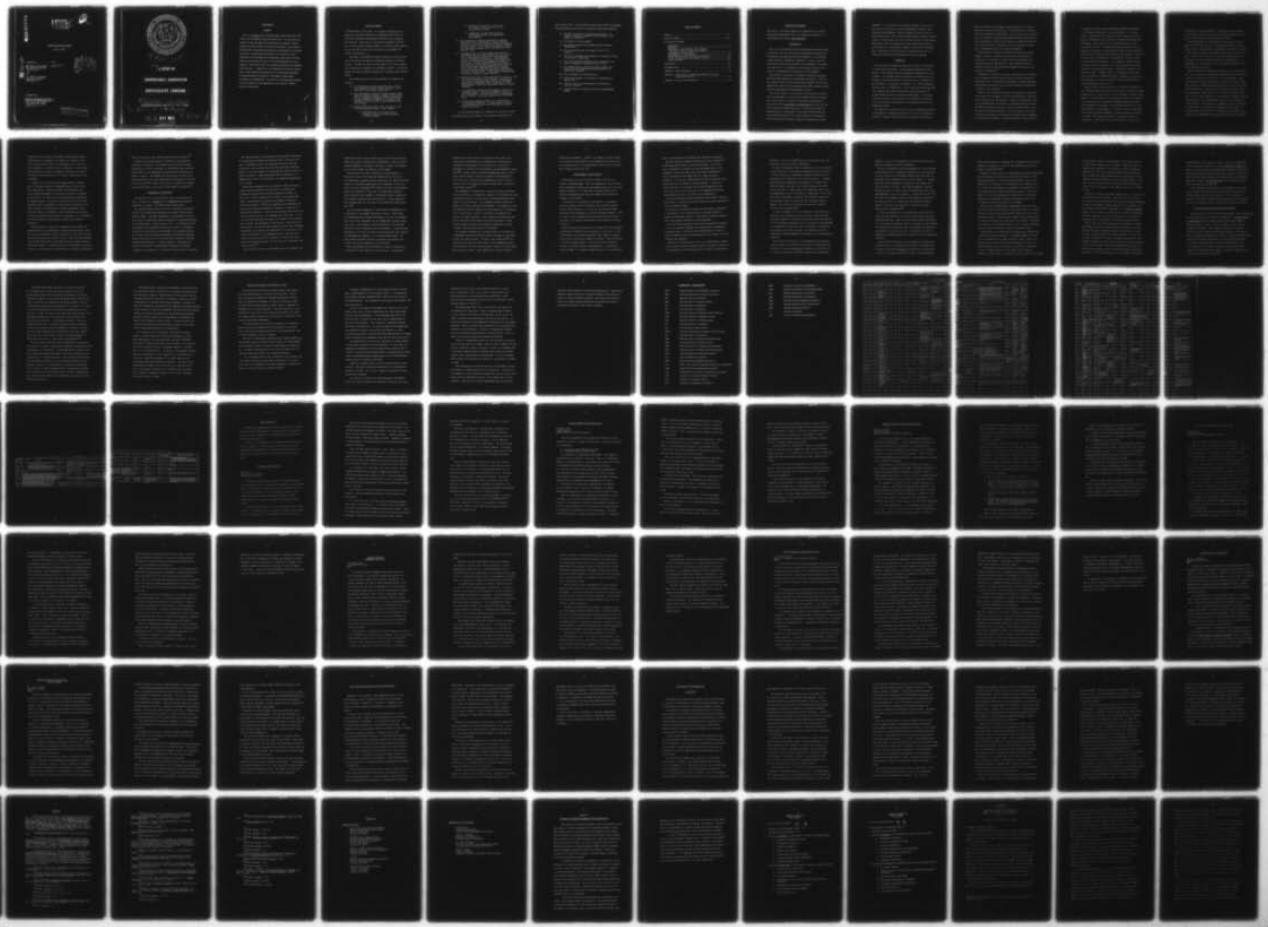
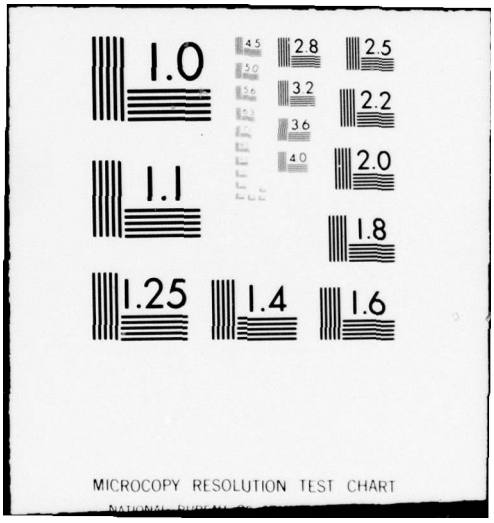
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CERTIFICATION STUDY REPORT

May 22, 1978

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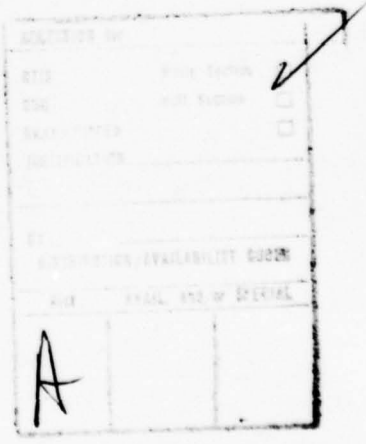
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Final Report

Forward

This is the final report developed under contract MDA 903-77-C-0365 with the Federal Acquisition Institute. In accord with the contract terms, Dan Roman and Associates has conducted a comprehensive literature search on material pertaining to certification, has developed, tested and administered a questionnaire on certification sent to professional associations, has conducted on-site interviews with representative professional associations, and has compiled and analyzed the data from the questionnaires and field research. This final report also contains recommendations stemming from the study. In addition to the stipulated contractual requirements, field research was conducted at two professional meetings to ascertain general attitudes of procurement professionals pertaining to certification. An article for informational purposes was also completed at the suggestion of the Director, Federal Acquisition Institute.



Executive Summary

The purpose of this study is to analyze certification programs which have been developed by professional associations to find their advantages, disadvantages, benefits, costs, problems, and solutions. This report of certification programs in the private sector provides valuable insights as to their possible application in the public sector, and particularly in government procurement (acquisition).

Over eighty certification programs offered by private associations are studied, and detailed information obtained on forty-one of them. In addition, field trips were made to visit nine associations offering such programs, and interviews conducted. Association members also were surveyed concerning their attitudes toward certification.

The primary results of this investigation are summarized as follows:

(1) All associations contacted regarded their certification programs as definite assets, and plan to continue and, in many cases, expand them.

(2) Those individuals certified in these programs stated they have received a number of benefits from certification, including a feeling of greater professionalism and professional recognition. In general, the attitude of those certified is very positive toward such programs.

(3) Certain common requirements exist in nearly all certification programs studied These include:

   a) Work experience in the field of certification, as much as ten years required in several programs.

b) Professional education, as little as a few courses in the field up to as much as post-doctoral study.

c) Examinations, in many cases both oral and written, usually very comprehensive and demanding.

(4) The requirement to prepare certification standards, particularly for the examination, forces professions carefully to define their applicable bodies of knowledge and their limits. This is one of the greatest benefits of certification programs, and at the same time a most difficult task.

(5) "Grandfathering", or waiving examinations and other requirements for those practitioners certified initially is a controversial subject with strong arguments both for and against the practice. "Grandfathering" dilutes the effectiveness of programs and weakens quality control. Too much "grandfathering" can destroy the prestige of certification, and demoralize those who come later and must meet more exacting requirements. *On the other hand*, "grandfathering" may be necessary to achieve initial backing of established practitioners, and thus a necessary evil. In any event, "grandfathering", if employed, should be closely controlled.

(6) Recertification after a fixed time period of from one to five years may be desirable for new programs. Recertification tends to strengthen quality control by encouraging study and self improvement, and, if required of those "grandfathered," reduce the undesirable effects of "grandfathering."

(7) It is desirable to employ several stages or steps in certification programs, perhaps with different certification designations. This may be difficult to administer, but it provides a continuous incentive for self-improvement.

(8) Certification programs provide a very strong simulus to professional education. A large upsurge of interest in professional education can be expected once certification is initiated.

If certification programs are considered for the public sector, and particularly in procurement, they should be implemented only

after careful study. The following are areas which should be thoroughly researched before certification is sponsored by government agencies:

(1) The basic objectives of certification programs - for example, are they to establish a minimum level of competence or knowledge?

(2) The legality of such programs.

(3) The probable reaction from unions and other employee organizations.

(4) The job classifications and ranges of skills to be certified.

(5) The body of knowledge and boundaries of knowledge to which certification is applicable.

(6) The certification requirements such as experience, education, examination, interviews, and the like.

(7) The administration of the certification program, and particularly the examinations and evaluation of experience and education.

(8) The requirements for recertification.

(9) Educational programs to be offered in preparation for certification.

(10) Possible costs to the government and individuals in time and resources.

(11) Possible effects on minorities and other disadvantaged groups.

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CERTIFICATION PROGRAMS

"The method of certifying competence by examination is so widely understood and appreciated that it is dangerous to neglect it." (Carr-Saunders and Wilson, The Professions)

Introduction

Why is the certification process attracting more and more national attention? Why are more and more professional associations developing and sponsoring certification programs? Is certification a valid measure of professional competence? To what extent does certification benefit the individual, the organization, the profession and society? Is professional certification a process which should be investigated and implemented in the Government?

The purpose of this study is to analyze certification programs which have been developed by professional associations. What are the characteristics of these certification programs? How are they administered? What are the experiences with these programs and what perceived advantages and disadvantages are there?

The current upsurge in the interest in professional certification, and the number of certification programs offered by associations is the result of a search for greater professionalism.[1/] The current (1977) Encyclopedia of Associations lists over one hundred associations offering some form of certification today for practitioners in a broad range of vocational, semi-professional, and professional fields.[2/] The spectrum extends from programs in anesthesiology and neurological surgery to purchasing and credit

management. It is possible to be certified competent in most of the major fields of medicine, accounting, engineering, insurance, data processing, and management. Medicine presents the widest choice of certification fields, with at least fifteen programs currently offered. A number of associations, such as the American College of Home Nursing Administrators and the National Pest Control Association, which do not presently have certification programs, are seriously considering them. Undoubtedly other associations not identified are also exploring the possibility of developing certification programs.

Background

The certification programs discussed in this report are sponsored by professional associations. The standards established as prerequisite to certification have been developed as guidelines for accomplishment. The standards vary by profession and association but invariably certification processes include any one or a combination of the following: (1) appropriate experience; (2) formal training or education; and (3) examinations. Most of the better known certification programs today require examinations and some experience.[3/] In many instances there are educational requirements. If the educational requirements are not explicit as a condition of certification, the educational requirements are nevertheless implied in the examination process.

The objectives of certification are usually to encourage individual development, a professional approach to the function involved, to establish a standard of attainment, and to promote the function as

being a profession with attendant status implications to other interacting activities and the public. Some functions have traditionally been recognized as professional. Certification in such instances serves as validation in maintaining established qualification levels. Other functions have sought or are seeking to broaden and professionalize their activities. Certification in such instances is important in delineating desired activities and standards.

Professionalism is normally associated with status and economic rewards. Aspiring to professional recognition is unrealistic if the function is vocational in content and the practitioners lack professional posture and motivation. Many semi-professional or vocational functions want professional recognition but are not yet accepted as professions.[4/]

Professions, as opposed to vocations, traditionally are characterized by long and sometimes arduous periods of formal training, an identifiable body of knowledge and philosophy, recognized standards of performance and behavior, and a sense of devotion and dedication of members to the profession.

There is often confusion associated with professional identification because of the tendency to relate professionalism to activities such as medicine, law, and dentistry. There are professionals, such as the aforementioned, who operate as independent economic entities, and there are people who meet the criteria of professionals but who are really professional employees. The trend appears to be toward a decline in the number of economically and operationally independent professionals and towards an increasing proportion of the work force

of salaried or organizationally affiliated professional employees.

A professional employee is still a professional. If a person selects a professional career pattern and wants professional recognition an obligation is also incurred for professional demeanor and performance. Realistically, not all professionals are of equal or predictable ability. Achieving professional stature is only an indication that there is an occupational standard of professionalism and that the individual has been exposed to that standard. There are diverse levels of competence in all professions. There are always both good and bad practitioners. Even though the competence range may widely vary in a profession, it is still important to set some standards for professional exposure. Professional standards as previously mentioned represent a goal for prospective practitioners, serve to establish an identifiable body of knowledge associated with the profession, and provide credibility for the practitioners with other professionals and the public.

There are almost as many definitions of the word "profession" in the voluminous literature devoted to this subject as there are authors commenting on it. The key issue, from the viewpoint of certification analysis, is that nearly all the definitions include some recognition of the requirement for occupational standards and quality control. The distinguished sociologist, Talcot Parsons, observes that a key characteristic of professionals is "authority," which is based upon their superior technical competence in some department of learning or science. This gives them authority over people who are, or reputed to be, their superiors in social status, in intellectual

attainments, or in moral character. As Parsons says, this authority is possible "because the area of professional authority is limited to a particularly technically defined field."[5/]

Given the necessity for professionals to have primacy of knowledge in their fields, how does the profession assure that this competence exists? The assurance of competence is necessary, of course, to obtain public respect and recognition, and also for internal control. At this point it is well to note that recognized ability is a necessary, but not sufficient condition for professionalism - - a requirement not fully understood, or more likely overlooked by many of the aspiring professions.

Objective measures of professional competence, such as certification, are of particular importance in professions in which the client is unable to evaluate the proficiency of the practitioner. Where there has been a certification process the client can have at least some assurance of minimal professional exposure. Half of all clients of lawyers lose their cases; does this mean that the losing lawyers were incompetent? Many patients die, in spite of excellent treatment. How can society separate the inept from the competent, when the observed results of the professional's service do not necessarily reflect ability? When inspection of immediate results is difficult or inconclusive, proxy measures of competence must be found. On the other hand, when the client or customer is a good judge of the product, as in engineering, professional controls tend to be weak.[6/]

Registration, Certification, and Licensing - - The Three Levels of Professional Control

From the earliest times, the guarantee of a minimum level of competence has been the sine qua non of professionalism. Three levels of control to assure this competence have been developed by professional groups, often in cooperation with the government. These levels, in order of their degree of control possible, are registration, certification, and licensing.[7/]

Registration, the weakest control technique, is merely the listing of names of practitioners with an association or government agency. There are few requirements for registration, usually only a fee, often only enough to offset administrative costs. Registration may also be a form of promotion for the practitioner, giving him the opportunity to inform potential clients of his availability and qualifications. This can be particularly useful when the profession frowns on advertising, as has been traditionally the case of law, dentistry and medicine. Registration by the government can also be a device to assist in taxation, or to assist law enforcement. Taxicabs must be registered and numbered, for example, so that customers who have been molested or victimized can easily identify the offending driver.

Certification is the second form of control, and it is a much more powerful tool than registration. Certification requires that the applicant not only register, but must meet in addition other requirements designed to prove a minimum level of competence. While certification generally is thought of as a control which applies to

people, it is also done with products. The Good Housekeeping Seal, for example, is a private certification arrangement designed to assure buyers of quality. One of the most interesting certification agencies for products is the Royal Warrant of the royal household in Great Britain. Products desiring the Royal Warrant, which authorizes the coveted royal coat of arms and "By appointment..." statement on product labels, is obtained by application to a royal commission for product certification. Other organizations giving product certification are the Underwriters Laboratories, the Consumers Union, and Consumers Research.

Certification of people by professional associations is, of course, not the only form of personal certification. Colleges, universities, and technical schools give diplomas for successful completion of requirements, and these are a form of private certification of individuals. Since the quality of schools and their requirements for graduation vary widely, certification from these sources is open to a variety of interpretation. This is also a possibility for certifications granted by associations. As a point of interest, many colleges and universities offer non-degree "Certification Programs" which normally are less demanding than "degree programs." The degree programs are themselves, of course, certification programs under a different label.

As indicated above, certification of individuals usually involves standardized examinations as proof of quality. If certification is not a legal requirement for practicing an occupation, and is done by the free choice of the individual, it normally is considered

consistent with traditions of individual freedom and opportunity. Certification of accountants, for example, is a function of the state, but one does not have to be designated a C.P.A. to practice accountancy. The same is true of architects. In some states certification of architects is offered by the state, but failure to achieve such certification is not a bar to the practice of the profession.

Licensure is the third and most powerful method of control. Since it has been subjected to widespread abuse, it also is the most controversial. Licensure requires that individuals meet certain legal requirements if they wish to practice an occupation. In this sense it is similar to the control techniques employed by the medieval guilds. Licensure is controlled by the state, which establishes basic requirements. Licensure may be initiated by the public through its representatives in state legislatures, or by individual trades or professions. Since licensure erects barriers to entry and prohibits free practice of occupations, it is considered the least consistant with democratic traditions and freedom of opportunity.

A common pattern of progression recognized by many students of professionalism is for professions to begin with registration, later move into the intermediate stage of certification, and finally achieve the ultimate objective of complete control of entry into their professions through licensure.[8/] As described by Milton Friedman, aspiring professional groups "...inevitably press for the extension of registration to certification and of certification to licensure...registration

tends to be the first step toward certification and licensure."[9]

Sometimes certification alone is sufficient to accomplish the objectives of licensing. This happens when certification becomes traditional for certain positions, or certification gives certified practitioners such an advantage that non-certified individuals are unable to compete. Carr-Saunders and Wilson point out that in the merchant marine it has become traditional for appointments to go only to certified men.[10] In many states, there is a tendency for accounting firms and others to hire only Certified Public Accountants.[11]

Advantages of Certification

What benefits exist in certification? How do individuals benefit? Are there any advantages to the organization of which the individual is a member? Are there societal implications?

In a technologically dynamic society it is becoming increasingly difficult for professional advancement and economic reward without personal growth. Knowledge requirements are increasingly intensifying because of external and internal pressures for professional obligation and performance. Status quoism is out! It is becoming more and more apparent that individual professional survival is contingent on personal self improvement; self improvement with attendant performance requires an expanded general awareness of developing knowledge, methods, and tools, as well as sharpened skills related to immediate professional obligations. A broader awareness - educational perspective is important in understanding, adapting, and utilizing knowledge from the general to the specific context of one's profession.

New career patterns are developing and the knowledge requirements for satisfactory performance are shifting within traditional functions. Knowledge, activity and performance which may have been satisfactory a few years ago are today often painfully inadequate. There is a very real danger in a technologically dynamic society for human obsolescence. Human obsolescence must be minimized; it is dangerous and costly to the individual, the immediate organization, and to society.

Certification programs which are offered by professional associations provide individuals the opportunity to increase their prestige and credibility by meeting professional standards, as Moore says, "In his relations with the public...the professional seeks: authentication as a genuine and competent specialist; status and prestige..." [12/] The more demanding the requirements for certification, generally speaking, the greater is the payoff in prestige and credibility. Since this social power often can be converted to economic power, this advantage can be very real. If the certification requirements are weak or not related to work requirements, however, the advantages are less certain. Moore points out that although the Certified Life Underwriters must take a demanding examination, the content of the examination is so unrelated to the actual work performed by the underwriters that, "all that can be claimed is that the successful candidate for certification has a mark of differential prestige, not that only such a person may practice the trade." [13/]

One indication of how much individuals value the prestige is the

frequency with which those certified use the certification initials behind their names in professional correspondence. Medical doctors, college professors, accountants, architects, to name a few frequently do so; with others, the practice is less common.

Certification, like other indications of professionalism, is important to those in the "aspiring professions" in their drive for professional recognition and in competition with other professions. Strauss says purchasing agents need such recognition in their conflicts with other departments.[14] Grammor also notes that purchasing agents are frustrated by their lack of professional prestige in their competition with engineers, professional lawyers, professionally qualified scientists and others who are "...being appointed to top purchasing jobs over the heads of old established buying office men..."[15]

One of the major advantages of certification by examination for a profession is the academic discipline it forces. Those taking the examination must be advised beforehand of the body of knowledge they will be held responsible for, and examinations developed along these lines. This requires a careful definition of the substance and limits of this professional body of knowledge. It means that the profession, if it takes its responsibilities seriously, must classify this knowledge and assemble it in an understandable manner. The whole process stimulates research, discussion, and analysis, all of which can be most rewarding for the profession.

Many organizations find it worthwhile to insure a minimum level of knowledge of their employees by certification. The previously

cited Ernst and Ernst study of certification states that in the leading public accounting firms, consideration is being given to extending the requirement for certification as a condition of employment to include not only accountants, but all management consultants.[16] A recent article in Purchasing magazine pointed out that certification provides a "definite standard of professionalism," and is a way for the senior in an organization to tell if his subordinates have the technical knowledge to enable them to perform in a satisfactory manner.[17]

The advantages of certification to society are much more complex. The social benefit of certification claimed by all professions is that it guarantees society a certain level of minimum professional knowledge in its practitioners. This allegedly protects society from abuses by the inept, unskilled and uneducated. Unfortunately it does not guarantee protection against the practitioners who are dishonest, lazy, or out of date. In fact, it may tend to strengthen their ability to mislead the public. Most professional associations have either codes and/or certification revocation procedures to bring sanctions against unethical practitioners; unfortunately in many instances, these have not proved to be effective.

The strongest arguments for assuring society of a minimum level of knowledge through certification normally are made for professions in which the public welfare is involved, such as medicine.[18] If a profession can prove that public health will be endangered without this protection, the task of gaining public support for certification and licensure is easier. Some professions go to great lengths in

developing such arguments. Barbers, for example, base their claims for certification and licensure on the argument that they have certain responsibilities for the maintenance of public health, and that their training reflects this. 19/

Disadvantages of Certification

Certification, as in any process or concept, has both advantages and disadvantages. There are disadvantages which could develop procedurally and there are disadvantages which stem from philosophical positions. It is important to recognize these real or potential disadvantages and weigh them against the perceived advantages of certification.

Certification is no guarantee of performance. No program, no exposure represents positive validation that applicable information has been presented or if it has, that the recipient really understands this information in a proper contextual framework. There is further no way to guarantee that any person exposed to what is determined to be relevant information has the motivation or ability to apply it.

Another important consideration is the implication that achieving a professional standard is only a beginning - not an end. Too many professionals go into mental hibernation once a degree is granted or an initial certification standard is achieved. True professionalism implies continued growth. Certification should represent a growing or evolving standard of accomplishment. To minimize the potential danger of a stagnant standard, systems for recertification

have to be developed and incorporated into certification programs.

There are several procedural problems which must be addressed in establishing and promoting a certification program. What can be done to accomodate or motivate old line experienced people in the profession? Many times these people have proven performance but are not motivated to take examinations and formal training or education. Or, worse yet, these people have come to terms with themselves and are not motivated for personal growth. If they hold senior positions it is possible that the entire organization may stack up in back of them, especially if by organizational position they establish the pace and climate in the organization.

Are the certification standards reasonable and relevant? How were they derived? Is there any provision for periodic review and modification to accomodate change?

Setting up a certification program can have negative connotations if certification is not incorporated as an important element in hiring and promotional practices. There must be economic incentives other than personal incentives for self-improvement.

The certification program can have little professional acceptance if it is not carefully designed and administered by professionally recognized people. The qualification standards must be realistic and the examination process beyond reproach if the program is to have integrity and acceptance.

There are, of course, obvious costs to the individual who aspires to certification in time and money required to prepare for certification examinations, and the monetary cost of taking the examinations

themselves. The cost of preparation in time and effort vary from program to program, and may be considerable.

In terms of preparation time, and sometimes cost to the examinee, a common objection to certification examinations is that they tend to cover a broad area of knowledge, sometimes much more than the individual will be required to use in actual practice. A student taking certifying examinations in psychiatry, for example, must learn the bones of the body. Law students planning to practice criminal law must, in order to pass bar examinations, have a thorough knowledge of the law of contracts. Goode points out that this wide range of knowledge is required, "The profession requires far more education from its trainees than the containing community demands...This allows the profession to enjoy more prestige... than can other occupations."[20]

In terms of monetary cost to the individual, certification involves two basic expenses, the cost of special courses and other preparatory material. These costs may be quite great, particularly in the established professions, such as accounting, law and medicine. In occupations which have less claim to acceptance as professions, this monetary cost tends to be less. The monetary cost of the examinations themselves generally is minimal, with a few significant exceptions.

Moving from the individual to the organization and some philosophical issues, it is found that criticisms of certification are not based on certification *per se*, but rather on certification as it relates to professionalism and its effect on the organization.

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Moving from the individual to the organization and some philosophical issues, it is found that criticisms of certification are not based on certification per se, but rather on certification as it relates to professionalism and its effect on the organization.

While professionalism has advantages for the organization in raising standards of competence, it may also have drawbacks, as noted in a number of studies.[21] [22] [23]

According to these critics, as organizations become more professional, they may experience difficulties in retaining the loyalty of their professional employee. The professional develops a loyalty to his profession at the expense of the organization, and conflict may occur. Often the more employees see themselves as professionals, the less likely they are to accept bureaucratic controls. Typical examples of this are the Army physician objecting to military regulations and the government scientist complaining about his lack of freedom to publish the results of his research.

Finally, when considering what disadvantages certification may have when viewed from the context of the total society, it is apparent that there are certain very powerful objections to this form of testing and control. The objections, however, center almost entirely around certification as a prerequisite for licensure. Voluntary certification, or certification when it is not a legal requirement for practicing a profession, is much more favorably viewed.

Certification as a prerequisite for licensure has sometimes been praised, but more often censured. The argument against certification as a prerequisite for legal licensure is that it gives those admitted to the professional brotherhood monopolistic control of their profession, which is contrary to the spirit of a democratic society. Wilensky points out, for example, that occupations aspiring to higher status as professions follow a pattern of development

which includes a number of steps leading to the ultimate objective of controlling entrance to the profession. Once this control is achieved, the profession is in a position to limit the number of practitioners. The law of supply and demand forces professional fees to higher and higher levels and, at the same time, the total quantity of services provided to the public may be reduced. In the end, society pays more for less, while the profession achieves security, wealth, and prestige at the expense of those it is pledged to serve.

Professions typically have sought legal support for certification as a prerequisite for licensure. Grant decries this as a return to the guild system whereby the medieval guilds encouraged governments to enact laws designed to curtail admission to the profession, and thus decrease competition.[24] Adam Smith, in the Wealth of Nations states, "It is to prevent the reduction in...profit, by restraining that free competition...that all corporations (i.e., guilds) and the greater part of corporation law, have been established."[25]

Watkins notes that state legislatures are responding to demands for widening the scope of certification and licensure to more professions and quotes a prominent educator, "Today there is a whole new level of subprofessionals or paraprofessionals in society" who in order to upgrade their status, "are seeking certification." [26] Friedman complains that state legislatures have been almost powerless to resist the pressures of these groups demanding legal support in their efforts to obtain control of admittance through certification and licensure.[27] Moore describes this as the economic "Balkanizing"

of labor markets as more and more barriers to entry are created.[28] On the other hand, an editorial in a recent Wall Street Journal comments on a reaction against such monopolistic activities, noting that Governor Jerry Brown in California has tried to loosen the control of state licensing boards over entry into a wide variety of professions, while newer reports in The New York Times tell of similar reactions in New York and New Jersey.[29] [30]

A final important consideration for the government in entertaining the prospect of internal certification programs revolves around the legal implications of such a process. It is not within the purview of this study to examine the legal aspects but most assuredly they must be confronted before a certification program is initiated.

The Professional Association and Certification

Associations play a key role in American business. These associations are rapidly growing in both numbers and membership. The Encyclopedia of Associations now lists several thousand associations having a national interest or scope. Not all of these, of course, are professional associations - many represent recreational or special interests, and many others are more nearly similar to trade unions than to professional associations. The major distinction between trade unions and professional associations, is that trade unions engage in collective bargaining while professional associations do not. This difference is not distinct, however, since some traditional professional associations have engaged in collective bargaining, particularly in the education field.[31]

The motivations for establishing professional organizations are mixed, but there is little doubt that the primary motivation for the formation of most professional associations is the long term economic advantage of the members.[32,33,34,35] This objective may be a positive benefit for society if this economic advantage is to be achieved by an emphasis on improved competence and better performance, rather than reduction of competition and monopolistic control. Other motivations are often an apparent strong element of altruism and sincere desire to serve.[36] The social rewards of association membership also are a strong attraction for many.[37] Indeed, Carr-Saunders and Wilson point out that many of the early associations were primarily social clubs, established for friendly and convivial meetings.[38] Moore also notes that at professional conventions "...the conviviality...makes it difficult to distinguish between the meetings of leading intellectuals and war veterans."[39]

The professional association is a powerful weapon in the strategic planning of the aspiring professions. As Wilensky notes, the formation of a professional association is accomplished early in the drive for professional status, and it is accompanied by an emphasis on training and education.[40]

The association is the vehicle used by the professional activists to separate the competent from the incompetent, and this task may even become its primary responsibility. Certification is, of course, the means whereby this division often is done by the association. The requirement to identify the competent and reject the incompetent requires that professional tasks be identified and internal conflicts

between practitioners of different backgrounds be resolved.

The requirement that associations define the body of knowledge of interest to their practitioners may result in conflict between associations. Professions often overlap in their areas of interest, for example, tax lawyers and tax accountants, or sociologists and psychologists. This conflict may be brought to a head by the certification process, when both professions claim the same subject matter. This occasionally comes to the notice of the public when bitter disputes break out in professional journals between the professions, as on the case of the psychologists and sociologists. "They (the psychologists)...have been deluding themselves - both because they have rationalized crass motives by assuming a noble posture and because they have, whether they knew it or not, moved toward putting all of an academic profession into a straight jacket."41/

The professional associations historically have led the drive for state licensure of their professions. Wilensky, in his discussion of the professionalizing process, notes that the fourth step of this process often is political agitation to win support of the law for the protection of job territory. This is done when state legislatures respond to pressure from the association and pass laws saying that the performance of a "professional" act by someone who is outside the profession is a crime. Wilensky also notes, however, that while legal regulation may be an expedient of an occupation "on the make," such regulation is not inevitable, "legal protection is apparently not an integral part of any natural history of professionalism."

While many associations are content to offer certification on a voluntary basis, others have been successful in not only getting legal support for certification and licensure, but also in obtaining delegation to them from state administrative organs of the right to establish certification and licensure standards. When an association has achieved such recognition, it, in effect, is no longer a private organization, but has become an administrative arm of the state. Through its control over certification and licensure, the association decides who will be admitted to the profession, and who will not be admitted. It also decides how many, if any, will be admitted each year. Such absolute control has been challenged in the courts as being contrary to democratic traditions, and while the courts have overturned some restrictive acts by state legislatures, they have not been able to resist this strong movement of professional association to control many occupations.[43/ 44/]

One of the major tasks which must be undertaken by the association before it initiates a certification program is a definition of the requirements for certification. As indicated earlier, these may consist of appropriate experience, formal course work, examination, and subscription to a standard of conduct. Major decisions which associations must make are whether or not all association members will be required to qualify for certification, or whether the requirements will be waived for some ("grandfathering"), recertification requirements, whether or not certification will be limited to members only. Also, are there provisions, where a sufficient cause exists, for certification revocation.

The administration of certification programs by associations may be a significant effort, particularly in the larger associations with many thousands of members. Administration of such programs involves obtaining associations' approval of the concept, deciding on the body of knowledge to be covered, identifying individuals to prepare and grade the examinations, setting pass-fail standards, notifying applicants of when and where to take the examinations and the results they achieve, setting up the physical facilities for giving and monitoring examinations, insuring security of the examinations and completed test papers, and financing the entire process. It also may involve advertising the program and offering academic courses to those interested in preparing themselves for the examination.

As indicated in this introduction, certification programs offered by associations have a great many advantages, but also some disadvantages. They can give status, prestige, confidence, and a sense of professional pride to the individual. They force the profession to define its body of knowledge, classify it, and present it in an intelligible way. In doing so, they generate research, analysis and discussion. On the negative side, certification programs cannot guarantee performance. To be valid they must have intellectual vigor and administrative integrity, they must reflect representative standards, they can be costly in time and effort, and, if they become a prerequisite to licensure, they can result in the profession obtaining a monopoly in its field, a situation which may be subject to abuse.

Survey of Associations and Analysis of Data

The forty-three certification programs examined are divided into two separate groups -- one-level and multi-level. The one-level certification programs are designed to establish a minimum level of competence or knowledge in a specific discipline, while the multi-level programs allow for several levels of competence or knowledge in one or more disciplines. The trend seems to be in the direction of multi-level or multi-discipline programs, which allow for somewhat greater flexibility and provide for a continuous incentive for professional advancement.

The study provided for twenty-nine categories of information about certification programs and the associations which sponsor them. Certification programs sponsored by other organizations, such as state governments, were not included.

The size of organizations sponsoring these programs ranged from the American Society for Quality Control (ASQC) with 28,000 members to the American College of Laboratory Animal Medicine (ACLAM) with 245. In general, associations with less than 500 members were not included unless they had very well established programs.

It is considered that the date certification was initiated, the total number certified, and the number certified in 1977 are key data, since this information, when taken altogether, provides evidence as to the most stable and vigorous programs.

The number "grandfathered" in each association should be noted since "grandfathering" is a controversial issue. It is significant that nineteen reported "grandfathering", while only eleven reported no "grandfathering". No information on this subject was available from four organizations.

As far as certification requirements are concerned, all but one demand either oral or written examinations, and eight require both oral and written examinations. Pass percentages range from a low of 25 per cent to a high of 99 per cent, and all examinations are offered at least annually. Time required for examinations ranged from three to fifteen hours. It is quite apparent that examinations are considered critical to the validity and prestige of these certification programs. Literature from these associations, for example, tends to emphasize the examinations more than any other single factor.

The organizations also stress the importance of careful preparation and close supervision of the examinations. In every case, the organizations themselves controlled examination preparation, but in a number of cases the actual administration of examinations was turned over to professional testing organizations, such as the Educational Testing Service of Princeton, New Jersey.

Almost all programs require at least some experience for certification. The maximum experience requirement of the associations listed is ten years. In some cases, however, education may be substituted for experience.

The majority of programs also have educational requirements. These range from one program which requires a doctorate, four years'

residency, and five years of post-doctoral education, to others with a requirement of only a few courses in the specialist area. Many associations, in stating educational requirements, follow specific degree requirements with the phrase "or equivalent", indicating some degree of flexibility.

Most associations which offer certification do not require recertification at a later date. There is a growing trend, however, to place definite time limits on certification, such as one to five years, and require recertification at the end of these periods. Recertification normally is accomplished by offering proof of continuing education. There is, however, some discussion of also requiring examinations for recertification. A number of organizations indicated they were considering recertification in the near future. This will result in an increased demand for professional education.

Almost all organizations provide for the revocation of certification if ethical codes are violated. There is little evidence that this is done in practice, however, and when it is done it is sometimes done to discourage practices which the general public might not consider ethical, such as advertising or reducing fees. In fact, the Supreme Court recently has questioned the legality of such apparent restraints of trade.

Most associations also provide some type of educational programs and guidance to prepare applicants for certification. Some have put such emphasis on these educational programs that they are closely integrated with the examination procedure, to the degree that it is not possible to take the certification examinations unless one also has

completed courses offered by the certifying organization. Association-sponsored courses include short seminars, workshops, and conferences as well as longer educational programs. Some associations also work closely with degree-granting educational institutions and support professional education in their areas of interest.

ASSOCIATIONS - ABBREVIATIONS

AAEE	American Academy of Environmental Engineers
AAAE	American Association of Airport Executives
ABA	American Bankers Association
ABOS	American Board of Orthopedic Surgery
ABO	American Board of Othodontics
ABP	American Board of Pediatrics
ACLAM	American College of Laboratory Animal Medicine
AIDC	American Industrial Development Council
AIKD	American Institute of Kitchen Dealers
AIP	American Institute of Planners
AMS	American Meteorological Society
APICS	American Production and Inventory Control Society
ASA	American Society of Appraisers
ASPA	American Society of Personnel Administrators
ASQC	American Society for Quality Control
ASTD	American Society for Training and Development
ASTT	American Society of Traffic and Transportation
ASHA	American Speech and Hearing Association
BAI	Bank Administration Institute
DPMA	Data Processing Management Association
FLI	Farm & Lane Institute (National Association of Realtors)
HFMA	Hospital Financial Management Association
IABC	International Association of Business Communicators
ICFA	Institute of Chartered Financial Analysts
IIA	Institute of Internal Auditors
IMC	Institute of Management Consultants

IREM	Institute of Real Estate Management
NAPM	National Association of Purchasing Managers
NAA	National Association of Auctioners
NAA	National Association of Accountants
NCMA	National Contract Management Association
NFDA	National Funeral Directors Association
NHAS	National Hearing Aid Society
SA	Society of Actuaries
SME	Society of Manufacturing Engineers

PART I SINGLE LEVEL CERTIFICATION PROGRAMS

								CERTIFICATION REQUIREMENTS				
Association	Members	Charter Date	Certification Designation	Certified Thru 1/1/78	Certification Initiated	Grandfathered	Certified in 1977	Association Membership	Experience	Education	Oral Exam	Written Exam
AAEE	1,600	1955	Diplomate	1,600	1955	350	Not Avail.	No	8 years practice and a license issued by a state board	Engineering degree or equivalent education	Yes	Yes
AAAE	1,000+	1928	Accredited Airport Executive (AAE)	505	1954	269	Not Avail.	Yes	3 years practice	Bachelors degree or equivalent	No	Yes
ABA	13,252	1875	Certified Commercial Lender (CCL)	445+	1975	368	Not Avail.	Yes	5 years bank commercial lending experience.	None	No	Yes
ABOS	Not Given	1934	Diplomate	10,798	1937	None	719	No	1 year practice	Doctorate, 4 years residency, 5 years post-doctoral education	Yes	Yes
ABO	1,000+	1929	Diplomate	1,000+	1929	98	51	No	5 years practice	Masters Certificate of Proficiency from PG course or hospital residency	Yes	Yes
ABP	382	1939	Diplomate	538	1940	88	21	No	2 years practice	Dental Doctorate and study of periodontology	Yes	Yes
ACLAM	245	1957	Diplomate	253	1961	22-50	8	Yes	4 years practice	Veternarian degree	Yes	Yes (practical)
AIDC	1,000+	1925	Certified Industrial Developer (CID)	420	1971	182	17	No	8 years practice. Education may be substituted for 3 of the 8 years	No. See "Experience"	Yes	Yes
AMS	9,100	1919	Certified Consulting Meterologist (CCM)	172	1957	None	11	Yes	5 years practice. Post-graduate education may be substited for up to 2 years.	No. See "Experience"	Yes	Yes
APICS	20,000	1957	Certified Practitioner	567	1973	None	Not Avail.	No	None	None	No	Yes
ASTT	3,307	1946	Certified Member	1,764	1948	0	46	Yes	5years practice	2 years college	No	Yes
ASHA	22,000	1925	Certificate of Speech Pathology or Audiology	16,000	1952	Not Avail.	Not Avail.	Yes	9 months practice	Masters degree or equivalent	No	Yes
BAI	9,000	1924	Chartered Bank Auditor	477	1968	65	58	No	6 years general banking; 2 years internal bank audit	None	No	Yes
DPMA	23,000+	1951	Certificate in Data Processor (CDP)	15,115+	1962	None	Not Avail.	No	5 years practice. (2 years academic work may be substituted)	None	No	Yes
FLI	5,000	1944	Accredited Farm and Land Member	350	1954	Not Avail.	21	Yes	5 years practice; 25 years old; licensed real estate broker	High School or equivalent; certain FLI courses.	No	Yes
IABC	4,527	1970	Associated Business Communicator(ABC)	196	1973	None	Not Avail.	Yes	3 years practice	Credit on point system for formal education in journalism and allied arts.	Yes	Yes
ICFA	4,557	1961	Chartered Financial Analyst (CFA)	5,087	1963	500	Not Avail.	Yes	4 years practice	Bachelor degree; may be waived.	No	Yes
IIA	15,500	1941	Certified Internal Auditor (CIA)	8,660	1973	7,880	200	No	3 years practice	Bachelor degree or equivalent	No	Yes
IMC	780	1968	Certified Management Consultant(CMC)	780	1968	143	25	Yes	5 years practice	Bachelor degree	Yes	No
IREM	4,200	1934	Certified Property Manager (CPM)	5,852	1938	147	500	Yes	Point system for experience	Point system for education	No	Yes
NAPM	19,500+	1915	Certified Purchasing Manager (CPM)	4,500+	1974	4,000	Not Avail.	No	Point system for experience	Point system for education	No	Yes
NAA (Accountants)	80,000	1919	Certificate in Management Accounting(CMA)	830	1973	None	160	Yes	2 years practice	Bachelor degree	No	Yes
NAA (Auctioners)	5,500	1949	Certified Auctioners Institute (CAI)	None (New program)	1975	None	None (New program)	Yes	2 years practice	None	No	Yes, with each 3 cou
NCMA	3,200+	1959	Certified Professional Contracts Manager (CPCM)	3,000	1974	2,500	Not Avail.	No	2 years	A bachelor degree; two contracting courses and four procurement-related courses	No	Yes
NFDA	14,000	1882	Certified Funeral Service Practitioner (CFSP)	None (New Program)	1976	None	None	No	Licensed to practice by a state board	180 hours of course in professional subjects	No	No
NHAS	3,600	1952	Certified Hearing Aid Audiologist (CHAA) or Certified Member National Hearing Aid Society.	1,886	1952	A few chartered members.	Not Avail.	Yes	2 years practice	Must successfully complete the NHAS basic course	No	Yes

REQUIREMENTS			CERTIFICATION EXAMINATION				
tion	Oral Exam	Written Exam	Pass Rate 1977	Contents	Frequency	Prepared By	Administered By
gree or equiv-	Yes	Yes	Not Avail.	Candidates select one field: air pollution control; general sanitation and environmental; industrial hygiene; radiation protection; solid waste management; water supply management.	Annually	Professional examination service	Diplomates of the association
ee or	No	Yes	25%	Three parts: (1) government and public relations; (2) management principles and practice; and (3) general transportation history and economics	At least twice yearly	Board of Examiners	Board of Examiners
	No	Yes	Not Avail.	Three parts: (1) credit policy and administration; (2) specialized lending; and (3) bank loan portfolio cases.	Not Avail.	Not Avail.	An accreditation board
ears resi- post- tion	Yes	Yes	85%	Questions related to the human spine and associated structures.	Annually	Board exam committee	The board
icate of om PG ital res-	Yes	Yes	Not Avail.	Didactic and clinical	Annually	Directors of board	Directors of board
te and study ogy	Yes	Yes	87%	Questions related to the field of periodontology.	Annually	An exam board	An exam board
gree	Yes	Yes (practical)	28%	Written-lab. animal biology, diseases, etc.; Practical-questions on several subjects.	Annually	Material from Diplomates	Exam committee
rience"	Yes	Yes	75%	Not Avail.	Twice a year	Certificate board	Certificate board
rience"	Yes	Yes	Not Avail.	Various aspects of science and profession.	Not given	Board of Association	Written: Board Oral: Regional Review Panels
	No	Yes	75%	Inventory planning; forecasting; capacity planning and control; shop floor control; materials requirements handling.	Twice a year	Committee of association members	Educational Testing Services
	No	Yes	70%	Economics of Trans; traffic; trans and elements of physical dist. management; tools and concept; law and reg.; Log systems.	Twice a year	Director of Education and Board of Exam	Proctor Apt. by Association
or equivalent	No	Yes	80%	Speech pathology and audiology	Three times a year	Educational Testing Service	Educational Testing Service
	No	Yes	50%	Accounting; bank operations; audit procedures; principles of EPC; sampling; business economics; law; management organization.	Annually	CBA Construction Committee	Auditors, Proctors, or University staff
	No	Yes	Not Given	Data processing equipment; computer programming and software; management; quantitative methods; systems analysis.	Annually	Certification Council	The Psychological Corporation.
equivalent; urses.	No	Yes	Not Avail.	Not Avail.	Three times a year	Designators and Education Committee	Designators Committee
t system for on in journal- arts.	Yes	Yes	70%	Communications skill and management	Annually and as required	Examination Committee	Committee of Accredited Members
e; may be	No	Yes	Part 1 63% Part 2 81% Part 3 77%	Part 1 - Preliminary exam. Part 2 - Applied financial analysis. Part 3 - Investment management.	Annually	Council of Examiners	Approx. 70 Colleges and Universities
e or equiva-	No	Yes	Part 1 52% Part 2 41% Part 3 51% Part 4 37%	Part 1 - Principles of internal auditing. Part 2 - Internal audit techniques. Part 3 - Principles of management. Part 4 - Disciplines related to internal auditing.	Annually	Board of Regents; Academia; Practitioners	Certified Members
e	Yes	No	95%	Oral description of seven representative consulting assignments, and questions about association code of ethics.	As required	Not Avail.	Regional representatives
or education	No	Yes	90-95%	Management policies and procedures and related subjects.	Exams given in conjunction with course series	Members, staff and consultants	Specially trained proctors
or education	No	Yes	Not Avail	Principles of purchasing; materials management; principles of business and finance; and quantitative areas of business.	Twice a year	Specialists in each area	Local chapters proctor
e	No	Yes	20%	Economics of business and finance; organization and behavior; public reporting standards; auditing and taxes; periodic reporting; and decision analysis.	Semi-annually	The technical staff	Proctor representing the association
	No	Yes, one with each of 3 courses	99%	Not Avail. Certification is given at completion of a three year program of three courses.	Annually	Indiana U. Dept. of Continuing Study	See "Prepared by"
ree; two con- es and four lated courses	No	Yes	70%	Law; finance; economics; accounting; production; procurement and contracting; logistics management.	Twice a year	Academics and practitioners	Approved proctors
ourse in pro- ects	No	No	N/A	N/A	N/A	N/A	N/A
lly complete course	No	Yes	Not Avail.	The human ear; the hearing process, disorder of the ear, pure tone audiometry, speak audiometry and other subjects.	Annually or as requested	Practitioners and educators	Approved monitors

ASSOCIATION	CERTIFICATION EXAMINATION (con't)				CERTIFICATION EXAMINATION FEES		RECERTIFICATION			ETHICS	
	Evaluated by	Parts	Time	Retake Provisions	Examination	Certification	Life Period	Recertification Requirements	Cost	Ethics Code	Certification Revocation Procedures
AAEE	Board of Trustees review all applicants	100 questions	3 hrs.	Yes	$50	N/A	Indefinite	N/A	N/A	Yes	Yes
AAAE	Board of Examiners	Three	One day	Yes, no limit	$75	N/A	None	N/A	N/A	Yes	Yes
ABA	Not Avail.	Three	Not Avail.	Yes	$100	$25	Indefinite	N/A	N/A	Not Avail.	Not Avail.
ABOS	NBME	Two	1 day	Yes, no limit	$50	$500	N/A	None	N/A	No	Yes
ABO	Directors of board	Two	2 days	Yes	$350	Re-reg. $10/yr.	Indefinite	None	N/A	Yes	Yes
ABP	An exam board	Three	Not Avail.	Yes, a retake fee of $100	$375	N/A	Indefinite	Evidence of Continuing education	N/A	No	No
ACLAM	Not Avail.	Two	6 hrs.	Yes, 3 times per application	$100	$30/yr.	Indefinite	None, but developing program	N/A	Yes	Yes
AIDC	Certificate Board	Three	Not Avail.	Yes, one time only	Member $10 Non-member $75	$20	1 year	Must meet attendance, educational, or publishing requirements	Members $10 Non-members $75	Yes	Yes
AMS	Commission on Prof. Affairs	Discretion of Board	Not Given	Yes, appeal within 90 days	$150	N/A	5 years renewable	Must not be inactive for 3 or more years	$30	Yes	Yes
APIC	Council on certification	Five	Not Avail.	Yes, at the next sitting, reduced fee	$25 for each part	N/A	Currently indefinite	Considering recertification	N/A	Yes	No
ASTT	Educators and practitioners	Four	4 hrs. each	Yes, unlimited	$15	$90	N/A	N/A	N/A	Yes	No
ASMA	Educational Testing Service	Not Avail.	Not Avail.	Yes, may take 4 times over 3 yrs.	$11	$72	Indefinite	None	N/A	Yes	Yes
BAI	Board of Regents	Four	15 hrs.	Yes, unlimited	Registration $25 Exams $75 ea.	None	Indefinite	None	N/A	Yes	Yes
DPMA	Not Avail.	Five	250 min.	Yes	Application $25; Testing Fee $10; Ea. exam $10	Not Avail.	Indefinite	None	N/A	Yes	N/A
FLI	Designators Committee	Five	3 hrs.	Yes	Not Avail.	Not Avail.	Indefinite	Continuing education	N/A	Yes	Yes
IABC	Not Avail.	Not Avail.	Not Avail.	Yes, may re-apply after one year	0	$50	Indefinite	None	None	Yes	Yes
ICFA	The Institute	Three	5½ hrs. per part	Yes, unlimited	$150 per part	None	One year	Candidates, members, and former members certify annually	N/A	Yes	Yes
IIA	Board of Regents, also by AAA	Four	3 hrs. per part	Yes, 5 years from sitting	Not Avail.	Not Avail.	Indefinite	None	N/A	Yes	Yes
IMC	Membership Committee & Interview	One	None	Yes, may request second panel	None	$50 application $100 entrance	Indefinite	None	N/A	Yes	Yes
IREM	Computer Grading	Not Avail.	4 hrs.	Yes, may take courses and exams.	Cost varies with type of test	None	1 year	Annual Dues ($150)	N/A	Yes	Yes
NAPM	Program Administrators	Four	3 hrs.	Not Avail.	$20 members $25 Non-members	$10	5 years	Continued Education	$20 members $25 non-members	Yes	Not Avail.
NAA	Hired Graders supervised by tech. staff	Five	3 yrs. for all parts	Yes	$30 for each part	None	Indefinite	Continued Education	N/A	Not Avail.	Not Avail.
NAA	See "prepared by"	Not Avail.	Not Avail.	Yes, but must take entire associated course again also	$250	None	To be determined	To be determined	N/A	CAI graduates must conform to NAA code	Yes
NCMA	Academics and practitioners	Five	3 hrs.	Yes, but must show improvement	$50	None	Indefinite	None	N/A	Yes	Yes
NFDA	N/A	N/A	N/A	N/A	N/A	$25 for 1st 3 years, $10/yr. thereafter.	1 year	To be determined	N/A	No	No
NHAS	Approved Grader	Seven	Not Avail.	Yes, no limit	$10	Between $5 and $60	1 year	Must have 10 hours of continuing education annually.	Annual dues $150	Yes	Not Avail.

...HICS	EDUCATION
Certification Revocation Procedures	Association Educational Programs
Yes	Breakfast seminars.
Yes	National Airport Conference; AAAE Annual Conference; and various speciality seminars.
Not Avail.	The National Committee Lending School and Graduate School Preparatory Courses.
Yes	None
Yes	None
No	None
Yes	College sponsored educational and tutorial programs, texts, symposia.
Yes	Not Avail.
Yes	Scientific and technical conferences and workshops
No	Educational seminars put on by the association and its chapters.
No	Study groups
Yes	National conference and workshops
Yes	None
N/A	Exam preparatory courses; seminar programs offered at regional conferences.
Yes	Short courses on real estate and related subjects.
Yes	Seminars; professional development courses offered by chapter; conferences sponsored by association.
Yes	Continuing educational program - seminars, etc.; recommended study plan.
Yes	Varied educational seminars, review courses at 25 locations.
Yes	Workshop/seminar in Fundamentals of Management Consulting given 3 times per year.
Yes	Short courses on real estate.
Not Avail.	Two week/executive seminars; one week seminars; local chapter courses.
Not Avail.	Short courses; chapter technical meetings and seminars.
Yes	Three one-week courses are offered, which lead to certification.
Yes	Short seminars sponsored by the Association.
No	10 professional conferences per year; 1 financial service seminar per year; 1 educational convention per year.
Not Avail.	Manufacturer seminars and workshops; Chapter meetings; hearing instrument institute courses; annual meeting seminars.

PART II MULTI-LEVEL CERTIFICATION PROGRAMS

Association	Members	Charter Date	Certification Designation	Certified Thru 1/1/78	Certification Initiated	Grandfathered	Certified in 1977	Assn. Membership	
ASA	4,750	1939	(1) ASA member; (1) ASA senior (fellow)	Total 2,622	1956	200	175	Yes	(1) 2 yea (2) 5 yea
ASPA	16,500+	1948	(1) Accredited Personnel Diplomate (ADP); (2) Accredited Personnel Specialist (APS); (3) Accredited Executive in Personnel (AEP); (4) Accredited Personnel Manager (APM)	Not Avail.	1976	Not Avail.	Not Avail.	Not given	(1) Combi (2) Combi (3) Combi (4) Combi
HFMA	16,000+	1946	(1) Certified Manager of Patient Accounts (CMPA) (2) Fellow (FHFMA)	(1) 118+ (2) 269+	(1) 1969 (2) 1957	None	Not Avail.	Yes	(1) 2 yea (2) 3 yea
SA	6,000+	1949	(1) Associateship; (2) Fellowship.	6,000	1949	Not Avail.	400	Yes	No
SME	12,500	1972	(1) Certified Manufacturing Engineer (CME); (2) Certified Manufacturing Technological, 2 levels: a. Associate Manufacturing Technologist (AMT); b. Manufacturing Technologist (MT)	(1) 10,500 (2) 2,000	(1) 1972 (2) 1976	10,500	550	No	The follo certain
ASQC	28,000	1946	(1) Certified Quality Engineer (CQE); (2) Certified Reliability Engineer (CRE); (3) Certified Quality Technician (CQT)	(1) 6,251 (2) 1,116 (3) 463	(1) 1966 (2) 1972 (3) 1971	(1) 1,457 (2) 871 (3) None	(1) 519 (2) 30 (3) 86	No, but proof of profession-alism is required.	(1) and be w (3) 4 ye for

CERTIFICATION REQUIREMENTS				
Experience	Education	Oral Exam	Written Exam	Pass % 1977
1) 2 years practice; 2) 5 years practice.	Bachelor degree or equivalent	Yes (interview)	Yes, and present representative appraisal work	66 2/3%
1) Combined 10 years of experience & college education; 2) Combined 6 years of experience and college education; 3) Combined 10 years experience and college education; 4) Combined 6 years experience and college education.	See experience	No	Yes	Not Avail.
1) 2 years practice; 2) 3 years practice.	A point system gives credit for education experience, and authorship.	No	Yes	Not Avail.
•	Must be pursuing actuarial studies	No	Yes	Not Avail.
e following experience requirements may be reduced by rtain educational progress: (1) 10 years (2) a. 3 years b. 5 years	None	No	Yes	75%
1) and (2) 8 years of practice, 5 years of which may be waived for education; 3) 4 years of practice, 3 of which may be waived for education.	None	No	Yes	(1) 40-60% (2) 55% (3) 40-60%

PART II MULTI-LEVEL CERTIFICATION PROGRAMS

Association	Contents	CERTIFICATION EXAMINATION				
		Frequency	Prepared By	Administered By	Evaluated By	
ASA	Ethics; general value theory; and a technical exam in area of specific expertise (24 disciplines)	(a) Annually	Representatives of the International Board of Examiners.	Two representatives of the International Board of Examiners	International Board of Examiners	
ASPA	Employment, placement, and personnel planning; training and development; personnel research; health safety and security; employee labor relations; compensation and benefits.	At least twice a year	The Psychological Corporation	The Psychological Corporation	The Psychological Corporation	
HFMA	Not Avail.	Annually	Commission of Members & Staff	Proctors at universities	Not Avail.	
SA	(1) Associateship: general math; probability, statistics, numerical analysis; life contingencies; demography; mortality tables, & other subjects (2) Fellowship: life, health, pension coverages; marketing of life insurance; risk; valuation of liabilities; and other insurance related subjects.	Part is given once a year and part twice a year.	Not Avail.	Not Avail.	The pass mark is arrived at by the chairman of the Part Committee and the officers of the education and examination comm.	Nine ship fell fell
SME	(1) The exam consists of a. a basic exam given to all candidates covering fundamentals of mathematics, physics, materials science & metallurgy, and engineering drawing; and b. a specialized exam in any one of a number of areas; (2) Engineering fundamentals - mathematics, physics, materials science, metallurgy, and engineering drawing.	Twice a year	SME Certification Department	A registered professional Engineer or a certified manufacturing engineer	SME Certification Committee	Each mult
ASQC	(1) Quality control subjects, such as statistical quality control; (2) Reliability subjects, such as human factors in reliability; (3) Quality control subjects; such as statistical quality control.	(1) Twice a year (2) Once a year (3) Twice a year	Certification Committee	Education and training staff	Computer and Certification Committee	

uated By	Parts	Time	Retake Provisions	Ethics Code	Certification Revocation Procedures	ASSOCIATION EDUCATIONAL PROGRAMS
onal Board of	Four	8 hours	Yes, depends on circumstances	Yes	Yes	(1) Machinery & Equipment Seminar: (2) A one-day seminar annually by each of 75 chapters; (3) International appraisal conference - 2 days annually (4) Valuation Science Bachelor degree program at 5 Univ.
ological Corpora-	Ten	6 hours	Yes, no restrictions	Yes	Yes	Not Avail.
l.	Not Avail.	Not Avail.	Yes, no limit	Yes	Yes	Not Avail.
mark is arrived at by man of the Part Com- nd the officers of the s and examination comm.	Nine parts: Associate-ship - Parts 1-5; fellowship - Parts 1-5; fellowship - Parts 6-9	14 hours	Yes, no limit	Yes	Not Avail	Not Avail.
ification Committee	Each exam has 300 multiple choice questions	3 hours	Yes, additional fee required.	Yes	Yes	Various Short and long-term courses & seminars
and Certification e	(1) two (2) one (3) two	(1) three hrs. each (2) 5 hours (3) 2 hrs. ea.	Yes, no limit to no. of retakes; however candidates must retake the failed portion within 2 successive exam dates	Yes	Yes	Local association sections, various colleges and Univ., and certain consultant firms have developed refresher or preparation course. Intensive short courses & home study programs.

Field Interviews

In-depth field interviewing was done to supplement the response received from the questionnaire. The objective of the interviewer was to get a wide cross-section of information from a variety of professional associations.

A list of the individuals and associations interviewed is contained in appendix A. Also, details on the associations interviewed beyond the information contained in the following text are covered in the summary section of association certification programs.

The Farm and Land Institute

John Amos
Executive Vice President
Farm and Land Institute

The Farm and Land Institute is part of the National Association of Realtors which is a federation type activity. Many different types of real estate activities are part of this federation which has about 50,000 members. Six of the nine associations in the federation have their own individual certification programs. These programs are tailored to the needs and interests of their members.

The Farm and Land Institute is part of NAR and has about 6,000 members. To belong to FLI it is necessary to belong to NAR. Membership in both organizations is required in order to be certified.

The Farm and Land Institute has chapters in all but two states. Meetings of local associations are primarily for the purpose of conducting business and exchanging information. The time, place and clientele for the meetings are arranged locally. Generally meetings are held monthly. These are business meetings. Attendance of members is high inasmuch as the marketing aspects of the meeting provide an important inducement.

There are three national meetings a year. There is a national convention which includes a business tour in a given area to help promote that area by educating the members to its economic potential. There are two other annual meetings in which there is participation by the education committee and the accredited activities committee.

As of December 1977, 350 members have been certified. An additional 100 members are in process of earning certification. The certification program was initiated in 1955. There were originally "Grandfather" provisions for certification, but it is estimated that fewer than 100 people qualified for certification under these "Grandfather" provisions.

Certification is offered but members are not coerced to become certified. The certification designations are AFLM (member) and AFLB (broker).

It is felt that many of the older and more experienced members could qualify for certification. The problem is that these people do not want to bother going through the qualification process. There is a unique aspect in this situation in that these people are generally independent business people who are well known locally through

long-time ties with the community. In short, there is a question of inducement.

There may be something of a contradiction to inducement for certification in that there is a published roster of people who have been certified. The roster has cross references by states and is a reference point for business contacts. It would seem that there is an organization within an organization.- the certified and the non-certified membership. The certified members, as mentioned, publish a separate roster of certified members which provides referral information to members when they do not personally know each other.

There are also different committees tied into the certification program. One committee is involved in promotional activities associated with certification. A second committee exists as an educational group to support the certification process. The third committee is a validation or designation committee. Accredition (certification) is given by the board of governors on the recommendation of this committee which interviews all candidates. The candidates are interviewed as to knowledge and experience requirements. Membership on this committee is for a three year term.

The association does have an educational program. The objective is to raise the educational level of the average person in this field. There are also short courses offered to beginners in this field. There is a wide range of educational activities from local to national level.

American Medical Records Association

Elizabeth Price
Deputy Director
American Medical Records Association

There are approximately 22,000 members and associates in this association. There is a chapter in every state. There are two levels of accreditation:

a) Registered Records Administrator (RRA)
b) Accredited Record Technician (ART)

The association is experiencing rapid growth. Most members of the association are employed in hospitals. There is a considerable range in job responsibilities. These people work closely with doctors in documentation activities pertaining to medical records. Such activities include recording, analysis, and recommendations. The responsibility levels range from job entry, which is merely record keeping to more advanced professional involvement including interpretation of information and recommendations for action.

There has been a certification program since the organization was founded in 1928. There is an impression of increased professional recognition of this activity within the past 10 years.

There are educational but no experience requirements for certification. These are first and second modes of job entry. An Associate of Arts Degree is possible or correspondence education for job entry responsibilities, such as working only in medical records. An examination is required for the ART certification. To achieve the RRA certification, a Bachelor's Degree is required. A Bachelor's

Degree is offered in Medical Records Administration at some universities. If the certification candidate does not have a Bachelor's Degree in Medical Records Administration, a one year post-graduate course is required. This is prerequisite for taking the certification examination.

Not all practitioners are members of this association. Membership in the association is not a requirement for certification. However, of the association membership it was estimated that as of June, 1977, there were approximately 10,000 accredited technicians (ART) and 5,500 registered professionals (RRA).

This is the fourth year of a continuing education requirement as part of the certification process. In a five year period to maintain accreditation, fifty applicable education hours are required for technicians (ART), and seventy-five applicable educational hours are required for professionals (RRA).

To qualify for accreditation (certification) the applicant must take and pass an examination. The examinations are made up by a committee of professionals and consist of true/false and multiple choice questions. Grading of the exams is by a designated testing bureau.

The exams are given twice each year: in April and September for the technicians, and in May and October for the professionals.

There is a difference in the fee charged for the examination for members and non-members.

In the event an applicant fails the examination, he is permitted to take the exam two successive times. Failure a third time

requires justification to be eligible to take the exam the fourth time. Such justification would probably involve additional education.

The association is heavily involved with educational programs. It is in the process of developing its own programs as well as encouraging participation in relevant and professionally directed university programs, workshops and seminars.

Initially there was a "Grandfather" clause for accreditation. There are only twelve active members who came in under the "Grandfather" provisions. It is felt that in a very few years all certified members will have been qualified under the formal examination procedures.

For the most part this program appears to be an unqualified success. There have been some problems with the program associated with its very rapid growth and in being sensitive and responsive to operational requirements.

A very significant aspect of this program is the economic inducement to be accredited. In some jurisdictions there are jobs which require accreditation as an employment prerequisite. More important is the salary differential between certified and non-certified people. The salary range was estimated from 20-100 percent more for certified vs. non-certified people with a 40-60 percent differential being the norm.

American Society of Clinical Pathologists

David L. Gilcrest
Executive Director
American Society of Clinical Pathologists

The Society was founded in 1922. The original members were restricted to Pathologists. It was recognized that technician support of medical doctors was necessary so the organization was broadened and training programs were initiated to train technicians. The Society currently has about 20,000 members. Twelve thousand of the 20,000 membership are not doctors. Most people being certified are not members of the society.

The Association has encouraged educational institutions to offer courses and programs in this field. The NAACLS has been delegated by the Federal Office of Education to accredit schools offering academic programs in this field. There is a separation between educational accreditation and the Society's certification program.

The examination is administered by a standing committee, the Board of Registry. This committee determines the examination criteria, including the making-up and grading of the exams. The exams are given twice yearly, in February and August. Membership in the Society is not necessary to take and pass the examinations. It is estimated that 16,000 to 18,000 people a year take these examinations.

The current examinations cover three general and ten specialized fields. There is a fifty dollar fee to take the examinations. Before being eligible for the exam, verifying data is required

such as educational transcripts and employment records. The examination committees are specialists in each area. There are 13 separate examining committees. Only actual expenses are paid to the examiners. A full-time staff of 33 people is required to administer the program.

The examination consists of two parts: a) a practical exam under special supervision, and b) a written exam. The examinations are periodically reviewed for content including relevance and understandability of the questions. Additionally, there is statistical analysis on the results of the exams, including pass/fail ratings for examinees who have been trained or educated at different institutions. Three retakes of the exams are permitted. If there is a third-time failure, additional education is required before a fourth retake is permitted.

At present there are three levels of certification:

1) The first level is where most people qualify. This is a medical technologist and requires a Bachelor of Science Degree. To sit for the exam, a degree from an accredited university is required and a stipulated number of academic hours on specific subjects is required.

2) The second level is for technicians. These people can qualify for the exam by a two-year community college degree.

3) The third level is the primary entry level in the field. A high school education plus two years' experience are required. Some technical knowledge requirements are also prerequisite to sit for the examinations.

There are some significant miscellaneous observations:

People in this field are now being notified that within the next five years there will be a certification requirement.

There is no requirement for certification as a condition of employment. This is an individual laboratory decision.

It appears that the Federal government is anticipating legislation to require certification. The pressure stems from the government's willingness to pay for medicare.

It is anticipated that the certification grading procedure will be changed in the near future. Current pass or fail is determined by grading on a curve. It is felt that a set percentage of demonstrated knowledge for passing is more desirable and will be the basis in the future for passing or failing.

Even though most of the people being certified are not members in the Society, there are advantages in membership such as membership discounts on educational programs, participation in Society activities, and communication with fellow technicians and professionals.

There is a heavy turnover of medical technicians. Most of these people are young women who do not stay in the field too long. As a result, there may be a problem of professional dedication. One possible inference is that the members of ASCP are interested and dedicated and are the real professionals in this field.

Hospital Financial Management Association

William Fill
Executive Director
Hospital Financial Management Association

There are about 16,000 members in this association. It is estimated that 11,000 of the membership are in hospitals. The balance of the members are C.P.A.'s, or work in insurance or governmental organizations. The commonality of interest is hospital financial operations. The annual membership dues are sixty dollars.

A major goal of the Association is to improve the status of the members through education. The association sponsors fifty two-day institutes a year on a national basis. There is also a one-week institute yearly held at the University of Colorado. There are also special courses and programs for entry level people in this field.

There are two steps or classifications of certification. One primarily covers patients' accounts management and requires a combination of education, experience and a written examination. This results in a CMPA (Certified Management Patients' Accounts). This was established in 1969 and there are now about 1250 CMPA's.

A second level is the Fellow. The Fellow was started in 1957. It is estimated that there are 350 members in the Association who are Fellows. The Fellow eligibility is based on education, experience and examination.

The Fellows take an eight-hour examination. The CMPA's take a four-hour examination. Grading is pass or fail. The exams may

be repeated indefinitely.

The examinations are given once a year, on the first Friday in June. There is a thirty-five dollar fee for the Fellow exam and a twenty-five dollar fee for the CMPA. To be eligible to take the exams, membership in the Association is required.

There are at present no recertification requirements.

It is felt that there are some distinct advantages in being certified, such as professional recognition in the field. Also, some jobs require or request certification as a condition of employment.

The Fellows have a special newsletter. They also have a seminar at the annual meeting.

A few additional observations:

In 1977 there were 150 applications for the Fellows examinations and 100 applications for the CMPA's. It appears that once these people have the motivation for the first step, they aspire to the ultimate recognition of the Fellow.

There is about a sixty-five percent failure rate on the exams, indicating the vigor and depth required.

The program is considered a success and appears to be growing.

Society of Actuaries

Peter W. Plumley
Executive Director
Society of Actuaries

There are 6,000 members in this Association. To be a member of the Association, certification is required. There are two levels of certification. It was estimated that the levels break down as follows:

a) Fellows - approximately 3,000
b) Associates - approximately 2,400

(If certification is required for membership, it would appear that there is a discrepancy in the above figures, since there are 5,400 certified against a membership required to be certified which was stated as being 6,00 members.)

The common goal or interest of members is actuarial science. This is an international association and there are reciprocity agreements in England and Scotland. Under such agreements, these people can become Associate Members.

The certification process involves nine examinations. Upon passing the first five examinations, an Associate Membership is conferred. Prior to this point, there is no official membership in the Society. After all nine exams have been passed, the member becomes a Fellow (FSA).

There are no educational or experience requirements stated as prerequisite to taking the examinations. However, due to the subject nature, it is estimated that over ninety per cent of the certified members

have college degrees. A large number of universities offer undergraduate and graduate courses and degrees in actuary science.

There are 200 members on the education and examination committee. These members participate in all but the first two of the examinations. The first two examinations are designed primarily to establish mechanical competence. These examinations are made up and administered by the American College Testing Service. The preliminary examinations in the certification process are basically objective; these earlier exams are less comprehensive than exams later in the sequence. The more advanced examinations in the nine examination sequence are combinations of objective and subjective questions. The examination fees range from twenty to fifty dollars. The exams are given world wide. Specific examination centers are designated and the exams are proctored in the U.S.A. by Fellows of the Society.

If an applicant fails an examination subsequent reexamination is permitted. Exams are given twice a year. Exams one through four are given in May and November. Parts five, seven, and nine are also given in May. Parts six and eight are given in November. There is a restriction on the number of examinations which an applicant can take in any given year. As previously mentioned, membership in the Society is contingent upon being certified. It is possible to apply for membership, which is not conferred until the first five exams are taken and passed.

The Society does not have a membership retention problem. Certification is only applicable as long as a person is a member of the Society. If a person leaves the society, he can no longer put

FSA (Fellow Society Actuaries) after his or her name. In view of the nine examinations required, it follows that people who have followed this route are interested and dedicated professionals who have a vested interest in certification.

Besides conferring certification, there are other inducements for membership, including extensive availability of professional publications, the value of which is about two-thirds of the membership dues. There is also professional recognition on the job, as evidenced by the fact that most employment organizations pay the annual dues which range from fifty to one hundred dollars, depending on the membership class.

About twenty percent of the membership is in Canada. There are thirty-five actuarial clubs. The individual chapter meetings vary in content and frequency according to local practices. There are four national membership meetings each year. The main meeting is in October of each year. Attendance at the national meeting in October 1977 was 1,350 out of a total membership of 6,000. The other three meetings in April, May, and June are more regional in character. One of these meetings is usually devoted to technical content.

There is a substantial educational program to support the exams. There are many correspondence courses available as well as applicable supplementary books. In addition, somewhere between 100 to 175 study guides are available for educational purposes.

At present, there is no recertification requirement. This may be up for future consideration.

There are definite economic pressures to become an FSA in this

profession. The FSA is considered a level of professional accomplishment. The Society maintains and promotes high standards of professionalism. The FSA is something of a standard for employment since insurance companies rarely employ actuarians who are not members of the Society. There are additional economic pressures and benefits, since the chief actuarian is invariably an FSA.

National Contract Management Association

Mr. James Scanlon
Certification Director
NCMA

The National Contract Management Association, with more than 6,000 members, is the nation's largest professional association concerned primarily with government contracting. Its interests extend to any form of contracting with Federal, State, County/City, and other forms of government. The broad umbrella of "government contracting," by the NCMA interpretation, includes procurement, production, quality control, engineering, negotiations, contract administration, termination, auditing, program management, logistics, accounting, law, pricing, general management, and management systems. Inspection of NCMA literature and programs indicates that it focuses mainly on the federal level, and emphasizes procurement and acquisition more than technical areas, such as quality control. Recently a part of the membership of the NCMA split with the association to form its own independent professional association devoted to grants and other forms of federal assistance.

The association is organized into seventy chapters in seven regions throughout the United States and overseas. It is very active in educational programs, such as seminars, which are held periodically on a local, regional, and national basis. It publishes a journal and magazine, and chapters have their own newsletters.

Chapters are also active in sponsoring workshops and social programs.

Membership includes individuals in industry, government, and education. Most are either actively involved in contract management-related activities, or have had experience in it. Many members have legal backgrounds, and, since approximately eighty percent of contracting volume is done by the Department of Defense, there is a great deal of interest in defense-related contracting.

The certification program of the NCMA was initiated on January 24, 1974, and has been gaining at a steady rate. Initially, in order to gain support for the program, it was felt necessary to "grandfather" approximately 2,500 members. Those "grandfathered" were certified on the basis of experience, and were not required to take certification examinations. The "grandfathering" brought the certification program to the attention of the members, and created interest and excitement. "Grandfathering" terminated in December, 1975, and those applying subsequent to that date have been required to take certification examinations.

Approximately 300 individuals have been certified by examination since "grandfathering" ended in 1975. In discussions with NCMA members certified by the examinations, it is apparant that they take a great deal of pride in the fact that they took the more difficult route. On the annual NCMA list of those certified, it is possible to tell from the certification registration number whether an individual took the examinations or was "grandfathered."

Since a very large majority of the present list of those

certified consists of individuals who did not take examinations, the question naturally arises as to whether or not this has had an adverse affect on the objectives of the program. The views of NCMA members on this subject are mixed. Some feel that the high percentage of "grandfathered" individuals has definitely lowered the value of NCMA certification, while others feel that the adverse effects have been minimal. The passage of time, of course, will tend to reduce this problem.

Recertification is under consideration, but some difficult questions must be answered if recertification actually becomes a requirement. One of these questions is whether or not those "grandfathered" will be recertified without examination. The association also will have to determine the period involved, costs, and educational or other requirements.

The NCMA certification program requires a bachelor's degree. two contracting/procurement education courses, one legal education course, four contracting/procurement-related education courses, and two years of practical experience. The educational requirement of a bachelor's degree is controversial and there is pressure to relax this requirement. The Association feels that the degree requirement is necessary to strengthen the professionalism of the program.

The examination for certification consists of five parts, each requiring three hours. These parts are legal aspects of contracting; finance; economics and accounting; production; procurement and contracting; and logistics management. The field of contract management is a broad one, and it is felt that the examination should

be somewhat general.

The NCMA either proctors the examination with its own members, or other local universities do so. Since all questions are of the essay type, it is believed that opportunities for cheating are minimal. An examination committee of mixed academicians and practitioners prepares and evaluates the examination. There are six graders for each of the coded examination papers, and all questions on the examination are published by the association.

The first time the examination was given in 1977, twelve candidates took it, and all passed. Since then, the pass rate has dropped to between sixty and seventy percent.

The NCMA certification program is effective, and growing in strength and prestige. The examination is demanding, and has caused renewed interest in contract management education. This program is seen as a definite asset in increasing contract management professionalism.

American Speech and Hearing Association

Dr. Frederick Spahr
Director of Research and Professional Services
ASHA

The American Speech and Hearing Association is particularly worthy of study because its requirements for certification are among the most demanding and sophisticated of the non-medical associations. As indicated previously, the professional medical associations are in a class by themselves in terms of experience and educational demands for certification, since all require at least a doctorate and two years of experience.

The American Speech and Hearing Association, with 22,000 members, is one of the nation's larger professional associations. It is the national scientific and professional association for speech and language pathologists, audiologists, and speech and hearing scientists concerned with communication behavior and disorders. It was founded in 1925 and has forty-six state speech and hearing association affiliates.

Its objectives are to maintain high standards of competence of professionals, encourage the development of comprehensive clerical service programs, promote investigation of clinical procedures used in treating disorders of communication and stimulate the exchange of information in these areas.

The certification program is felt to be very important to the association, its "heart and soul". There are now in excess of 16,000 individuals certified. At present association membership is required to take the examination, but by 1980 this rule will be changed, and membership no longer will be a requirement.

The applicant for certification must meet educational, experience,

and examination requirements. The program was instituted in 1952, but did not initially require an examination. The examination was added in 1965, for new applicants only. Basic educational requirements were changed from a bachelor's to a master's degree a few years later when the master's degree became a requirement for association membership. When the examination was adopted, all previously certified individuals were automatically "grandfathered".

The certification experience requirements are unusual in that this experience must be obtained under supervision, and that the applicant's performance is evaluated by his supervisor. The first increment of practical experience must be gained as a student, when a minimum of 300 clock-hours of supervised clerical experience are required, and later, after the applicant graduates, nine months of full-time professional employment under supervision. The association is quite explicit about the kind of supervision it demands,"CFY supervision must entail the personal and direct involvement of the supervisor in any and all ways that will permit him to monitor, improve, and evaluate the applicant's performance in professional clinical employment. The supervision must include on-sight observations of the applicant..."

The educational requirements, which include at least a Master's degree or the equivalent in speech pathology, audiology, or speech and hearing science, are quite explicit. A total of sixty semester hours of academic credit must have been obtained in professional subjects, of which number thirty must have been at the graduate level.

The examination requirements for the association's Certificate of Clinical Competence are that the applicant must pass either the National

Examination in Speech Pathology or the National Examination in Audiology. Approximately thirty per cent of applicants pass the examination in their first attempt. An applicant who fails the examination may retake it four times in a three year period.

The association has contracted with the Educational Testing Service of Princeton, N.J., to administer the examinations, but the association monitors closely the performance of the testing service. The employment of an outside testing service not only relieves the Association of an unwanted administrative burden, but probably increases objectivity and reduces the possibility of accusations of favoritism or fraud. Costs are, of course, passed on to the applicants.

The Educational Testing service draws from a panel of professionals provided by the association to develop the examination. The association reviews the examination so prepared, and an association committee sets pass/fail standards for the examination.

One interesting aspect of this program is its increasing difficulty with time. Beginning in 1952 with a few basic requirements for certification, it has evolved into a very sophisticated and demanding program, which probably appears quite formidable to those desiring to enter the profession. The increased demands are voted by the existing certified members who do not, of course, have to comply with them since they are protected by "grandfather clauses". The "grandfathered" members thus receive what amounts to windfall returns on their original investment of time and effort to obtain certification because as the difficulty of obtaining certification increases, certification itself presumably becomes more valuable. In addition, increasing the difficulty of certi-

fication tends to limit entry into the profession, and thus gives existing certified members a quasi-monopoly. The stated objective of increasing certification requirements is, of course, that the increased requirements result in increased professionalism, which is good both for society and the profession, and hopefully this is true in fact.

The association is considering a requirement for recertification, which is another indication of the trend toward more requirements. Presumably the recertification requirement, if it comes about, will apply only to new members.

American Society of Appraisers

Dexter D. MacBride
Executive Vice President
ASA

The American Society of Appraisers is an international, non-profit, independent appraisal organization represented by approximately 5,000 members in seventy-eight chapters throughout the United States, Australia, Canada, Central and South America, England, India and Japan. It represents the multi-disciplines of the various appraisal specialties: appraisal administration, appraisal education, intangible property, machinery and equipment, personal property, real property, technical valuation, and public utilities.

This association is of special interest because it is striving hard to obtain professional recognition for appraisers. The following steps are seen as the proper approach in achieving such a goal:

L. Public recognition through registration, certification and licensing by the states. At present, no states require licensing, and only one requires certification of appraisers. Public recognition of the profession would be more likely if the support of state legislatures could be obtained. The association has proposed a "model bill" which would be enacted by state legislatures.

2. Identification of a recognizable body of knowledge pertaining to the profession. As part of this effort, the association sponsored an extensive Bibliography of Appraisal Literature, Dexter D. MacBride, editor. This bibliography includes general material on appraisal theory and methods, as well as specific material on individual appraisal fields such as rural property, fine arts, and recreational property.

3. Encouragement of the development of degree-granting undergraduate programs at various colleges and universities. Recently, the need for this was underscored by legal decisions that appraising was a "trade" and not a profession, the reason being that there were no formal programs at institutions of higher learning teaching appraising. Partly as the result of the association's efforts, five colleges and universities are now planning "Valuation Sciences Degree Programs".

The membership consists of three groups: Associates, Members, and Seniors. There are 2,300 associates, 350 members, and 1,850 seniors. Membership requires a college degree or its equivalent education; an interview; and investigation of the applicant's experience, financial and personal integrity.

A formal examination is required for the American Society of Appraisers (ASA) certification designation. One special problem is the twenty-four disciplines for which it is responsible. Most of these areas require special proof of competence by examination. Each candidate also is examined on a common core of knowledge, consisting of a code of ethics and value theory. The total time required is seven hours. In addition to the examinations, candidates must submit examples of their work for evaluation.

In the less popular disciplines in which there are only a few members, the association may require, in lieu of the regular specialized test, a technical paper of sufficient value to be accepted by a journal, or a sample examination with answers and resources indicated.

The association puts special emphasis on integrity. The nature of the appraisers work is such that the temptations for abuse or self-

benefitting appraisals may be very strong, and a spirit of professional pride and ethics is critical. Some instances in which violations have occurred have received extensive publicity, and the profession fears the possibility of government regulation if it fails to police its own activities.

The association is not in favor of "grandfathering", and feels that any waiver of examinations or other standards for practitioners is self-defeating. In particular, it is felt that "grandfathering" misleads the public, and thus weakens the profession. When certification was initiated, however, approximately 200 members were "grandfathered".

The association handles the preparation, monitoring, and evaluating of examinations by itself. It employs strict security measures to ensure that examination questions are not compromised.

While no precise figures were provided, it was estimated that thirty-five to fifty per cent do not pass the examinations in their first attempt. Retakes of the examination are permitted, depending on grades achieved and other considerations.

The executive director states that certification is the "essence and life blood of the society and its membership". He says that certification as an "ASA" gives a practitioner professional stature, aids in court testimony (condemnation proceedings, estate hearings, IRS investigations and the like), and is a very real benefit in every respect.

American Production and Inventory Control Society

Mr. Henry F. Sander
Executive Director
APICS

With 20,000 members, this association is the leading professional association in the United States in the production and inventory control field. Its activities include a relatively new certification program, a number of publications, and certain conferences and educational activities. Its certification program is of special interest because it is a multi-level one, and also because it was initiated without the usual "grandfather" clause.

Like all professional associations, this one states that its objective is to develop professionalism. This it will do "through the study and application of scientific principles and methods of production and inventory control management". It also aims to provide a means whereby practitioners are aided in applying these scientific methods to actual problems, to advance the professional body of knowledge, to encourage education and research in this field, to disseminate knowledge by means of professional meetings and publications, and to assist colleges and universities in the development of production and inventory control-related courses.

The association has been quite active in developing the professional body of knowledge and disseminating this information. It publishes a monthly newsletter, a quarterly journal, conference proceedings, a training manual, training aids, a bibliography, a dictionary, and a production control handbook. It also sponsors a yearly conference and technical exhibit, educational seminars, an executive placement service,

an advisory council, and issues research grants for "scholarly pursuits".

The certification program, which was initiated in 1973, has two levels, the Certified Practitioner (CP) and the Fellow. Neither level has educational or experience requirements. The only real requirement for certification is success on examinations given by the association. Five examinations are offered - Inventory Planning, Shop Floor Controls, Capacity Planning and Control, Forecasting, and Materials Requirements Planning. There are two critical scores on each test, a "Fellow" level score and a "Certified" level score. In order to become a "Fellow", an applicant must score at the certified level in at least four tests.

The examinations are written by a committee of the organization, but are administered by the Educational Testing Service of Princeton, New Jersey.

The examinations are given at seventy locations throughout the United States, and in September 1977 there were 567 who had been certified or were "Fellows".

The program did not provide for "grandfathering", which resulted in its slow growth and acceptance for its first few years. It was felt that "grandfathering" dilutes such programs, and that the high quality achieved by the "no grandfathering" policy will result in greater prestige and a more successful program in the long run.

The most difficult task is getting the large amount of educational materials required by the members written, published, and delivered. Another problem is that of getting teachers who are preparing applicants for the certification examinations to do more than merely teach materials they feel will be covered by the examinations. The educational efforts

of the association may become largely examination-oriented if this trend continues.

In 1977 the association did a survey of its certification program, with interesting results. At that time 282 individuals had been certified, 179 as CP's and 103 as Fellows. All 282 were sent questionnaires, and 206 responded. Certified members were also compared with non-certified by another questionnaire.

In general, the survey seemed to show that certification identified the better qualified members. The certified individuals, on the average, had more experience, were higher in supervisory rank, and had more education than others. The largest number of people taking the examinations were between thiry-one and thirty-five years old. After the age of thirty-five, the number of people taking the examinations dropped dramatically.

The survey also showed that, in general, the greatest benefit perceived by those certified was a sense of achievement. With regard to promotion potential, they said that, while companies place value on well-known certification programs such as the CPA, there was little or no recognition of this program. They indicated that this would change as the program became better known.

Those certified also were asked if they felt the money and time invested in this certification program was worthwhile. A large majority of the group indicated that if time were turned back they would again go through the certification process. Two-thirds of the CP's also consider going on to quality for higher "Fellow" designation.

Some Observations Resulting From Field Interviews

Designation is not uniform. Some organizations used the term "certification," others "accreditation" and still others employ the term "Fellow," "associate," or "diplomat." Regardless of the title, the process includes some validation of professional competence.

In almost every interview, the issue was discussed as to what certification meant. There was uniform agreement that certification is no guarantee of performance. A certification process only sets some minimal standard that the professional should meet. This standard can vary from education, *ability to perform* technical functions, and perhaps applicable experience. Awareness does not mean that superior performance will follow. On the other hand, awareness evidencing personal growth by greater exposure and some motivation is strong evidence of personal interest and professional dedication.

In the field interviews, without exception, the various Associations or Societies expressed satisfaction with their certification program. There is considerable societal and economic pressure for self-improvement and better job performance. Certification appears to be a viable avenue to improved personal performance and professional recognition.

Several purposes for certification were stated. Where health or public safety were involved, certification is a process for validating technical competence. In other instances, certification was cited as prerequisite for membership in a professionally recognized

organization. Membership in such organizations was also a contingency for employment. In one organization, certification represented a distinct economic advantage by way of significant salary differentials between certified and non-certified people. Some organizations said there were no real or immediate pressures for certification other than professional satisfaction. However, without exception, certification in each organization studied ultimately lead to economic benefits. In some instances these inducements were very apparent; in other instances these inducements were more subtle.

Another area discussed was recertification. Most organizations have not provided for a periodic recertification process. Most of these associations feel recertification is desirable and are seriously considering modifying existing programs to incorporate recertification procedures.

The majority of the organizations do not have explicit educational or experience requirements for certification. In every instance, though, it appeared certification would be difficult or impossible without adequate and relevant education and experience. Every organization interviewed did have an examination validating procedure. The exams are considered critical, since it was often stated that it is extremely difficult to evaluate educational exposure and competence as well as experience.

Most of the associations stated time limits within which candidates must take and pass qualifying exams. Since most of the exams seem to be vigorous, the idea is to encourage people for self-

improvement within a pace that is reasonable and consistent with their ability and job obligations. In several instances, retakes of exams are permitted three times after which additional education is required as a contingency for taking the exam a fourth time.

It was interesting to note that some organizations restricted certification to members while others left the certification process wide open.

Another observation of importance is that most organizations recognize varying degrees of experience, competence, and professionalism. This is evidenced by more than one step or level certifications.

Conclusions and Recommendations

Conclusions

Approximately 100 associations ranging in scope from vocational to technical to professional now have certification programs. From all indications, the number of certification programs is growing.

The response to the mailed questionnaire and the field interviews support the contention that associations which have initiated certification programs are invariably well satisfied with the results. Limited polling of association members and the association's membership participation in existing certification programs would appear to support the contention that the members are also happy with certification programs.

In many instances, there are direct economic benefits accruing to certified members resulting from absolute to preferential treatment in employment. In some instances, certification is prerequisite for employment. Besides employment practices, there are also instances where there are significant salary differentials based on certification.

The certification programs have variations as to qualification procedures. However, three common elements exist in nearly all of the programs: (1) qualification by one or more professionally related examinations; (2) applicable experience requirements; and, (3) some educational level of attainment. Some of the programs make accomodation for other qualifications such as teaching, publication

and professional involvement to earn credit toward certification.

The pronounced interest and trend toward certification would be reflective of broader environmental considerations. There is increasing pressure for professionalization of functions. We live in a very status-conscious society and establishing and maintaining professional credentials is important for functional acceptance. Professionalism should encourage individual development. Individual development should relate to career objectives and take into consideration expanded and improved job performance and job innovations encouraged by motivation, interest and added insight provided by education and expanded intellectualism. Where such attitudes and accomplishment exist, it follows that interface between professionals will be enhanced.

Another important impact of certification is that it forces the identification of knowledge relevant to capable performance. Knowledge requirements can be explicit or "how-to", which appear to be vocationally oriented. Knowledge requirements can have a general orientation in the field where conceptualism is necessary to adapt the knowledge to the specific situation. Or, knowledge requirements can range from the specific to the general depending on the nature of the function and the career level involved.

A most relevant aspect of knowledge identification is the establishment of operational boundaries in a field. Knowledge requirement identification is a vital communication form to practitioners as to the level of performance expectation anticipated. Periodic review

of the knowledge requirements is also of the utmost importance. Fields, functions and activities are subject to change in a technologically dynamic environment. Review by qualified individuals should enable the incorporation of new knowledge requirements into the inventory and should find manifestation in the qualifying certification examinations. There is evidence that almost all of the associations which have initiated certification programs have provided for frequent field knowledge reviews and audits. Knowledge identification is one of the compelling pluses for certification programs.

Some form of certification or career attainment levels is indicated for people involved in governmental acquisition processes. In Task Number 1 Study Report sponsored by FPI (FAI), it was reported that there are an estimated 80,000 people in the Federal procurement work force. Of significance is the fact that most of these people are over-age and under-educated. As of 1971, it was estimated that fifty-nine percent of the civilian work force was fory-six years of age or older and that by 1980, over fifty percent of the entire procurement work force would be eligible for retirement. As for educational attainment, it was stated that the average level was high school graduation with three months of college. Only about one-third of the people working in Federal procurement had a Bachelor's degree or higher.

The preceeding paragraph suggests several considerations. There is a very large population employed in a very vital governmental activity which has questionable credentials. The fact that a

disproportionate number of this work force is over forty-five years of age is disturbing. Age per se is no criterion for determining job effectiveness. What is indicated by the age composition of the work force is the failure to entice young people into this activity. The implication is that there is either reluctance to recruit and train young people, or that procurement as a career is not enticing to young educated people. Perhaps a lot of both are true. Young people should be solicited to enter this field and career opportunities should be made attractive. With an age-heavy working population, training, integration and continuity must be planned for.

Another aspect of an older work force is the tendency to rely on experience to the exclusion of new knowledge or new techniques. Some people become intellectually stagnate at 20, some at 40, and some never. However, as a person gets older, it becomes difficult to become involved with new concepts. Most certification programs studied offered encouragement for young or new job entry people and mid-career level people. There was an impression that unless senior people had qualified for certification under "grandfather" provision, they generally were not attempting to qualify by formal training and examination. On the other hand, those older people who had been certified, even under the "grandfather" provisions, were almost invariably attempting to maintain their status by qualifying for recertification (where recertification programs exist) by completing the necessary continuing education requirements.

There is an implication in the preceding that older employees can be motivated. This is especially critical since the retirement age

has been extended. Human obsolescence can be retarded. The conclusion is that a certification program must be designed to encourage older member participation with built-in provisions for professional competence maintenance.

Most certification programs provide only for one or two steps of achievement. In the government procurement activity, several steps should be considered. The steps should consider career levels and progression within those levels as indicated in the following chart, "Overview of FAI Educational Objectives". By career progression levels and established plateaus of accomplishment, incentives consistent with job responsibility and human capability can be provided. The steps would also establish a self-improvement ment for relevant education which could eventually up-grade the educational accomplishment level of the procurement work force. With a system which provides attainable professional careers and educational levels, the work force should have motivation and the calibre of people employed should substantially improve.

Relatively few of the associations having certification programs have made provisions for recertification. The field interviews seem to support the view that failure to provide for recertification was an oversight rather than a studied decision. Few, if any, of the organizations surveyed indicated unfavorable attitudes toward recertification. The associations which have incorporated recertification procedures invariably expressed extreme satisfaction of having so done. Recertification provides control. It provides continued

incentive for the members to maintain a status which in most instances was not easily acquired. Recertification has also given major impetus to the support of educational programs sponsored by the various associations. A good example is the National Association of Purchasing Management which has always had an extensive educational program. The educational program before certification could be considered successful, but since certification, it figuratively has exploded. The increased membership participation in NAPM educational programs has been dramatic. Existing programs have been oversubscribed and many new educational programs have been inaugurated. The NAPM has had to expand its professional staff to accomodate the increased educational demand.

Recommendations

Many recommendations for proposed action are suggested by the study. While the study has indicated a very favorable response to, and experience with certification programs, and that a certification program can prove extremely beneficial to the government under FAI sponsorship, such a program should not be undertaken without considerably more research and thought.

The recommendations stemming from the study follow:

The legality of an in-house administered government certification program will have to be explored. How will such a program be accepted by organized labor and the Civil Service Commission? What will be their objections? How might they want to participate in such a program?

The different job classifications involved in Federal acquisition activities will have to be more clearly identified. The range of activity within each job classification related to professional progression must be delineated.

The general body of knowledge relating to all acquisition positions must be clearly defined. As part of this procedure accomodation will have to be made for the degrees of knowledge sophistication within job classifications, the special knowledge requirements related to the different job classifications and specific knowledge involved with the different agencies and peculiarly related to their operational missions.

Possible alternative certification program designs will require extensive investigation. What levels? How many levels? Eligibility requirements such as experience, education and examinations must be looked into.

The administration of a certification program has to be studied. To be professionally accepted, there must be credibility. There must be reasonable standards of achievement developed. The program will require intellectual vigor with a subsequent sense of accomplishment. There must be procedural integrity in processing applications, making up and grading examinations, and determining frequencies and procedures. There must be a review process.

How would the program be administered? Who would administer the program? These are critical questions which must be explored and answered.

Provisions will have to be made for periodic recertification. What would constitute continued eligibility? Are there any standards or ethical considerations the abrogation of which would disqualify existing certifications?

A review of the educational inventory will have to be undertaken. What in-house and out-house educational programs exist? Do they support operational and certification objectives? Is there excessive duplication? Are there educational goals? Is the educational operation sensitive to the professional and career development goals? Do adequate educational materials exist? Would new techniques have to be developed? Would the government have to commission the development of appropriate educational material?

A decision will be necessary concerning FAI establishment of a policy to encourage acquisition people to join professional associations. Or, should FAI encourage the formation of an in-house association directed to professional objectives?

Certification must be looked at in a systems context. What can be achieved by certification? What costs are involved? What components for such a system exist and what components will have to be developed? In such a context areas for improvement should be identified and integrated with the design of a certification program; there should be an analysis of short and long-term needs, objectives and human resources.

FOOTNOTES

1/ For excellent discussions of professionalism and certification, see A.M. Carr-Saunders and P.A. Wilson, The Professions (Landau: Oxford University Press, 1933); Amitai Etzioni (ed), The Semi-Professions and Their Organization (New York: The Free Press, 1969); Ray Lewis and Angus Maude, Professional People (London: Phoenix House, Ltd., 1952); Wilbert E. Moore, The Professions: Roles and Rules (New York: Russell Sage Foundation, 1970); and Talcott Parsons, "The Professions and Social Structure," Social Forces, 17 (May 1939), pp 457-467.

2/ Encyclopedia of Associations (Detroit: Gale Research Corp., 1977).

3/ A definitive study on certification done in 1976 by the a accounting firm of Ernst and Ernst, The Management Consultant and Professional Certification, analyzed 31 certification programs of associations. Of this number, 30 programs required examinations for certification. (Ernst and Ernst, Certified Public Accountants, 1300 Union Commerce Building, Cleveland, Ohio, 44115).

4/ Harold Wilensky, in his "The Professionalism of Everyone?", The American Journal of Sociology, Volume LXX, Number 2, September 1964, p 142, is dubious that these "aspiring professions" will ever attain professional recognition, "...many occupations will assert claims to professional status and find their claims are honored by no one but themselves. I am inclined to place here occupations in which the market orientation is overwhelming - public relations, advertising, and funeral directing." (p 142).

5/ Talcott Parsons, "The Professions and Social Structure" in Social Forces, Vol. 17, May 1939, p 459, 460.

6/ William J. Goode, "The Theoretical Limits of Professionalization" in The Semi-Professions and Their Organization, (New York: Free Press, 1963), p 300.

7/ Milton Friedman, Capitalism and Freedom, (Chicago: University of Chicago Press, 1962), pp 144.

8/ Wilensky, op cit, pp 142-146.

9/ Friedman, op cit, pp 149 and 150.

10/ Carr-Saunders and Wilson, op cit, p 357.

11/ Friedman, op cit, p 144.

12/ Wilbert Ellis Moore, The Professions: Roles and Rules, (New York: Russell Sage Foundation, 1970), p 216.

13/ Moore, op cit, p 123.

14/ George Strauss, "Work-flow Functions, Inter-functional Rivalry, and Professionalism: A Case Study of Purchasing Agents," Human Organization, Vol. 23, Summer 1964, pp 137-149.

15/ Murray J. Grammor, "Should Purchasing Be a Profession? Purchasing, August 27, 1962, pp 74-76.

16/ Ernst and Ernst, op cit, p 1.

17/ "Certification is the Hallmark of the Buyer-Manager", Purchasing January 27, 1976, pp 95-96.

18/ Carr-Saunders, p 305.

19/ Friedman, op cit, p 142. Friedman, in amusing discussion, points out the extremes to which barbers have gone in justifying licensure on public health grounds. He quotes other sources listing educational requirements for barbers in certain states. Such subjects include bacteriology, chemistry and histology.

20/ Goode, "Community Within a Community: The Professions," op cit, p 195.

21/ F.H. Godner and R.R. Ritti, "Professionalism as Career Immobility" American Journal of Sociology, Vol. 72, March, 1976, pp 489-502.

22/ Lee Taylor and Rolland Pellegrin, "Professionalization: Its Functions and Dysfunctions for the Life Insurance Occupation," Social Forces, Dec. 1959, pp 110-114.

23/ Russel Thornton, "Organizational Involvement and Commitment to the Organization and Profession," Administrative Science Quarterly, Vol 15, 1970, pp 417-426.

24/ J.A.C. Grant, "The Guild Returns to America, I," Journal of Politics, Volume 4, August 1942, pp 303-337.

25/ Adam Smith, The Wealth of Nations, (London: Cannons Edition, 1930), Vol. 1, p 125.

26/ Beverly T. Watkins, "Certification of Professionals" A Bonanza for Extension Programs," Chronicle of Higher Education, April 1, 1977, p 22.

27/ Friedman, op cit, pp 137-160.

28/ Moore, op cit, p 58.

29/ "The New Regulation," Wall Street Journal, January 30, 1978, p 14.

30/ New York Times, June 24, 1976.

31/ Moore, op cit, p. 157-159.

32/ Grant, op cit, p. 329.

33/ Goode, Community within a Community: The Professions, op cit, p. 195.

34/ Parsons, op cit. p. 458.

35/ Friedman, op cit, p.137-160.

36/ Cogan, op cit, p. 41.

37/ George Strauss, "Professionalism and the Occupational Associations," Industrial Relations, May 1963, pp. 9,10.

38/ Carr-Saunders and Wilson, op cit, p. 299.

39/ Moore, op cit, p. 158.

40/ Wilensky, op cit, p. 144.

41/ Theodore M. Newcomb, "On the Certification of Academic Professions: An Exchange," American Sociological Review, February 1959, p. 95-96.

42/ Wilensky, op cit, p. 145.

43/ Grant, op cit, p. 303-337.

44/ Friedman, op cit, p. 137-160.

Appendix A

Chicago Interviews

John F. Amos, Executive Vice President
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Chicago, Ill. 60611

Elizabeth Price, Deputy Director
American Medical Record Association
John Hancock Center, Suite 1850
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David L. Gilcrest, Executive Director
American Society of Clinical Pathologists
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Chicago, Ill. 60612

W. Fill
Hospital Financial Management Association
666 No. Lake Shore Drive
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Peter Plumley, Executive Director
Society of Actuaries
208 So. La Salle St.
Chicago, Ill. 60604

Washington, D.C. Interviews

James Scanlon
Certification Director
National Contract Management Association

Dexter D. MacBride
Executive Vice President
American Society of Appraisers

Dr. Frederick Spahr
Director of Research and Professional Services
American Speech and Hearing Association

Henry F. Sander
Executive Director
American Production and Inventory Control Society

Appendix B

ATTITUDE OF ASSOCIATION MEMBERS TOWARD CERTIFICATION

The attitudes of association members toward certification in most cases tends to be quite favorable in the organiztions studied. Three very limited surveys of these attitudes are consistent in this respect. The 1977 survey of the American Production and Inventory Control Society, which involved over 200 certified members, has already been mentioned in this study (see field trips). The other surveys were done in 1978 of National Association of Purchasing Managers (NAPM) (S=48) and National Contract Management Association (NCMA) (S=30) members. Their later surveys are of limited value because of the small sample in each case, but they do provide some insights.

The surveys, in giving the advantages of certification for the individual as he perceives them, seem to stress the personal, as opposed to career or material benefits. "Professional recognition", "stimulus to professional growth", and "personal satisfaction" were given as most important advantages, while the direct career benefits, such as "greater career mobility" and "increased promotional opportunities" were considered as less important. This, of course, may well be due to the fact that their certification programs are relatively new and do not have the prestige or career value of the better recognized certification programs, such as the CPA program.

As far as the perceived disadvantages were concerned, in one survey career-related aspects seem important. "No tangible benefits" and "beyond the phase of the career where certification would make a difference" were important, while in the other, factors relating to the

personal cost of certification, such as "too much effort to pass exams", and "educational requirements not realistic" were stressed. As in the case of the advantages, the relative newness and lack of prestige of the certification programs seems to have influenced these attitudes.

It would be dangerous to infer too much from these surveys in view of their shortcomings indicated above. In general, the attitudes of professionals in these organizations with relatively new programs seems to be that certification gives inward satisfaction and a sense of pride and professionalism, but that material benefits have not yet been forthcoming. It is suggested that future research involve more certification programs, particularly those with well known and prestigious certification designations, and larger sample sizes.

SUMMARY OF SURVEY OF
NAPM MEMBERS

1. Are you certified (S=48) Yes 50% No 50%

2. Average years of experience (S=48) 13.7

3. Average age certified (S=48) 43.6

4. Perceived advantages of certification in order of importance (S=46):

   1 Stimulus to professional growth

   2 Professional recognition

   3 Personal satisfaction

   4 Greater career mobility

   5 Increased promotional opportunities

   6 Increased prestige within organization

   7 Increased economic gains

5. Perceived disadvantages of certification in order of importance (S=31):

   1 Too much effort to pass exam

   2 Educational requirements not realistic

   3 No tangible benefits

   4 Beyond phase of career where certification would make a difference

   5 Educational requirements too difficult

   6 Cost too great vis-a-vis benefits

   7 The concept will die

SUMMARY OF SURVEY OF
NCMA MEMBERS

1. Are you certified (S=30) Yes 74% No 26%

2. Average years of experience (S=30) 18

. Average age certified (S=30) 47

4. Perceived advantages of certification in order of importance (S=29):

   1. Professional recognition

   2 Stimulus to professional growth

   3 Personal satisfaction

   4 Increased prestige within the organization

   5 Increased promotional opportunities

   6 Greater career mobility

   7 Increased economic gains

5. Perceived disadvantages of certification in order of importance (S=21):

   1 No tangible benefits

   2 Beyond the phase of career where certification would make a difference

   3 Too much effort to pass exams

   4 Educational requirements not realistic

   5 Educational requirements too difficult

   6 The concept will die

   7 Cost too great vis-a-vis benefits

Appendix C

THE FEDERAL ACQUISITION INSTITUTE, PROFESSIONAL GROWTH, AND CERTIFICATION

by

D. Romm, R. Springer, and J. Bennett

The Federal Acquisition Institute

The establishment of the FAI in 1976 is recognition and response for professionalism in acquisition.* The acquisition function has become more comprehensive and requires skills, knowledge, and formal education in a variety of disciplines.

Acquisition is defined by the FAI as consisting of five major skill areas: (1) contracting and contract administration (2) quality and reliability assurance, (3) systems acquisition planning and project office business management, (4) supply, transportation, and some phases of maintenance, and (5) Federal assistance/grants management. There are several elements common in each of the aforementioned skills. Each is concerned with managing public funds, each entails good management and the use of sound business practice, and, generally, there is some administrative instrument employed such as contract, cooperative agreement, a grant, etc, to achieve government objectives.

The FAI is dealing with government business management; the FAI also will be educating, training, and developing government business managers

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*"Acquisition" is broader in scope than "procurement," which is a more commonly used term.

who will carry out Federal acquisition and assistance programs. To be more specific, the FAI is the focal point for coordinating the government-wide planning, development, implementation, and evaluation of programs in the areas of procurement research, education and training, and career development. The Institute is providing leadership and assistance in improving the quality, efficiency, and performance of procurement personnel. The FAI will work in cooperation with the participating agencies, the Civil Service Commission, and the OFPP.

Some major objectives of the FAI are to raise professional standards and competence of people involved in the acquisition process. Career development and professionalism are related to job performance. Continued professional awareness and personal growth have been recognized for a long time as important job-related elements. With recent Federal regulations extending the possible working life of people to 70 years, the avoidance of personal stagnation is more critical than ever before.

Professional Dynamics

In a technologically dynamic society, it is becoming increasingly difficult for professional advancement and economic reward without personal growth. Knowledge requirements are intensifying because of external and internal pressures for professional obligation and performance. "Status quoism" is synonymous with obsolescence. It is becoming increasingly apparent that individual professional survival is contingent upon personal self-improvement; self-improvement with attendant performance improvement requires an expanded general awareness of developing knowledge, methods, and tools, as well as sharpened skills related to immediate

professional obligations. A broader awareness--educational perspective--is important in understanding, adapting, and utilizing knowledge from the general to the context of one's profession.[1]

New career patterns are developing. The shift in career opportunities is dramatized by Johnson,[2] who reports that about one-quarter of the people gainfully employed in the United States are in occupations which were nonexistent 25 years ago. In the foreseeable future, 75 percent of all workers will be employed in occupations which do not exist now. To reinforce the aforementioned, The Dictionary of Occupational Titles listed 7000 jobs in the 1965 edition which were not listed in the 1949 edition.

Not only are new career patterns developing, as indicated, but existing careers and professions are undergoing profound changes. Knowledge, activity, and performance which may have been satisfactory a few years ago are today often painfully inadequate. The range in activities and knowledge requirements in professions have been changing drastically. What might have been acceptable knowledge and performance ten or even five years ago would not suffice today. Human obsolescence is very real; it is dangerous and costly to society, the immediate organization, and to the individual.

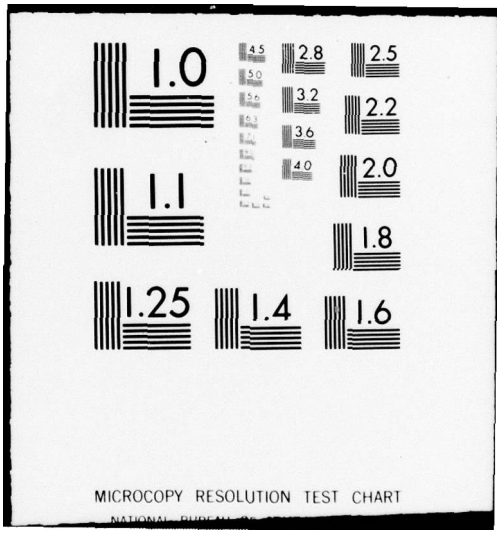
Job satisfaction is another very personal and important consideration. Joseph Coates reports, "Professional workers who enjoy the highest levels of education, income, or autonomy, i.e., occupational flexibility, find the most satisfaction with work."[3] From the discussion, it would definitely appear that personal improvement is necessary for career advancement; it would also seem a safe assumption that those professionals

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A STUDY OF PROFESSIONAL ASSOCIATION CERTIFICATION PROGRAMS.(U)
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who hone and constantly refine their skills enjoy personal satisfaction and career security.

Professional Identification

Professions, as opposed to vocations, traditionally are characterized by long and sometimes arduous periods of formal training, an identifiable body of knowledge and philosophy, recognized standards of performance and behavior, and a sense of devotion and dedication of members to the profession.[4]

There is often confusion associated with professional identification because of the tendency to relate professionalism to activities such as medicine, law, and dentistry. There are professionals such as the aforementioned, who operate as independent economic entities, and there are people who meet the criteria of professionals but who are really professional employees. The trend appears to be toward a decline in the number of economically and operationally independent professionals and toward an increasing proportion of the work force of salaried or organizationally affiliated professional employees.[5]

A professional employee is still a professional. If a person selects a professional career pattern and wants professional recognition, an obligation is also incurred for professional demeanor and performance. Realistically, not all professionals are of equal or predictable ability. Achieving professional stature is only an indication that there is an occupational standard of professionalism and that the individual has been exposed to that standard. There are diverse levels of competence in all professions. There are always good and bad practitioners. Even though

the competence range may vary widely in a profession, it is still important to set some standards for professional exposure. Professional standards represent a goal for prospective practitioners, serve to establish an identifiable body of knowledge associated with the profession, and provide credibility for the practitioners with other professionals and the public. As Carr-Saunders and Wilson note, "The prestige at which all associations aim, can only be built upon the proven competence of its members."[6]

The FAI Study of Professional Certification

The FAI, in consonance with its objective of increasing professionalism in the acquisition and Federal assistance work force, recently has authorized a study of certification programs sponsored by professional associations and other groups.

Professional certification is not a new concept. Certification programs have been deeply rooted in the structure of the traditional professions for at least one hundred years. They developed for a combination of reasons, including the desire of the professions to raise their professional standards by establishing qualifications for entry, the encouragement and recognition of skills development, and the enhancement of the prestige of the professional or the profession in the eyes of the public. Also, in some cases, self-certification was initiated by professions to eliminate abuses and preclude government intervention and regulation. In other instances, certification was developed for economic reasons, primarily to reduce the danger of an oversupply of skills which result in increased competition and lower rewards.

Professional validation and some form of certification are becoming increasingly important. Many of the professions which have traditionally had some form of certification are reviewing their standards and processes for continuing professional validation. Additionally, many professions which previously had no established standards or processes for professional recognition have seriously embarked upon certification programs.[7] To give some indication of the range, certification programs have existed or been initiated in recent years in finance, accounting, engineering, personnel and industrial relations, hospital administration, information sciences, insurance, banking, traffic and transportation, contracting, procurement, material management, and management.

The objective of the study sponsored by FAI is to examine certification programs as to professional requirements and standards, content, and administration. Investigating successfully initiated certification programs can provide important guidance in determining relevant standards or expectations for the many professionals operating under the auspices of FAI.

Preliminary Results

The study team has contacted more than sixty of the leading professional associations with certification programs, and conducted interviews with association officers and members concerning their certification programs. It also has done an extensive review of pertinent publications and other literature. This study should be available by mid-summer 1978. Pending detailed review and analysis, the following are some preliminary findings:

1. Certification programs have been a strong and effective force in increasing professional awareness, pride, and confidence in nearly all organizations investigated. Officials and members alike speak with enthusiasm of their certification programs.

2. Examinations are essential to effective certification programs. Of one group of thirty programs investigated, only one permitted experience to be used in lieu of examinations. If a certification program is to have "teeth" and be effective, this form of objective quality control is essential.

3. "Grandfathering," or waiving examinations for practitioners with certain levels of experience, is a highly controversial issue, with good arguments both for and against this technique. The study team considers that while "grandfathering" may be unavoidable in some cases, the less grandfathering the better, and that, if possible, grandfathering should be eliminated completely. Grandfathering often dilutes the effectiveness of programs and weakens quality control.

4. One of the major advantages of certification programs for all professions is that they force a disciplined examination and identification of the body of knowledge of the profession. Many professions have existed for years with only a loose, vague appreciation or understanding of their own concepts, techniques, theories, and practical applications. The requirement for certification examinations forces a profession to state these things clearly and concisely.

Possible Benefits

As previously indicated, functions and activities within functions change. Personal growth, including expansion of professional horizons, is important to the individual, the organization, the profession, and society. New knowledge must be developed and be responsive to the changing operational environment. It is becoming increasingly important to put professionals in a learning-conducive environment. It is also very important to identify the operational sphere, knowledge, and skills needed to professionally function within that operational sphere. There are well over thirty different jobs and approximately 36,000 people within the Federal Government performing some phase of this activity. There are also many skill levels from job entry to professional management classifications.

There is no guarantee that ability will commensurately reflect exposure. However, applicable professional exposure, education, and stimulation in concert with ability and motivation should forestall or minimize professional erosion and attendant human obsolescence. A well conceived program establishing standards for professional achievement should be sensitive to levels of career progression. Professional standards should offer great inducement for young people. Bright, productive, and strongly motivated people reflect credit on a profession. In our very status conscious society, young people are attracted by and gravitate to those activities where they feel they can grow as individuals and where there is intellectual challenge and opportunity for contribution and promotion.

There are also inducements for more experienced professionals. Too often, there is age discrimination. There should be no barriers to learning. Older, experienced professionals should be judged on contribution, motivation, growth, flexibility, and potential--not age. Professional maintenance is critical for senior people because of the investment of the organization in such people. Senior people frequently hold supervisory positions and if they are not professionally growth-oriented, the entire subordinate organization suffers.

Professional validation and maintenance of professional competence are relevant for organizational performance and reputation. Organizations are made up of people. People should be encouraged to grow professionally and to have a professional attitude. Professionalism is the key to functional recognition, better intra- and interorganizational interface, and contribution with its subsequent benefits to the individual, the organization, and society.

Some FAI Objectives

1. Develop, conduct, and promote undergraduate and graduate programs, executive seminars, and other academic programs.

2. Promote, monitor, and conduct research to develop business methods and management techniques that will advance the state-of-the-art in procurement.

3. Develop and implement agency- and government-wide career development programs, including the needed education and training.

4. Develop and implement plans and procedures for the review and evaluation of programs.

5. Articulate standards by which programs can be developed, measured, and certified.

6. Monitor and review programs to ensure that they are current and to avoid or eliminate duplication and overlapping.

7. Develop and maintain a system of communication which will ensure identification of and responsiveness to new issues, developments, and needs in the procurement community.

FOOTNOTES

1. William J. Goode, *Community Within a Community: The Professions*, American Sociological Review, Vol. 22, 1957, p. 195.
2. Roosevelt Johnson, *Career Education, Professional Preparation, and Minority Groups*, Minorities and Career Education, eds. Laurence Davenport and Reginald Pelty, (Columbus, Ohio: The House of Haunesworth, 1973), p. 16.
3. Joseph F. Coates, *Technological Change and Future Growth: Issues and Opportunities*, U.S. Economic Growth from 1976 to 1986: Prospects, Problems and Patterns. Studies prepared for the use of the Joint Economic Committee, Congress of the United States, Vol. 9 - Technological Change, January 3, 1977, p. 38.
4. D. Roman and R. Springer, *Proposal to Identify, Classify and Evaluate Programs and Procedures for Certification of Professional Societies and Associations*, unpublished paper, 1977, pp. 1-2. For a detailed discussion of the characteristics of a profession, see Morris F. Cogan, *Toward the Definition of a Profession*, Harvard Educational Review, Vol. 23, 1953, pp. 33-50.
5. F. E. Kast and J. E. Rosenzweig, Organization and Management, 2nd ed., (New York: McGraw-Hill Book Co., 1974), p. 618.
6. A. M. Carr-Saunders and P. A. Wilson, The Professions, (Oxford: The Clarendon Press, 1933), p. 372.
7. For a discussion of the new professions and the role of certification programs in them, see P. Gross and P. Osterman, *New Professionals*,

Saturday Review of Education, April 1973, pp. 64-65; Amitai Etzioni, The Semi-Professions and Their Organization, (New York: Free Press, 1969); Stuart R. Temperley and Michael D. Osbalderton, *The Professionalizing Process: A Study of Aspiring Occupational Organization*, The Social Review, August 1975, pp. 607-27; and Harold J. Wilensky, *The Professionalizing of Everyone*, American Journal of Sociology, Vol. LXX, September 1964, pp. 137-58.