THE ACCOUNTING PROFESSION
IN AMERICA

2. Philosophy of American Accounting Education
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2. PHILOSOPHY OF AMERICAN ACCOUNTING EDUCATION

The purpose of this paper is to briefly describe some themes of American educational philosophy which may interest Japanese readers. The paper will discuss *formal* education rather than *informal* education. Formal education is the education which takes place in school. *Informal* education is the education which takes place in the home and community. This paper will suggest some ways in which American educational philosophy affects American accounting education in colleges and universities. The American author of this paper believes that American accounting educational philosophy can only be understood as part of American educational philosophy in general. American accounting education is not very different philosophically from the rest of American education. In the course of America's history, American education has changed from an activity only for the wealthy and religious, into an activity required by the state until 16 years old. Meanwhile, American accounting has changed, from a trade learned only through experience, into a profession which is taught in colleges and universities.

In the previous paper in this series, the structure of higher education in the United States was summarized. Accounting higher education was then described.

I. The Purpose of American Education

The purpose of American education has been, and will continue to be, widely discussed. Thousands of books and articles have been written on this topic, and education is generally one of the issues in every American political campaign. There are many purposes to the American educational system, and there has always been much disagreement over the different purposes of American education. This not surprising, since America is a very diverse society.

The American educational system provides a means to educate a very diverse population, and achieve different goals. Ignas (1981, p.2) states two purposes that
most agree are the main goals of American education:

"(1) that the schools produce citizens with the necessary skills, knowledge and attitudes to function in the nation's social, political and economic structures, and,

"(2) that every child be given the opportunity to learn whatever is needed to carry out basic life tasks."

The debate over educational philosophy reflects the changing national character. Just as there is controversy about goals for American education as a whole, there is much disagreement on goals for higher education. We agree with Eble (1983, pp. 142-143), who believes that the aims of American higher education are:

"(1) the development of a highly educated citizenry as basic to a complex and functioning democracy;

"(2) the expansion of knowledge for such practical ends as improving crops, roads, health, and so on, and the training of professionals to carry out these practical ends through research and practice; and

"(3) the fostering of the arts, sciences and humanities as contributing to the creation of an attractive culture."

For private schools supported and administrated by religious groups, he adds another goal:

"(4) a tie between education, and moral and ethical development."

American accounting faculty in colleges and universities seem to agree with these goals. Accounting graduates should have a broad general education, so that they will be fully-informed participants in democracy. Accounting also should serve the practical ends of increasing economic prosperity. Finally, as part of their education, accountants will discuss moral values, such as honesty and integrity.

One of America's greatest philosophers was John Dewey (1859-1952). Dewey had a profound influence on American education. As he wrote, "A democracy is more than a form of government; it is primarily a mode of associated living...." (Dewey, p. 101). In a society with a ruling class, only the ruling class needs an education. However, since all members of a democracy participate in governing
the democracy, all must be educated. It is important that "...intellectual opportunities are accessible to all on equable and easy terms" (Dewey, pp. 103-104). Without this education, changes in the environment will overwhelm those who do not understand the environment. This also implies that the purpose of education is to prepare students to take action. American accounting education reflects these views. American faculty want to prepare their students for a changing world. Decision-making skills are emphasized in teaching accounting students.

American elementary and secondary schools are used for many other purposes than the ones stated above. The schools promote racial integration, deliver health care, provide drug and sex education, and teach driving education. Schools also reflect cultural values. For example, individual achievement and individual competitiveness are characteristic of American culture. In the school system, there is competition between individual students. Equality of opportunity gives a chance for individual accomplishment. By rewarding individual competition and achievement in school, some suggest that this pressure for individual success harms a student's ability to learn co-operation (Ignas, 1981, p. 15).

American calls itself "the melting pot." The melting pot refers to the blend of many cultures, religions, and values which exist simultaneously. The ideal of the melting pot is assimilation into one American culture. An alternative is the cultural pluralism which is American today.

To improve one's condition in life is "the American dream." One way to achieve this dream is through education. An education means a greater opportunity for an economically prosperous future. American schools are an important means to rise in economic and social status. A goal of American schools is to provide equality of opportunity. Receiving a degree in accounting is one way to achieve this.

Equality of opportunity means that elementary and secondary schools are open and free to all students. Equality of opportunity means that entrance into college is not based upon social class, as has been the case in other countries. Entrance
into college is based mostly upon high school grades and scores on college entrance examinations. However, some critics have said even these requirements create too many barriers to admission into college. To be sure that everyone has a chance at higher education, some states have "open enrollments" into higher education, most often with two-year community colleges. open enrollments permit anyone with a high school diploma to enroll in college, without any qualifying examination. Schools with these "open enrollments" have very high failure rates, because many students are not prepared or motivated for higher education.

Even when there are entrance requirements, once into college, any student can take the introductory accounting courses. There are no admission requirements to introductory accounting courses other than the requirements of being admitted to college. These courses usually have very high failure or withdrawal rates. Some of the reasons for the high failure and withdrawal rates are lack of interest and a poor mathematics background.

II. Philosophical Questions of General and Accounting Education

One American textbook in print for over 30 years (1942–1972) was DeYoung and Wynn’s American Education. This book was widely used in the United States in Teacher’s Colleges and Colleges of Education. When considering the purpose of United States education, DeYoung and Wynn (1972, p. x) suggest that there are five major questions regarding American education:

a. Who will decide the purpose of education?

b. Who should be educated?

c. What should be taught?

d. How should students be taught?

e. How shall it be paid?

These questions are never permanently answered in the United States, and are continuously debated.
a. Who will decide the purpose of education?

In the elementary and secondary public schools, the power to decide the curriculum rests with the voters. Each school district has a school board, and voters choose representatives to that school board. The trend is to push control to the lowest possible level of local control.

Education at the elementary and secondary levels is more closely controlled than colleges are controlled. Prior to 18 years of age, American students are considered children, and their parents are responsible for their education. Students usually graduate from high school when they are 18 years old, and receive full adult citizenship rights (the right to vote, to enter into contracts, own property, marry, serve in the armed forces, etc.). One reason that colleges and universities can be much more autonomous in determining their curricula and setting academic standards, is that they are dealing with adults.

Accounting education in colleges and universities is an open system, with inputs from many sources influencing the educational process. As mentioned in the previous article in this series, a student receiving an accounting degree will have about half of all course work outside the accounting and business areas. Within the accounting courses, the core courses are set by the tradition of how accounting has been taught for years.

However, the content and scope of these accounting courses are also influenced by:

1. professors in other areas of the university,
2. alumni,
3. student desires,
4. practicing accountants, such as the American Institute of Certified Public Accountants, and accountants with corporations and public accounting firms, and
5. levels of state government funding.

At the elementary and secondary level, there are about 15,700 public school districts (Snyder, 1987, p. 70). These school districts contain 59,000 elementary schools and 24,000 secondary schools. Local control of the schools gives educa-
tion appropriate for the local conditions. For example, children in cities may have never seen a farm in person. These children need materials which relate to their environment, so a city school board will usually select textbooks with vocabulary and examples appropriate to an urban environment. Within a school district, the overall curriculum in each school is the same, but each teacher is permitted to adapt the material to the class being taught.

Besides public schools, there are also private elementary and secondary schools. About 11% of all elementary and secondary students are enrolled in private schools (Snyder, 1987, p. 9). The largest private school system in the United States is the parochial school system run by the Roman Catholic Church. There are other church schools run by other religious denominations. There are also private schools which are not associated with any religion. There is a wide range of quality in both public and private schools. A private school does not necessarily have higher academic standards than a public school. A private school usually is preparing all of its students to enter college. Public schools also have a college preparatory curriculum. However, public schools have other programs besides college preparatory courses, such as mechanical courses. There are also both public and private universities in the United states.

There is a federal Department of Education, which functions to collect data, distribute grants, support research, and perform an advisory role. It has no power to require a national curriculum, and does not set a curriculum standard for accounting education. There is no national standard for accounting education, except for those colleges and universities which are members of the American Assembly of collegiate Schools of Business (AACSB, 1987). This was discussed in the previous paper in this series.

The federal government's role in education is limited mostly to issues which involve the entire nation. For example, school districts are required by federal law to offer productive education to those who do not speak English. This means that schools districts with large numbers of immigrants from Southeast Asia or Hispanic populations will have bilingual education.
Overall, in spite of many problems, Americans are becoming more educated. The median number of years of education has steadily risen in the United States (Snyder, 1987, p. 13). This is shown in Figure 1.

**Figure 1. Median number of school years completed by persons age 25 and over, 1910 to 1985.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Median School Years Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>8.1</td>
</tr>
<tr>
<td>1920</td>
<td>8.2</td>
</tr>
<tr>
<td>1930</td>
<td>8.4</td>
</tr>
<tr>
<td>1940</td>
<td>8.6</td>
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<tr>
<td>1950</td>
<td>9.3</td>
</tr>
<tr>
<td>1960</td>
<td>10.5</td>
</tr>
<tr>
<td>1970</td>
<td>12.2</td>
</tr>
<tr>
<td>1980</td>
<td>12.5</td>
</tr>
<tr>
<td>1985</td>
<td>12.6</td>
</tr>
</tbody>
</table>

Source: Snyder, Thomas D., *Digest of Education Statistics, 1987*, (Washington, DC: Center for Education Statistics, U.S. Department of Education, 1987), Table 8, p. 13. ("Median" is not the mean or average. Median represents the middle number. In this case, it means that half of these Americans have more than 12.6 years of education, and half of these Americans have less than 12.6 years. The concept of "average" is useful only when there is a normal distribution of values.)

**b. Who should be educated?**

The clear answer is that every American should be educated. Attendance in school is mandatory in the United States beginning at the age 5 or 6, depending on the state. Most jurisdictions require that students attend school until they are at least 16 years old. Every American student has a right to a free education through high school.

In some school districts, students may be grouped by reading ability, or achievement on standardized tests. For example, if a second grade student's mathematics ability is at the third grade level, then in many school districts, the student
will go to the third grade class for mathematics. If the same student is on the first
grade ability in reading, then the student would go to the first grade classroom for
reading. This practice is often debated.

The conflicts of a culture are carried into its institutions. Everyone should be
educated, but this can lead to conflict. One conflict in American culture is over
equality. While one ideal is that all persons should have equal rights and respon-
sibilities, not all students have equal abilities. For this reason, students are often
separated into different ability groups. Some protest against this, saying this
practice is “elitist.” These critics say that the better students will receive too
many teaching resources.

At the college and university level, education is based on merit. The better
students can move quickly through some course sequences. Students have the
opportunity to have advanced placement in mathematics and other courses.
Usually, it takes four years to get a college education in accounting. A bright
student can finish the curriculum and graduate in three years.

The Certified Public Accountant (CPA) and other examinations can be taken by
those who have received a degree in accounting. This is not based on age. The
American author of this paper had one student graduate from the University, and
pass the CPA examination, when the student was 18 years old.

**c. What should be taught?**

At the elementary level, grades 1-8, most American students receive “general
education.” General education gives basic knowledge such as reading, grammar,
spelling, mathematics, geography, history, and science. General education is the
common body of knowledge that all Americans are expected to know.

Beginning in high school, grades 9-12, many students will specialize. Every
American high school district offers high school vocational education. For
example, vocational education for an office career might give a student courses in
bookkeeping, typing, and clerical skills. Other students in a vocational high
school curriculum might take courses in automotive mechanics, agriculture, or
other specialized areas.

The trend in American education is to group students according to their ability and achievement, not according to their age and class. School districts have "special education" for students who are too different to be in other classes, such as blind and deaf students. There are special schools for the mentally retarded. There are also special education programs for "gifted" students. Many school districts attempt to identify students who are gifted in mathematics, verbal skills, or music. These gifted students may go to another school just for gifted students.

Some students may have high abilities in only one area, and be average in all other areas. These students will not go to another school, but instead have courses with other students who are high in achievement in that area. These courses are called "honors" courses. Honors courses permit a student to advance more quickly than the rest of his or her classmates. For example, a student may take regular classes with his or her classmates in history, mathematics, and health, and then take English honors and music honors courses with a very small group of other students who are talented in those subjects. In many school districts, it is possible that a student will advance too far for the high school teachers to form a class for that student. In that case, the student will be sent to the local college or university to take courses, paid for by the local school district.

Grouping students by achievement and ability is done in colleges and universities. Many students majoring in accounting are very good in mathematics. First year students are often given advanced placement in mathematics, and take mathematics with second and third year students, rather than remaining with their classmates.

American schools teach values essential for a diverse society. For example, one essential quality for a democracy is tolerance. Students are repeatedly told and shown that they must respect other races, other religions, and the opposite sex. Race and religion have divided America in the past, and still are important issues in America. Accounting students in colleges and universities have the opportunity to study these problems as part of their elective courses. For exam-
ple, most colleges and universities offer courses in American society's current issues, such as Black Studies, Women's Studies, and Human Sexuality.

In elementary and secondary schools, tolerance may be shown when working with a group of students. A slow student may need individual attention by the teacher. The group will continue at the pace set by the teacher, and the teacher will often provide individual tutoring to the student. A group will not be permitted to laugh at the individual who is a slow learner. In colleges and universities, an accounting professor is expected to be available to students individually or in small groups, several hours a week. The professor will help the students who are having difficulty with the course.

**d. How should students be taught?**

The previous paper in this series described the current structure of American college education. Accounting students have some courses which are required, which survey a broad areas of knowledge. Other courses are required for a major in accounting. Finally, there are free electives, for which students can choose any course which they please.

Until the early part of this century, the traditional educational style was one of lectures by the teacher and memorization by the student. This changed with the influence of John Dewey and others, in what is called the "progressive education movement." The dominant philosophy of this movement is pragmatism. Pragmatists believe that education must be for some purpose, not undertaken for its own sake.

A typical American attitude of pragmatism is that the environment is something to be mastered. Dewey (1915, p. 400) stated that the only real knowledge is knowledge which "will adapt the environment to our needs...." Real knowledge would also "adapt our aims and desires to the situation in which we live...." Real knowledge would give "the connection between ourselves and the world in which we live." Based on this philosophy of pragmatism, the progressive education movement emerged. The progressive education movement was extremely
influential in changing American elementary and high school education. The old system was a system of lecture and memorization; the new system emphasized action, learning by doing. Students learn better when they are able to move and experiment. Schools not only had classrooms, but also added laboratories, kitchens, and vocational shops.

American elementary and secondary schools still rely heavily on teaching techniques which are more “knowledge-based” than “processed-based” (Ignas, 1981, pp. 12-16). The teaching style in a knowledge-based curriculum is mostly teacher lectures and student memorization. A process-based approach is learning based on experimentation and discovery. The student should “learn how to learn.” This is an important goal of education for the majority of American teachers.

A knowledge-based curriculum at the elementary level is called “the three R’s.” The three R’s stand for Reading, Writing and Arithmetic. The three R’s are the traditional approach to learning facts. As stated by Ignas (1981, p.13) “The traditional system incorporates in its theoretical construct the belief that there exists some body of knowledge that is meant to be passed on to continuing generations.” Much of this material must be memorized. An example of this body of knowledge is teaching the students spelling, the rules of grammar, and the multiplication table.

In large colleges and universities, there are a few classes with large lectures for several hundred students at a time. These occur in introductory courses where the students must memorize fundamental material for that area of study; for example, this occurs in many schools when teaching principles of accounting. A typical style is that an accounting professor will give one lecture for one or two hours, once a week during the semester. Then students attend small discussion sections once or twice a week. These discussion sections are usually led by teaching assistants.

The higher the level of education, the more process-based learning is used. College and university education is more process-based than occurs in high school.
A process-based learning style is one which emphasizes discussion. Accounting students should not be filled only with facts. American professors repeatedly challenge the students to think about their assumptions. Through discussion and argument, one has the best chance of finding the truth. A search for truth is fundamental to democracy and fundamental to education. In America, teachers and students have equal civil rights and responsibilities, so there should be an equal search for knowledge in the classroom.

Some of the discussions are led by students, when they present their term papers or semester projects. In some classes in colleges and universities, class grades are based on examinations, and also on class participation. Discussion should not be just between the professor and a student, but also between students. Professors may call on students by name in class, and professors expect their lectures to be interrupted with questions.

Accounting education in colleges and universities follows many of the principles of pragmatism that emerged with the progressive education movement. In American accounting courses, there is an emphasis on problem-solving skills. For example, while an accounting student must have a basic knowledge of generally accepted accounting principles, it is also important that the student know how to apply these principles. Understanding how to apply principles comes from the student attempting to solve problems, making mistakes, and discussing solutions with the professor and other students. Professors make mistakes, and many professors encourage the students to point out these mistakes.

At the end of each college course, the students prepare evaluations of the course and the professor's teaching. These evaluations go to administrators, and then to the professor. In many schools, these class evaluations are published for all students to see. A teacher with poor evaluations will be counseled. Many older professors who are not able to keep up with current accounting problems can be forced into retirement.
**Figure 2**

Sources of revenue for public elementary and secondary schools: 1939-40 to 1984-85

<table>
<thead>
<tr>
<th>Percent of revenue</th>
<th>70</th>
<th>60</th>
<th>50</th>
<th>40</th>
<th>30</th>
<th>20</th>
<th>10</th>
<th>0</th>
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<tbody>
<tr>
<td>Local governments</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>State governments</td>
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<td>Federal Government</td>
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</tr>
</tbody>
</table>


e. **How shall it be paid?**

Most of the cost of elementary and secondary schools is paid from local property taxes, state income taxes, and federal income taxes. Figure 2 (reproduced from Snyder, 1987, p. 32) shows how public schools are financed. In that figure, one can see that state and local governments are about equal in their payments to public schools. The federal government pays less than 10% of the cost of elementary and secondary schools. Private schools are supported by tuition payments, and if they are associated with a religious group, they are supported by that church. Both public and private schools receive help from alumni and other contributors.

As shown by the source of the financing, education at the elementary and secondary level is largely a responsibility of state and local governments.
Figure 3

**Sources of revenue for public institutions of higher education: 1984-85**

- Tuition, 14.5%
- Federal Government, 10.6%
- State governments, 45.1%
- Local governments, 3.6%
- Private sources, 3.1%
- Endowment income, 0.6%
- Sales and services, 20.2%
- Other, 2.6%

Total revenues = $59.8 billion


Figure 4

**Sources of revenue for private institutions of higher education: 1984-85**

- Tuition, 38.7%
- Federal Government, 15.9%
- State governments, 1.9%
- Local governments, 0.6%
- Private sources, 9.3%
- Endowment income, 5.4%
- Sales and services, 23.7%
- Other, 4.5%

Total revenue = $32.7 billion

Colleges and universities do not rely heavily on local taxation. This is one reason that they can be so independent.

Figure 3 (reproduced from snyder, 1987, p. 120) shows the sources of revenue for public colleges and universities. Accounting education receives part of this revenue. Accounting students in public colleges and universities pay only a small percentage of the real cost of their education. The most important part of financing of colleges and universities is money provided by the state government. The next most important source of funding is the sale of goods and services. An example of the goods sold by a college is the sale of textbooks. An example of a sale of services is the rental of university facilities, such as dormitories.

Figure 4 (reproduced from Snyder, 1987, p. 120) shows the sources of revenue for private colleges and universities. While the students' tuition pays a larger share of support, students in private colleges and universities still are not paying the full cost of supporting the institution. The private schools rely more heavily on federal grants, endowments, and private contributions. The federal government has played many roles in supporting education. After the 1957 launch of Sputnik, Americans were deeply shocked. The result was the National Defense Education Act of 1958. Billions of dollars were given by the federal government to local school districts for improvement of science and technology education in elementary and secondary schools. Billions more were made available for student tuition loans to attend colleges and universities.

The federal government also encourages education through its tax policy. Private and public universities pay no income taxes. Any charitable contribution to such schools gives a deduction from taxable income on a federal income tax return.

III. A Brief History of American Educational Philosophy

American accounting education can be understood only as part of American education overall. In turn, American educational changes can be understood as a part of American history. The American author of this paper has arbitrarily
divided American education into these periods:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Important Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1636-1776.</td>
<td>Pre-Revolutionary War. Elementary education was church-related. The concept of a University came to America from Europe.</td>
</tr>
<tr>
<td>1776-1837.</td>
<td>Post-Revolutionary War. Both private and state elementary and secondary schools were founded.</td>
</tr>
<tr>
<td>1918-1945.</td>
<td>The progressive education movement emphasizes pragmatism.</td>
</tr>
</tbody>
</table>

In the pre-revolutionary period, the concept of a University came to America from Europe. The starting point is chosen as 1636, because that is the founding of Harvard, the oldest college in the United States. In 1776, as the American Revolution began, there were nine American colleges (Mandell, 1977, pp. 15-16). These were founded by religious groups, enrolled only males, and never had more than 100 students at a time. Accounting at this time was not a full-time occupation (Edwards, 1978, p. 25).

Nations feel their unity through their school system, and America was no exception. In the Post-Revolutionary War period, schools reflected patriotic values that unified the different states into a single nation, as United States. The emphasis then was also on religious values. Indeed, Harvard and many other colleges were founded originally to be seminaries to train clergy. There was no formal business education at this time. Accounting was learned in counting
houses or by becoming a clerk to a business. The first bookkeeping offices opened during this period (Edwards, 1978, pp. 44-45). However, accounting did not have the status of a profession.

In the pre-Civil War period, one important change in education was in 1837 when Oberlin College became the first college to admit women as well as men. Until the American Civil war, most of the 264 colleges were private schools; only 17 were financed by state money (DeYoung and Wynn, 1972, p. 214). The first colleges for black students began during this period. Some states began to require elementary education. This took place first in the northern states, as the North industrialized.

The American Civil War began in April, 1861. In 1862, Abraham Lincoln signed the Morrill Act, which created "land-grant" institutions. At least one land-grant institution was created in each state. A land-grant institution was created by granting land to found a college to teach and study agricultural and mechanical subjects. This was state, rather than private, support of agricultural and engineering education and research. The concept of the land-grant school revolutionized American farms and factories, by providing a steady stream of graduates and research results. These graduates and research innovations transformed America's farms and factories. Business and accounting are also applied skills, and they were natural additions to the curriculum of land-grant colleges. Today there are 69 land-grant schools, and they include some of the largest, most prestigious colleges and universities in America. Usually, the largest university in any state is a land-grant college. Many of the largest accounting programs in the United States are found at land-grant institutions.

The South did not industrialize in the mid-1800s; rather, it remained agricultural. America fought a bitter Civil War from 1861-1865, in which a significant percentage of the population died from battle, disease and famine. This war was as much rooted in economic differences North and South as in cultural differences, such as slavery. In this tragic war, some schools were closed for lack of pupils, and never re-opened. Other schools were destroyed in the fighting.
After the Civil War, most of America had profound changes. Tens of millions of immigrants poured into the country, the Western territories were developed, and large manufacturing industries developed. Education expanded greatly to meet the needs of teaching immigrant children to read and write English. The traditional education in this period was knowledge-based; that is, the teacher read to the students and they wrote this knowledge into their copybooks.

The developments in accounting during this period were also important. The first business college was founded at the University of Pennsylvania in 1881, and accounting courses were taught shortly after the founding (Langenderfer, 1987, p. 304). In 1896, New York became the first state to license CPAs (Edwards, 1978, p. 68). By 1904, there were seven states with CPA laws (Edwards, 1978, p. 87). The public accounting firms which would become known in America as “The Big Eight” had their beginning at this time. In 1900, New York University created the first accounting department (Edwards, 1978, p. 79). A society of CPAs was formed, and The Journal of Accountancy began in 1905. A national income tax began in 1913, and this created more demand for accountants. In 1916, the predecessor organization of the American Accounting Association was formed.

A new era began in 1918, when the last state enacted a compulsory school attendance law. This was the beginning of a new attitude in American education, because now, all states required children to be in school. In this time period, America emerged as a world power. The progressive education movement had a great impact in stimulating research on how learning takes place. The community (two-year) college began to expand rapidly, to provide vocational training after high school. Community colleges provide one year training in accounting education. These programs permit entry into positions as apprentices. In 1918, the Federal Reserve Board set minimum audit standards, becoming the first government group to set standards (Edwards, 1978, p. 140). The stock market crash of 1929 brought more government regulation. With the Securities Act of 1933, and the creation of the Securities and Exchange Commission in 1934, there was a sharp increase in the demand for CPAs. More CPAs meant a greater

After World War II, there was a great expansion in American education. For World War II veterans, Congress provided a generous financial package to veterans, the "G.I. Bill of Rights." One of the options in the package was free education or vocational training. Millions of veterans used this opportunity to get their college educations. They were serious students, and few failed school. There were later G.I. Bills for Korea, Cold War, and Vietnam service.

In the 1960s, there was another huge increase in enrollments as the children born in the post-World War II baby boom entered colleges and universities. Many colleges and universities were founded during the baby boom, and existing colleges grew in size. Today, about 15% of American adults have a college education.

There has also been concern over the content of the college curriculum. According to DeYoung and Wynn (1972), there was a time when the entire college curriculum consisted of free electives. "Then in the 1930s a reform swept college curriculum toward required core courses in broad interdisciplinary areas of social studies, physical sciences, and humanities to provide each student with a base of common knowledge deemed essential for the broadly educated man" (DeYoung and Wynn, 1972, p. 228). Today in the United States, these broad requirements are being intensely debated. Many believe these courses have content which is irrelevant, sexist, or racist. They contend that these courses emphasize a white, male perspective, or have nothing to do with career objectives.

Others defend this general education. They feel that the only problem is that the courses have been badly taught. The extent of interest in this topic is shown by the wide discussion of Alan Bloom's book (1987), The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students. The book was a best seller for months, selling over 500,000 copies in hardcover alone. Bloom's critique is that university faculties have been overcome by "relativism." Relativism is the belief that all ideas and all cultures
are of equal value. He argues that traditional material (such as Shakespeare, Greek philosophers, etc.) are the core of Western culture, and that students need a thorough understanding of their own culture before they can understand others. Furthermore, Bloom believes students should learn that there are some moral values that are superior to others, and that morality is an essential requirement in education. The authors agree with this. We believe that accounting education implicitly teaches moral values such as honesty.

Accounting education grew rapidly in this time period. In the 1960s, the emphasis of accounting education was still on getting CPA certification. However, many accountants were moving to industry and government (Langenderfer, 1987, p.312). The requirements and demands for accounting faculty increased. In 1967, the AACS B increased the terminal degree requirement from a master's degree with a CPA certificate, to a Ph.D. (Langenderfer, 1987, p. 312).

IV. Future American Accounting Education

Accounting education has paralleled American education. When general education was knowledge-based, accounting education was rule-based. The largest growth in accounting education has taken place during the time when the progressive education movement's effects were having the most impact. Accounting textbooks in America always have many exercises and problems at the back of each chapter. Accounting students do not just memorize rules; they are expected to solve problems so that effective and efficient decisions can be made.

To receive a bachelor's degree in accounting or to pass the CPA examination, students do not need an extensive theoretical background. Much of the CPA examination is problem-solving. Few graduates from bachelor's degree programs in accounting have ever read a complete Statement from the Financial Accounting Standards Board.

One way to implement practical knowledge in the curriculum is through the use of microcomputers. In elementary and secondary schools, only 18% had microcomputers in 1981 (Statistical Abstract of the United States, 1987). By 1985,
92% of these schools had microcomputers. In accounting education, the AACSB requires microcomputers to be part of accounting education for colleges which it accredits.

Professors who are not teaching material relevant to contemporary business problems are accused by some businessmen of living "in an ivory tower." Therefore, the undergraduate curriculum content is very pragmatic. Theoretical and historical works are read mostly in graduate school. For example, the American author of this paper never heard of A.C. Littleton's *Accounting Evolution to 1900* (1966), prior to being in a doctoral program.

Educational requirements are increasing. The American Institute of Certified Public Accountants (AICPA) recently adopted a resolution requiring new members to have five years of higher education. They believe that four years of higher education do not prepare students to enter public accounting. This new standard would mean that the accounting graduate from a four-year program today would have to continue for one more year of education past the bachelor's degree. This requirement does not go into effect until the year 2000.

Universities must keep course content current with current practice. For example, the Advanced Accounting course covers current practice in accounting for foreign transactions. This course also covers the translation of foreign financial statements. These topics are covered on the CPA examination.

The AICPA code of ethics also reflects the changes in education. The first codes of ethics were very rule-based, and filled with prohibitions. This has now changed. Rather than concentrate on detailed rules, the AICPA membership adopted a new Code of Professional Conduct on January 12, 1988. This new code of ethics has two parts, Principles and Rules. There are only six principles, which are guidelines to be applied in specific situations. There are only eleven rules, some of which come from the past codes of ethics, and are prohibitions.

For public accountants, continuing professional education is required annually. The CPA selects the courses which will satisfy this requirement. Accountants are responsible for their own education, just as all adults in America are expected
to be responsible for their own education.

Recently, the American Accounting Association issued a study of the future directions of American accounting education, and that report was summarized by Bedford and Shenkir (1987). The study group which wrote the report was composed of representatives from education, public accounting, industry, and government. The committee recommended that future accounting education should consist of three steps:

1. General education (2-4 years). These courses would be courses in the arts and sciences, and courses which broaden the student's knowledge of the world in which he or she lives.

2. General professional education (2 years). These courses would be courses which are applicable to all accountants, regardless of their area of interest.

3. Specialized professional education (1 year). These courses would be courses in specific specializations, such as auditing, governmental systems, or international accounting.

Bedford and Shenkir (1987, p.88) summarized the goal for accounting education: “Accounting education should treat accounting as an information development and distribution function, and accordingly, university education for future accountants should focus on the central theme of information identification, measurement, analysis and communication.” Accounting is becoming a means to handle all business information, not only business financial information.

Bedford and Shenkir (1987, p. 91) report that “The scope of accounting education should be extended to include information for the development and control of administrative plans and for the formulation and implementation of organizational strategies. It is no longer realistic for universities to confine accounting education to the gathering and summarizing of day-to-day operating information on organizational activities.” This is a systems view of business which is becoming more common in American education. The role of the accountant will be to expand management's ability to make decisions.

The future direction of undergraduate accounting education will continue to be
pragmatic. Changing business and world conditions, and changing technology, will require accounting students to learn more complex problem-solving skills.

Acknowledgements:
We are grateful to three professors at the University of Delaware who criticized this article. Dr. Judy Bailey provided editorial criticism on educational theory. Professor David Durkee provided comments on accounting. Professor Brian Greenberg suggested sources on American education and gave comments on history. They do not necessarily share our opinions. Any errors remaining are the responsibility of the authors.

APPENDIX
Abbreviations Used in This Article

A.A.C.S.B. - American Assembly of Collegiate Schools of Business
A.I.C.P.A. - American Institute of Certified Public Accountants
C.P.A. - Certified Public Accountant
G.I. - Government Issue

FOOTNOTES
(1) "Roads" in this sense means streets and highways.
(2) American school system emphasizes individual achievement, not group achievement. Every American teacher has had a class which was noisy, talking, and looking at a neighboring student's work. The teacher says, "Do your own work!" The teacher does not want a group effort.
(3) Elementary schools are usually grades 1-8. Secondary schools, or high schools, are usually grades 9-12.
These courses were discussed in the first article in this series. The core accounting courses are principles of accounting, intermediate financial accounting, advanced accounting, cost accounting, tax accounting, and auditing.

The Roman Catholic elementary and secondary school system is 9,200 schools enrolling 3,500,000 students (Statistical Abstract of the United States, 1987, Table 219).

This includes not only free tuition, but also free books, supplies, and laboratory materials. Buses to and from school are free, as is the cost of field trips to museums, theatres, and other cultural activities.

An "elitist" is someone who believes that only a small group are fit to be leaders.

The CPA examination and other professional examinations will be discussed in a future article, number four in this series.

Many believe that vocational schools are not schooling for democracy, but rather for industrial efficiency. These critics believe that this creates a class system in society, and upsets social harmony. For a discussion of this, see Nasaw (1979), pp. 154-58.

Another trend is to place these different students in with other students. This is called "mainstreaming."

They are called the three R's because of the sound of these words when spoken in early America: "Readin', 'Ritin', 'Rithmetic."

A teaching assistant is a graduate student working on a master's or doctor's degree. The student must generally teach for six hours per week. This provides income to the graduate student, and also gives teaching experience.

These grants are usually research grants for specific projects. They are not general funding of private education, which would be against the U.S. Constitution.

The "G.I. Bill of Rights" is slang for the Servicemen's Readjustment Act. "G.I." stands for "government issue" and is a nickname for American soldiers, sailors, and airmen.

A "land-grant" is a grant of land. A grant of land is a gift of land; in this case, a gift of land as a building site for a university.

Slavery can also be considered an economic system.

Before 1880, immigrants came mostly from Great Britain, Ireland, and northern Europe. After 1880, immigration came mostly from southern and eastern Europe.
The Big Eight accounting firms are, in alphabetical order, Arthur Andersen & Co.; Arthur Young; Coopers and Lybrand; Deloitte, Haskins and Sells; Ernst and Whinney; Peat, Marwick, Main & Co.; Price Waterhouse; and Touche Ross & Co. Many of these firms had British roots as well. See Edwards (1978) Chapter IV, "The Emergence of Public Accounting in the United States, 1748-1895."

This was the American Association of University Instructors in Accounting.

A "terminal degree" is the educational standard required of professors. For example, accreditation agencies usually state that a master's degree is the terminal degree required for teaching undergraduate students. The terminal degree for teaching in a university is a Ph. D., because graduate degrees are awarded from universities.

SUGGESTED READING

While there are thousands of books and articles on American education, there is one comprehensive and reliable source for statistics on American education. That source is the United States Government. The following two books are updated every year, and are strongly recommended:

Statistical Abstract of the United States
Education Conditions Digest

This book is also recommended, and is updated every two years:

Education Projections

These three books are available at a reasonable price from:

Superintendent of Documents
U.S. Government Printing Office
Washington DC 20402 USA

Another important source of information is to write to:

National Center for Education Statistics
U.S. Department of Education
Washington DC 20208 USA

They maintain a list of their current publications. These publications are available for purchase from the U.S. Government Printing office, at the above address.
There are two journals in the United States which deal only with accounting education. These two are:

1. *Issues in Accounting Education*. This is available from:
   American Accounting Association
   5717 Bessie Drive
   Sarasota FL 34233 USA

2. *Journal of Accounting Education*. This is available from:
   School of Accounting
   James Madison University
   Harrisonburg VA 22807 USA
LITERATURE CITED

American Assembly of Collegiate Schools of Business, Accreditation Council Policies, Procedures and Standards, 1987-1988. (St. Louis MO: AACSB, 1987). Copies of this booklet can be obtained by writing to: AACSB, 605 Old Dallas Road, Suite 220, St. Louis, Missouri, 63141, USA.


(1988年9月14日提出)