Professionalism—A question of semantics

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INTRODUCTION

The topic of professionalism is of crucial importance to the ever-increasing group of individuals dedicated to the design, production, dissemination of knowledge, and application of the computer. There is a strong desire for professional recognition by large portions of this group. This paper focuses on the need for an appropriate definition for a computer professional. Questions are raised concerning the various requirements and related responsibilities which should be associated with recognition as a professional. The element of controversy over numerous issues will serve to clarify, if not resolve, the parameters which outline the future data processing professional.

PROFESSIONALISM DEFINED

In order to establish a baseline from which this dissertation can proceed, there is some value in presenting a “Webster’s” definition of terms which are of fundamental importance to the topic. These terms include the following:

• Profess—To practice or claim to be versed in (a calling or profession).
• Profession—A calling requiring specialized knowledge and often long and intensive academic preparation.
• Professional—Characterized by or conforming to the technical or ethical standards of a profession. (Participating for gain or livelihood in an activity or field of endeavor often engaged in by amateurs).
• Professionalism—The conduct, aims, or qualities that characterize or mark a profession or a professional person.

The term professionalism has different meanings to different people. Ralston1 defined professionalism by saying that “. . . a professional is someone dedicated to rigid training rather than immediate self-gratification. As such, "professional" bespeaks not elitism but a state of mind.”

In an attempt to define the term professional by example, it would seem that there are at least two distinguishable groups. The first group might be called the “learned” professional and it might be categorized as having demonstrated a profound knowledge or scholarship. This group includes the universally recognized titles of doctor, lawyer, and engineer. Their professional recognition is based on an attained level of knowledge in a specialized field; a certification that they have reached a specified level of knowledge; and legal registration which gives them the right to practice their profession within certain constraints.

A second group of professionals may be categorized as the “other” professionals. These individuals may be identified as being associated with the second definition for professional which was given previously. That is, we may consider that they participate for gain or livelihood in an activity or field of endeavor often engaged in by amateurs. This group would include the professional bowler, the professional boxer, the professional football player, the professional golfer, and others. In addition to professional athletes, we might also include the professional politician, the journeyman electrician, and the journeyman plumber. The professional athlete has recognition based on his level of ability in his chosen field. In most cases this status is governed by membership in a professional association. The professional trades normally require an apprenticeship associated with a trade union. Advancement to the journeyman level implies the attainment of a reasonable skill. In some cases, local governments require that a licensed journeyman be responsible for the quality of work performed.

It may be helpful to associate the “learned” and “other” professionals on a continuum. In terms of respect or service to society, we may place the “doctor” at the high end of the continuum. In terms of income or monetary reward, we would have to place the boxer at the first of a continuum. In the case of either the “other” professional or the “learned” professional it is possible to identify the credentials associated with their professional status. In the case of the computer professional, it is important to identify the credentials associated with the achievement of a professional status. In addition to other things, these credentials are meant to insure a minimum level of competency and adherence to certain standard practices. If suitable credentials or criteria do not exist, it is important that these be identified or established to the satisfaction of the individual, his peer group, his employer, and society at large.
ELEMENTS OF DATA PROCESSING

PROFESSIONALISM

In addition to identifying the various factors associated with the achievement of a high level of professional recognition in the field of data processing, it is important to pursue the parameters or limits associated with each factor. It must be possible for individuals to work toward achieving the status of a professional and know when they have obtained it. Such recognition must extend beyond the peer group to the employer and to society as a whole. Once a high level of professional recognition is possible, it may be that many individuals in data processing may not be suitably motivated to try to achieve it.

Perhaps the first question to be resolved is why we wish to achieve a professional status. What is our purpose? Is it to satisfy some personal ego requirement which would allow one to be a member of an elite group? Do we wish to improve our monetary status within our group? Do we wish to improve the moral and ethical level of our peer group? Are we interested in improving our level of service to both our employer and society as a whole? We are associated with the use of a technology which can have awesome implications to all of mankind.

The term profession implies the existence of a certain level of specialized knowledge. One might question the make-up of this body of knowledge and how it can be validated. The Institute for Certification of Computer Professionals identifies the content of the Certificate in Data Processing (CDP) examination as containing sections on Data Processing Equipment, Computer Programming and Software, Principles of Management, Quantitative Methods, and Systems Analysis and Design. The CDP eligibility requirements consist of the equivalent of 60 months full time related experience. An academic alternative allows a substitution of designated academic work for up to two years experience. This sets an example for a test that, to some extent, validates a level of knowledge at one point in time. Is this "the" common body of knowledge which the computer professional should have? Are there several specialties as there are in medicine or engineering?

If we could assume that this is "the" common body of knowledge that is desired and that the eligibility requirements are suitable, there are still many other factors which must be considered. Is there a need for periodic re-certification? Both DPMA and ACM have Self-Assessment programs under way which should help an individual identify his weak points and provide references for correcting them. Continuing education in many forms is available on almost any topic. The mechanism for maintaining a current knowledge of the state-of-the-art is present but the verification vehicle is missing.

Consider the ethical implications of professional status and how they might apply to this situation. In terms of loyalty, Pletta and Gray point out that "... the professional's primary loyalty may be to: (1) society; (2) his peer group; (3) employer or client; or (4) himself. Only if he is free to elect the first of these does society confer upon his peer group the status of a profession."

Loyalty will greatly influence a course of action when a question of conflict of interest arises. Questions involving privacy and security are also related to ethics.

While each major professional group has a code of ethics associated with membership, one might question the adequacy of the requirements. It would seem that the enforcement provisions and mechanisms leave something to be desired. Even the old line professional groups such as the doctors and lawyers have great difficulty in adequately enforcing their respective codes.

The legal implications of professional status are primarily related to a licensing process. Municipal, state, and federal agencies often have a role in licensing. The various legislative groups must enact specific laws to create the license mechanism. Lord goes to great lengths to distinguish between the licensing and certification processes. The licensing process must also have a sound basis for enforcement.

It is appropriate to identify the various players and their role in the question of professionalism. The list includes the following:

Academia—The majority of the formal training will be done in the numerous colleges and universities. These institutions have a responsibility to provide training in an accepted common body of data processing knowledge. The curricula must be kept current with the changing technology. In addition to a well rounded education they must attempt to instill a sense of responsibility, morality, ethics, and general professional awareness in the students.

Professional Groups—The role of continuing education carried out through professional meetings, quality publications and innovations such as the self-assessment programs is a primary responsibility of these organizations. Their role in certification, and/or some accepted vehicle for determining the minimum level of knowledge is crucial. An organization such as the ICCP, which receives wide support from most related professional groups, is needed to serve as the testing and enforcement agency. The professional group must strive to represent and provide a unified voice for the membership.

Employers—If a significant professional status is to be achieved, it must be recognized and supported by business and industry. This recognition could take the form of consideration in the hiring and promotion processes.

Governmental Agencies—In the event that some form of licensing or registration is appropriate, the government agencies would be expected to establish the requirements, procedures, and control mechanisms for enactment of legislation.

Society—If society does recognize a professional group through general acceptance and the enactment of legislation, it has the right to expect a high level of moral and ethical responsibility. Society also has the responsibility to speak out when the actions of the professional adversely affect segments of the public.
The Individual—When an individual achieves the status of a professional, he must accept certain responsibilities along with the related benefits. Some of these responsibilities are legal and some are social. In the event that he fails to meet the responsibilities, his peers must be willing to take appropriate corrective action.

Each player has a role and associated responsibilities in progress toward professional recognition for the Data Processor. The failure of any player to assume his proper role and responsibility will impede the progress.

SUMMARY

Professional status will be achieved in the data processing area. The speed and degree to which this is accomplished will depend on the dedication of the individual and his level of support for the data processing professional societies and related groups.

REFERENCES
