

ON BECOMING A PROFESSION

INTRODUCTION

Safety practitioners continue to strive for recognition as a profession—within society, by other professions, by their employers, government agencies, and from each other. They will attain recognition as a profession only when the practice of safety has progressed to meet the regimens of a profession, and only when the content and quality of their practice earn the respect of other professions and of society in general.

We who are engaged in the practice of safety use the word *professional* quite freely as a form of self-identification. For those who want the practice of safety to be recognized as a profession and want to be considered safety professionals, a serious introspection concerning the perception others have of what they do would serve their purposes well. This chapter will present:

- The requirements for the practice of safety to be recognized as a profession
- Comments on each of those requirements
- A listing of actions that, if undertaken, would move the practice of safety toward recognition as a profession

As this discussion commences, it is appropriate to recognize with gratitude the accomplishments over several decades by those who have been successful in promoting and achieving a higher level of preparation for, and accomplishment in, the practice of safety. Many have contributed to that progress. Nevertheless, a major challenge remains for continued gains.

A LIMITED LITERATURE REVIEW

Only a few authors have written about the practice of safety being recognized as a profession. Most safety texts do not address the subject at all. A brief review of relative literature follows. As the history shows, authors have questioned whether what safety practitioners do meets the requirements of a profession. Some authors have pleaded for the necessary actions to be taken to achieve professional status.

In *MORT Safety Assurance Systems*, William G. Johnson (1980) includes a chapter titled “The Safety Function.” It commences with these questions. “What is the nature of the safety function? What are the safety professional’s responsibilities, qualifications, and methods.” This 1980 publication pleads for answers to those questions. Johnson quotes from *Scope and Functions of the Professional Safety Position* published by the American Society of Safety Engineers (1998) as a reference paper (463).

In *Analyzing Safety Performance*, written by Dan Petersen and published in 1980, Chapter 1 is titled “The Professional Safety Task.” It opens with a duplication of the previously cited *Scope and Functions of the Professional Safety Position*. On several occasions, Petersen questioned the appropriateness of safety practitioners referring to themselves as professionals, as will be seen later.

Richard J. Finegan’s article “Is the Loss Control Effort a Profession?” was published in *Professional Safety*, the Journal of the American Society of Safety Engineers, in June 1981. Note the commonly used term “loss control” rather than safety profession. Finegan questioned whether the discipline applied in loss control met the requirements of a profession.

Dan Petersen’s article “Professionalism—A Fourth Step” was published in *Professional Safety* in November 1982. Petersen began with this statement: “Safety is working very hard to become a profession.” Petersen suggested that safety practitioners examine their theoretical base by asking whether what they believe to be fact is really fact or just

opinion. Many of the questions he posed in 1982 are still pertinent today.

Ted S. Ferry made this brief mention of the need to “determine the limits of the safety and health field” and gave the following description of a profession in *Safety Program Administration for Engineers and Managers*, a book published in 1984:

A profession is an occupation generally involving a relatively long and specialized preparation on the level of higher education and is usually governed by its own code of ethics. (14)

In their book *Introduction to Safety Engineering*, David S. Gloss and Miriam Gayle Wardle speak of the requirements of a profession. This is what they wrote in 1984.

Hallmarks of a Profession

If safety engineering is to be considered a profession, then it must meet the criteria for professionalization. Gloss and Wardle refer to Greenwood who proposed that professions have specific characteristics, such as:

1. A well-defined theoretical base
2. Recognition as a profession by the clientele
3. Community sanction for professionalization
4. A code of ethics, which regulates the professional's relationships with peers, clients, and the world at large
5. A professional organization (13)

Dan Petersen again suggested in 1998 that safety professionals should engage in serious introspection concerning their work in his book *Techniques of Safety Management*. Petersen wrote:

In the safety profession, we started with certain principles that were well explained in Heinrich's early works. We have built a profession around them, and we have succeeded in progressing tremendously with them. And yet in recent years we find that we have come almost to a standstill. Some believe that this is because the principles on which our profession is built no longer offer us a solid foundation. Others believe they remain solid but that some additions may be needed. Anyone in safety today at least ought to look at that foundation—and question it. Perhaps the principles discussed here can lead to further improvements in our approach and further reductions in our record. (27)

Darryl C. Hill, a past president of the ASSE (American Society of Safety Engineers), also expressed his views on the need for the safety profession to define itself as a step toward recognition as a profession. His article “Time to Transform?—Assessing the Future of the SH&E Profession” was published in *Professional Safety* in November 2002. Hill wrote:

- How can the profession be transformed when high school students and the population at-large know little about the safety discipline?
- In essence, the safety, health and environmental profession has not established a common definition of safety practice nor a common terminology to explain what practitioners do. The safety profession must define who it is and what they do.
- Safety has operated under an outdated set of principles for too long. Now, the transformation must begin to ensure future prosperity,
- The foundation on which safety is built needs a different look. A rebuilt or “patchwork” foundation is not enough. Total reconstruction is required if the SH&E profession is to reach new heights and become a recognized, respected profession.

Lon H. Ferguson and James D. Ramsey joined those pleading for action by safety practitioners to be recognized as a profession in their article “Development of a Profession: The Role of Education and Certification in Occupational Safety Becoming a Profession.” It was published in *Professional Safety* in October 2010. They wrote:

- Adding to the [absence of a recognized] image is the failure to develop a universally or legally adopted definition of *safety professional*.
- To call oneself a professional, one must work in a recognized profession.
- If an incipient profession grows and matures, it is recognizable as a distinct profession by those in the field as well as by those who hire them.

Ferguson and Ramsey quote J. C. Dean who suggests the following characteristics are consistent with well-developed professions:

- A service orientation and a code of professional ethics
- A specialized body of knowledge
- A distinct education tract that derives from the specialized body of knowledge
- Associated educational credentials

- Continuous learning and professional development
- A social or collegial dimension

REQUIREMENTS FOR THE PRACTICE OF SAFETY TO BE RECOGNIZED AS A PROFESSION

Previously cited references are helpful in producing the following outline of the requirements for the practice of safety to be recognized as a profession.

A. ESTABLISH A WELL-DEFINED THEORETICAL AND PRACTICAL BASE, TO INCLUDE

- A definition of the practice of safety
- The societal purpose of the practice of safety
- A recognized body of knowledge
- The methodology of the practice of safety

Discussion

Chapter 2, “Defining the Practice of Safety,” was written to move the discussion forward: concerning the societal purposes of the practice of safety; to establish that there is a recognized body of knowledge for the practice; to speak of the rigor of education that would prepare one to enter the practice of safety; and to outline its methodology.

Chapter 3, “Principles for the Practice of Safety: A Basis for Discussion,” sets forth a sound practical base for the practice of safety, which if applied, will lead to professional recognition. Also, a work in progress relates to those purposes. At the American Society of Safety Engineers, the Body of Knowledge Task Force is gathering data to outline the body of knowledge applicable in the practice of safety.

In Chapter 20, “Applied Ergonomics: Significance and Opportunity,” reference is made to an article by Alphonse Chapanis (1991) titled “To Communicate the Human Factors Message, You Have to Know What the Message Is and How to Communicate It.” One of his themes is that human factors engineering has to be defined and its practitioners must know what it is to be able to communicate about it successfully. Safety professionals have the same need.

The practice of safety, as defined, includes all fields of endeavor for which the generic base is hazards—occupational safety, occupational health, environmental control, product safety, transportation safety, safety of the public, health physics, system safety, fire protection engineering, and the like. If the practice of safety is to be recognized as a profession, it must:

- Serve a declared and understood societal purpose.
- Clearly establish what the outcome of applying the practice is to be.

The definition given in Chapter 2 of the practice of safety is also given here as a reference for the discussion that follows.

The Practice of Safety

- Is hazard and risk focused.
- Serves the societal need to prevent or mitigate harm or damage to people, property, and the environment.
- Is based on knowledge and skill in the following categories:
 - Applied engineering
 - Applied sciences
 - Sound management principles
 - Information and communications
 - Legal and regulatory affairs
- Is accomplished through
 - Anticipating, identifying, and evaluating hazards and assessing the risks that derive from them
 - Taking action to avoid, eliminate, or control those hazards
- Has as its ultimate purpose attaining safety—defined as freedom from unacceptable risks.

In ASSE's (1998) *Scope and Functions of the Professional Safety Position* these comments are made about the education, training, and experience needs of safety professionals:

To perform their professional functions, safety professionals must have education, training, and experience in a common body of knowledge. Safety professionals need to have a fundamental knowledge of physics, chemistry, biology, physiology, statistics, mathematics, computer science, engineering mechanics, industrial processes, business, communications, and psychology.

Also, the domains and responsibilities and the knowledge and skill categories for the Comprehensive Practice Examination given by the Board of Certified Safety Professionals defines in detail the breadth of knowledge and skill required in the practice of safety.

Serious questions about our “recognized body of knowledge” continue to arise since some safety practitioners still hold dearly to far too many myths. In *Safety Program Administration for Engineers and Managers*, Ted S. Ferry (1984) devoted a chapter to “Those Cherished and Hallowed Old Safety Clichés and Truisms.” He wrote, “we should take a professional approach to examining those safety clichés and, where appropriate, educate concerning them” (24).

At ASSE professional development conferences, almost always, one or more speakers inform attendees that 88 percent of accidents are principally caused by unsafe acts of employees. How pitifully unprofessional! Heinrich’s 88–10–2 ratios were the conventional wisdom decades ago. They have been found to be untenable.

Many still offer as truth Heinrich’s foundation of a major injury—the 1–29–300 premise, which stated that “in a unit group of 330 similar accidents occurring to the same person, 300 will result in no injury, 29 will produce minor injuries, and 1 will cause a serious injury.” Think about that—330 similar accidents occurring to the same person. Would that include a fall off a 50-story building?

Bird and Loftus propose a different ratio: “1 disabling injury for every 100 minor injuries and 500 property damage incidents.”

Use of these statistical bases gives support to the principle that if we give adequate attention to the incidents that occur frequently, we will also be taking care of the severity potential. That may or not be so, depending on whether the severity potential is also represented in the more frequent incidents.

It has not been possible to locate a body of research that supports the validity of either the Heinrich or the Bird and Loftus postulations. They are mythical. Yet, safety professionals continue to offer them as truths. (For further discussion on the Heinrichean myths, see Chapter 10, “Reviewing Heinrich: Dislodging Two Myths from the Practice of Safety”).

Surely, the time has arrived for safety practitioners to stop reciting clichés, repeating the literature—without requiring substantiation. They should cease docilely adopting published premises, without promoting scientific inquiry as to their validity.

In no way is it intended that the preceding comments on clichés be considered inclusive of all of them, especially coming from but one source.

B. DEVELOPING A COMMON LANGUAGE FOR THE PRACTICE OF SAFETY, REALIZING THAT

- A “hallmark” of a profession is to define itself.
- The public does not know who we are or what we do.
- We confuse others with our multitude of titles.

Discussion

Try this experiment. Have your associates assume that a member of the public asks them: What is your job? What do you do? I asked these questions of a group of safety professionals and the answers were embarrassing. We have not established a common understanding of our practice; nor do we use a common language to define what we do. If we are to be recognized as a profession, we must be able to identify what is unique about it, and its societal purposes.

One of the objectives of Chapter 2, “Defining the Practice of Safety,” is to emphasize the significance of our not having yet defined our practice. And, we must do so to attain professional recognition.

Names of other professions—law, medicine, accounting—immediately bring to mind an image of a particular field of endeavor, and the requirements to be a member of the profession. We must follow that lead and define who we are. What we call ourselves and the language we use in communications both with our clients and in the community at large should convey an appropriate image of our discipline.

We must also consider whether the variations in terms and titles we use may confuse those with whom we try to communicate. A brief and unscientific study was made of the understanding decision makers have of the titles we use, about which comment is made in Chapter 2. I wrote that if I had a magic wand with which I could eliminate the use the titles *Loss Prevention*, *Loss Control*, and *Industrial Hygiene*, I would do so and believe that I had done a great service for those engaged in the practice of safety. There is no question that we baffle decision makers, and the public, with the multitude of titles we give ourselves.

In addition, I said that the generic base of the practice of safety is hazards, and that if there are no hazards, there would be no reason for safety professionals to exist. It was also said that the ultimate goal for what we propose is to achieve acceptable risk levels. In time, we will more than likely be considering an umbrella term that encompasses all aspects of the practice of safety. Operational Risk Management would serve very well for that purpose.

C. ACHIEVING RECOGNITION AS A PROFESSION BY THE CLIENTELE TO WHOM WE GIVE ADVICE, CONSIDERING

- The content, the substance, of the advice we give
- Whether the advice we give achieves expected results
- The nature of our communication

Discussion

It's possible that the substance of the communications of too many safety professionals to decision makers is perceived as shallow, superficial, and not pertinent to an entity's real safety management needs. Much of our language developed years ago.

It is time to evaluate the substance of it. As an example, are the terms *unsafe act* and *unsafe condition* obsolete? Ergonomists and industrial hygienists who are closely related as practitioners don't use those terms. They speak of risk factors or causal factors.

Too many safety professionals are perceived as having established a culture of separateness and of having purposes that do not directly help management attain their goals. Safety professionals should strive to be perceived as part of the management team and as cognizant of the goals of, and the constraints on, the organizations for which they provide a consultancy.

Our literature frequently indicates that the causes for all incidents resulting in injury or illness or property damage derive from *something being wrong in the management system*. And it is so. But, as we use language promoting the idea, are we perceived as being overly critical of the group of which we want to be a part? Does use of the term suggest separateness from the management team? Do we gain more or lose more by its never-ending repetition?

Yes, it can be theorized that there was a management shortcoming for the existence of every hazard, the realization of which resulted in injury or damage. And it's necessary to identify those shortcomings in causal studies. But acceptance by our clientele can be obtained more effectively through language that demonstrates participation toward achieving goals we share.

At our professional conferences, speakers often comment on "how to obtain management support." They address effective communication methods, and they are important. But, this author suggests that we will gain from an examination of the *content* of our practice and the *substance* of our communications. If a practice is not perceived as being

professional, supportive, and having import, the world's best communicator will still not get the management involvement necessary.

D. PROMOTING AND SUPPORTING RESEARCH, RECOGNIZING THAT

- Knowledge requirements concerning hazards and the methodologies to anticipate, avoid, eliminate, or control those hazards so as to achieve acceptable risk levels will continue to expand.
- It is typical for a profession to continuously examine the effectiveness and outcomes of the solutions proposed, to publicize favorable and unfavorable outcomes, and seek other solutions with respect to unfavorable outcomes.

Discussion

How much needs to be said about the expanded knowledge safety professionals are expected to have, especially in the past 10 years? Even though the transitions are substantial, we are excluded almost entirely from determining what the research needs are, and from assessing the results of the research. It should concern us that relevant safety research is most often done by people who would not consider themselves to be safety professionals.

This is a subject for which, with rare exceptions, activity by safety practitioners will be an original undertaking. As a beginning, research is needed to evaluate the premises that have accumulated in the practice of safety in the past 75 years. If we are to be recognized as a profession, we must have established that we are promoters and supporters of research.

E. MAINTAINING RIGID CERTIFICATION REQUIREMENTS, PROMOTING THE SIGNIFICANCE OF CERTIFICATION, AND GIVING ADDITIONAL STATUS TO CERTIFICATION

Discussion

Many thanks should be given to those visionaries on the Board of Directors of the American Society of Safety Engineers who, in the 1960s, conceived of and established the Board of Certified Safety Professionals (BCSP). As a result of their work, a sound and proven

certification program exists for safety professionals. The Certified Safety Professional designation—the CSP—has become the mark of the professional within the safety field and recognition of its significance continues to grow.

Little will be said here about the BCSP program. Initiated in 1969, it has stood the test of time. The number of safety practitioners taking the examinations and seeking certification has steadily increased. To have examinations that relate to the actuality of the practice of safety, which is constantly in transition, BCSP undertakes a validation study about once every 5 years to assure that its examinations properly examine what safety professionals actually do. Revisions in examination content are made after each validation study to adjust to what safety professionals taking part in the study say about the content of their work.

The current *Comprehensive Practice Examination Guide* issued by BCSP, a sixth edition, is dated April 2011. To give an indication of the breadth of responses that safety professionals gave in the polling exercise—a part of the validation process—one task description follows:

Evaluate the risk of injury, illness, environmental harm, and property damage to which the public or an organization is exposed associated with the organization's facilities, products, systems, processes, equipment, and employees by applying quantitative and qualitative threat, vulnerability, and risk assessment techniques. (P7)

All involved—individual safety professionals, the BCSP, ASSE—could do a better job of promoting the significance of certification and of giving it a higher status. Individuals who employ safety professionals can especially give greater significance to the CSP designation.

F. ADHERING TO AN ACCEPTED STANDARD OF CONDUCT

Discussion

How can anyone presume to be a professional without being willing to meet high standards of performance and to insist that others in the profession do the same? A prescribed statement of professional conduct would cover the content of an individual's practice and the relationships expected with one's clients, peers, and the community at large. The Board of Certified Safety Professionals and the American Society of Safety Engineers have issued Codes of Professional Conduct that deserve publicity and promotion. They are attached to this chapter as Addenda A and B.

G. HAVING A PROFESSIONAL SOCIETY, PARTICIPATING IN IT, AND SUPPORTING IT

Discussion

Several related societies exist that safety professionals can well support. Low levels of participation in such societies lead to the observation that more safety practitioners call themselves safety professionals than should. Just being a member of such a society doesn't really qualify for professional status.

Those who seek professional status and would like their practices to be recognized as a profession must be more prominent participants in the societies of which they are members.

H. OBTAINING SOCIETAL SANCTION FOR PROFESSIONALIZATION

Discussion

This is a futuristic goal. It will have been achieved when the public perceives that the practice of those who designate themselves as safety professionals has a distinct value to society. Safety professionals will earn that respect and recognition only through their performance.

When that occurs, it will be expected that a person with a prescribed professional education, experience, and certification will fulfill safety responsibilities. We've come a long way and yet have a long way to go, especially with respect to the recognition we desire.

At least in employment, the value of professional certification—the CSP designation—has achieved greater recognition. That is a form of societal sanction. There has been a continual increase in the percentage of job advertisements for safety positions that mention the desirability of being a Certified Safety Professional.

CONCLUSION

This chapter is intended to promote individual and collective introspection. Accomplishment for each of the action subjects discussed in this chapter will serve to achieve professional status for those engaged in the practice of safety, which is an ultimate ideal. A summary pertaining to those action subjects follows.

Action Subjects

1. Agreeing on and promoting an understanding of a definition of the practice of safety and its basic methodology.
2. Strongly promoting the need to have the curricula for baccalaureate and advanced degrees in safety prepare one for the safety profession.
3. Establishing that the domains and responsibilities and the knowledge and skill categories for the BCSP Comprehensive Practice Examination represent the breadth of knowledge and skill required for professional safety practice and communicating that to the public and to safety professionals.
4. Examining the safety literature to identify what is patently unprofessional, with the intent of arranging exposition and debate on those subjects.
5. Promoting adoption by safety professionals of methods of scientific inquiry, and encouraging peer review and verification of that which is published.
6. Establishing a system to review the knowledge fields for which additional information is needed to maintain professional practice, and arranging development and dissemination of that information.
7. Undertaking to develop a commonly accepted language that clearly presents an image of the practice of safety.
8. Arranging for a study of the public understanding of the titles we use and promoting adoption of those that best convey the image of a profession.
9. Promoting exploration into incident causation theory, knowledge of which is both fundamental and vitally needed for the practice of safety.
10. Taking the initiative in arranging, promoting, and supporting research projects.
11. Promoting the significance of the CSP designation by professional societies, governmental agencies at all levels, and individual safety professionals.
12. Publicizing the ASSE and BCSP standards of professional conduct, and encouraging safety professionals to consider them as foundational in their own practices.
13. Convincing safety professionals who want recognition as a professional that they should be active participants in their professional societies.

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Addendum A

American Society of Safety Engineers

OUR COMMITMENT TO PROFESSIONALISM

Member's Code of Professional Conduct

Serve the public, employees, employers, clients, the Society, and the profession with fidelity, honesty, and impartiality.

In professional relationships, treat others with respect, civility, and without discrimination.

Abstain from behavior that will unjustly cause harm to the reputation of the Society, its members, and the profession.

Continually improve professional knowledge, skills, competencies, and awareness of relevant new developments through training, education, networking, and work experiences.

Consider qualifications before undertaking any professional activity and perform only those services that may be handled competently.

Make informed decisions in the performance of professional duties that adhere to relevant laws, regulations, and recognized standards of practice.

Inform all appropriate parties when professional judgment indicates that there is an unacceptable level of risk of injury, illness, property damage, or environmental harm.

Maintain the confidentiality of information acquired through professional practice that is designated or generally recognized as non-public, confidential, or privileged.

Accurately represent professional qualifications including education, credentials, designations, affiliations, titles, and work experience.

Avoid situations that create actual, potential or perceived conflicts between personal and professional interests, and if a potential conflict of interest arises disclose applicable facts to potentially affected parties.

Approved June 2012

Addendum B

Board of Certified Safety Professionals

CODE OF ETHICS AND PROFESSIONAL CONDUCT

This code sets forth the code of ethics and professional standards to be observed by holders of the Certified Safety Professional Designation conferred by the Board of Certified Safety Professionals. Certificants shall, in their professional safety activities,

sustain and advance the integrity, honor, and prestige of the safety profession by adherence to these standards.

Standards

1. Hold paramount the safety and health of people, the protection of the environment and protection of property in the performance of professional duties and exercise their obligation to advise employers, clients, employees, the public, and appropriate authorities of danger and unacceptable risks to people, the environment, or property.
2. Be honest, fair, and impartial; act with responsibility and integrity. Adhere to high standards of ethical conduct with balanced care for the interests of the public, employers, clients, employees, colleagues and the profession. Avoid all conduct or practice that is likely to discredit the profession or deceive the public.
3. Issue public statements only in an objective and truthful manner and only when founded upon knowledge of the facts and competence in the subject matter.
4. Undertake assignments only when qualified by education or experience in the specific technical fields involved. Accept responsibility for their continued professional development by acquiring and maintaining competence through continuing education, experience and professional training.
5. Avoid deceptive acts that falsify or misrepresent their academic or professional qualifications. Not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, or past accomplishments with the intent and purpose of enhancing their qualifications and their work.
6. Conduct their professional relations by the highest standards of integrity and avoid compromise of their professional judgment by conflicts of interest.
7. Act in a manner free of bias with regard to religion, ethnicity, gender, age, national origin, sexual orientation, or disability.
8. Seek opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community and their profession by sharing their knowledge and skills.

Approved by the BCSP Board of Directors, October 2002