Professional Credentials – What Associated Schools of Construction (ASC) Members Are Doing

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Professional Credentials have long been a part of the construction industry and many different credentials are available to the construction professional. Due to the number and variety of professional credentials it is often times difficult for individuals to decide which credentials are most advantageous to their career. ASC member schools with construction management programs have been conservative in the number and variety of professional credentials supported by their respective schools. ASC member schools have also not mirrored the construction industry in their support for certain professional credentials. This paper surveys the department heads of ASC member schools to decipher how they are incorporating professional credentials into their programs.

Keywords: Credentials, Professional Credentials, License, Licensure, Professional Licensure.

Introduction

Obtaining a professional credential from a third party entity has become a major industry in itself over the past forty years. As an association becomes entrenched in our construction economy a certificate of competency is sure to follow. The building industry has seen this occurrence take on a heightened level over the past couple of years as the LEED rating system has become popular in the commercial sector of the building industry. Various LEED initiatives are currently found in federal agencies (13), states (45), localities (195), public school jurisdictions (17), and institutions of higher education (39) across the United States (USGBC 2009); adding fuel to the fire.

Professional credentials differ from a professional license as there is usually no government oversight involved in the credentialing process (Wiki 2009). Groups that historically have required a license to engage in its practice include medicine, law, engineering and architecture. One of the first associations to grant a license was the Royal College of Physicians. The Royal College was founded in 1518 for the specific purpose of "granting licenses to those qualified to practice and to punish unqualified practitioners and those engaging in malpractice" (Royal College 2009). Arguably, the practice of law has the oldest roots going back to the early Greek and Roman civilizations. However, the first state to initiate a formal licensing requirement for lawyers was Delaware in 1763 (Wiki 2009). Following in a similar fashion, engineering began a licensing requirement by the late-1700s, and architecture in the late 1800s (Wiki 2009).

All states have licensing requirements, that vary somewhat, for those engaged in the practice of law, medicine and engineering. However, states are unanimous when it comes to general contractors in that no individual license is required in order to be involved in the industry. All states have licensing requirements for general contracting businesses; but this does not necessarily require an individual to have a license (NOCA 2009). A few states (e.g., Florida) do require an individual to have passed the general contractors exam before the company can get a license that is good throughout the state (i.e., certified contractor). However, this provision only applies to a single individual in a given company and one can obtain a "registered contractors" license that is good only in a specified country without meeting the more stringent requirements of a certified contractor (Fla. Stat. § 489.103 2009).

A number of organizations offer professional credentials that have gained popularity in at least some of the sectors of commercial construction. Among these are the Occupational Safety and Health Act (OSHA), the Design Build Institute of America (DBIA), the Project Management Institute (PMI), the American Institute of Constructors (AIC),

and the U.S. Green Building Council (USGBC). OSHA was the first to offer credentials for constructors beginning soon after its formation in 1970. OSHA, a part of the U.S. Department of Labor, is also the only governmental organization offering a credential. OSHA offers a 10-hour training course and a 30-hour training course for contractors (OSHA 2009). The DBIA offers the Associate DBIA and the Professional DBIA designations based on education, testing and experience (DBIA 2009). The PMI offers certificates demonstrating proficiency in a number of areas; scheduling, risk management, program management and project management. The PMI was founded in 1969 and soon afterwards began its certification program for the Project Management Professional (PMP) (PMI 2009); one of the most recognized designations world-wide with a reach well beyond the bounds of construction. The AIC was founded about the same time as these other organizations (1971) and offered a credential since its inception. However, it was only in 1994 that the AIC began a testing requirement for their Associate Constructor (AC) and Certified Professional Constructor (CPC) designations (AIC 2009).

The USGBC, founded in 1993, began offering its LEED Accredited Professional (LEED AP) examination and related designation in 2001. Since then, more than 100,000 have become credentialed as LEED AP making it the most sought after designation in the current construction economy. LEED 2009 was introduced this past spring with a new two-prong designation system whereby the first designation will be the LEED GA (Green Associate) to be followed up after the candidate has some project experience with the LEED AP+ designation (USGBC 2009). Two points should be brought out with this change. First, it appears that an unstated goal of the USGBC is to provide a mechanism whereby students will seek the LEED GA designation more readily than they sought the LEED AP designation in the past. Second, one of the stated requirements of taking the LEED GA exam is to have completed a course in sustainability. It is unclear as to whether the USGBC's intent with this requirement is to sell more of its own courses or to encourage university programs to provide the sustainable construction course allowing their students to meet the eligibility requirement.

Each association or entity has its own reasons why one should seek its particular designation and the benefits that it will provide the individual. Among these reasons are many common threads that transcend the goals of the associations. "Three trends act together to make professional certification important to both the organization and the individual. First, university degrees no longer represent, if they ever did, the ultimate measure of professional knowledge and capability. A certification, by measuring job-related expertise, more closely reflects an individual's capacity to perform. Second, the downsizing of corporations, coupled with teaming, outsourcing, and temping, has forced professionals to take control of their own careers independent of their employers. A certification, awarded by a third party, endorses skills beyond the requirements of a specific position or role. Third, the business environment requires almost constant training, development, and professional involvement beyond one's particular job title. Certification programs, especially through their recertification requirements, provide guidance to individuals working to stay current in their profession" (Barnhart, 1997).

While many construction management (CM) programs are an integral part of an engineering or architecture college, the degree offered by the CM component is typically separate and distinct from the latter. By far, the most common degree offered to CM students is a bachelor of science degree, often with an area of expertise appended to the title. As very few opportunities exist for the constructor to seek a recognized "professional" designation such as professional engineer (PE), the construction industry offers fertile ground for third part credentials that allow construction students or practitioners to set themselves apart from their peers (Zimmerman 2008). CM programs encourage these credentials in a variety of ways, either directly or indirectly. The purpose of this study is to determine what CM programs are doing as a way of encouraging or requiring a particular credential as a part of the CM degree program. A follow up study is planned that will look at the ethnicity of such action.

Methodology

The objective of this research is to identify which credentials are being offered at ASC schools; how they are being managed, and if they are incorporated into the curriculum. The ASC is a professional association dedicated to the development and advancement of construction education. As such, ASC member schools, which are primarily located in the United States, have a focus on construction education. To conduct this research, an online survey was sent to the department heads of all 128 ASC member schools. Twenty-nine (23%) valid responses were received.

The survey included a number of specific questions about the credentials being offered at ASC schools. As previously mentioned, this paper focuses on the following four survey questions:

- 1. What third-party credentials does your school offer?
- 2. Who pays the cost associated with this certification?
- 3. Is the credential associated with a class offered at your school?
- 4. Is the student's grade in the associated class dependent upon the receipt of this credential?

Results and Analysis

The most common credential offered through ASC programs is the 10-hour or 30-hour OSHA certification. Ninety percent of the respondents reported that their program required the students to complete the OSHA training course (Figure 1). Seventy seven percent of these schools required the 30-hour course while twenty three percent required the 10-hour course. The next most popular credential offered is the AICs Associate Constructor credential. It is not surprising that these two top the list as the American Council for Construction Education (ACCE) requires at least one credit hour in construction safety and the OSHA certification is obtainable by the student at no fee if it is offered through a safety course in the CM curriculum. Similarly, the AIC Associate Constructor credential is offered to those who have completed a four-year construction curriculum with a fee of \$155 required to take the exam (AIC 2009).

Somewhat surprising to the authors of this paper are the next two results. The PE Fundamentals of Engineering (FE) exam was offered by thirty eight percent of those responding to the survey. This is surprising as only 14% of the ASC CM programs offer an engineering degree (ASC 2009). This can only be explained by a higher percentage of the engineering based programs responded to our blind survey than non-engineering based programs. The other somewhat surprising result is that those schools offering the LEED credential only comprised twenty four percent of those responding to the survey.

Over the past few years a heightened awareness has been placed on building sustainable facilities. This may be a result of higher oil prices, a renewed emphasis on global warming, the popularity of former Vice-President Al Gore's Academy Award winning film, the federal government's initiative to build more efficient buildings, or simply because we think it is the right thing to do. As such, much more media exposure is placed on the LEED credential and many employers pride themselves on the number of LEED AP employees they have. While a number of CM programs are incorporating sustainability in their curricula, it is not evidenced by the relatively few schools supporting the LEED credential. One can appropriately argue that sustainable construction is not the LEED system, that LEED is simply one avenue to promote or showcase your sustainable efforts – and that there are other measuring devices available. The authors do not disagree, we only note that the USGBC has been very successful in promoting the LEED system in commercial construction as evidenced by the number of projects that have received certification (over 3,800) and the number of projects that have been registered in 2009 (almost 9,000) (USGBC 2009). By any measuring stick, this represents an outstanding growth record in such a short period of time.

Figure 1 shows the professional credentials which are offered at the ASC schools represented by our 29 respondents. Figure 2 shows the number of respondents that incorporate a given credential program vs. those that do not. As one can easily see, only OSHA and AIC show more CM programs include credentialing from these associations than CM programs that do not. One item that should be noted in this figure is that while the PMI has one of the strongest member bases with over 265,000 members and that a number of universities associated with the ASC are PMI providers; no respondents to our survey reported a CM program providing a PMI credential as a part of their program.

Figure 3 distinguishes itself from Figure 1 in that not only are the professional credentials offered at the respective ASC schools, but are also formally incorporated into a class. Ninety percent of the schools offered an OSHA course and all ninety percent were a part of a course provided by the CM program as a part of its curriculum. While the AIC–AC credential was offered at 72% of the CM programs it is was only part of a class in 48% of CM programs. Similarly, the number of CM programs offering the LEED or PE credential is approximately twice the number of the programs that incorporate these credentials into their coursework. Figure 4 represents a follow up question to the

results in Figure 3. In approximately one-half the instances when the credentialing process is incorporated into a class, the passage of the test or gaining the credential is considered in evaluating the student's performance in the class; i.e., it becomes part of the student's grade (Figure 4). The other half the time it simply is a course requirement and the student's grade is not affected by passing the credentialing test.

The last item that is reported in the first part of the study is who bears the cost of obtaining the credential. In sixty four percent of all instances when a credential is offered, the student is required to pay his own way (Figure 5). The credential may be required as a part of the curriculum but the student receives no monetary assistance with the cost of the examination. Thirty six percent of the time the school does absorb the cost of the exam either using school funds (thirty percent of the time) or using external funds (six percent of the time).



Figure 1 - Third-Party Credentials Offered at ASC Schools



Figure 2 – Credentials Offered by ASC Schools



Figure 3 – Third Party Credentials Offered as a Part of the Curriculum



Figure 4 - Class Grades Based on Receipt of Credential



Figure 5 – Who Pays the Cost of the Credential

Conclusion and Trends

One thing seems clear from the results we received -- that ASC schools are generally conservative in the number of professional credentials they support and incorporate into their curriculums. It also appears, as evidenced by the marginal support for the LEED credential that ASC schools lag behind the industry in supporting a new credential and adopting it into their curricula. There is a direct correlation between those credentials which are incorporated into a class and those credentials which are offered at ASC schools. The results also suggest that for the majority of professional credentials which are offered, students are expected to pay for the testing and certification costs.

As we all are aware, changes in the curriculum and coursework at ASC schools is not easy and does not happen quickly, but as evidenced by the popularity of the OSHA certifications, if a credential can be incorporated in the course work it is more likely to be offered at an ASC school. It would be reasonable to assume that one reason some professional credentials such as LEED have not received wide range support from ASC schools is the difficulty of marrying it to a specific class. It also appears that for the majority of professional credentials ASC schools are comfortable leaving the choice and responsibility in the hands of the student and not commingling them into their respective curriculums.

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