an adequate diet are, but she also feels very strongly that if one chooses to do something by the exercise of the free will, then one must do it very well" (Kendall, 1977, p.60).

Boulanger was a disciplinarian because she believed that students needed to put everything—every ounce of love they had—into what they were doing. For her a student was expected to try to do their work with enough love and enough desire that it would represent his or her very best. "The whole joy of being a human being is to realize the difficulty in reaching one's aim. The higher the aim, the greater the difficulty, and the greater our humility and joy."

These are some of the comments Nadia made on the subject of discipline, as recorded by her students:

> I demand nothing of you. You must demand it of yourself (Campbell, 1984, p. 71).
>
> The question is: where am I the most free? The answer is: where I have worked the hardest. . . ."
>
> The idea is to practice the impossible until you can do it, and then nothing will ever again be difficult (Walters, 1981, p. 59).
>
> I am your highest degree of tension. Listen to it in yourself (Campbell, 1984, p. 71).
>
> Loose is not beautiful, loose is loose (Campbell, 1984, p. 77).
>
> As long as I am exacting, there is hope. If I am nice, that is a bad sign (Campbell, 1984, p. 80).
>
> Without discipline, there can be no freedom (Campbell, 1984, p. 92).

Lennox Berkeley, one of Nadia's students, said that it was almost impossible to hand in an assignment that was not up to standard. He felt an almost moral obligation, in response to the great fervor of his teacher, to do his best. For her even exercises had to be

done with conviction. Indeed she felt that without conviction there could be little, if any, worthwhile progress.

Students described her classroom manner as laughter-provoking, loquacious, even garrulous; one who was mercurial and who could be rebuffingly, shockingly austere, also aloof, even mysterious. Hugues Cuenod, whose acquaintance with her spanned almost half a century, said that she had a lot of heart, and even more brains. And perhaps she had even more principles than she had brains (Spycket, 1987).

In later years Nadia gained a reputation for teaching endlessly and obsessively, far into the night. Walters (1981) describes her formidable methods: "She must have been a goad, a critic, a not-so-still voice of conscience. To some she must have been maddening . . . but necessary as spinach." Still, they "went away with their wings unclipped to work alone, with the privilege of making their own discoveries and mistakes" (p. 75).

Not all of Boulanger's students appreciated her teaching style. "Her intensity and acute concentration could easily push students beyond their psychological extremities. The rigid technical requirements occasionally brought more of breakdown of attitude for her students rather than a breakthrough toward an independent creative freedom" (Campbell, 1984, p. 57). She scolded many students like any mother who cared for their safety and well-being.

> Obviously this did not suit all her pupils, and some went their own way with regret, yet paying tribute to the qualities of the woman. A few felt that they had been treated badly, even provoked into going, but if that be so, it may well have been her way of acknowledging that in such cases she had nothing to offer. Out of the hundreds and hundreds of students it is perhaps remarkable that there are so few "casualties" (Kendall, 1977, p. 60).

Nadia knew that though there are times when a teacher has to be destructive to be constructive, there is also the danger that she might stunt a student's growth with her intensity and personal drive on their behalf. One story illustrates the battles that would sometimes ensue between the teacher and her students:

> He [Harris] was so single-minded in his determination to become a composer that during his first year he resisted Mademoiselle Boulanger's invitations to meet other musicians at her Friday afternoons. He also resisted her pedagogy. She called him her autodidact and tried to make him submit to her formal discipline. But the frontiersman was not to be tamed. "She wanted me to do what I call *Academie Francaise* exercises," Harris explains, "but I wanted something more fluid. What she had in mind was the clipped gardens of Versailles, but I wanted to write big trees.
>
> We had an awful row. She was half Russian, you know, and when she saw that her Gallic reasoning didn't work she used Russian tears. But I couldn't see the point of learning something that wouldn't help me, so I said I was going home.
>
> Then she asked me what I wanted to do, and I said, "You have the most remarkable sense of form of any person I have ever met. You can put your finger on the weak spot of any composition. I want you to go through all the great composers and point out their weaknesses. Not their strengths. I can see those myself."
>
> And that's what we did for three years. And it was wonderful (Walters, 1981, p. 80).

Of course Nadia believed that a student could only be free of a concentration on essential techniques when the discipline had been completely mastered. Once she knew a student had attained this mastery, she encouraged him to concentrate on making his expression the literal embodiment of what was in his soul. Nadia knew that when a student is laying bare his inmost being, his whole musical life is at stake. She felt it of vital importance that whatever the student wrote or played, it represented the best interpretation of what his true self, his own heart, was feeling. She said that

> Without order there can be no inner satisfaction. Without inner satisfaction, there can be no freedom. Without freedom there can be no joy (Campbell, 1984, p. 96).

> You are all deep. It is the deepness of you I want to meet within me (Campbell, 1984, p. 70).

Virgil Thomson has written, "Her teaching of the musical techniques is . . . full of rigor, while her toleration of expressive and stylistic variety in composition is virtually infinite" (Walters, 1981, p. 82).

> Although Nadia Boulanger nearly always makes her pupils go through the most elementary exercises, she would be the first to waive any particular part of the discipline if she thought that the pupil was sufficiently endowed in it. Indeed she has declined on occasion to take a pupil through a field in which she thought he was already quite competent, lest she hamper his natural development. While knowing precisely what she regarded as the ideal musical formation for students, she has nonetheless always tailored her teaching to individual needs. The goal has always been the same: to put into her pupils' hands the equipment necessary for making their particular contribution to music, and in the last analysis, by implication, to fulfill themselves (Kendall, 1977, p. 56).

> Strictness and premeditation, in her book, are for training circumstances only, like a dancer's exercises at the bar. The creative act should be free, a gratuitous communication. . . . That way, she believes, lie all the possibilities there are of originality, of individuation, of truth and of humane expressivity. Any other approach to the creative act in music, according to Nadia Boulanger, is timid, conformist and artistically dishonorable (Walters, 1981, p. 82).

Virgil Thomson attempted to show the mystery of her relationship with students when she was being particularly analyzing:

> She can understand at sight almost any piece of music, its meaning, its nature, its motivation, its unique existence; and she can reflect this back to the student like a mirror.

> Suddenly he sees that which has caused him pain, struggle and much uncertainty unveiled before him, without malice or invidious comparisons, as a being to which he has given birth. Naturally he is grateful. His work has been taken seriously, has received the supreme compliment of having its existence admitted to be real.
>
> Viewed in this warmly objective way, his piece may seem to him worth correcting or it may not. If its faults appear to be minor, eliminating them can be a joy. If this child seems born to be permanently a cripple, he may cherish it but not let it out into the world. Or he may let it die in a drawer and try to avoid the next time whatever has caused the hopeless deformity. All such decisions are up to him (Kendall, 1977, p. 57).

Her students have talked about what made the interaction between Nadia and her students so transcendent:

> Her energy seems inextinguishable, her presence electrifying. The student is confronted by a frail woman who is at the same time larger than life. Her gestures, her way of talking, her figures of speech, her far-ranging sources of reference, all leave a lasting impression. She is capable of praising, cajoling, criticizing, or even badgering, at a second's notice, yet not a moment of this virtuoso performance is gratuitous. Indeed, its only *raison d'etre* is the inspiration and information of the pupil.
>
> For all her insistence upon the traditional disciplines, however, the really efficacious teaching occurs at the point of contact with the pupil. It is something akin to an electric current that is capable of flowing both ways: from teacher to pupil and vice versa. It does not happen automatically, nor indeed during every lesson. Nor will it be the same with every pupil, let alone during every lesson with the same pupil. Each occasion is a totally individual experience. Sometimes the lesson will be fruitful, but fairly routine, while on other occasions pupil and teacher experience something quite extraordinary, which leaves them both feeling exhilarated, and later the pupil probably exhausted. This is what gives teachers generally the courage to persevere and pupils the desire to return time and time again. It may happen only rarely, but when it does, it is ample reward for hours of the humdrum (Kendall, 1977, pp. 61-62).

Accomplishments and Influence

With the exception of the disruptive war years 1940-1946 when she was a guest and visitor in the United States, Nadia always lived and worked in Paris. Eventually she was accorded the recognition she deserved. In 1932, at age 45, Nadia was made a Chevalier of the Legion d' Honneur. In her ninetieth year (1977) she was made Grand Officer of the Legion, and Commander in a posthumous ceremony (1979). She was the first woman to direct the Royal Philharmonic of London and the orchestras of Boston and Philadelphia, and one of a select few to direct the New York Philharmonic and the National Symphony (Brooks, 1993).

At the first International Festival of Contemporary Music in Warsaw in 1956, no one present could fail to notice that most of the works presented were written by musicians who had passed through the doors of her salon. And she still had twenty good years of teaching ahead of her.

Unquestionably, Nadia Boulanger's greatest and most enduring influence is through her students worldwide. In 1977 a writer for the *Los Angeles Times-Post* news service wrote:

> There can be no question that Nadia Boulanger has been the most influential teacher of music in this century. Even a very abbreviated list of those who have studied with her demonstrates the way in which her principles have spread throughout the world of music into at least three generations of composers (Walters, 1981, p. 63).

Virgil Thompson saw her in the role of "midwife to developing musical cultures" (Walters, 1981, p. 71). In 1962, Thomson wrote "America does not greatly need her now, though she remains our Alma Mater. Her pupils are teaching in our every conservatory and college, carrying on her traditions of high skill, expressive freedom, and no

nonsense. . . That way lies her ability to go on being the greatest music teacher in the world so long as her physical powers shall remain" (Walters, 1981, p. 75).

Certainly one of her greatest contributions was to help open up the highest levels of musicianship to women. She must have known that she had broken through when the music critic of the *London Times* described her in his column, the day after she had conducted the Royal Philharmonic, as a top-flight conductor (Spycket, 1987). Although from the 1920s she supported women's rights organizations, it cannot be said that women's issues were a major preoccupation. When feminists made an effort to enlist her she resisted. In fact it irritated her that some people attached so much importance to her sex. "Let's forget about the fact that I'm a woman," she would interrupt them dryly, "let us talk about music!" (Spycket, 1987, p. 123).

Aaron Copland was able to place Nadia's contribution as a woman in perspective. In *Copland in Music* he wrote:

> Curiously enough I have no memory of discussing the role of women in music with Mademoiselle. Whatever her attitude may have been, she herself was clearly a phenomenon for which there was no precedent. In my own mind she was a continuing link in that long tradition of the French intellectual woman in whose salon philosophy was expounded and political history made (Kendall, 1976, p. 17).

Comments about Nadia have streamed forth during the twenty years since she passed on. Comments like these:

> She was like a philosopher's stone which could transmute the musical souls of her students, purging them of the lesser and unpurified qualities of technical discipline (Don Campbell in Campbell, 1984, p. 3).

> So far as musical pedagogy is concerned—and by extension musical creation—she is the most influential person who ever lived (Ned Rorem in Campbell, 1984, p. 3).

Last Years and Death

"I never think of age," Nadia said. "I have not time. I work" (Campbell, 1984, p. 96). Nadia worked on into her eighties. "Retirement?" she questioned, "I do not know what that is. One works or one cannot work . . . that would be death" (Campbell, 1984, p. 96).

In the summer of 1977, to celebrate her ninetieth birthday, a party was given at the School of Fine Arts at Fontainebleau, which was a culmination of all the celebrations of her life. Nadia's body had weakened and she was blind, but she retained her hearing and her perfect pitch until the end of her days. Speeches were given, soloists played and an ensemble from the Menuhin School in England performed. At dusk ninety white candles were set afloat in the pond. Finally, three balloons classically decorated in blue and white were released over the pond into the clear summer air. Her last young protégé, a Romanian, escorted her from this touching ceremony (Campbell, 1984).

Two years later, kneeling at her bedside, Leonard Bernstein shared one of her last lucid moments. He later wrote about his experience:

> Everything conspired to urge me on to Fontainebleau that day. . . On the other hand, there were some strong contra-indicative warnings from her closest friends and guardians: Mademoiselle would be disturbed and exhausted by a visit: she could not speak, and in any event would not recognize me. *Tant pis*: I paid my visit as if compelled.
>
> I was ushered into her bedchamber by the angelic and anxiety-ridden Mademoiselle Dieudonne, who...whispered a short order: ten minutes only. As it turned out, the visit lasted closer to one hour. Nadia was beautifully dressed and groomed, as if for the coffin. Her crucifix gleamed at her throat; her eyes and mouth were closed; her whole face seemed closed in coma. I knelt by the bed in silent communion. Suddenly there was the shock of her voice, deep and strong as always. (How? Her lips did not seem to move; how?)
>
> *Qui est la?* (Who is there?)
>
> I could not respond for shock... Finally, I dared to speak: "Lenny. Leonard. " Silence. Did she hear, did she know?

Cher Lenny . . . . .

She knew; a miracle. An encouraging signal from Dieudonne. I persevered: "My dear friend, how do you feel?" Pause. Then that basso profundo (through unmoving lips)

Tellerment forte. (So far, strong)

I drew a deep breath. *"Vous voulez dire . . . . interieurement?"* (You mean inwardly?)

Oui . . . . mais le corps . . (Yes, but the body . . .)

"Je comprends bien" (I understand). I said hastily, to shorten her efforts. *"Je pats. Vous devez etre tres fatigue."* (I'm leaving. You must be very tired.)

Pas de fatigue. Point . . . . (Not at all tired)

A protracted pause, and I realized she had drifted back to sleep... I knew there was more to come, and in a few minutes, it did come:

Ne partez pas. (Do not leave)

Not a plea, but a command. I searched my mind anxiously for the right thing to say, knowing that anything would be wrong. Then I heard myself asking: *"Vous entendez la musique dans la tete?"* (Do you hear music in your head?) Her instant reply:

Tout le temps. Tout le temps. (All the time. All the time.)

This so encouraged me that I continued, as if in quotidian conversation: *"Et qu'est-ce que vous entendez, ce moment-ci?"* (Do you hear it now, at this moment?) I thought of her preferred loves. "Mozart? Monteverdi? Bach, Stravinsky, Ravel?" Long pause.

Une musique . . . ni commencement ni fin . . . .

(A music . . . without beginning or end.)

She was already there, on the other side.

(Leonard Bernstein in Campbell, 1984, pp. 11-13)

Nadia Boulanger died in October, 1979.

Boulanger's Educational Legacy

1. Nadia Boulanger is frequently referred to as the greatest music teacher of the twenty-first century. She was the teacher of hundreds of renowned musicians, who in turn have trained thousands. Virgil Thomson commented of her influence on the music of America: "Nadia Boulanger has for more than forty years been, for musical Americans, a one-woman graduate school so powerful and so

permeating that legend credits every U.S. town with two things: a five-and-dime and a Boulanger pupil" (Walters, 1981, p. 72).

2. In an interview, Annette Dieúdonne attributed Nadia's success as a teacher to her love for her pupils and her clarity of explanation. She described her as having a warm heart and an appealing charisma. "She has always had inspiration, instinct—she believes it is a gift of God to be a great teacher" (Walters, 1981, p. 85).

3. Aaron Copland discussed the process of what might be called an osmosis of personalities that issues because of the presence of a powerful teacher, and the stimulation of a student's capabilities for learning from a teacher for whom art holds no secrets:

> My purpose here, however, is to concentrate on her principal attribute, her gift as a teacher. As her reputation spread, students came to her not only from America but also from Turkey, Poland, Chile, Japan, England, Norway and many other countries. How, I wonder, would each one of them describe what Mademoiselle gave him as teacher? How indeed does one describe adequately what is learned from a powerful teacher? I myself have never read a convincing account of the progress from student stage to that of creative maturity through a teacher's ministrations. And yet, it happens: some kind of magic does indubitably rub off on the pupil. It begins, perhaps, with the conviction that one is in the presence of an exceptional musical mentality. By a process of osmosis one soaks up attitudes, principles, reflections, knowledge. That last is the key word: it is literally exhilarating to be with a teacher for whom the art one loves has no secrets (Walters, 1981, p. 77).

5. Nadia Boulanger's greatest strength was her ability to draw out the greatest strength from each of her pupils. Her demand for rigor coupled with her enthusiasm propelled them to new heights, allowing them to perform beyond their wildest dreams. Her inspiration and her very presence became the catalysts which

led students to fulfilling ambitions, whether in the original way they envisaged or not. Those passing through Nadia's doors came away with the understanding that if one chooses to do something, one must do it supremely well (Kendall, 1977).

> Those men who have lit up the road for eternity
> were always alone in the midst of the multitude,
> alone among loved ones,
> alone in seeing too high, too far,
> alone in some terrifying solitude,
> because questions that reared up between them and the unknown
> are scarcely conceivable to us.
>
> (Nadia Boulanger in Campbell, 1984, p. 61)

MYLES HORTON

Life of Myles Horton

Myles Horton was born in Savannah Tennessee on July 9, 1905 to Perry and Elsie Falls Horton. The poor Scottish-Irish parents held to the good old fashioned American values embedded in their strong Presbyterian background. From his mother Myles learned the true meaning of religion: don't worry about theology, she told her young son. God is love: "Love your neighbor. That's all it's all about" (Horton, 1990, p. 7).

Horton's Education

Perry and Elsie were independent spirits with a healthy respect for the power of education. Though neither had more than a grade school education, they had both been school teachers. After he graduated from high school, Myles attended Cumberland University in Lebanon Tennessee from 1924 until 1928 where he majored in English literature. During summer vacations he helped the Presbyterian Church by organizing Bible schools. One year he headed off to Ozone in the Tennessee mountains to create a program for the children of poor workers there. But he found that, while Bible stories and hymns were fine for the kids, that they were not meeting the needs of the adults in the community. "I couldn't put it into words," he said years later, "but such education failed to connect with their lives" (Adams, 1975, p. 2). Myles decided to ask the parents to meet together to talk about their personal and community problems. Their simplest concerns turned out to be powerful food for thought and debate. Evenings often started with the singing of hymns or the telling of stories. But then the serious talk would begin. Parents came back every week and brought more of their friends. Not knowing much

about the solutions to their problems, the young collegian couldn't do much more than provide the setting for discussion. But the people didn't seem to mind that he couldn't answer their questions. They just asked him to help find someone who could. Mostly they were happy just to have a chance to talk amongst themselves about their problems.

These community meetings soon grew so crowed that Church supervisors suspected Horton of misrepresenting attendance figures. He was such a hit that the community asked him to stay on year-round. He declined. But for Myles it proved to be foundational experience for his future work. His experience had taught him that people can learn in situations that don't necessarily look like traditional education. The Ozone experience became the germ of his later educational ideas and the genesis of his own school programs.

Other activities during Horton's college years involved his work as President of his campus YMCA. During his junior year, in 1927, Horton attended a southern YMCA conference in Nashville where he interacted with students of different races and nationalities for the first time. From then on, whenever he organized YMCA functions, they were interracial. To Myles, *all* men and boys were included in the YMCA's mission. But as complaints piled up, his resignation became inevitable.

He then began working on union issues. When he visited a textile mill in Lebanon he witnessed unfair practices and urged workers to organize. This upset University officials. Though threatened with expulsion, the young man did finally manage to graduate from Cumberland in 1928.

Next he went off to attend Union Theological Seminary in New York City. There he met a number of socially-conscious academics. During these years, Horton began to conceptualize an educational plan that was truly revolutionary. His ideal school would be

largely unstructured and affordable. It would help those striving for reforms in their communities by providing a venue for communication. There would be no grades, no credits and no degrees would be offered; just a climate that would encourage change.

During these years Horton changed schools, preferring the curriculum at the University of Chicago. While there he received encouragement from Jane Adams who ran Chicago's Hull House. She told Horton,

> To arrive at democratic decisions, you need to have a bunch of ordinary people sitting around the stove in a country house or store and contributing their own experiences and beliefs to the discussion of the subject at hand. Then you take a poll of the majority opinion of those present, regardless of who they are, and that is a democratic decision (Adams, 1975, p. 18).

Danish Folk Schools

In the spring of 1831, as Horton was deep into formulating the type of educational situation he would found, he spoke with two Danish Lutheran ministers who suggested that he check out Denmark's folk school movement. He obtained a copy of *The Southern Highlander in His Homeland* by John Charles Campbell which described the folk school concept, and discussed one such school located in the United States. By doing extra work at the University, Horton earned the money to visit some of the schools in Denmark.

The folk school tradition was started by Bishop N.S.F. Grundtvig, a scholar of Scandinavian mythology, during a time when Denmark was in serious decline. Prussia had defeated her armies twice; the nation was nearly bankrupt, and the people were feeling so downtrodden that they were forsaking their native language, preferring German language and customs. This had been going on for a decade when the Bishop conceptualized a solution in the establishment of new community schools which he called

"schools of learning." His new schools would stimulate the innate intelligence of people in the villages without use of traditional classroom methods (Kohl, 1991).

Unfortunately Grundtvig's own school failed, but a subsequent school started by Kristen Kold in 1844 brought the concept to life. Kold's school used no books but encouraged sharing though singing. Students were not graded and there were no tests or diplomas. Anyone over eighteen was free to attend. People paid what they could in order to support the school; many gave produce they had raised or worked at the school. Discussions focused on community problems and the struggle folks had with their landlords, the church and the nobility. So popular were these folk schools that they grew into a movement; within thirteen years twenty-six more schools opened. By 1925 over 300,000 Danes had been through the schools. The entire country was revived and awakened by a new spirit of patriotism and sense of civic responsibility. Denmark's economic prosperity was entirely restored and a new democratic spirit ensued throughout the country (Adams, 1975).

Horton took some inspiration from his visit to the folk schools. He especially liked the newer schools, which were high schools designed to teach industrial workers, noting the motivated learning and informality he saw there.

Highlander Folk School

By the time he returned to the US, Horton had a solid idea of how his future school would be organized. It would be located in the South. Blacks would be welcomed to work along side whites. The school would focus on helping people talk about their problems and find solutions. And teachers would go out into the field with students to help them implement solutions. Students would live for periods of time together; they would eat and wash dishes, sing and share together. Staff would also live together in community.

On November 1, 1932 Horton opened the Highlander Folk School with two other men, Jim Dombrowski and Don West, in a converted farmhouse among the rolling hills of the Smoky Mountains. Highlander was to be a center for democratic education. Horton was it's director and chief advisor for much of its history. Highlander attracted people of all races and agendas. Most were emerging leaders who could take what they learned at Highlander and teach people in their own communities.

The Highlander philosophy was based on Horton's ideas about how to teach people to build democratic communities. Of utmost importance to Horton was his belief that adults can learn to take charge of their lives and circumstances. Second was his understanding that all learning is self-acquired and that people will learn and use only what they determine to be necessary. Education had to start where the people were, to develop naturally from the people themselves, from the ways they found it easy to learn. These ideas reflect the views of other early adult educators like Eduard Lindman. Like them, Horton believed that adult education held the key to victory in battles against racism, economic exploitation and illiteracy (Conti, 1977; Mezirow, 1991).

The physical surroundings at Highlander reflected these ideals. Students met in large rooms filled with rocking chairs and over-stuffed cushions. Furnishings were plain and well-used. There were no desks, no bells, no cafeteria; in fact, nothing suggested an institution. Intimacy was important, especially because most people who attended had either been offended or frightened by traditional schools, and because their needs fit no traditional academic pattern (Adams, 1975). "The beautiful part of Highlander is that you could be washing dishes with somebody who had a Ph.D. or no 'D's'–you could say what was on your mind" (You've Got to Move).

Highlander Curriculum

Visitors to Highlander participated in various types of workshops for the purpose of learning to think critically, renew self-confidence and communication skills and work with others. Typical weekend community workshops were essentially nonacademic experiences in which conventional learning devices were discarded or used in some entirely new way. At gatherings of this type, much time was given to singing, outdoor games and hiking in the mountains. Regular staff members spent part of their time in the field helping former students with their own communities and organizations. In addition to weekend and community workshops, Highlander conducted long-term residential programs. These were more intensive periods of study, lasting six weeks to two months. Upon returning home from these intensives, students were expected to devote themselves to teaching others what they had learned of the Highlander philosophy.

Zilphia Horton and Music at Highlander

It was during one of the community workshops that Myles met and fell in love with the woman who would become integral to the educational programs at Highlander. Zilphia was the daughter of a coal miner from Arkansas. After she graduated from the College of the Ozarks she sought a way to use her musical and dramatic talents to advance labor unions. Sometime after attending a Highlander workshop, she married Myles Horton on March 6, 1935. At Highlander, Zilphia taught drama, play writing, public speaking, wrote and directed plays and led square dancing and singing.

Zilphia Horton's special gift for using music, drama, and dance for education helped unite workshop participants and lifted their spirits. Through Zilphia, Highlander's cultural programs gained national and even international renown when the BBC presented a cultural program from Highlander in March 1937. She was also a key person

in the popularizing of the song that moved an entire generation in the 1960s: "We Shall Overcome." Originally an Afro-American folk song, it was picked up by union members who sang it as they picketed in southern union strikes. Two women sang it at Highlander in 1946. Zilphia recognized its emotional appeal, slowed the tempo, added verses, and began to sing it at meetings. Folk singer Pete Seeger learned it from Zilphia in 1947, established its title as "We Shall Overcome," added verses, and sang it at 1950s folk concerts around the country. Folk singer Guy Carawan, who with his wife Candie worked at Highlander, further refined it, and added the verse, "We Shall Not be Moved," during a workshop at Highlander. At one point Martin Luther King, Jr. was deeply moved when he heard "We Shall Overcome" for the first time when Pete Seeger sang it at Highlander. The song continued to be sung at Highlander workshops and at civil rights gatherings through the 1960's, and became the song of freedom heard round the world (Parker, 1991).

Zilphia wrote these words about her work:

> Singing, poetry, literature—all these things that we think make life richer—are like water lilies. What determines how beautiful that water lily is and how strong it is, is the rich mud at the bottom of that pond. And that's the way I think about songs that we sing. To me, what people stand for represents the roots in the mud at the bottom of the lake. There has to be some central core that holds people together before anything worthwhile comes out in the way of culture (Carawan, 1991, p. 44).

Aleine Auston (1991) points out in "Building Monuments" that, had Zilphia made folk-song collecting and performing her primary vocation, she would probably have become as famous as did her friends Pete Seeger, Alan Lomax, Lee Hayes, and Woody Guthrie. But Zilphia used her gift to educate and empower people. Singing became an integral part of Highlander's learning program; through the use of culture at Highlander

the leaders in the labor and civil rights movements gained a powerful weapon in their fight against oppression. In this Highlander followed the Danish folk school model—first enliven, then enlighten.

Zilphia and Myles Horton were married for twenty-one years and had two children. But tragedy struck in 1956 when Zilphia mistakenly drank a glass of carbon tetrachloride. Though she immediately realized her error and induced vomiting, the poison aggravated a kidney condition, and two weeks later she died of uremic poisoning. Her death produced an outpouring from Highlander's friends around the world. Though Myles was distraught, he forced himself to carry on the school's work. Later he explained, "You solve personal problems not by maximizing them and dissecting them and concentrating on them and brooding over them; you solve them by getting interested in something bigger than yourself. Then your problems are unimportant to you" (Glen, 1988, p. 138).

Highlander's Activities

For the first decade the workshops at Highlander focused on helping to unionize southern textile workers and coal miners. At first Horton held workshops to train organizers for the CIO. Jim Crow laws forbade integration, but Horton invited both blacks and whites. Thus it was that Highlander become one of the few places in the South where the two races could meet under the same roof. Through part of the 1940s and into the 1950s, Horton turned his focus to helping blacks become better educated so they could participate in democratic government. Highlander became the principal gathering place for leaders and educators involved in the black revolution.

One notable student was Mrs. Rosa Parks. One weekend late in 1955, the soft-spoken seamstress attended a Highlander workshop. The experience was life-changing for her:

> At Highlander, I found out for the first time in my adult life that this could be a unified society, that there was such a thing as people of differing races and backgrounds meeting together in workshops and living together in peace and harmony. It was a place I was very reluctant to leave. I gained there strength to persevere in my work for freedom, not just for blacks but all oppressed people (Adams, 1975, p. 122).

Just a few weeks later, on Friday, December 1, Mrs. Rosa Parks made history when she refused to move from her seat on a bus in Montgomery, Alabama when the bus driver demanded it. She later explained: "For a white person to take the seat I would have had to stand. It was not at all prearranged It just happened that the driver made a demand, and I just didn't feel like obeying his demand. He called a policeman, and I was arrested and placed in jail, later released on a hundred-dollar bond and brought to trial on December 5" (Parks in Adams, 1975, p. 148).

At a testimonial dinner in 1980, Rosa Parks spoke about how knowing Myles Horton affected her life:

> Myles Horton just washed away and melted a lot of my hostility and prejudice and feeling of bitterness against the white southerner because he had such a wonderful sense of humor. I often thought about how he could strip the white segregationalists of their hard-core attitudes and how he could confuse them, and I found myself laughing when I hadn't been able to laugh in a long time. He always had a way of disarming those people who would attack him, and there were so many I can't name all of them. People were trying to make it seem impossible to have that type of living that he had organized and established at Highlander. There was a great thing about Black and white people sitting down to the same table eating. Now the Black person could stand up and hand them the food at the table, prepare the food and all that. But the two were never supposed to sit together and have a meal. But he managed it. These reporters were asking him, "How do you get the races to eat together?" and he said, "First, the food is prepared. Second, it's put on the table. Third, we ring the bell." I found myself just cracking up many times (Brown, 1991, pp. 24-25).

Though neither Horton nor Highlander would attempt to claim any direct credit for the string of events that led to the empowerment of the black community, none-the-less, partly encouraged by Highlander participants, the possibility of freedom began to stir among Southern blacks. Several leaders regularly attended Highlander sessions including Andrew Young, Julian Bond, Stokely Carmichael, Rev. Martin Luther King as well as scores of others (Adams, 1975).

One of the most important educational programs Horton implemented was the Citizenship Schools curriculum which eventually helped 100,000 blacks become literate so they could qualify to register to vote. Horton became convinced by some of his students that blacks in the south needed adult literacy classes. The experiment began on Johns Island, population of 4,000, the largest island in the Sea Island chain along the South Carolina and Georgia coasts. Sixty-seven percent of the people were black. They spoke Gullish, a dialect of their African slave ancestors. Black islanders tended to be suspicious of whites, so Horton trained potential black island leaders at Highlander and sent them back to conduct Citizenship Schools. The schools were all black and taught by locals. Horton chose a beautician as the first literacy teacher. She was a natural community leader and her parlor was a community center. Additionally he appointed a black Charleston South Carolina teacher, Siptima Poinsette Clark, to run the schools. Once successful on Johns Island, the Citizenship Schools were instituted on other Sea Islands, and then throughout the South (Parker, 1991).

Horton and the Highlander staff continued working to educate blacks in the South for twenty-five years. They worked with some of the south's most responsible leaders during its transition from a segregated to an integrated society. Nowhere was integration more practiced than at Highlander's Summer Project held in the summer of 1960. At that

time it was illegal in Tennessee for blacks and whites to have social contact. But that summer fifty-five black, white, Indian, and Chicano teenagers lived together for two months. The idea was to bring together everyone who had been involved in demonstrations, to meet one another and exchange ideas and experiences. Julius Lester (1991), one time counselor at Highlander, remembered:

> The Summer Project was remarkable because it worked. Highlander created an atmosphere in which Black kids from the rural South, middle-class northern white kids from private schools, Native Americans from Montana, and Chicanos from urban Texas met, not as ethnic categories or sociological abstractions, but as people who were not racially or ethnically self-conscious or aggressive. "Differences were there to be shared, ignored, or teased, but it was not the differences that were important. What was important was the quality of being human; that was what we shared. No one told us this. We learned it for ourselves because Highlander was an environment which made such learning easy (p. 10).

Educational Philosophy

Myles Horton and his colleagues were college educated. With their academic backgrounds they initially thought they had to teach what they had learned and in the manner in which they had learned it. They assumed they had answers to the problems of the poor people they encountered. They began by trying "to figure out what in our bag of tricks would apply to that problem, and we would adapt it and make it fit the situation" (Horton, 1990). It was a process of growth for them to realize the answers were within the people themselves. Over time they came to understand that they needed to be learners so they could share what they learned; and that they needed to provide an experience that would exemplify what they were trying to teach.

Horton quickly realized the need to start the education of people where they were.

> Education is what happens to the other person, not what comes out of the mouth of the educator. You have to posit trust in the learner in spite of the fact that the people you're dealing with may not, on the surface, seem to merit that trust.
>
> I like to think that I have two eyes that I don't have to use the same way. When I do educational work with a group of people, I try to see with one eye where those people are as they perceive themselves to be. I do this by looking at body language, by imagination, by talking to them, by visiting them, by learning what they enjoy and what troubles them. You have to start where people are, because their growth is going to be from there, not from some abstraction or where you are or someone else is.
>
> Now my other eye is not such a problem, because I already have in mind a philosophy of where I'd like to see people moving. It's not a clear blue-print for the future but movement toward goals they don't conceive of at that time. . .
>
> Popular education should give people experience in making decisions. Many take for granted that people can make decisions, but actually, the majority of us are not allowed to make decisions about most of the things that are important (Horton, 1990, pp. 131, 134).

Horton, a strong proponent of democracy, saw the need to make education a democratic process. He, like great teachers before him, realized that when people are hungry or needing attention in other ways (physical, emotional, spiritual), discussion needed to revolve around resolution of those issues. At Highlander education sessions always began with talking about the experiences of the people. People learn from experiences, but only those they learn from; Horton helped Highlander's students analyze their experiences so they could learn from them and then keep learning after they left. He helped them learn to motivate themselves.

Neither Horton nor his colleagues initiated programs at Highlander. In keeping with the democratic philosophy, programs were initiated by former students and the staff aided in implementing those projects that they were asked to work on.

Horton also believe that the process of learning should be an organic whole, not an assortment of unrelated methods and ideas. He believed in the unity of all things: "nature and mind and spirit and the heavens and time and the future all are part of the big ball of life. Instead of thinking that you put pieces together that will add up to a whole, I think you have to start with the premise that they're already together and you try to keep from destroying life by segmenting it. . . (Horton, 1990, p. 130). Because of his philosophical understanding of an ever-changing unity, Horton avoided the attempts of people to divide and segment Highlander into compartments of "what has worked" or "what hasn't worked." Every experience is part of the whole.

In July of 1989, Myles Horton met in Montana with a group of education professors:

> He reminisced about his life and about what he had learned from people. Fifty-seven years of dedicated work at the Highlander Center constantly struggling to bring democracy to the world was a life that had brought him satisfaction, even though his great goal of democracy for all remained a hope for the future. It is better, he said, to build toward a future ideal for human living than to be side-tracked by more attainable but less meaningful goals. It was this enthusiasm, this trust in people that marked so many aspects of his life as a great adult educator. Horton confessed that when he first started the Highlander Center he had to "go back to school with the people and learn from them." Schooling had given him many answers to problems that people didn't have but no answers to problems they did have. "So we started learning how people react; we learned from them, how they learned." This lesson of learning from the people was a lesson well learned for it remained one of the dominant characteristics of the Highlander Center. People gathered there not to be given answers to their problems but to share their insights and to learn together how to bring freedom and justice to the people of their communities. This "circle of learners" approach, as Myles liked to call it, also necessitated a re-examination of the role of the teacher. "I always thought my role was to pose questions and help people examine what they already knew. By questions, you help people to know what they already know but don't know they know" (Fellenz & Conti, 1990, p. v.).

Horton's Teaching Techniques

Teaching for Myles Horton was an organic process. Although his method can be characterized with four broad categories: 1) peer learning through social interaction in a non-formal setting; 2) critical questioning; 3) modeling; and 4) motivating, these categories are not separate and distinct, but rather overlap and are integrated in an holistic approach.

Once Myles and his colleagues realized that the answer was within the people themselves, they undertook to find ways to draw out of the Highlander participants their experiences and consequent solutions. Weekend workshops were in-residence, away from the circumstances of everyday life, where anyone—students and teachers, Ph.D.'s and no "D's," people of color and people of no color, rich and poor—from any walk of life could live together, eat together, talk together, laugh and cry together. Everyone was equal and all participated in the various aspects of group living, i.e., cooking, cleaning, routine chores, etc.

One very large room was filled with rocking chairs in a circle around the room. Horton took the idea of the circle of learning from Native Americans. He liked it because it is non-hierarchical. The rocking chairs provided an atmosphere of comfortability (Conti & Fellenz, 1986). Such was the gathering place for story-telling. When moved to do so, a participant would stand and tell his or her story, both personal and social. Discussion followed and usually culminated in ideas for change.

Myles was a powerful story-teller. "He used specific stories (somewhat embellished) to represent a greater principle" (Conti interview, 1993). He didn't lecture or use formal presentations, but rather allowed the stories to empower people. The archetypal patterns within the stories the people told resonated within each one in the

group. Listening to stories caused an awakening to the realization that one already knows the answers. This process is one that builds self-esteem and self-confidence in participants.

Music was also used as a medium of social interaction. In the circle of learning, besides telling stories, participants often stood and read a poem or sang a song. In the mountainous small towns of the south, the only places for interaction were the church and school. Music and singing were integral to church services and therefore had become endemic of the culture. Horton believed that music communicates and is part of the cultural expression of a people. It provides a common language and cuts across other-wise artificial boundaries. Folk songs are especially helpful because people can put their problems and fears into the music. So at Highlander, participants did a lot of singing (Conti interview, 1993).

By listening to others' stories and folk songs, by sharing, participants came to know what they needed to do to make change in their own communities. "Horton didn't give people solutions to their problems, he let them discover for themselves" (Fellenz interview, 1993). Because of this, participants in the Highlander process were not aware, minute by minute, that they were learning. "It wasn't a learning mode, but more like conversation. In conversation things come up" (Conti interview, 1993).

The crucial aspect of communicating personal experience was analysis of that experience. One doesn't learn from all experiences, but rather from those that are questioned and critically viewed. "It is one thing to have had an experience, but to learn from it we must go back and ask 'What did I learn?'" (Conti interview, 1993). Horton's method of teaching was to help people critically question their experiences. He was a keen observer of behavior and used that to ask pertinent questions. His goal was for

people to gain insight into the deeper issues of life in their communities. This provided the backdrop for them to question and understand their own experiences (You've Got to Move). "Horton didn't teach students. In fact, he didn't see students. He saw people. All were worthy, all were interesting. His attitude was, 'I have knowledge, you have knowledge. You have different ideas than me; let's kick them around, back and forth'" (Conti interview, 1993).

Horton's presence—as personality, charisma and style—validated people's experiences and fired them up. He was the voice of experience. "People would feel like Horton was speaking directly to them. He was a catalyst—different people who heard him learned different things from one short encounter (Conti interview, 1993). He had the effect of motivating people to go out and do those things which they had heretofore not felt empowered to do.

Horton was an effective teacher because he participated in learning right along-side students. He knew that once he stopped learning his participants would stop learning. He never taught in a formal way or setting, but rather "he taught by example, by the way he lived. His values came through" (Conti interview, 1993). He used humor to teach others to confront problems not as obstacles but as opportunities for seeing things differently. The whole Highlander project was a model of the ideal life—equality, democracy, communication, sharing, learning, growth, empowerment.

Horton's Trial by Fire

To celebrate its twenty-fifth anniversary on Labor Day, 1957, Highlander arranged a special weekend celebration. Hundreds of friends and former students were invited. Reverend Martin Luther King, Jr. was a key-note speaker. In his address King stated his belief that the South was on the threshold of a new era in race relations. In spite

of the Ku Klux Klan and Citizens' Council, he believed that hundreds of white southerners would soon move to implement the Supreme Court rulings and to "make the ideal of brotherhood a reality" (Glen, 1988, p. 143). King called upon his friends at Highlander to remain "maladjusted" to racial discrimination and to work for the day when freedom and justice would extend to all races and classes.

The celebration turned out to be a memorable occasion for Horton's opponents as well as his beloved students. The Nashville Banner announced that the anniversary had brought together many of the instigators of the South's racial strife with headlines like "Stuff of Rebellion Planted." Even worse was the accusation by the Georgia Commission of Education that Highlander was a "Communist School." The report asserted that "During Labor Day weekend, 1957, there assembled at Highlander the leaders of every major race incident in the South." At this point Southerners were beginning to equate Highlander with black victories in the South, and Horton was targeted as a primary instigator. A series of attacks began to put the school and Horton in jeopardy. Billboards appeared bearing the caption "Martin Luther King at Communist Training School." Horton's home was burned by the Ku Klux Klan. He was thrown into jail, was investigated by the FBI and was harassed by the Senate un-American Activities Sub-committee. Without warning, the Internal Revenue Service revoked the school's tax-exempt status and the Tennessee legislators adopted a resolution to investigate Highlander (Glen, 1988, p. 214).

A trial was held in which the school was accused of being subversive and of promoting communism and free love between the races. The State of Tennessee was intent on proving that Highlander was not really a school at all, for no regular classes were held there, it maintained no regular full-time faculty and no regular standard

curriculum; it awarded no diplomas and carried out few of the usual activities associated with schools. Further the State claimed that Highlander sold spirits without a license, and that Horton operated the school for personal profit.

Horton answered each charge. Highlander, he said, had always been integrated; it was implied in its charter. The school was not subversive but allowed all points of view to be discussed. He and the staff were not communists; in fact, they believed that communism was authoritarian, which was against Highlander's spirit of open inquiry. Later Horton expounded on this position:

> Communism has never tempted me because I believe in democracy, a powerful concept worthy of mankind the world over. You know, if you have made any effort to find out, that I have never been a member of the Communist Party. I am fearful only of the results of our own timidity in advancing democratic principles (Adams, 1975, p. 199).

> Another time he said, ". . . I couldn't be a communist. My strong mountain background of independence prevents me from pledging in advance to do what someone else decides for me. I could never do it" (Horton, 1990, p. 35).

No, Horton continued at his trial, Highlander did not promote free love, but while square dancing and folk dancing hands were held and bodies sometimes touched. No, Highlander did not issue diplomas. And yes, their teaching methods were somewhat different in that they taught by discussing problems and issues, but so did many other adult education institutions. Horton admitted that the staff at Highlander had given him his house and some acreage, but that was because he and his wife had worked for over twenty years without taking any salary. He admitted that beer had been kept at Highlander, but that was because the nearby cafes would not serve racially mixed groups (Parker, 1991; Adams, 1975).

All the Tennessee authorities could convict Highlander of was selling beer without a license and being guilty of questionable financial practices relative to Horton's property. All other charges were dropped. Ultimately the State of Tennessee did revoke Highlander's charter and closed the school. As Highlander's main building was being padlocked, Horton stood outside on the porch and laughed at the Sheriff. As photographers snapped pictures, Horton said to them, "'My friend here. . . thinks he's padlocking Highlander. . . . Highlander is an idea, and you can't padlock an idea" (Adams, 1975, p. 133).

With Highlander closed the white community seemed overjoyed. Many got into their cars and drove by Highlander to take a look at the "communist school." Myles sat on the front porch of his house next door to the school, and spent the afternoon waving at people in their cars.

Horton and legal advisers obtained a new charter, and the Highlander Research and Education Center began to hold the same kinds of educational programs, this time in Knoxville, Tennessee. Again they were harassed. The KKK marched in front of the school; there were phone threats and crank calls. Once while eating in a restaurant, Horton and his lawyer were badly beaten as their wives watched. Horton kept on, but his lawyer had to close his office and move to another state.

Through all his trials, Horton's friends noted that the laughter never left his eyes. He always continued to laugh, and he never lost his ability to tell a funny story (Lester, 1991).

Later Life and Death

Horton retired as educational director of Highlander in 1971. Afterwards he continued to live at Highlander and to act as a consultant. But he also traveled to talk

about the Highlander idea with adult educators all over the United States and in China, the Philippines, India, Malaysia, New Zealand, Australia, and Nicaragua. Though he was frequently interviewed (most notably on Bill Moyers' Journal, sponsored by the Public Broadcasting System in 1981) Myles Horton remained an unknown to most Americans. Not long before his death, Horton made these remarks about his fate:

> Some people have seen me limping around here. My leg turns to well-cooked spaghetti once in a while when I'm walking around. It hasn't always been that way. In fact, I am having a hard time practicing what I have been preaching all my life in terms of the interdependence of people. I'm having a hard time justifying the fact that I am having problems. . . .
>
> It looks like I am dying from the bottom up. If I had a choice, I would rather die from the bottom up than the top down. I would rather know where I am going and not be able to get there, than be able to get there and not know where I am going (Horton in Fellenz & Conti, 1990, p. 9).

Horton died at Highlander on January 19, 1990.

Horton's Influence

To many who learned about him in his later years, Horton has seemed the "elder statesman" of the social justice movement (Braden, 1991). But Horton was an educator first and foremost. His being resonated with the greatest of educators who have held a vision of the new freedom they longed to give to all through a revolution in education. His half century of promoting learning and problem solving has left this country a better place than it would have been without him. Myles Horton spoke candidly with Bill Moyer during their interview about what his life was meant to achieve:

> In my life, I set for myself a goal that I knew I would never be able to achieve. I don't think limited goals are really helpful. They can be a step toward your goals, and steps are wonderful to tell whether you are making progress or not. But they can also make it seem that our goal is something that is always getting further and further away. My goal was to work for world democracy—real democracy, not just make-believe democracy—

> economic democracy, cultural democracy as well as political democracy. There is still no place in the world where I have seen the kind of democracy I would like to see. . . It is like climbing a mountain. When you get to the top of the mountain, you see a bigger mountain and go on. I think that is great, to have that kind of goal. . . I am not disappointed that I have not been able to see a world of democracy. . . .
>
> I am not unhappy about my life journey because I believe that you build a future as you go along; what you do today is a building block for the future. The future is not something that you have later on, it's something that you build now. The way you do things today determines the future you will have (Horton in Fellenz & Conti, 1990, p. 9).

In the end, Horton acknowledged that anything worth doing takes a lifetime to do: "I feel that I would like to judge myself not by what I have done but by what I have helped other people to learn to do. That would be my criteria of a successful life (Horton in Fellenz & Conti,1990, p. 10).

Horton's Educational Legacy

1. Few people have seen as much change in the American South, or helped to bring it about, as Myles Horton. As Bill Moyer said in his program (1981), "He's been beaten up, locked up, put upon, and railed against by racists, toughs, demagogues, and governors. But for almost 50 years now he has gone on with his special kind of teaching—helping people to discover within themselves the courage and ability to confront reality and change it."
2. Horton practiced what he preached. He wanted a heightened experience for his students in making democratic principles work. The tools he used, even his development of the school at Highlander, were aimed at bringing the principle of democracy into the physical. Education at Highlander was democratic; Horton promoted the use of democratic techniques such as discussion, group dialogue—even group singing—to encourage people to learn to work together to solve their

problems. Lessons were all out of real life. And real people came to learn, to understand and to respect the people of other cultures, races and customs. In his curriculum, Horton took democracy to the extreme, to the point of allowing students to determine their own learning needs, and the educational methods used by the staff were constructed with individual students needs in mind. Learning was measured not with tests on paper but by the true test of the spirit of the student as he interacted with his environments.

3. For him the individual was imperative. "Insofar as I have learned to listen to people and to honor and respect them as individuals," he once said, "I have been a good teacher. . . . When I have failed to do this my teaching has failed." (Adams, 1975. p. 47)

Jack Mezirow praised Myles for the legacy he left teachers of adults in our time:

> His words and deeds inspire us . . . [In him] we can recognize the embodiment of [our] ideals. Our encounter with such a hero is one of self-confirmation and transcendence beyond our mundane, self-centered preoccupation with personal security, achievement and reward. . . . Myles' dream is the dream of every adult educator. That is why he speaks to us still as we think about what we stand for as adult educators. His legacy is to let us stand tall (Mezirow, 1991, p. 30).

ESTABLISHING PRINCIPLES OF EDUCATION

By comparing the statements, attitudes and actions of the fourteen great teachers studied it has been possible to identify a common set of principles each one was found to agree with. Nine basic principles were identified as being true for all teachers studied. They are as follows:

Principles Demonstrated by Great Teachers

1. Learners are their own best teachers. They have an inner mechanism akin to an inner teacher which has been described in various ways. This is the learner's true teacher. Learning is facilitated by an inner dialogue whereby the person arrives at understanding.
2. Teachers play a significant role in guiding learners through the learning process. The great debate in education through history has been whether any man can teach another. Though many have downplayed the teacher's role in the accumulation of wisdom, all agree that teachers can help learners with knowledge that is based on facts and figures, formulas and skills, and with modeling learning.
3. The primary underlying purpose of education for the adult is personal development rather than the acquisition of knowledge that relates to facts and skills. The Greeks and Orientals called it "happiness." Moderns call it self-actualization. Even when the intent of learning is to fulfill practical or career-oriented purposes, the underlying benefit is personal development and fulfillment.

4. A teacher's responsibility, as a lifelong learner, is to model that which learners are trying to become. The teacher as model is essential to learning.

5. Each student is unique; therefore teaching should be constructed to fit individual differences.

6. Discipline in learning involves the expectation that the student needs to exert his own effort toward the accomplishment of his learning. Teachers hold up the standard and provide exercises and requirements to assist the learner, but the learner determines the amount of effort he or she will exert to attain success.

7 Knowledge is not just for the keeping, but for action in the world. Learning must be made practical and useful. Learning should not just sit on a shelf to be pondered but should be used to improve conditions on earth.

8. Learning requires personal assimilation coupled with some type of interaction with others. Learners need opportunities to take in and assimilate knowledge, whether with a teacher or coach or on their own. But they also need interaction with others for complete assimilation. Many teaching methods have been useful, but the most prevalent are those involving group work.

9. The teacher/student relationship can be the highest form of relationship. It can include intimacy, support and love as well as challenge and discomfort. Ultimately teachers sacrifice something of themselves in order that learners might succeed, and even exceed their own best efforts.

Discussion of Principles

Principle 1: Learners are their own best teachers. Learners have an inner mechanism akin to an inner teacher. This internal teacher, which has been described in various ways—as the true self, the Truth within, active intellect, God, the sun of souls, the Christ, the voice of conscience—is the learner's true teacher. Learning on the part of the individual is facilitated by a process of recollection, association of preexisting knowledge with new information, and an inner dialogue that the individual carries on with this inner teacher; this is how learners arrive at understanding.

Principle 2 (as corollary to Principle 1): Teachers play a significant role in guiding the learner through his learning process. The great debate throughout the history of education has been whether any man can teach another. Though many have downplayed the teacher's role in the accumulation of wisdom, all agree that teachers can help learners with knowledge that is based on facts and figures, formulas and skills, and with modeling learning.

The first important concept to examine in this comparison of teachers is what teachers believe about how students learn. According to Gary Conti (1992), author of the *Principles of Adult Learning Scale* (PALS), an instructor's teaching style is based on what he or she believes about how students learn. This belief provides the foundation for a teacher's philosophy of education. Whether or not the teacher is aware of—has analyzed—his or her own beliefs about learners, the individual's philosophy and practice will reflect this foundational belief.

Therefore this comparison looked first at what each teacher believed about how students learn. Then attention was paid to the corollary: what did these teachers believe about their roles, and how did they structure their teaching programs to accommodate what they believed about how students learn?

There has been remarkable agreement among all fourteen teachers studied in the belief that the adult learner is actually his own teacher. It is he who motivates the learning process, initiates it, takes in stimuli, assimilates and integrates it with other preexisting knowledge and finally takes from it a new understanding. None of the teachers studied disagreed with this view of the learner. In fact, this belief appears to have been central to most of these teacher's educational philosophies.

Where these teachers sometimes disagree is not in the role the learner plays in his education, but in the role of the teacher in the process. Though all teachers studied believed that the external teacher can be helpful to the learning process, some believed that he or she is expendable except to instruct in very practical matters involving skill development. Others saw the teacher as important not so much for his knowledge and abilities pertinent to the subject matter, but for his ability to model for the student what he wishes to become. For others the teacher is an important, even essential, adjunct to the learning process as the subject matter specialist and organizer of the process in terms of curriculum development.

The controversy, which has been posed in the question: can one man teach another, arose first with Aristotle who veered from his teacher Plato in his belief that teachers are essential to the learning process for their ability to influence students, to put knowledge "into" them. Previous teachers—Pythagoras, the Greeks and the Oriental teachers—agreed with a definition of education based on the Latin word *educere* which means "to draw out." Aristotle took his definition of education from another Latin word, *educare*, which means to put into—to hand over, to impart, to instruct, in the sense of knowledge, skills or facts (Bodin, 1983, p. 5). Latinists are not sure which word properly explains the learning process.

Pythagoras, our first philosopher and great teacher of adults, originally established the principle that the power to know and to understand resides within the individual. To this lover of wisdom self knowledge is man's greatest gift. Truth is an ideal which one seeks in many ways, but ultimately can only be found within. His famous expression "Man, know thyself" puts in a concise statement his belief about where wisdom comes from.

Pythagoras comes to his faith in the power of the learner from his belief that each learner has lived before and that he or she retains his previous understanding within him. Learning is really a process of remembering what one already knows, and assimilating new knowledge into preexisting knowledge. While a student is new at the learning process he can be greatly assisted by the presence of a teacher who can act as a guide. After the student becomes fluid with the process of learning he will discover all the wisdom he needs inside his own mind and heart, and will no longer need a teacher.

Crotona's school was designed to reflect this understanding of the learning process. The teacher's job, according to Pythagoras, was to create an atmosphere for the student to contemplate all that has become a part of him as he has been learning in his life. In his school Pythagoras provided time and exercises specifically designed to assist the student in this assimilation. He also set up his curriculum to accommodate different levels of learners. Students were responsible for their own attainment, and the tests and initiations given at the school were a means for the student to test himself, to discover the level of his own progress.

As Pythagoras' student, Plato also believed that students had lived before and that when they learned, they were working with knowledge that was already stored within them. His teacher, Socrates, also believed this. They believed that between incarnations

learners live in realms of perfection where they come to know absolute truth. This truth has the power to illumine the mind, to bring to it the light of wisdom. Once reembodied on earth, learners strive to remember this truth. One way they can come close to the light of truth on earth is through contemplation of truth, and an excellent way for one to know truth, according to Socrates, is through discussion with others. The Socratic dialogue was his way of assisting learners to delve into themselves to find the answers to their questions. Socrates made the statement that it is "impossible" for a teacher to teach another. He later admitted that teachers can be helpful in providing stimulation and encouragement to students, in sharing knowledge (facts and procedures) and in modeling practical skills.

Socrates' concept of the teacher as midwife was quoted over and over by the teachers studied to describe the type of assistance a teacher can give a student. A midwife can provide stimulation, can guide and protect. But a midwife can not do the job for the patient. Teachers since Socrates and Plato including Augustine, Boulanger and Horton, have used this analogy to define their roles as guides and assistants. They never claimed the power to make learning happen for the individual.

Aristotle agreed on this point with his teacher, Plato, and with those who had come before him in Greek education. He acknowledged the primacy of the learner as the direct cause of his learning. His philosophy placed the learner in the center of the learning process. The teacher cannot be the cause of learning like a carpenter is the cause of a chair. But Aristotle recognized the teacher as an indirect cause of learning, as the teacher provides the organization of learning materials and a process, or formula, for learning. Aristotle believed that learning takes place through a process of demonstration and that the intellect of the learner can benefit from formal processes that teachers can

provide. Aristotle was the first proponent of the "putting in" approach to education, and started a debate among educators which continues today regarding the place of the teacher in the educational process.

On the other side of the cultural world Gautama and Confucius, who both lived when Pythagoras was teaching in the west, were laying the foundations for oriental educational theory. Both of these teachers believed that the learner is the only possible source of his own learning. As Confucius exclaimed, "I cannot compel understanding in him who does not endeavor with all his heart to understand. . . . If someone does not say, 'How is it to be done? How is it to be done?' What can I do for him?" (Do-Dinh, 1968, pp. 30-31). Both Confucius and Gautama lived during a time when it was common for students to wander from teacher to teacher learning what they could. But always their search was for their own mastery which they knew only they could accomplish. Gautama was one such student, and ultimately he had to abandon all his teachers in order to attain his enlightenment.

Gautama is the supreme example of one who believed and taught that the way to wisdom is through self knowledge—knowledge of all aspects of self. In order to achieve this inner knowledge, one needs to be free of attachment to anyone, including a revered teacher. He told his disciples not to accept as dogma or truth the concepts of anyone, including himself. "The Buddha can only tell you the way: it is for you yourself to make the effort" (Dhammapada, 1985, verse 276). When he died he exhorted his followers, "Be ye lamps unto yourselves, betake to yourselves no external refuge," and "Behold now, I exhort you, brethren: work out your own salvation with diligence" (Martin, 1911, p. 55).

Jesus is another example of a teacher whose mission was to remind people that the truth they sought already resided within them. When he taught them of the coming kingdom, he was referring to the place inside where internal truth resides. "The Kingdom is inside of you . . . When you come to know yourselves, then you will be known" (Pagels, 1979, 128-129). In *The Gospel of Thomas* he said, "If you bring forth what is within you, what you bring forth will save you (Pagels, 1979, p. 126). Elaine Pagels explains that Jesus taught his disciples that the one who comes to know himself can discover what even the teacher cannot teach. According to Jesus' teaching in *The Testimony of Truth*, the student becomes the "disciple of his own mind" when he discovers that his own mind "is the father of the truth (Pagels, 1979, p. 132). For Jesus the purpose of the teacher is to help the learner find his own inner teacher, and to provide an example of the way to do so.

When he reviewed the question of the role of the learner in the educational process, Saint Augustine took up the cause of Plato and declared his belief that there is really only one teacher—the internal wisdom who lives within the interior man. As learners learn they are guided by this inner teacher. Augustine considered it preposterous that anyone would think that teachers can teach anyone anything, believing instead that when teachers make use of words to explain concepts, learners look within themselves to discover if what the teacher says is really true. It they decide it is true, then learners determine that they will accept the concept and say that they have "learned" it from the teacher. But without the inner confirmation, they would never be able to accept the concepts of their teachers.

Augustine agreed with all the previous great teachers about the way students learn. But for him the inner teacher was God. He described the process of gaining

wisdom or understanding as a gift from God. His doctrine of divine illumination explains that God shines down on a virtuous seeker just as rays pour forth from the sun. These rays expand the learner's consciousness and illumine him. With this teaching on divine illumination Augustine maintained the concept of the inner teacher while making it congruent with his religious belief that all truth comes from God. Augustine noted a definite place for the teacher saying that, even though the teacher cannot impart knowledge into a pupil's mind, he can stimulate introspection within the learner so that the learner can teach himself. He can guide the learner's activities, stimulate him with outer facts and circumstances, remind him to attend to certain things and recognize when the learner is ready for a new level of experience.

Some centuries later Thomas Aquinas agreed with Augustine that God is the inner teacher of the soul (though he called it "Christ" in keeping with his Christian mission). But he altered the concept to conclude that while Christ illumines the learner, it is his own personal light (intellect)—given to him by God—that guides his decision making. For Aquinas, personal experience is the most important teacher, and an external teacher's best service is to guide the student through a discovery process that involves the stimulation of critical thinking within his intellect. So for Aquinas learning happens by both internal contemplation and by the external stimulation of a teacher.

In Europe Desiderius Erasmus and the Christian Humanists were so focused on the individual as the true cause of learning that they determined to remove the entrenched forces of the Catholic Church from their interference with the educational process. To this end they revolutionized education by providing books, such as the classics and the scriptures, to those who had previously been denied access to them. Erasmus believed that through searching the knowledge of the past, people would come

to their own understanding and would accelerate personally. His tool was a new type of educational method—the printing press.

Francis Bacon followed in the footsteps of the humanists and was considered to be one of their ranks. He agreed with them in some respects and strongly disagreed in others. Bacon recognized the power of the individual learner to determine the course of his learning. He is the prime example from his age of the self-directed learner. He conceived of his great plan without the help of any teachers or curriculum; in fact, he thought these could be a hindrance to progress. He created his plan solely out of the fabric of his mind. He believed in, and experienced the power of, personal intuition which scientists call "hypothesis." However, Bacon also broke with the tradition of the great teachers before him in believing that one needs more than an internal consultation to know truth. Truth, he felt, is often merely satisfaction. One needs to test one's truth in the real world of Nature. Thus his method of experimentation taught people to follow their hearts and then test their inclinations before accepting them as truths.

Benjamin Franklin took Erasmus' concept of the self-education of the masses to an extreme never realized before. He so believed in the power of the individual to initiate his own learning that he started whole movements based on his belief. Franklin's entire scheme of education was based on his belief that the individual is in charge of his own education and that the learner has within him all the power he needs to educate himself as long as the necessary tools are close at hand. To this end Franklin went about creating learning opportunities to help people accomplish their own self-education. He even created a "teacher" for the common American in his Poor Richard character. The libraries and learning clubs he initiated were monuments to the practical application of the concept that one's learning is a product of personal striving in the interior self.

Alfred North Whitehead spoke of the process of learning as holistic. He noted that learning is an interior activity that involves not only cognitive work on the part of the student, but emotional and physical work as well. Learning involves "clashes of emotion and unspoken revelation of the nature of things." His holistic educational theory is based on what he believed to be the natural rhythm of the learning cycle: a period of excitement and passion for the newness of an idea which he called "romance;" followed by the experience of delving into the details and formulas of a subject, dissecting its causes and effects, and recognizing the disciplines inherent in the subject—all of which he called "precision;" and followed again by the cycle of "generalization" which is a return to the passion of romance with a view to finding practical application for the subject. Whitehead believed that any learning program should allow students to flow through these three experiences, for this is the natural way students learn.

In Nadia Boulanger we find very clear definitive statements regarding her belief that learners are in charge of their own learning. She knew that each student has within him his own teacher, and her role was to draw out from the student his inherent qualities. She was a tough disciplinarian because she saw herself as a reminder to the student of how serious and dedicated he must be to his own learning if he expected to succeed. Her attitude was, "I demand nothing of you. You must demand it of yourself," and "I am your highest degree of tension. Listen to it in yourself" (Campbell, 1984, pp. 71). Nadia was a goad and a critic, a sweet mother and the one who held the vision for what her students could become. But she was never the doer. She admitted that she could do nothing to change or influence any student; it was all up to them. Her goal was always to put into the hands of the learner the techniques necessary for him to fulfill his own desires in life.

Finally, Horton was the champion par excellence of the learner's right to control her own learning. Horton believed that students have inside them not only the answers to their questions, but the questions as well. Therefore Horton trusted learners to understand their own needs. The role of the teacher is simply to listen and to assist learners to understand what they already know, to encourage and help them analyze their experiences. He helped learners motivate themselves to continue their own inner dialogue, and he used outer dialogue to facilitate inner learning.

The history of the most respected practitioners reveals a profound understanding of a process that has very little to do with teaching and everything to do with learning. Perhaps it can be said that these teachers were great because they understood how people learn and directed their efforts toward assisting in the learning process.

Principle 3: The primary underlying purpose of education for adults is personal development rather than the acquisition of knowledge that relates to facts and skills. The Greeks and Orientals called it "happiness." Moderns call it self-actualization. Even when the intent of learning is practical or career-oriented, the underlying benefit is for personal development and fulfillment.

According to the great teachers studied, the goal of life, and therefore the goal of education, is the attainment of a state of well being and a sense of fulfillment. The Greeks called it "happiness" and the Orientals referred to it as a state of being in balance. This concept was well established in the doctrines of Pythagoras, Socrates, Plato, Aristotle and subsequent teachers Augustine, Aquinas, Franklin and Whitehead.

The concept was delineated in the teachings of Pythagoras when he said that the way to happiness is through harmony. The same concept can be found in the writings of Plato and Aristotle. The Greeks believed that the goal of citizens is the attainment of

happiness. This state of happiness is a state of balance. When one is happy one is balanced internally and in one's actions. One feels no need to either overdo or underdo things. One is neither too extravagant nor too stingy. One is not foolhardy or cowardly. One steers the middle course.

This concept of staying in the middle was also taught by Gautama. He called it the "Middle Way." To Gautama happiness is self-knowledge; suffering is caused by ignorance, and the way to avoid suffering is to follow the Middle Way, veering neither to the left nor to the right. He delineated the steps of a life lived in accordance with the Middle Way in his Eightfold Path. Confucius also taught about the benefits of a balanced life. This was the thread that ran through all his teaching: by keeping one's heart in the very center, neither to the left nor to the right, one will be able to achieve a state of well being and be faithful to oneself and to humanity.

Confucius called this principle the "Happy Medium" or "Golden Mean." It is interesting that Pythagoras talked about a Golden Mean, as did the Greeks. In Aristotle's writings it is called the Doctrine of the Golden Mean: "The happy man, the virtuous man, is he who preserves the golden mean between the two extremes of ignoble conduct. He is the man who steers the middle course" (Thomas & Lee, 1941, p. 31).

Jesus taught the Golden Rule: Do unto others as you would have them do unto you (Mt. 7:12). This is very similar to Confucius' description of the Golden Mean: when one stays balanced in the center of his heart, he can be faithful to himself and to his fellow man. In describing this he said, "Do to others as your heart prompts or urges you," and "Cherish the other's heart as if it were [your] own" (Wu-chi, 1995, pp. 148-149).

Augustine was very pointed in his belief that the goal of education is the attainment of personal happiness. For him to be happy he had to understand his own destiny. He felt that knowledge of truth is essential to finding oneself and to finding happiness. This happiness is the primary goal of life, the attainment of one's chief good. For Augustine this goodness was to be found in God, who gives wisdom as his gift.

Each teacher discussed so far would agree with the stated principle that the goal of learning is the development of the self as a "good person," as a balanced, self-fulfilled person. Each of these, including Aquinas and Erasmus, put acquisition of personal fulfillment ahead of the need to acquire factual knowledge or skills. In later centuries, after the scientific revolution, the appreciation of skills and factual knowledge began to take precedence in education. Benjamin Franklin was very career-oriented, and one of the objectives of his educational programs was for people to use their education for practical purposes. But even for him the principle purpose for learning was to grow in virtue.

This concept of education involving the striving toward virtue or self-perfection was echoed in almost all the great teachers studied. Whitehead, also intently practical in his view of the purpose of education, stated in his *Aims of Education* that education was for the attainment of culture and the cultivation of a unique individual. Horton would probably agree, though he made no definitive statement as to the purpose and aim of education. Nadia Boulanger was the most focused on physical results of all teachers studied, yet even she was more concerned about character development in her students than with their technical skills.

Francis Bacon was an advocate of happiness as the goal of life, but he rarely spoke if it in personal terms. His goal was happiness for all of humankind. For him the

goal of learning was for the betterment of the individual and beyond the individual to society as a whole. All his educational pursuits were toward "the relief of man's estate," and he hoped that all progressive people would join their efforts together to this end.

Principle 4: A teacher's responsibility, as a lifelong learner, is to model that which learners are trying to become. The teacher as model is essential to learning.

Learners benefit most from interaction with teachers who are high calibre, who are continual learners themselves, and who can embody the personal and professional traits learners are seeking to emulate. This was the stated belief of nearly all the teachers studied, and this principle was reflected in their personal lives. Unfortunately not all teachers, even those most respected, have lived up to their own or other's expectations of them. Though several of these teachers had personal burdens or did things we might judge today as improper, all held to the principle that teachers should strive to represent the highest moral conduct.

In Confucian philosophy a primary reason for education is the attainment of values, morals and ethics. A teacher in such an environment must therefore also be concerned with his or her personal character development. To Confucius a main reason for a learner to study with a particular person is so that the teacher can model certain personal characteristics. The main object of learning is to be able to imitate those models, and the main job of a teacher is to model virtue for students.

Confucius was an early adherent of the concept that teachers and students should be lifelong learners. A teacher always renews himself. He should store-up knowledge and continually improve himself. A teacher must work hard to keep up with students because teachers, though models, are not necessarily superior to students. Continual self-improvement is the prerequisite to achieving improvement in others.

At the same time in history Pythagoras was teaching his students that a teacher must constantly strive for his own perfection. He must stay ahead of students so that he can demonstrate the reason for the performance of certain disciplines and to provide the perfect example of one who has attained to self-knowledge. The foundation of education for both teacher and student is living a virtuous, moral life.

Gautama also taught during the same century. His life was the example of the teacher as model. To him every day was an opportunity for self-improvement. Those who teach, in his eyes, must be on the same path of striving as those who learn. Both he and his students' lives were devoted to learning and improving themselves. Just before Gautama died he left this advise for students and those who would become their teachers: "Study together, learn together, practice the teachings together" (Kyokai, 1966, p. 12).

Jesus' entire reason for being was to model, as teacher, a moral life and to show others through his own lifestyle just how to live and how to contact inner truth. His disciples were expected to strive to emulate their teacher. Not until Jesus had prepared them for this lifestyle did he set them free to become teachers themselves.

Boulanger talked about her own internal striving for perfection. As a devoted Catholic she spent much of her time in intense concentration on her spiritual life. She saw herself as so intense in her own striving that she felt she had to be careful not to impose too much of that on her students, for many of them would not have been able to abide it.

Principle 5: Each student is unique; therefore teaching should be constructed to fit individual differences.

The best teachers recognize the individuality of each student and take that into consideration when designing courses. Myles Horton provides a good example of this principle:

> Education is what happens to the other person, not what comes out of the mouth of the educator. . . . When I do educational work. . . I try to see with one eye where those people are as they perceive themselves to be. I do this by looking at body language, by imagination, by talking to them, by visiting them, by learning what they enjoy and what troubles them. You have to start where people are, because their growth is going to be from there, not from some abstraction or where you are or someone else is." (Horton, 1990, p. 134)

Myles so believed in the importance of individual differences that he wouldn't initiate educational programs for people. Instead he helped them analyze their own experiences to determine what were their most pressing needs. Only then did he work with them as they tried to determine the solution to their problems.

Nadia Boulanger also sought to give students exactly what they needed as individuals. Though her teaching style and methodology reflected definite ideas about how students learn, she recognized that each person needs his own type of learning experience. She sent several famous musicians on their way, suggesting they seek other learning situations because she realized that her style would not be right for them; one of them was Gershwin.

Whenever she was asked to describe her students she would say, "I have many students. No one is representative. . . . You cannot compare one nationality to another, or one epoch to another. They are each of them, fortunately, individuals completely" (Walters, 1981, p. 242).

A story is told about a student who was studying with Boulanger who wasn't doing very well in composition. He wanted to be a composer in the style Nadia was teaching, but his work was just not exciting. One day one of his friends told Nadia that the student really excelled in writing tangos, that he was the best composer of music based on the tango rhythm in the world. Nadia called the student in and listened to his tangos. She was so impressed with his talent that she baid him leave and dedicate himself to writing tangos, saying in essence "This is who you are."

Boulanger also made exceptions for students who were strong in certain areas and did not need, or did not want, her regular training. The prime example is Harris, who insisted on a very specific program of instruction from her and was given exactly what he asked for, once he had proven that he meant it. He deserved his own unique learning experience, so she taught him in exactly in the way he wished her to.

Some teachers have taken this principle to the extreme of literally treating every student differently. Stories are told in Buddhist literature about how Gautama changed his form depending on who he was speaking with. They tell somewhat absurd stories to make the valid point that Gautama recognized that each person needs a different manifestation of the teacher. Out of his compassion he sought to give to each according to his or her need.

Confucius was very democratic in his treatment of students. He believed that there should be no class distinction, and he taught students from all economic levels and all age groups. His was an informal teaching style, and he saw each student as a unique challenge. He acknowledged that each of his learners excelled in different virtues, and some even excelled him. But what he could offer them was the ability to harmonize all their qualities to attain a "happy medium."

Confucius was one among many of the great teachers studied who was so intent upon knowing the uniqueness of students that he put the would-be student through a rigorous examination before deciding to take him on. Pythagoras spent months, even years, watching and observing each student to determine the best educational process for him. Once accepted, students were placed in certain classes and levels based on their individual characteristics and attainment. Confucius examined each student, having them relax and discourse with him about their ambitions and desires. He was a good listener and was able to listen without interrupting the student until he had learned what were the student's strong and weak points.

Nadia Boulanger went through a definite ritual with every new student which helped her determine the specific curriculum for them. In her case she sat with the student and after an initial conversation to learn his goals and aspirations, she would trade places with him and play the part of the student while the student answered her questions. Thereby she was able to know the extent of her student's musical knowledge.

Jesus treated those he taught with special care. A woman whom everyone had condemned became one of his closest companions. A man with great wealth was advised to sell all he had accumulated, but not everyone was told to do this. Jesus had the capacity to read the hearts of his students and to understand what he could give them that would provide the specific understanding they needed to overcome their circumstances.

All of the other teachers studied looked to individual differences in learners. A major change Bacon proposed for his college, which has been adapted and is considered a natural part of our modern curriculum, is the idea that students should be able to design their course of study according to their individual needs. Franklin upheld the power of the individual in the way he constructed educational experiences as individualized instruction. Whitehead's open houses were his attempt at teaching individuals, getting to

know them outside of the formality of Cambridge or Harvard and finding out what they were thinking. Augustine's educational setting accommodated a similar opportunity for each learner to be able to conduct his learning independently while having opportunities to share with others.

Principle 6. Discipline in learning is the expectation that the student will need to exert his own effort toward the accomplishment of his learning. Teachers uphold the standard and provide exercises and requirements to assist the learner, but the learner determines the amount of effort he or she will exert to attain success.

Nadia Boulanger is our best example of a teacher for whom a learner's ability to practice disciplines was paramount. As she often said, discipline is everything because one cannot create and express in absolute freedom without it.

Most people tend to think of discipline as something that someone does to someone else. When an authority figure makes someone do something, that becomes discipline. This is especially true when we think of discipline in educational settings.

But when we look at the great teachers we see that discipline is an internal thing. It is something the learner does for herself. The teacher is there to remind, to cajole, to encourage and to set a standard that is high but attainable. But the student is the doer. The learner uses the disciplines of the teacher for her own purposes. It's all internal. Even though the teacher is the outer sign of the discipline, the discipline is enacted by the learner. Discipline can be a determination to exert an extra effort to accomplish and perfect as part of learning. Or discipline can be an established set of recognized procedures, the rigor expected of a certain practice. In this use of the term, the expectation is placed by those who are practitioners as a way of setting a standard for that practice.

The scientific method of experimentation advocated by Francis Bacon requires the learner to subject himself or herself to a strict discipline. Standards set up and agreed to by a group of standard-bearers is essential for the assurance of continuity. Each individual participant in the process of scientific progress is responsible to every other, around the world, as trust is the first requirement in the scientific community he fostered.

For Boulanger, a learner's internal discipline was related to his personal character. That is why she only chose to work with students who exhibited strength of character. She believed that the greater a musician's talent, the greater must be their character. Unto them who have exceptionally creative gifts, more will be added, but only if they are willing to labor and sacrifice. A student can only be truly creative when he has followed his inner and outer discipline and mastered himself. This mastery is absolutely necessary for the attainment of beauty in art: "Loose is not beautiful; loose is loose" (Boulanger in Campbell, 1984, p. 77). She thought of herself as a reminder of the degree of internal discipline necessary to accomplish great things. "I am your highest degree of tension. Listen to it in yourself" (Boulanger in Campbell, 1984, p. 71).

Whitehead's educational theory includes the concept of "precision." He realized that the student eventually has to get beyond his passion for a subject and begin to practice in the physical. This practice, in some fields such as science and music, requires the application of certain techniques or formulas. Precision means learning all the rules and formulas—the disciplines—within a field.

Aristotle and Aquinas concerned themselves with scientific disciplines which they felt were necessary for students to grasp. Aquinas required students to be able to stand up to public criticism of their ideas as they participated in disputations in his classes. To do this students would have to really dedicate themselves to their studies.

Socrates, Jesus and Gautama have inherent within their teaching philosophies the requirement for self discipline on the part of the student. Gautama's students, for instance, owned nothing but the robes on their back and a bowl. Their daily activity involved moving through a town asking (begging) for food to be placed into their bowls. Survival depended on the student's practice of humility, for no one would make the effort to fill his bowl but him. For Confucius a student's discipline was for the benefit of the entire country. Everything the student did and all of his learning was for the day when he would be privileged to exert effort in the service of his family, community or country.

Great teachers expect students to meet certain expectations, certain standards. Students of Jesus had to be very serious to continue to be in a relationship with him. Some of them had to leave their families and careers, give away all they owned and go out and teach just as their teacher had. Pythagoras held perhaps the highest expectations of learners. He put his students through very intense tests to check what they would be willing to exert for the gift of wisdom. Students had to earn their every level under extreme circumstances.

But with teachers like Pythagoras and Boulanger every student knew at the outset what was coming. There were no illusions. People who didn't make it and weren't accepted into the intimacy of the teacher/student relationship were sometimes violent and hateful toward their former teachers.

Even the democratic Horton had stringent expectations for learners that came to Highlander; each was expected to return to their communities to practice what they had learned during the workshops. So important was this effort to Highlander that the school did not accept people to their workshops who did not clearly indicate an intent to share their learning in their own communities. To go home and not to share would not have been acceptable to Horton.

Principle 7. Knowledge is not just for the keeping, but for action in the world. Learning must be made practical and useful. Learning should not just sit on a shelf to be pondered but should be used to improve conditions on earth.

Francis Bacon is the best example from the teachers studied of this principle. His argument with most of the teachers that came before him was that their goals were not practically grounded. Like them he held a vision and a far-reaching personal philosophy, but unlike others, like Plato and Aristotle, the knowledge Bacon sought was not for thinking about but for doing something about. He states in the Preface to his *Great Instauration*: "I am labouring to lay the foundation, not of any sect or doctrine, but human utility and power." This is not an opinion to be held but a work to be done, a blueprint for a new world, but one which must be implemented by men of practical determination. To Bacon knowledge that sits on shelves, philosophies without practical ends in the real world, are deadly in that they have the power to stop human progress.

Whitehead was a cousin to Bacon in his thought, for one of his primary teachings was the wonderful concept of "inert ideas." Whitehead believed that ideas which aren't used or applied to practical living are dead. Such ideas, to Whitehead, actually become harmful and can corrupt their owners. Inert ideas are those that are merely received into the mind without being utilized, tested or thrown into fresh combinations. "Knowledge does not keep any better than fish. You may be dealing with an old species, but somehow or other it must come to the student just drawn out of the sea and with the freshness of its immediate importance" (Hill, 1990). In another colorful illusion Alfred North explained that women who aren't educated can end up being the upholders of cultural accomplishment because they were never burdened by old ideas in old universities.

For Whitehead reality is continually becoming. It is always in a process of being. Nothing is static. God is not even complete yet; God is continually becoming more of himself. So ideas that aren't changing and growing as we change will hold us back. Even old ideas that have relevance must be repackaged for use today. Whitehead believed that unless the student can take what he has learned in the precision phase and actually apply it to reality and life, the point of his education has been lost.

Thomas Aquinas made knowledge practical. The intellectual in Aquinas believed that the practical expression of God's wisdom is man's ability to use his intellect to solve human problems. Aristotle would have agreed, and may have been the inspiration for Aquinas' thought on this point.

Erasmus knew that knowledge was power for action. Knowledge and understanding are freeing. Erasmus, More and the Christian Humanists sought to open doors to learning for all by bringing into the realm of the common man that which had only been available to the religious. Erasmus's goal for revolutionizing learning was for people to be able to experience truth, not from religious authorities and not third hand, but first hand.

Pythagoras wanted people to embody what they knew. Learners at Crotona put their knowledge into practices of several kinds, including diet, exercises, discourses and use of music. Pythagoras keep students physically active by requiring exercise once or twice a day. Confucius was very practical in his philosophy, believing that it is not enough just to know something; the student must go back to help those tied to him. What one learns must be applied in daily life. In fact, his students all wanted to go into government service because he held that up as an ideal.

Gautama's Eightfold path encouraged right practice in the physical of the spiritual truths he taught. Right action, right livelihood—right living according to a set of principles. Jesus took the Jewish ten commandments and made them into just two that require action: love God and love your neighbor as yourself (Mt 22:37-39). In his famous parable of the good Samaritan Jesus insisted that good intentions be made into good actions. The way he treated people brought his philosophy into practice: his compassion for the downtrodden and poor, his treatment of women as equals and his care for children were ways of putting philosophy into practice. Ultimately he encouraged his disciples to go and do likewise, to teach as he had taught.

Franklin was so practical that he made everything "doable" in the context of typical American life. Horton also insisted on a real life application for the learning that occurred at Highlander. Every program had to be practical, not just for the student, but also for the benefit of whole communities.

Boulanger's students were required to start with reviewing and learning physical techniques. If you played an instrument you had to play with expertise. If you composed, you had to know how all the instruments were played and how they resonated with one another. If you were a singer you had to be able to play piano as well as any accompanist. Students were continuously challenged to physically do things. After the physical skills were mastered, students could soar to the sun in their creative expressions.

Principle 8. Learning requires personal assimilation coupled with some type of interaction with others. Learners need opportunities to take in and assimilate knowledge, whether with a teacher or coach or on their own. But for complete assimilation they also need interaction with others. Many teaching methods have been useful, but the most prevalent are those involving group work.

Many different methods were used by the great teachers studied, but the most prevalent are those which involve the learner in group learning situations. A principle emerges that suggests that while learners are individuals and learn best by methods particularly conducive to them, they also require some kind of interaction with other students or practitioners to get their ideas out of their heads, to test them.

Pythagoras lectured and used students to lecture. His advanced students practiced their learning by teaching in group settings. The school at Crotona featured regular group activities that were carried out at certain times every day. While students were given specific time to do personal mediation and for a solitary walk, they also played games together to get their exercise. They had a group walk every afternoon during which they talked in pairs or small groups about what they were learning. The day ended with a group session where the youngest student would read a passage of text chosen by the eldest.

The communities established by Augustine were very Pythagorean. Students shared daily with one another about what they were learning. They gathered in the bathhouse and spent hours in deep discussions that were often carried on way into the night. Plato's Academy attracted people from all over Greece who came to participate in its famous Socratic dialogues. Aquinas popularized another type of group discussion, the disputation, which required that learners take the knowledge they had developed and subject themselves to a formal defense of their thinking as other students challenged them. This was a very good method not only for getting knowledge active but also for teaching critical thinking skills.

Confucius used small group interaction more than any other method. His classes were held in this home, and students were permitted to interrupt him anytime they had

questions. This was also true for Gautama. He often lectured, but these lectures were actually two-way conversations where students could interject their own understanding, or ask for clarification on a point of interest.

Jesus also used interactive discussion. He lectured but also allowed people to ask questions. With his close students there was much opportunity for interaction. His students challenged him, asked him questions, and also had opportunity for one-on-one discussions with their teacher.

Myles Horton provides perhaps the best example of the power of group work. In his workshops individual learning took place in the midst of a group of people all talking about their experiences. The "circle of learners" at Highlander happened in a large room full of rocking chairs. The atmosphere was relaxed and conducive to free, open and honest conversation. Often individuals would tell their personal stories and in the process of sharing, would glean an understanding that had previously evaded them.

The scientific learning communities which had their foundation in Bacon's *New Atlantis* have put into practice this principle that individual learning is crowned by group interaction and discussion. The Royal Society of England was the first group to come together to share experiments and also to conduct research as a group. This format became the standard for many learning societies, even those not scientifically oriented, in Europe and also in America.

It is important to mention the power of the residential programs featured at Highlander and in other teachers' schools: Augustine's learning communities; Jesus's group of disciples who lived together; Whitehead's open houses; Boulanger's Wednesday afternoon classes in her home; Confucius's home school. These represent particularly

personal encounters between teachers and learners. These were opportunities for teachers to model through their lifestyles. Students could see the way they lived and chose which aspects they might wish to imitate.

Highlander provides a good example of the use of several other learning techniques. Horton understood the power of myths and stories to communicate in a unique way. Horton is one of numerous teachers who have used storytelling as well as humor, adages or fables and parables to communicate truth and to elicit responses in learners they could not get from intellectual discussions.

Music was used at Highlander and by many other teachers reviewed. The ancient Greeks believed that music was good not just for pleasure but for its purgative power. Music was used to displace intense emotional feelings, or to create the same. Music contributes to the development of character because music, more than any other manifestation, illustrates the different types of characters and emotions found in people. The Greeks believed that by learning to take pleasure in the right kinds of music, people could be led to take pleasure in the right kinds of feelings (those that enable good character) and to avoid the wrong kinds of feelings displayed in certain kinds of music. Pythagoras used music to soothe the souls of his students when they went to bed and upon arising. Plato recognized the power of music, and Aristotle wrote about it. Confucius composed a *Book of Songs* and insisted that students learn the songs by heart. And Boulanger certainly understood the power of music to transform learners.

Dance and other cultural arts such as playwriting, drawing and public speaking have also been important tools for learning.

Principle 9: The teacher/student relationship can be the highest form of relationship. It can include intimacy, support and love as well as challenge and discomfort. Ultimately teachers sacrifice something of themselves in order that learners might succeed, and even exceed their best efforts.

This principle points to teaching as a tremendously powerful experience for those who dedicate themselves wholly to it. Great teachers come to love their students, but that love can be a two-edged sword. As the teacher pours her all into the learner, the learner can have a variety of reactions that can range from excitement in the newness of the relationship to intense resentment at being challenged to come up higher. Great teachers know this and prepare themselves internally for all possible reactions.

Great teachers uphold the greatest potential of each one they care for. Teachers must know with a certainty what students can become. They must be able to hold this vision for themselves and for the student, even when the student can't see it for themselves. Teachers must believe in their students. Perhaps this is why Nadia Boulanger and Pythagoras were so careful about choosing students. Once a relationship is established, teachers must hold on for dear life through the course of changing emotions and reactions to experiences.

Learners go through many changes through the process of growing. As Whitehead points out, the first stage of the relationship can feel like a romance. There is the excitement of the new relationship which is enhanced by the fact that learners must also trust their teachers. Aristotle made this a principle in his educational paradigm. Students don't actually know what they seek to know. Therefore they must trust and believe in the teacher, at least for a period of time. This trust amounts to a kind of surrender or suspension of disbelief. Once surrendered, the student feels himself or

herself at the mercy of the teacher. Great teachers take this very seriously, which may be why they believe so strongly that teachers must maintain the highest moral standards.

To a certain extent, in the beginning and sometimes for a long while, the teacher knows more about what the student can become than the student does. If the teacher's vision falls short he can impair the student's progress. This may be the reason for all the testing at the beginning of the relationship; teachers must assess potential accurately if they are to guide students toward their greatest expression.

Sometimes a student doesn't understand the requirements a teacher is giving him. He may not actually believe that he can become what the teacher is trying to push him towards. Sometimes teachers have to back off or let the student go altogether when this happens.

Teachers sometimes have to challenge students when the student is not yet expecting to be challenged. During Whitehead's precision stage many ideals come to be challenged in the light of practical reality. In the teacher/student relationship this can become uncomfortable. Emotions can rise and a student can begin to feel that his teacher is becoming his worst enemy. Also, a certain element of fear can arise during the relationship when the student begins to take back his trust in the teacher, when he begins to realize that his teacher is not perfect. Ultimately the learner must discover all truth for himself, and he may come to believe that his beloved teacher has erred.

Teachers receive many challenges from students in the midst of these very personal relationships. Plato experienced many challenges from his best and most beloved student Aristotle. Though he was an outstanding intellect and the top student in the school, Aristotle badgered his teacher continually. He tore apart every concept Plato taught in order to subject it to self examination. But through it all they adored one

another. Jesus was continually being questioned by his closest disciples who did not understand certain choices he made in carrying out his mission. And he was betrayed more than once by students who momentarily lost faith in him. Erasmus, while popular at first with the bulk of the Christian Humanists, found himself alone at the end of his teaching career, feeling betrayed and abandoned. Socrates was challenged by an entire city; they took his life because they became convinced that his ideas and practice were bad for their youth. Later Aristotle was forced to leave Athens in an effort to avoid the fate of Socrates. Though we rarely hear about it, Gautama was pursued by a group of unhappy students who wished to destroy him and his community.

Myles Horton and Highlander went through the worst kind of challenge to his right to be doing what he was doing, though this challenge did not come through his personal students. Sometimes great challenges can come to great teachers through outside institutions. Like Horton, Jesus was also challenged—and killed—by an institution which opposed his teaching. Pythagoras is another sad example of the teacher who endures for years with students who ultimately cannot take the challenge and rebel against the teacher. In his case, he and most of his community were murdered by unhappy students who rallied the entire community against him.

Teachers endure greater and lesser challenges from students as a natural course of the relationship. The only way they can avoid this is to never set high standards or to never challenge a learner who is in a rut. Nadia tells stories of students crying and those who left her entirely. It is a wonder that, as tough as she was, she did not incur more wrath from former students.

Ultimately great teachers have to realize that after they have given their all and shared everything they know with their students, those students can go on to exceed

them. This happens very often with teachers and students. Nadia gave up a promising career as a composer and went on to train hundreds of composers who excelled her talent in that area. Plato excelled Socrates, and Aristotle excelled Plato. Alfred North Whitehead has been succeeded by Burtrand Russell who may gain greater reputation than his teacher.

Jesus made the statement to his disciples that stands as a testament to his understanding of the ultimate outcome of the teacher/student relationship:

> Greater works than these shall you do;
> because I go unto my Father (Jn 14:12).

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