AC 2012-2939: PLUMBERS AND PROFESSIONALISM

Dr. Marilyn A. Dyrud, Oregon Institute of Technology

Marilyn Dyrud is a Full Professor in the Communication Department at Oregon Institute of Technology and regularly teaches classes in business and technical writing, public speaking, rhetoric, and ethics. She is part of the faculty team for the Civil Engineering Department’s integrated senior project. She is active in ASEE as a regular presenter, moderator, and paper reviewer; she has also served as her campus’ representative for 17 years, as Chair of the Pacific Northwest Section, and as section newsletter Editor. She was named an ASEE Fellow in 2008, and two years later received the McGraw Award. Currently, she is on two division boards Engineering Technology and Engineering Ethics, and serves as Zone IV Chair.

In addition to ASEE, Marilyn is active in the Association for Practical and Professional Ethics and the Association for Business Communication, serving on the editorial boards of two journals and editing a teaching section for ABC’s pedagogical journal.
Plumbers and Professionalism

Abstract

Anyone who teaches professional ethics faces an immediate challenge: how to lead students to an understanding of what truly constitutes a “professional.” The term is used very loosely in our culture, and many students believe that a professional is someone who holds a job and earns a living wage. In fact, an episode of *Judge Judy* nicely encapsulates the popular view: when hearing a case, she asked the defendant what her job was; commenting on the response that she was a barista, Judy replied that she didn’t know that that was a profession. Judge Judy was roundaboutly correct: a barista is not a professional nor is coffee-making a profession. Neither is plumbing, electrical work, nor a host of other jobs typically classified as the trades.

This paper provides readers with ammunition to combat the notion that anyone who works is a professional and explains a classroom activity that will lead students to an understanding of the term. Specifically, the paper focuses on common misconceptions, a brief literature review, a classroom small group activity designed to develop a working definition, and student reactions.

Introduction

“So,” I casually ask my ethics class early in the term, “Is a plumber a professional?” About three-fourths of the students, consisting primarily of engineering majors with a few psychology, business, science, and allied health majors tossed into the mix, enthusiastically raise their hands in the affirmative. When I first asked this question a dozen years ago, during my first foray into teaching an actual ethics course, I was surprised by the response, especially since students had just read three articles by prominent ethicists who carefully recount attributes that distinguish between the professions and jobs. Yet students will invariably respond by mentioning superficial characteristics, such as dress or reliability, and vocally—in some cases loudly—maintain that our plumber is indeed a professional. Instructors who assume that their students know what a professional is may be surprised by the response, should they ask a similar question.

Common Misconceptions

My students’ responses to that question, I have since discovered, echo common misconceptions about the term. A quick Google search, using “what is a professional?” as the descriptor, reveals that the common perception of that term differs radically from the definition used in ethics courses; websites and blogs classify a whole host of jobs as professions, including the following:

*Tattoo artist:* After identifying tattooing as an “apprentice-based art,” the “Skin Artists” website identifies several factors that qualify tattooists as professionals, the chief one being that they sterilize their instruments and maintain a clean shop.¹

*Fashion blogger:* Asche identifies three traits that transform a regular blogger into a professional one: “a professional attitude,” meaning that she “treats [her] blog like it’s a business”; clear writing ability; and a “vision,” not only of the present but of the future as well.²
Fly fisherman: Dr. Trout, on the “Utah on the Fly” blog, maintains that “anyone who makes a living by fly fishing would have to be considered a professional fly fisherman.”

Belly dancer: Comments on a belly dancers’ blog repeats the theme: “You are a professional belly dancer if the majority of your income comes directly from your work as a belly dancer,” flatly declares Zumarrad.

Professional organizer: Popularized by the TV series Hoarders, professional organizers must jump a few hurdles to gain the title, including a form of licensure; they “have met specific minimum standards, and prove through examination and client interaction that they possess the body of knowledge and experience required for certification.” A related field is a “professional wardrobe stylist,” a person who organizes “uniforms, costumes, accessories or outfits,” presumably for department stores or stage and screen companies.

Professional poker player: Martin Clemmensen, a famous (and wealthy) poker player, characterizes a professional in his area as “a self-employed theorist with specializations in logistics, statistics and psychology,” which certainly elevates card-playing to a loftier status.

And the list continues, ranging from the true trades, which involve measurable training, to glorified hobbies that have morphed into businesses, such as scrapbooking. In short, according to popular parlance, anyone who makes a living in a certain occupation is deemed a professional. Dating back at least 40 years, this very broad definition is problematic. Since most people do make a living by working, does this mean that everyone is a professional? And if everyone is a professional, then why bother to use the term? Seeing everyone as a professional actually has the effect of demeaning the true professional, who has sacrificed considerable time and money to acquire expertise in a field that s/he has made a lifelong commitment to.

Professionalism according to the Literature

The literature defining professionalism is rich, varied, and contradictory, constituting a body of knowledge in itself. A brief tour of selected books and articles reveals a definition of professionalism that counters the popular notion, one that for many students is foreign territory. While sociologist E. C. Hughes (1958) argues convincingly that a strict definition of professionalism is not necessary, a working definition of the term is useful in a professional ethics class in order to provide a context for other course topics, such as professional judgment and professional responsibility.

Using our plumber as an example, s/he is not a professional because, according to Michael Bayles, s/he does not exhibit three significant components of professionalism: “rather extensive training,” which may include “advanced academic degrees,” as required per the field; “the training involves a significant intellectual component,” rather than physical labor; and “the trained ability provides an important service to society . . . vital to the organized functioning of society.” In addition, the professions tend to be self-regulating and members adhere to a set of ethical norms, determined by the profession itself and manifest in a code of conduct. While plumbers have training, that training does not involve an intellectual component, and the service
provided, while a convenience, is not vital to society. And plumbers are not self-regulating, instead answering to higher authorities.

John Kultgen suggests that professionals also have an obligation to “repay society,” by offering service in the public arena: judicial, civic, and educational. Dedication and altruism, coupled with a fervent passion, clearly mark professionals and distinguish them from those who simply make a wage in a certain occupation. For Samuel Florman, service is “the main existential pleasure of engineering . . . to contribute to the well-being of his fellow man.”

Professionals may provide *pro bono* work for the indigent or be active in local governmental boards, such as traffic commissions or city planning committees. Engineers without Borders, in particular, is laudable as an activity that has a significant, positive impact on project recipients; our campus chapter, for example, has gone to Tanzania for the past three summers to dig wells and provide the infrastructure in a remote community that currently does not have access to clean water. From these experiences, students learn important lessons about passion and commitment, as well as the very practical skills of managing large projects and obtaining sponsorships. While plumbers may indeed engage in civic affairs and conduct *pro bono* work, as a handful of websites attests, the degree of commitment appears to be less. There are exceptions, however: C.J. Plumbing, located in tiny Alsip, Illinois, has a “community service corps” that in 2010 racked up 388 hours of volunteer work in various community venues.

An attribute consistently cited in the literature is the necessity of lifelong education and currency in the discipline. While at least 30 states require refresher courses, seminars, or other types of professional development for maintenance of professional licensure, the professional, spurred by intellectual curiosity, goes beyond disciplinary requirements. Furthermore, the knowledge that the professional seeks is esoteric, out of the ordinary, and the professional actively contributes to the body of knowledge in his/her discipline. And the professional typically applies that knowledge as advice, rather than performing manual labor. Surgeons and lawyers, of course, are notable exceptions, as “manual labor” is a necessary component of those professions.

Autonomy is yet another characteristic commonly mentioned in the literature as a key professional attribute. Unlike our plumber, who generally works for someone else, professionals may provide consulting services and “are expected to exercise a considerable amount of discretionary judgment.” The ability to exert professional judgment, within the general guidelines of practice, is a hallmark of professionalism. Engineering, however, is curious in regards to autonomy, as, typically, engineers work for companies that control, to varying degrees, the work they perform. As Heinz Luegenbiehl explains, “most engineers and most of society think of engineers as professionals, but perhaps in a rather confused sense, since the individual autonomy of engineers tends to be restricted by their employment context.”

Professionals also belong to organizations that differ markedly from a plumber’s union. Whereas a union champions equitable pay and safe working conditions, professional organizations have a more scholarly function, sponsoring conferences, journals, and, most importantly, developing a code of conduct for its members, one that emanates from the membership itself to ensure consistent standards of practice and behavior within a given profession. For ethics instructors,
this is, of course, old hat, but for students—especially first-generation college students—this is genuinely new information.

Our list of professional attributes could consume many more pages, but for the purposes of expediency, we will mention but one more: “professionalism involves a sense of having a ‘calling.’” This term is usually associated with more metaphysical ventures than engineering (pastors, for example, are “called” to serve God), but it is an appropriate description of the type of abiding commitment professionals exhibit. Fulfilling the “hold paramount” principle of engineering ethics codes requires immense dedication and devotion to safeguarding and improving the lot of humanity.

Classroom Activity

In an effort to make the notion of professionalism more accessible and understandable, I have developed a small group activity that also serves as an icebreaker, since it occurs early in the term. This activity is easy to implement and takes about one 50-minute class period. I simply divide students into small groups, mixing up the disciplines; they need access to their written responses to the question, “What are attributes of a professional?” (at the beginning of each class, students receive a question, based on assigned readings from our textbook, Martin et al., Ethics across the Professions, to answer for the next class period). I ask the question, “Is a plumber a professional?” and include a working definition of a plumber—the person who comes to your house to fix your pipes, leaks, or whatever related problems you are experiencing. Predictably, most hands shoot up, indicating yes.

We then start a series of round robins, with each group offering a different characteristic of a professional; I write these on the chalkboard. While during this initial round most groups focus on superficialities, one or two groups may offer an attribute that is a defining feature of a professional, such as autonomy or work involving Bayles’ “significant intellectual component.” We stop frequently to discuss the responses: for example, “training” is a typical reply, so we discuss the difference between training and education. I always mention that training would probably not involve a required course in ethics. Engineering students, however, must be well versed in ethics and their professional codes, not only for the pragmatic reason of passing the ethics section of the impending FE exam but to avoid some of the egregious ethical transgressions of the past. If appropriate, I will mention a case or two, such as the Hyatt Regency Walkways Collapse, which clearly involves professional (and municipal) code violations. After each group has responded, I repeat the process: asking the plumber question, writing new responses on the board, discussing salient points. Groups may not reproduce the answer of another group; each must offer a new response. Typically, fewer hands go up, and we have another round robin, adding to the list on the board. This process continues until most students do not raise their hands or time considerations intervene.

After three or four rounds, we have filled up the three classroom chalkboards and have quite a healthy list. We then take a few minutes to identify defining characteristics of a professional, including the following:
Active in professional societies
Actively contributes to discipline’s body of knowledge/scholarship
Adheres to code of ethics
Avoids inflicting harm
Continues education beyond discipline requirements
Demonstrates lifelong commitment
Exhibits passion for work
Gives advice rather than performing manual labor
Has higher education/advanced degrees
Performs pro bono work
Practices autonomy
Provides a service to society
Receives rewards, either monetary or self-satisfaction
Self-regulating

By the end of our class period, most students have quit raising their hands in the affirmative, although there are always a few diehard hold-outs, whether out of sincere belief or sheer obstinance, I can never tell.

One cautionary note: some students may see professionalism as a checklist, perhaps as an unintended consequence of our board lists: develop that skill/attribute and presto! You are a professional! So it is important to discuss, in a follow-up session, that professionalism involves much more than checking items off of a list; it comes from within. It is part of an individual’s intellectual and psychological make-up, and, for some, an almost epiphanic awareness. Professionalism is much more than a job or career. It is a lifestyle.

**Student Reactions**

Student reactions emerge in two written assignments that follow the classroom activity: a memo analyzing their code of ethics and a reflection paper. The memo requires them to access their professional code and analyze it according to a given set of criteria, while the reflection paper allows for free discussion, referencing the readings, of any course topic thus far that has caught their fancy or spawned thinking. A number of students choose professionalism as their paper topics, and, as the paper is due about two weeks after the activity, they have had enough time to formulate relatively coherent responses, which tend to represent an emotional gamut.

Some students enter the class with very rigid notions of right and wrong—more than a few rooted in Christian fundamentalism—and evidence anger when their views are challenged, a perspective that clashes utterly with my own conviction that challenging beliefs is a major purpose of a college education as well as my “devil’s advocate” teaching methodology. Chris,* a mechanical engineering major, for example, queries, “Who decides who is a professional? Who makes the rules?” Similarly, Sean, majoring in manufacturing, interpreted our comments in the class

* Students’ names are pseudonyms
activity as an insult to his father, who is, of course, a plumber!

These are not uncommon reactions, and, upon further inquiry, I discovered that both students are first-generation college attendees. The “insult” reaction was partly due to a lack of knowledge about academic/professional culture, and partly because Sean assumed that we were accusing his father of being a bad worker. He equates professionalism with doing a job well, not with credentials, educational background, and expertise.

Benign indifference, simply not caring, is another common response. These students are neither hostile nor enthusiastic; they are just taking up space, waiting for the end. And most of them are seniors who just want to finish up and leave. Their papers tend to be rather perfunctory, uninspired, usually simply summarizing the readings, and pretty much devoid of original thought. Erika, a psychology major, explained that she didn’t see how this topic related to her life. She was simply tired of college and thought that philosophy was boring. By the end of the term, I had discovered that Erika thought everything was boring.

Some students experience a revelation of sorts. In terms of the activity, they may have argued vigorously in class in favor of plumbers as professionals but, after further thought, have changed their perspective. Greg, a civil engineering student, had an “aha” moment following our class discussion; he ended a very thoughtful paper by noting that “plumbers may be good, reliable workers but they are not professionals.”

Mike, another civil engineering major, nicely captures the change of perspective that many students experience after the classroom activity: “Prior to this course, “ he explains, “I considered any working human being a ‘professional’ at what they do, and I believed everyone could behave professionally.’ Now I understand that a true professional has a higher level of understanding and thus responsibility. . . . Although I feel like I have made significant progress, I understand that I still have much to learn about professionalism and myself. The soul-searching continues.”

Conclusions

Ultimately, how important is it to define professionalism? In a professional ethics course, it is essential. As professionals, our engineering students will design the products and processes that define our quality of life, impacting the environment, our health care, our business and personal relationships, our educational systems. The fruits of engineering ingenuity ooze into most areas of our lives, so much so that engineering is more of an environment, than a field of study. Greater impact confers greater responsibility.

While definition by trait is not necessarily the optimal approach in a world constantly reshaped by technology, our students must understand that professionalism binds them to society—legally, ethically, and technically—in ways that a simply making a living wage by working a job does not. Our plumber may be an excellent worker, a good family provider, a reliable civic volunteer, and an all-around great person, but that is a far cry from the responsibility that the professional bears.
References


