Activity and interest in competency-based education are growing. As of March 1978, some type of competency-based education requirement had been instituted in 34 states. Many recent changes in American society are affecting competency-based education. For example, today's learners are likely to be "lifelong learners," but their learning may be intermittent. Jobs are changing from low-skill manual labor jobs to high-skill technical positions. Needs and roles of the citizen, the consumer, and the family member are changing. Traditional high school graduation requirements are becoming obsolete. The five major characteristics of competency-based education are that it is a learner-centered philosophy, it is a policy demand, it is real-life oriented, it is flexible, and its standards are clearly articulated. Contrary to the opinion of critics, competency-based education is not really new or revolutionary, is not an emphasis on only the measurable, and does not underestimate the complexity of individuals and of social systems. Oregon was the first state to institute competency-based education and in spite of some implementation problems, the program is beginning to be successful. Competency-based education is certainly not all of education but it is the foundation on which all other schooling must be built. (Author/JM)
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Dale Parnell began his teaching career shortly before graduating from Willamette University in 1951 and has been involved in public education ever since. He earned both the master's degree and doctorate from the University of Oregon.

He has held positions as teacher, coach, vice principal, and principal of high schools in Oregon, his native state. From 1960 to 1964 Parnell was superintendent of the Lane County (Oregon) Public Schools. From 1964 to 1968 he served as president of Lane Community College in Eugene, Oregon. On July 1, 1968, he was appointed by Governor Tom McCall as Oregon's superintendent of public instruction, a post in which he served with distinction for six years. He was elected and reelected to the office by popular vote in three statewide elections. In 1971 Parnell took a leave of absence to teach a first-grade class for one month.

From 1974 to 1976 Parnell served as chancellor of the San Diego Community College System. In the summer of 1976 he assumed the presidency of San Joaquin Delta College, Stockton, California, the position he now holds.

Recognized as the originator of Oregon's "survival curriculum," which is centered on competency-based instruction and performance requirements for graduation, Parnell's influence in that area is extending well beyond Oregon and California as other states move to adopt his recommendations.

Series Editor, Derek L. Burleson
The Case for Competency-Based Education

By Dale Parnell

Library of Congress Catalog Card Number: 78-61322
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Bloomington, Indiana
This fastback is sponsored by the West Chester State College Chapter of Phi Delta Kappa through a generous gift commemorating the 10th anniversary of the chapter's founding in 1968.
# Table of Contents

Prologue ........................................................................................................... 6

Competency-Based Education: A Nationwide Ground Swell .................. 7

**Some Factors Influencing Competency-Based Education** .................. 11
  Schooling and Education Are Not Synonymous ........................................ 11
  Changing Life Roles—The Learner ................................................................. 12
  Changing Life Roles—The Wage Earner ...................................................... 14
  Changing Life Roles—The Citizen ................................................................. 14
  Changing Life Roles—The Consumer ........................................................... 15
  Changing Life Roles—The Family ............................................................... 15
  High School Graduation Requirements ...................................................... 16

**What Competency-Based Education Is** ....................................................... 18

**What Competency-Based Education Is Not** .............................................. 28

The Development of Competency-Based Education in Oregon ............... 32
  A Progress Report ......................................................................................... 38
  Problems with CBE ...................................................................................... 40

Epilogue ............................................................................................................ 43

Appendix .......................................................................................................... 45
Prologue

I had a memorable experience as a high school principal with an outstanding teacher who was the head of the English Department. One summer the high school sponsored a program through which teachers went into the business world to examine the relevancy of the school curriculum to the real world. Alice had taught English literature for many years and was an excellent teacher. She chose to go into the woods at 4:00 a.m. each morning for two weeks to be with the loggers working in the Oregon forests. She would stay there all day to watch them, work with them, and talk with them. About two weeks after that experience she bounced into my office and said, “Oh, that was a wonderful experience. You know those men up there really communicate, but I can’t repeat most of what I heard. I will never teach the same again because what I’ve been teaching is not what [those] men need.”

This little story illustrates one of the basic premises of competency-based education: Congruence must be established between the school curriculum and the needs of individuals to face and cope with real life. A democratic society has a moral obligation to help its citizens, young and old, to acquire those competencies necessary for reconciling personal needs with life-role expectations.
Competency-Based Education:  
A Nationwide Ground Swell

State and local activity and interest in competency-based education (CBE) are running at fever pitch across the nation. Discussions on competency-based education are a common agenda topic in the meetings of the Chief State School Officers, the National Education Association, the American Association of School Administrators, and many classroom teachers' groups. Committees, commissions, and task forces on CBE are active in every state as well as in Congress.

Some type of competency-based education requirement is now a fact in 34 states. Several others are considering the addition of a state-level competency graduation requirement. Beginning with the 1978-79 school year, the two most populous states in the U.S., California and New York, will require graduating high school students to demonstrate competency before receiving the diploma. The 1979 federal Elementary-Secondary Education Act includes aid to states to assist in the development of minimum competency standards.

It is estimated that by 1980, 65% of the high school students in the nation will be required to pass some type of competency test as a condition for receiving the high school diploma.

The 1976 Gallup Poll on public attitudes toward public schools indicated that two out of three of those surveyed favored high school students being required to pass a standard proficiency examination to receive a high school diploma. Now, it must be readily admitted that competency-based education involves more than passing high school

*As of March 15, 1978.*
graduation proficiency tests, however, the Gallup Poll does indicate broad public support for some type of competency-based education.

Christina Ellen Moller, America's Junior Miss for 1977, was recently asked, "If you were First Lady, what's the first thing you'd try to do?" Her reply was:

"I'd make the requirements for graduating students stiffer. High school diplomas don't mean much any more because they're too simple to come by. I'm not setting myself apart—I have it too easy, too. I'd rather be taught than have to work at learning. We're forgetting how to learn and think."

Phi Delta Kappa's Thirty-Sixth Biennial Council, held in October, 1977, identified basic skills and competencies as the number one issue in education today. A National Association of Secondary School Principals special task force report says that the high school diploma should not signify that the holder is necessarily ready for college or a job, but that the graduate possesses the basic skills and knowledge essential to effective adult citizenship.

H.E.W. Secretary Joseph Califano has recently recommended the use of basic competency tests at state and local levels. He has stated that the U.S. Office of Education will insure that training and information are available to help state and local decision makers answer technical and policy questions about basic competency testing.

Even grand juries are ruling on competency-based education. The 1977 Grand Jury of San Joaquin County, California, recently stated:

"It is the recommendation of the Grand Jury that competency tests be given to the eighth-graders to determine what students have learned before they enter high school. If a student fails the minimum requirements of a competency test in the eighth grade, then he or she should be placed in a remedial program. There should also be a proficiency or competency test in the twelfth grade. Anyone who fails to meet the minimum requirements should be given a certificate of attendance only and not a diploma. The Grand Jury feels that competency tests are desirable, but they should be aimed at the lower grades now. The students in the first, second, and third grades should have to meet a minimum competency level before being automatically promoted to the next grade level. As these students proceed up the grade levels, then new goals should be set.
for each level. The setting of these goals of competency levels must not be left to the teachers but should be set by the joint effort of school board administration, teachers, and parents.

Schools and school districts all across America are currently developing competency based education programs. One worthy of note is in Oakland, California, where under the leadership of Superintendent Ruth Love competencies are being developed by grade level. A three-way contract has been initiated among parents, staff, and students aimed at improving student competencies.

Superintendent Love says, "The three-way contract is predicated on the assumption that students, parents, teachers, administrators, and other personnel are deeply concerned about the quality of education for all students. This concern transcends economic and ethnic background."

The Salem, Oregon, School District, under the leadership of Superintendent Bill Kendrick, has instituted a competency-based and performance-oriented education program systemwide from grades 1-12. Superintendent Kendrick says:

The competency requirements are but a small portion of the curriculum revision. The Salem system is designed to bring a high standard of student achievement starting in grade 1 and building with community and articulation through the twelfth grade. Our community helped us determine the philosophy of the system. We developed broad system goals and have completed all the performance objectives for all the areas of the school system. Teams of teachers developed learning activities to accommodate the goals and identified the evaluation measures that are being used. Ours has been and will continue to be a building block approach that will culminate with a student satisfying required units of credits, attendance, and performance of competencies. We are dedicated to helping our students develop those survival skills they need to function in the complex society of today and tomorrow.

Detractors will argue and have, that a competency program set at survival or functional levels will ultimately produce mediocre. Where that is all there is to an educational program, the detractors are right, but the Salem program goes far, far beyond survival.

The Salt Lake City, Utah, public school system began to move...
toward promotion and high school graduation based upon demonstrated competence in the spring of 1975. Board policy indicates that students who do not achieve grade school basic skills will not be advanced to a higher grade level. Students who do not demonstrate basic competence at the high school level will not be graduated.

Salt Lake City Superintendent Don Thomas says,

Some attack competency-based graduation as mechanistic, inhuman, and restrictive to teachers. The opposite is probably closer to reality. Basic competencies must be taught and taught well. Obviously, only after basic competencies are acquired can students explore the world of literature and the beauty of poetry. People who do not have basic competencies are cheated, enticed into eating the wrong foods, sold items of little value, and misled by propaganda.

The most humane thing we can do for our children is to teach them to read, to understand principles of mathematics, to work effectively within the political system, and to know the basics of science. Without such knowledge, a person is at a tremendous disadvantage in our society.

Further, to give a graduation diploma to those lacking the skills it signifies is a fraud of gigantic proportion. Making the diploma mean that one has learned basic competencies is an obligation that schools should readily accept.

What is behind this great surge of competency-based activity? What are the motivating factors for such sweeping nationwide activity?
Some Factors Influencing Competency-Based Education

If historians produced a color book, the current era in the United States would likely be painted gray. This is a time of few clear distinctions. We have a penal system that neither punishes nor rehabilitates, an economy where supply and demand are minor forces, a social security system that isn't very secure, a justice system that denies justice by excessive delay, and schools and colleges that often teach knowledge and skills unrelated to the needs of real life. It is difficult to assign cause and effect, but as a nation we are uneasy. What are some of the elements of this malaise or discomfort as related to education?

Schooling and Education Are Not Synonymous

The educational system of this country includes public libraries, the military, public rehabilitation institutions, media (particularly television), the home, and the church, as well as public and private schools and colleges. Schooling comprises only one part of the educational system of the country. The local, state, or federal policies developed for this educational system during the twentieth century have seldom been comprehensive. The schools and colleges operate in one political and professional milieu, the libraries in another, and the rehabilitation institutions in yet another. The media, particularly television, operates in an entirely different environment.

City and county governments are now becoming an important element of the educational system. More federal vocational education and manpower training dollars will flow to state, city, and county govern-
ments in 1978 than the schools will spend on vocational education. This demands that Americans reconsider the place of schooling in the total educational effort. Schools have not suddenly become unimportant; rather, the situation has undergone such rapid and revolutionary change that we must reconsider the role of schooling in our society.

During the late nineteenth century, the schools became vital instruments of public policy and political development. This tendency became more pronounced during the twentieth century as Americans placed broader and heavier responsibilities on the public schools. The "education of the whole child" philosophy began to lead the schools into all sorts of social endeavors. Gradually, the schools became overextended and were being held accountable for resolving societal problems, and they had neither the training nor funding to do so.

The mission of the schools became increasingly fuzzy as society became increasingly technical and urbanized. In part, school people did not have clarity of purpose, and in part they did not know enough, and in part, when they did know enough and had clear goals, they seemed unable to persuade the public to change. In the absence of clear purpose, sufficient knowledge, and adequate funds, the schools have too often ended up performing custodial and firefighting functions. It has been a struggle just to get the doors open and meet the daily challenges.

Changing Life Roles—The Learner

Unfortunately, the role of a lifelong learner has not been considered conceptually as a primary force for shaping the school curriculum. And the learner role has encountered unprecedented change in this century. James Coleman has said that the society of 75 years ago was information-poor but experience-rich. People received most of their information from books or from neighbors, certainly not from television or radio. On the other hand, they were involved in all kinds of personal experiences not widely available today. More than half the people lived on farms where they began developing a sense of responsibility at a young age as they struggled against the elements of their environment. Young people had chores; they grew up working with their hands as well as their brains and no one disparaged that.

Today, society is different. It is an information-rich society where
individuals are flooded with information on all sides. Young people pick up a great deal of information from television alone. The very young may not be emotionally equipped to assimilate or interpret all that they see and hear. They are certainly confronted with a heavy daily dose of violence. Many observers are worried about the impact of TV on the development of moral and ethical principles. When students enter the classroom, they are confronted with even more information, (generally less interestingly presented than TV, information). The media, newspapers, paperbacks, magazines, radio, and television may have as much impact on helping young people develop the competencies required to be lifelong learners as the schools do. Yet, the school teaching-learning process continues, in many instances, to operate as though the media did not exist.

Another aspect of modern life affecting the role of a lifelong learner is mobility and the impact of that mobility on continuity in learning. Ours is a highly mobile society. In some geographic areas, 20% of the students in a class move during the school year as a result of divorce or relocation. For example, 45% of San Diego, California, heads of households have lived in the area less than four years.

When you add to the mobility factor school absences due to illness and irregular attendance for any reason, educators are faced with a major challenge in simply maintaining continuity of learning. The loss of continuity has probably done more to damage good learning habits than any other single factor in modern society.

The importance of regular classroom attendance in the learning process is so obvious that it is often overlooked. In the current worry over declining Scholastic Aptitude Test scores, reports and studies do not mention mobility and the consequent loss of continuity of learning. Continuity is always important and is sometimes vital. Many subjects, such as math, are sequential, and missing just one key session can break the learning chain. But attendance is more than exposure to required sequential instruction. Attendance has an impact upon the formulation of lifelong habits. Few individuals get to work on time, pay bills, or maintain a physical conditioning program by inspiration or chance. These habits are formed through self-discipline, a competency that somehow has gotten lost in the goals for schooling.
Changing Life Roles—The Wage Earner

Computers, the space industry, and the energy business all have contributed to changes in the technological complexity of jobs. The transistor has been used commercially only for about 30 years, but it has made a tremendous difference in the skills required of many wage earners. America moved in one century from a society characterized by farm-related jobs to blue-collar jobs, and today there are more white-collar workers than any other single category of worker. At one time there was a fairly abundant supply of low-skill, manual labor jobs. But the development of technology is rapidly eliminating the bulk of these jobs. The great expansion in the job market is in the area of the technician who requires more knowledge and more skills.

Changing Life Roles—The Citizen

There are fewer, larger, and more complex units of government today than ever before. I served as a county school superintendent during the early sixties and helped to consolidate 57 school districts into 16 unified districts. Suddenly the local newspaper, which hadn’t been able to cover the activities of the 57 school districts, sent reporters to the board meetings of the 16 unified districts. After many years of making decisions in isolation, school board members were intimidated and uncomfortable with the media present at their meetings. Citizens of the area were equally befuddled by the sudden profusion of good and bad information about their local school boards. And they began to wonder what was wrong. Nothing had really changed except the sudden public exposure.

Another change in the citizenship area has to do with high-speed automobiles, freeways, and an abundance of alcohol. Last year over 50,000 Americans were killed in traffic accidents and nearly half were killed in accidents in which at least one driver had been drinking. It is amazing that this problem is not generally viewed as a citizenship problem.

The past 40 years have seen the greatest migration known to mankind. Over 30 million people have moved from the farms to the cities, from rural to urban suburban life. The rural to urban shift has
brought a proliferation of zoning laws and issues generated from impacted living.

Students now become voting citizens at age 18, yet most of them know more about George Washington and the federal government than they do about their own city council or their own school board. The recent vote in California on Proposition 13, which initiated wholesale cutbacks in local property taxes, revealed widespread ignorance about local government and the interrelationships of government at all levels.

**Changing Life Roles—The Consumer**

Seventy-five years ago credit cards and installment buying were a rarity. Young people were not required to cope with a plethora of advertising and marketing pitches. In a recent series of congressional investigations, the late Senator Phillip Hart of Michigan concluded that every year U.S. consumers paid between $174 and $231 billion for which they got nothing. This sum included the cost of automobile repairs that were improperly done, not necessary, or not done at all. In addition, consumers paid millions of dollars for ineffective combination drugs now being ordered off the market and one billion dollars for automobile insurance that duplicated protection that consumers already had. The changing role of the consumer over the past 50 years has been dramatic as a result of credit cards, installment purchasing, advertising, and technology. I recently had a call from my daughter. She said her washing machine had gone on the blink, her electric hair dryer wasn’t working, and her automobile had broken down. Her comment was that she had had about all of this technology that she could stand.

**Changing Life Roles—the Family**

Divorce and family breakup represent one of the most dramatic sociological changes in our history. There is one divorce for every two marriages in the state of California. The family has traditionally been the foundation for development of moral and ethical values. The statistics on juvenile delinquency and crime as correlated to broken and single-parent homes are ominous.
The recent reduction in the average number of children per family has had a profound effect upon the schools. Instead of rampant growth, schools are generally struggling today with declining enrollments. This situation has resulted in the closing of schools, laying off of teachers, and consequent budgetary retrenchment.

High School Graduation Requirements

At the turn of the century, colleges and universities throughout the country were facing the problem that high school graduates in many cases were ill-prepared for college work. There was no standardized set of high school requirements with which colleges could compare the achievement level of different applicants. A standard measure of high school educational achievement was developed in 1910 as a result of the Carnegie Foundation's attempt to formulate a definition of a college. The story is an interesting one.

In 1904, industrialist Andrew Carnegie contributed 20 million dollars to a trust fund for retired college professors. But the Carnegie Foundation, which was responsible for distributing the money, felt it was necessary first to describe a college. In order to do this, the trustees believed that a definition of a high school had to be formulated. And after that was done, they reasoned that a college could be defined as an institution that accepted graduates from a standard high school. A high school was then defined by the Carnegie Foundation as an institution requiring 16 "units of study." A unit of credit was to be given for a class that met for 120 clock-hours per year and for five periods per week throughout the school year. This definition was accepted by the College Entrance Examination Board and quickly incorporated into high school graduation requirements across the country. The Carnegie unit is still the standard used in most high schools, with little evidence to validate its effectiveness.

Parallel to development of the Carnegie unit was the elimination of high school departments in most colleges and universities. With this development it became necessary for the colleges and universities to establish some standardized admission requirements. The typical admission requirements called for four credits (Carnegie units) in English, two credits in mathematics, two credits in foreign language
(usually Latin), two credits in history and geography, one credit in science, and three elective credits.

In the late 1950s questions began to arise about the effect of the Carnegie unit on education, and that debate grew in the 1960s. It continues today. It is safe to say that the high school curriculum across the country remains basically a college preparatory curriculum. A strong college preparatory bias persists in high schools despite the fact that a large proportion of high school students did not, and still do not, attend college. It is estimated that only about 15% of the population in the U.S. actually has earned a four-year college degree.

The first public high school in California was opened August 16, 1856, in San Francisco. Before that time high school education was available only in private or parochial schools. Not until 1887 did the legislature provide funds for "grammar school courses." These were intended to "fit and prepare students to enter the scientific department of the University of California." (The university was established in 1868.) Grammar school courses were developed rapidly after this precedent. At the same time, high schools were established in some other large cities and towns.

It can be seen that current high school graduation requirements were developed for quite a different society and quite a different set of conditions. College preparation was a perfectly legitimate goal for the 1910 high school program and is still a legitimate goal of high school programs for some students. However, one must question whether the college preparatory curriculum is adequate for a universal schooling system that endeavors to educate all the children (including the severely handicapped) of all the people. Contemporary society has presented the school system with a whole set of new conditions.
What Competency-Based Education Is

At its root, competency-based education is an emphasis on results. It calls for agreed-upon performance indicators that reflect successful functioning in life roles. It emphasizes the specific knowledge or skills to be learned rather than how they are learned or how long it takes to learn them.

There are five major characteristics of competency-based education: It is a learner-centered philosophy, it is a policy demand, it is real-life oriented, it is flexible, and its standards are clearly articulated.

Let us look at the first characteristic: Competency-based education is a learner-centered philosophy. There is little direct relationship between the time-honored subject matter disciplines and the competencies required of an individual to cope with modern life. The emphasis of traditional subject matter disciplines is upon what is to be taught. It should cause one concern to realize that in the modern school curriculum there is no specific location in the curriculum to assure that young people are exposed to the major concerns of our contemporary society, i.e., energy decisions, consumer problems, environmental issues, lifelong learning skills. Many of these contemporary concerns are scattered throughout various disciplines, and this diffusion has tended to aggravate the accountability problem.

Our daily lives do not compartmentalize neatly into math, social science, English, science. And therein lies one great problem for the modern public schools. There is a lack of congruence between the traditional time-honored subject matter disciplines and the competencies required to function in real life. Student competence is defined as demonstrated ability to apply knowledge, understanding, or skills assumed to contribute to success in life. Therefore, embedded deep
within the philosophy of competency-based education is the philosophy that every student in elementary and secondary schools should have an opportunity to develop the competencies required to function effectively in the real-life roles of learner, individual, wage earner, citizen, consumer, and family member. It is a basic CBE philosophy that says schooling should meet students at the point of student need rather than at the point of faculty need or administrative need or subject matter need. This philosophy expresses a profound shift in emphasis from what is to be taught to what is to be learned and to the outcomes of schooling. This is probably the most basic and powerful characteristic in a competency-based education philosophy: It is learner-centered.

The second major characteristic of competency-based education is a clear policy demand. Educators seem strangely reluctant to talk about policy demands, but the schooling experience is chaotic unless a policy demand is made upon the school system and clear outcome signals are given. The system is really not a system; it is a nonsystem. Schooling across the country is still basically a cottage industry; each person does his or her own thing. The only factors that hold this nonsystem together are a lot of good teachers and good administrators working very hard. Every quality organization or system requires clear goals or targets. When the goals are fuzzy or out of focus, everything in the organization takes on the same complexion. There is nothing basically wrong with the American school system except fuzzy goals. As a result, the schools respond to real-life needs in all kinds of weird ways. Some clear policy demand signals are required.

The principal outcome of the competency-based education movement may be that educators and the communities they serve will together reexamine what is to be taught and, more importantly, what is to be learned. This focus upon the visceral levels of the curriculum just may result in a greater degree of congruence between the expectations of the students, the public, and the educators. Everyone will have a clearer picture of what the schools are to accomplish.

Goal-based planning is fundamental to the competency-based education philosophy. It helps the schools become accountable by identifying, planning, teaching, and measuring those skills or that knowl-
edge that is learner-based rather than subject matter-based. A goal-based educational system helps to shift the emphasis of the schooling enterprise from inputs (what is to be taught and what resources are needed), to outcomes (what is to be learned and for what purpose).

A renewed emphasis upon the expected outcomes of learning sets the stage for the introduction of competency-based education. A goal-based policy demand provides the framework in which to establish, conceptualize, and integrate the processes and procedures of CBE. Here is the kind of goal that policy makers should consider writing into every policy handbook for schools:

The education of the student results from a combined effort of home, church, community, and the media. It shall be the responsibility of our schools to help students develop individual competencies to function in the life roles of learner, individual, wage earner, citizen, consumer, and family member.

The schools have an important but shared responsibility and a secondary role in helping students develop social, emotional, cultural, and ethical moral values. It is important that the schools support and reinforce the home and other community institutions in these areas.

The first priority for the use of schooling resources shall be to help students develop the competencies to function as a lifelong learner.

With this type of goal, we not only begin to update school requirements but also to define areas for which schools can be held accountable. Under the present system, the public is holding schools accountable for results the schools haven't the remotest possibility of producing. The schools must deal with goals that they are uniquely equipped by training and by financing to accomplish. Once these goals have been established, educators then must exercise leadership in planning how these goals can be reached.

Typically, educators go to legislators or school board members and say, "Give us money. Don't tell us what to do, just give us more money." What would you think if you went to a store to buy something and the clerk said, "Just give me money and I'll give you what's good for you"? Over the years, because legislators and local school board members have not had enough points of access into the educational decision-making process, they have involved themselves arbitrarily in
the process by dealing with administrative detail and the “how” of teaching.

It is clear to me that the vast majority of policy makers do not want to involve themselves with specifics, but they do want to have some knowledge about what they are buying. It is perfectly legitimate for policy makers to tell educators *what* to accomplish. In fact, policy makers have an obligation to give clear signals about what they expect the schools to accomplish and what kind of performance indicators they will accept to assure that the schools are accomplishing the expected goals. At the same time, it is inappropriate for policy makers to tell professional educators *how* to use the money they receive. Countless hours are wasted and school systems decimated because policy makers deal in minutiae, or worse yet, involve themselves heavily in the process of “how to” aspects of schooling.

The third characteristic of competency-based education is a *real-life orientation* as expressed in life roles. The American public school system operates within a web of “tensions.” The major strand in this web of tension is congruence between individual needs and societal needs *vs.* the goals and activities of the schools. Many of the things done by the schools are done well, but the key question must be asked, Should they be done at all? Are the schools addressing the highest priority needs?

Many of the major concerns in our contemporary society have no home in the modern school curriculum. Where is the home in the curriculum for environmental concerns? Is it in chemistry or biology or social science or business? Where is the home for consumer education concerns? Is it in business or the social sciences or math? Where is the home for intergroup human relation concerns? What part of the school curriculum is responsible for helping people learn about their local government, voting on tax proposals, dealing with planning commissions? Where is the accountability in the modern school curriculum for helping a person develop the competencies to become a lifelong learner, to analyze, to improve his memory, to speed read? We often leave these vital concerns to chance and continue to insist on meeting the student at the point of subject-matter need rather than at the point of real-life needs.
The schools have not kept in synchrony with the times and the real-life needs of a changing society. The needs have changed, but the schools and the school curriculum have not.

The competencies required to cope with real-life roles and their relationship to the school curriculum are the crucial issues facing the schools today. These issues are interrelated, and the measure by which they are made compatible will largely determine the significance of all schooling activity. The fact that schools are busy and teachers are skilled does not necessarily mean that the schools are accomplishing the right things. Two questions must be asked of modern schools: Which real-life needs are you meeting? How well are you meeting these identified needs? These questions must be posed continually.

When one considers how life roles have changed over the last 70 years and how the schools have responded to help prepare students to survive in these roles and cope with modern society, it can be said that as they are currently set up, schools are dealing with a minority of the needs of a minority of the students. It is common for students to know more about the Eskimos of Alaska and the Incas of Peru than about their own city council, the property taxation system, or the justice system. Most modern-day young people haven't the foggiest idea about the taxes that support their own schools, who levies them, and how or why they are levied. As we examine the changes in our society over the past 75 years, we find that in our highly urbanized society some citizenship problems are apparent that were not apparent when one could ride his horse to the county seat. For example, we don't talk much about citizenship or our streets and highways, and yet over 50,000 people are killed annually in traffic accidents. This figure greatly exceeds the number killed in the Vietnam war.

During my tenure as superintendent of public instruction in Oregon, an excellent curriculum guide on local and state government was published by the State Department of Education. I was visiting with a U.S. history and civics teacher one day and said, "How do you like the curriculum guide on local government?" She said, "Oh, it's wonderful, it's really a fine publication." I said, "Well, are you using it?" She said, "Oh, I'm not using it. I'm too busy." "What are you busy doing?" I asked. "Oh, I'm too busy teaching about the federal government. Our
curriculum and textbooks are filled with emphasis upon the federal government. Our students must know about the Constitution and the Bill of Rights. We just don't have time to do much with local and state government."

Now, here was a good person and a fine teacher who was too busy to help young people develop some survival skills in dealing with their local government, the government they must face every day. There is a tremendous lack of congruence between what we emphasize in schools and the competencies required to cope with modern life.

The schematic representation that follows is suggested as a competency-based curriculum around which several states are structuring school graduation requirements:
Life-Role Competencies

1. Read
2. Write
3. Compute
4. Memorize
5. Analyze interpret
6. Converse listen
7. Identify assimilate

Evaluate quantity and quality of goods

1. Use consumer assistance agencies
2. Understand basic legal documents (e.g., contracts, warranties, bills of sale)
3. Understand buying with credit
4. Understand provisions of standard insurance policies
5. Compute interest rates
Life-Role Competencies

Explain the judicial system

Explain local government operation

Locate community resources

Identify with community, state, and national issues

Cope with bureaucracies

Understand basic principles of economic and governmental operations

Develop some saleable skills

Understand payroll deductions

Understand the meaning of "inflation" and "wage"

Develop effective interviewing techniques

Plan for a career vocational

Understand the processes of production and consumption

Prepare job application forms

Analyze employment trends

CITIZENSHIP ROLE

CAREER ROLE
Life-Role Competencies

Develop avocational skills (nonsport hobbies)

Create something

Enhance aesthetic appreciation

Develop recreational skills (sports)

Understand legal and social responsibilities of parenting

Plan for long-range economic security

Learn to deal with family crises (e.g., divorce, illness, death, etc.)

Understand family planning

Develop family activities
The fourth characteristic of competency-based education is less emphasis upon time. Students must be allowed to cycle and recycle through the instructional and evaluation processes easily. Time must be used flexibly. Not all learners are nine-week or 18-week learners. Rate of learning is the key difference among learners. Proponents of competency-based education are not as interested in how long it takes a student to master a given competency as they are in mastery itself.

A fifth characteristic of competency-based education is that clear expected outcome statements are placed “up front” as guides for both instructors and learners. There should be no surprises in the instructional or evaluation processes. The instructor teaches to the test, and the measurement and evaluation process occurs when learners demonstrate ability to meet clearly defined outcome requirements. For example, when teaching swimming, the instructor teaches to the test by having the student swim from one end of the pool to the other. That is one clearly stated anticipated outcome, and there are no trick questions or surprises. The same can be said for computing interest rates or reading a newspaper or locating a book in a library.

Competency-based education does not turn its back on traditional subject matter or time-honored instructional techniques; it only insists that the instructional program be based, at least in part, on real-life needs and that students demonstrate the applicability of what they have learned.
What Competency-Based Education Is Not

Competency-based education is not new or revolutionary. Students always have been asked to demonstrate competence in many areas of the curriculum. Outside of the schools individuals are also asked to demonstrate competence. Possibly the best example is found in the driver-licensing program.

A driver's license protects lives because every driver you meet or pass on the highway has had to prove his ability to cope with typical traffic situations. To earn a driver's license an individual must demonstrate knowledge of basic traffic laws, have his or her eyes examined, and must certify that he or she has no physical or mental handicaps that would interfere with driving. He or she must also demonstrate ability to operate a motor vehicle safely and properly under the watchful eye of an experienced driver examiner. All tests must be passed before an individual is granted the privilege to drive on the streets and roads. A driver's license is a citizenship privilege, not a right.

Despite the fact that there are still traffic accidents, no one advocates doing away with this testing program simply because everyone doesn't measure up and some people have accidents. The same can be said for school proficiency standards: not every individual will make it.

Many changes and refinements have been added to the driver licensing program since its inception some 60 years ago, but it is basically a competency-based education program aimed at safeguarding life and property. The California State Department of Motor Vehicles is a
giant driver licensing and vehicle registration agency, the largest department of its kind in the world, and it is competency-based. It operates a competency-based driver improvement program, a remedial program aimed primarily at the negligent driver and based upon a point system. Punishing offending drivers is not the purpose of this driver-improvement program. Driver improvement analysts try to improve individual driving performance. That is the key: improving individual driving performance. The aim of competency-based education in the schools is similar: improving individual performance.

Again, competency-based education is not new. In the late 1950s the Cooperative Extension Service of the U.S. Department of Agriculture, in pursuit of more effective and efficient use of educational resources, began to develop models of the specific competencies required for successful farming and the required competencies for the roles of homemaker, youth leader, community change agent, and farm business manager.

Many practitioners in adult basic education have used teaching strategies based upon the idea of adult functional competency, and practitioners in special education have been working on the competency-based theory for many years, particularly with mentally retarded students.

In the field of teacher education, the notion of competency can be traced as far back as 1929 when Charters and Waples, in a quest for a more rational basis for the development of effective teachers, analyzed 12,000 activities that teachers performed. They then developed, on the basis of these activities, 25 essential traits. Approximately half the states today have adopted or are moving to adopt teacher certification and accreditation standards that call for competency-based programs. The move toward competency-based education is generally accepted in the reform of personnel preparation programs. So there is nothing really new or even revolutionary about competency-based education; it is only new in the sense that it has not been applied in any systematic way to the schooling process or to helping young people develop the competencies to function in real life. By and large, competency education has surrounded the schools, but has not been used in the schools in any systematic way.
Competency-based education is not an emphasis only upon ends. Means are important. If you go into a restaurant and are served on dirty dishes and the service is sloppy, no matter how good the food is, you will probably be dissatisfied with the product. Shoddy means were used to develop it. The same thing can be said in education. Often in the past it has seemed that the curriculum was a secret. The schools have always had goals and have always had course offerings, but few people other than the teacher knew what outcomes to anticipate. The student didn’t know about it except as it was slowly revealed; the parent didn’t know; other school staff often didn’t know. Competency-based education is attempting to effect documentation of courses so that teachers can agree on goals and on the means of evaluating what they’re trying to accomplish. This form of education provides a way to share and help students become involved and accountable. Students under competency-based systems indicate that they like knowing what they’re supposed to be doing and learning.

Next, competency-based education is not an emphasis upon only the measurable. The charge against competency-based education is that measurement becomes the basic management interest: If you can measure it, do it. Certainly competency-based education focuses upon those things that can be measured, but there are many things going on in the schools that cannot and should not be measured.

Can you measure the beauty of an orchestra’s symphony rendition? No, but an individual violin player must demonstrate certain competence to be able to play that symphony. Can you measure the trauma of losing a basketball game or the excitement of winning a football game? No, you cannot measure the team spirit or the emotional highs and lows, but each player must demonstrate competence in order to perform on that athletic team. Can you measure the beauty of an art object? Indeed not, but the individual artists must demonstrate certain competence as they work with the tools of their trade. The speech or drama student must demonstrate certain individual competence to participate in a play or debate tournament. Can you measure the sense of accomplishment: when a person is able to do a job well, no matter what it is? That individual feels confident and proud but no one can measure his feelings of confidence and worth.
Third, competency-based education does not underestimate the complexity of individuals and of social systems. Indeed, it recognizes this complexity and is aimed at sorting out some of it. Competency-based education is aimed at helping the school system narrow its accountability and give clear signals about what is to be accomplished. Amid the complexity of modern society, someone must give clear signals about what the schooling enterprise, as only one element of the educational system, is expected to accomplish.

Finally, let us recognize that there is considerable controversy in competency-based education between required minimums and desirable maximums. This is probably unavoidable. Inherent in any schooling process is the establishment of a performance base that students must reach in order to receive institutional endorsement for completing a certain program. However, minimums cannot be allowed to serve as maximums. This issue becomes particularly troublesome for institutions of higher education as they try to cope with entering students who come with such great variance in their preparation. This is one reason why I support a certain number of courses to be mastered as a requirement for high school graduation, but flexible time requirements must be provided to achieve such mastery.
The Development of Competency-Based Education in Oregon

Oregon was the first state to initiate competency-based education on a statewide level. The experience of that state provides some valuable lessons for other states or local school districts considering similar action.

The adoption of competency-based education in Oregon came about as a result of several major events. First and foremost, Oregonians have a long history of pride and energetic involvement in their schools. There is a "populist" tradition in the state of Oregon. Its citizens have generally supported innovative and creative approaches to governmental problem solving. As a consequence, the social climate in Oregon supports change in the schools. A 3.5 million dollar Ford Foundation grant was given to the state in the early sixties to stimulate research and development activities in the schools. A significant number of outcome-oriented learning materials and teaching methods were developed.

Second, a hotly contested statewide battle to elect a superintendent of public instruction in 1968 brought much public attention to matters of education. During that campaign I outlined competency-based proposals, including a revision of the high school graduation requirements and career education emphasis in the schools. It was no secret that my election would mean that Oregon schools would move in the direction of competency-based education. My election, therefore, was
interpreted to mean that Oregonians expected a modernization of the high school graduation requirements and movement toward a performance-oriented curriculum.

Third, the initiation of the federal Elementary-Secondary Education Act of 1965 had an impact on Oregon education. Among other things, this act required states and school districts to assess educational needs. Under the leadership of Associate U.S. Commissioner of Education Leon Lessinger, much national attention was paid to the subject of accountability. Many of the federal rules and regulations for implementing the ESEA legislation called for accountability requirements and a clear statement of goals.

Fourth, in 1969 a statewide needs assessment study was conducted by means of interviews with 800 members of the general public, 201 educators, 469 students, and 52 former students who had dropped out of school. The study provided one of the first indicators that a sizable portion of the general public felt that the current needs of students were not being met by the schools. The study helped to identify 10 "critical needs." Applications for ESEA Title III funds to meet these needs were not approved by the Oregon State Board of Education unless objectives were stated in performance terms and the degree of achievement was measured against those objectives. The needs assessment study thus became the impetus for one of the first state-level actions to require the measurement of learner outcomes.

As a follow-up to the needs assessment study, the state superintendent and members of the State Board of Education conducted a series of town hall meetings throughout the state. The purpose of these public discussions was to validate the findings of the needs assessment study and refine a list of goal priorities for Oregon education developed by the board. Over 2,000 persons in 14 cities generally agreed with the needs assessment and goal priorities. Concerns expressed at the town hall meetings were similar to those discovered in the needs assessment study. Town hall meeting "findings" were published in a pamphlet called Oregonians Speak Out. From these two actions, the needs assessment and the town hall meetings, three follow-up activities were initiated within the State Department of Education. First, work was begun to revise the state-level goals for elementary and secondary education.
Second, work was begun to revise the state-level minimum standards under which the schools of Oregon operate. And finally, work was begun in revising the state-level high school graduation requirements.

Fifth, a study completed in 1970 by the Oregon Association of Secondary Principals at the request of the superintendent of public instruction concluded that "there is a definite need today to state goals, purposes, and objectives; the activities by which objectives may be reached; and to develop a sense of reality on the part of the institutions charged with these tasks." The study was critical of the heavy reliance placed on the Carnegie unit and was supportive of the notion that the high school diploma should mean something more than exposure to certain experiences and school attendance time. This report advocated building more rigorous standards into the diploma requirements. Internal work was begun immediately within the State Department of Education to draft new requirements. The requirements underwent much public discussion, review, and five State Board of Education hearings.

Sixth, the new competency-based high school graduation requirements were formally adopted by the Oregon State Board of Education in September, 1972. Traditionally, the high school diploma had been based on the Carnegie units and upon course requirements or exposure to a number of school experiences. As a result, courses, textbooks, teaching techniques, and graduation requirements have been geared to time and subject-matter (what is to be taught) rather than to goals or performance (what is to be learned).

It was concluded that the high school diploma should mean a standard of competence preparatory for real life. The diploma should certify the survival competencies essential to cope with the modern life roles of learner, individual, wage earner, citizen, consumer, and family member. The world of the seventies and eighties is and will be vastly different from the world of the 1920s and 1930s. Credit cards, installment purchasing, high-speed automobiles, television, and countless other modern developments require more individual competencies than were required 50 years ago.

In the discussions of proposed graduation requirements, "survival-level competencies" emerged as a vital issue. The prevailing argument
was that the specification of minimum competencies in the graduation requirements would remove the traditional right of school districts to define their own educational programs as determined by local needs. As a compromise to the dissention over state vs. local control, new state-level minimum standards specify that districts establish minimum competencies for three areas of study—personal development, social responsibility, and career development. The standards, therefore, do not identify the specific competencies as such, but do assure that competencies must be developed for areas of performance that are generally considered to be critical for survival in a modern society. There was no thought that the validation of these competencies would be delayed until grade 12; rather, it was envisioned that competency validation would be an ongoing process from about grade 7.

Figure 4 on page 36 is a graduation requirement scorecard used in some Oregon high schools that illustrates how specific competencies in the three areas are covered.

Seventh, as the graduation requirements were being developed, another effort focused on the revising of statewide goals for elementary and secondary education. The statewide goals and planning systems of a number of states were reviewed. Initial drafts of Oregon’s statewide goals were presented to 13 goals advisory councils convened at each of the state’s community colleges in the fall of 1973. These advisory councils were composed of school board members, school administrators, teachers, students, and business and professional people. A final draft in public hearings was officially adopted in February, 1974. The new goals replaced a lengthy set of educational objectives the board had adopted in 1959.

The Oregon goals statement is as follows:

**PREAMBLE**

The Oregon Board of Education, in response to the changing needs of Oregon learners, sets forth six goals for the public schools.

Conceived and endorsed by Oregon citizens, these statewide goals confirm that every student in the elementary and secondary schools shall have the opportunity to learn to function effectively in six life roles: learner, individual, producer, citizen, consumer, and family member.
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<th>Subject Area</th>
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**Tradational Subject Matter**

**Real-Life Competencies**

<table>
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<tr>
<th>Competencies</th>
<th>Personal Development</th>
<th>Date</th>
<th>Comp.</th>
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<tbody>
<tr>
<td>141. Read newspaper</td>
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<td>142. Explain rental agreement</td>
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<td>121. Listen and recall</td>
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<td>141. Summarize discussion</td>
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<td>141. Write response to job ad</td>
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<td>161. Compute gas consumption</td>
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<td>162. Determine interest</td>
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<td>163. Measure</td>
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<td>161. Balance checkbook</td>
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<td>165. Make change</td>
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<td>171. Understand computer</td>
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<td>processing</td>
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<td>172. Use resources</td>
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<td>181. Fund leisure time activities</td>
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<td>182. Avoid drug use</td>
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<td>184. Perform first aid</td>
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<td>184. Have a healthful diet</td>
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<td>191. Enjoy community resources</td>
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<td>192. Provide information</td>
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<td><strong>Social Responsibilities</strong></td>
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<td>221. Voting process</td>
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<td>241. Payroll deductions</td>
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<td>214. Tax forms</td>
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<td>211. Environmental problems</td>
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<td>212. Helpful, harmful</td>
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<td>chemicals</td>
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<td>251. Highway conduct</td>
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<td>261. Monthly budget</td>
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<td>262. Credit plans</td>
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<td>268. Consumer purchasing</td>
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<tr>
<td><strong>Career Development</strong></td>
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<td>311. Safe working practice</td>
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<td>312. Grooming</td>
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<td>331. Problem solving</td>
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<td>311. Job training</td>
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<td>351. Employability</td>
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<td>352. Job application and</td>
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<td>interview</td>
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<td>353. Employment seeking</td>
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</table>

**Figure 1**

An Oregon High School Graduation Requirements Scorecard
Each goal states the knowledge, skills, and attitudes needed to function in these life roles.

The statewide goals shall be implemented through the program and course goals of each local school district. These local goals are set by the schools together with their communities to fulfill a shared responsibility for the education of every student. Because most of the knowledge and skills needed to function effectively in the role of learner are acquired in school, the school has primary responsibility for helping students achieve this goal.

Each school and its community establishes priorities among the goals to meet local needs and allocates school and community resources accordingly. This assures each student the opportunity to achieve the requirements for graduation from high school and as much additional schooling as school and community resources can provide.

STATEWIDE GOALS FOR SCHOOLING.

Each individual will have the opportunity to develop to the best of his or her ability the knowledge, skills, and attitudes necessary to function in each life role.

1. In preparation for the role of learner.

Each individual will develop the basic skills of reading, writing, computation, spelling, speaking, listening, and problem solving; and will develop a positive attitude toward learning as a life-long endeavor.

2. In preparation for the role of individual.

Each learner will develop the skills to achieve fulfillment as a self-directed person, acquire the knowledge to achieve and maintain physical and mental health; and develop the capacity to cope with change through an understanding of the arts, humanities, scientific processes, and the principles involved in making moral and ethical choices.

3. In preparation for the role of producer.

Each individual will learn of the variety of occupations; will learn to appreciate the dignity and value of work and the mutual responsibilities of employers and employees; and will learn to identify personal talents and interests, make appropriate career choices, and develop career skills.
4. In preparation for the role of citizen
Each individual will learn to act in a responsible manner, will learn of the rights and responsibilities of citizens of the community, state, nation, and world, and will learn to understand, respect, and interact with other cultures, generations, and races.

5. In preparation for the role of consumer
Each individual will acquire knowledge and develop skills in the management of personal resources to provide wisely for personal and family needs and meet obligations to self, family, and society.

6. In preparation for the role of family member
Each individual will learn of the rights and responsibilities of family members, and acquire the skills and knowledge to strengthen and enjoy family life.

The final aspect in the development of competency-based education in Oregon relates to accreditation of teacher education institutions and schools. The State Board of Education is required by law to establish state standards for public schools “after having considered the goals of modern education and the requirements of a sound comprehensive curriculum.” The board is also required to administer funds for basic school support appropriated by the legislature. In order for districts to qualify for state support, they must meet the minimum standards established by the board.

The Teacher Standards and Practices Commission is required by law to establish standards for training and licensing public school teachers in Oregon. Both the State Board of Education and the Teacher Standards and Practices Commission have incorporated competency-based measures into their accreditation standards.

A Progress Report
Competency-based education in Oregon is beginning to work. More teachers, more students, more parents, more administrators, and more citizens are concerning themselves with what is to be learned and becoming involved in the process and results of schooling.

Verne Duncan, current superintendent of public instruction in Oregon, gave an interesting testimonial about competency-based edu-
cation to a 1977 Oregon legislative task force studying this subject. He
told the task force that he was one of the original skeptics with respect
to the Oregon program. One of his major concerns was, Would this be
a paper-game exercise? He took the office of state school superinten-
dent with that attitude. As a result of visiting in schools and seeing
what was happening, his attitude began to change. He started to see
some exciting things happening, such as elementary and high school
people working together. That in itself is a rarity; usually each level is
critical of the other. It would appear that the Oregon program is bring-
ing these people together more than ever before.

Duncan indicated that he has been influenced and impressed by
what was happening in some schools. He observed teachers who were
learning that the system was manageable. In turn, their classes were
becoming far more effective than they ever were before. Teachers were
setting goals; the students knew what was expected of them.

It is difficult to assess the progress of competency-based education
in Oregon, because the first high school students to participate in the
new system did not graduate until June, 1978. However, there are a few
cues from a progress report prepared by Don Egge, associate superin-
tendent of public instruction in Oregon.

An Oregon Competency-Based Education Project survey appears to
indicate that something different is happening in the classroom. Over
90% of the 105 districts responding stated that students, in general, will
increase their achievement in the basic skills of reading, writing, and
computing. More than 80% said that student learning will be of more
immediate use than has been true in the past. Nearly 70% of the re-
spondents stated that: a) students will have an increased opportunity to
select courses of their own choice; b) students will more often work at a
pace that is best for them; and c) student learning programs will more
often be designed for their individual needs.

Data about how students spend their time is perhaps the most dra-
matic evidence about the positive effects of the new standards. In over 90%
of the schools surveyed, it was estimated that students will likely be
spending more time: a) talking to teachers or counselors to select courses
and b) working on basic skill areas of reading, writing, and computa-
tion. More than 70% said that students will likely spend more time in

39 40
learning settings outside the classroom and in relatively active pursuits such as writing, speaking, and demonstrating skills.

Community participation in the design of new school programs also seems to be clearly evident. Over two-thirds of the school districts state that community representatives are participating in setting district goals. In schools where community involvement was sought, over 95% reported the involvement as helpful.

In school districts where progress toward implementation has been made, the survey report stated that it appears that parents like the new standards because they understand what the schools are about. They are able to make recommendations for change.

Problems with CBE
As with the implementation of any new program, not all has run smoothly with CBE in Oregon.

- Variations in local district response has been a problem. The standards require each of the local school districts to establish competencies for their students. This requirement is seen by some as a strength in that local boards, teachers, administrators, and the community develop a commitment to the changes that they themselves have designed. But the differences in leadership among districts create problems of support, of communication, and of transferability by students from district to district.

- Emphasis on minimum competencies is receiving much attention. It is feared that teachers will teach only to the minimums. Parents of some college-bound students question time their children spend studying personal finances, for example, when they should be concentrating on calculus. Often overlooked is the fact that the minimum competency requirement for high school graduation is only one part of a three-part requirement. There are learning outcomes vital to a quality education that go well beyond minimum competency.

- School districts are struggling with the definition of competence. The problem appears to center on trying to predict what a student must be able to do in order to function effectively in adult life.

- The number of required competencies ranges from nine to over 300. Some teachers complain about the time and energy required to maintain records for such a number.
The content of competencies vary widely. Some address the arithmetic processes of addition and subtraction while others focus on application of skills such as maintaining a checking account. Must everyone be able to compute the interest rate of a loan?

There are two major components necessary to operate a competency-based education plan. First is the definition of what is to be learned; and second, the development of performance indicators to determine what learning has taken place. Paper-and-pencil tests are not always appropriate in measuring what a student can do. Sometimes the classroom teacher must make a professional judgment, as in a reading inventory. It is important, however, that the basis for professional judgment be very clear. The development of performance indicators is still in an embryonic stage.

Students who move from one school district to another present problems in a state where the development of specific competencies has been left to local school districts.

In some school districts the competency program has been treated as an “add-on” to the traditional program rather than being integrated into existing programs. When competencies are viewed as an “add-on,” they are also viewed as a nuisance and extra paperwork.

Some critics of the Oregon high school graduation requirements feel that the competencies are too minimal to stimulate the college-bound student or that they present roadblocks for the disadvantaged students that may be considered unnecessarily punitive.

One of the most unusual criticisms of CBE comes from an Oregon legislator who indicates that the new high school graduation requirements cause administrators to spend an inordinate amount of time on one aspect of schooling. He states that this extra time and money could be spent improving such problem areas as pupil transportation, vandalism, dropout rates, and curriculum planning. The standards consume too much of teachers’ time and pressure teachers into having their students learn only enough to meet the competency requirements, he says.

In summary, the criticism of the competency-based education program in Oregon appears to center on two problems. The first is the sheer logistical problem of implementing such a sweeping change
across an entire state. Clearly, more time is required. Second, some individuals, mainly college professors, hold that the traditional subject-centered college preparatory program is perfectly adequate. This problem will be difficult to resolve, for underlying this viewpoint is a philosophy that the emphasis for schooling should remain on what is to be taught rather than on what is to be learned.
Epilogue

Abraham Maslow’s theory of basic human needs provides insight for understanding competency-based education. Maslow contends that the human being is motivated by several basic intrinsic needs. They cannot be killed by culture—only repressed. He postulates that these basic human needs are organized into a hierarchy. Throughout life a person is always desiring something but rarely reaches a state of complete satisfaction, except for a short time. As one desire is satisfied, another pops up to take its place. Most individuals in American society have partially satisfied many basic needs, but those that are still unsatisfied continue to motivate and drive a person. Maslow found that individuals who satisfy their basic needs are healthier, happier, and more effective, while those whose needs are frustrated develop psychopathological symptoms.

The most powerful and basic need is for survival—both physiological and emotional. Maslow indicates that once survival needs are satisfied to a degree, safety needs emerge. Any good teacher of young children has found that the child needs a secure world. When security and a degree of consistency are absent, the child becomes anxious. With a predominance of survival and safety needs met, the needs for love and belongingness emerge.

The next level in the need hierarchy revolves around self-esteem and respect from others. Self-esteem needs include competence, confidence, achievement, and independence.

Finally, Maslow finds that the need for self-actualization generally
emerges after adequate satisfaction of the love and esteem needs. This highest level of need stems from a constant human drive to explore the human potential and nurture that potential into all it can become. Maslow describes a whole list of higher-level needs he calls growth needs. However, it is important to point out that Maslow and many of his colleagues continue to state that the higher nature of man requires that the lower-nature needs be met first.

The first purpose of the great American dream of universal schooling is to meet each individual at the point of his or her need. One must look at the basic needs of human beings to gain an understanding of student needs. If the first level of need is survival, does it make sense to force students to sit through the self-actualizing experiences of Shakespeare and Homer and ignore the survival needs? This is not to intimate that literature is unimportant, but only that if schools and colleges are to meet students at the point of their greatest need, then other things must come first.

Human needs must be met, at least partially, in rank order. The postulate expressed here is that American schools often aim for the self-actualizing and higher-level needs while ignoring survival and security needs. What competencies will be required for survival during the last quarter of this century? What kinds of competencies will be required to cope successfully with life as a citizen, wage earner, consumer, and learner?

Each civilization has its own artifacts, scrolls, tablets, coins, and tools. It is very instructive to study other cultures. But it would even be more instructive to surround our students with the artifacts of our own society. These artifacts include credit cards, bank statements, ballots, rental agreements, checkbook stubs, loan contracts. Yet, it is not only possible for most students to complete their formal education without ever seeing an installment contract, it is highly probable. Shouldn't we understand our own artifacts as well as those of the Romans and the Greeks?

Competency-based education is certainly not all of education, but it is foundational. Everything in the schooling experience must be built upon this foundation.
Appendix

Below are examples of three competencies and performance indicators that are essential for leading a profitable, responsible, adult life.

GOAL—EACH STUDENT SHOULD DEVELOP THE ABILITY TO TRANSACT BUSINESS ON A CREDIT BASIS

COMPETENCY

☐ Show a thorough knowledge and understanding of the terms, conditions, and interest rates that go along with using a department store credit card.

☐ Satisfactorily complete a standard installment payment contract for a purchase of $300 or more and compute the cost to you in varying interest rates if you pay it in one year.

PERFORMANCE INDICATORS

1. Explain to the satisfaction of a certifier the terms and conditions of a given department store credit card, including credit limits and interest charges.

2. When presented with hypothetical or real information about your income and current debts, complete an installment purchasing contract to the satisfaction of a certifier.

GOAL—EACH STUDENT SHOULD DEVELOP THE ABILITY TO MAKE APPROPRIATE USE OF PUBLIC AGENCIES

COMPETENCY

☐ Complete application to the Federal Insurance Contribution Act (FICA), which provides Social Security.

☐ Survey public information available through local government agencies.
PERFORMANCE INDICATORS

1. Make an application for and secure a Social Security card.

2. Using information available at the county courthouse, list the following information about your present place of residence:
   a. Assessed valuation
   b. Property tax amounts by category of allocation
   c. Zone designation
   d. Type of sewer service
   e. All assessments against that property (sewer, street, lighting, fire district, water district, roads, etc.)
   f. Monthly payments or rent
   g. Legal rights for the tenant, if rented property

3. Contact a local government agency to obtain some information or services and keep a record of the steps you go through (actions, names, titles, and phone numbers of contact people) in order to obtain the information or services desired.

GOAL—EACH STUDENT SHOULD DEVELOP THE ABILITY TO MAKE APPLICATION FOR EMPLOYMENT

COMPETENCY

☐ Go through the appropriate steps to obtain a job.

☐ Either obtain a job or research the job characteristics that would directly affect an employee.

PERFORMANCE INDICATORS

1. Read classified employment ads or register with the State Employment Office and use their listings; choose at least one job, prepare a resume, make application, and have an interview for the job.

2. Either obtain a job and work for a specified period of time or explain to the certifier details about the job such as salary, hours, fringe benefits, dress regulations, and job duties.
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