

# Thoughts on Professional Practice and Education

Article 6: Licensing With and Without A degree

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This is the sixth article I have prepared in the series offering thoughts on professional practice and education. In this article, I wish to review survey licensing requirements. I have noted that a graduate of a surveying course of study will likely seek multiple state survey licenses. More practitioners seek multiple state licensing than when I started my surveying practice. It is common for four-year surveying graduates to be licensed in two or more states. I know of one individual licensed in more than a dozen states. As I look back on fifty years of surveying practice, over that time, I have held licenses to practice surveying in six states.

While the reader is probably aware of their state licensing requirements, a review of licensing requirements nationwide is appropriate. Requirements for licensure among states vary.

More than 25% of states require some formal education in order to be licensed. Not all of these states require a surveying or geomatics degree. The most stringent academic requirement found for licensure exist in states that require a surveying or geomatics degree from an ABET accredited program.<sup>1</sup> Some states relax this standard slightly by not mandating an ABET accredited surveying or geomatics degree. Relaxing academic restrictions even more, some states accept any four-year degree with a certain number of surveying credits. Next in academic laxity is a state allowing any four-year degree without specific surveying credits. Some states will permit a two-year surveying or geomatics degree with a certain number of surveying courses. Finally, a number of states continue to allow licensing by experience only. Two-years of experience is a minimum requirement coupled with education. The norm for experience among states appears to be four-years of experience coupled with education. More experience is required when there is less formal education.

It stands to reason that a person wishing to pursue licensure as a surveyor with the widest possible opportunity for employment and licensure in the United States should meet the most stringent state requirement for licensure. The person casting a wide net for employment or licensing should obtain an ABET accredited four-year surveying or geomatics degree. There are several universities in the United States and foreign countries with excellent programs that are ABET accredited. Some offer accredited surveying degrees entirely through distance education. Individuals can achieve an ABET accredited degree without leaving their state.

This wide diversity of pathways allowing surveying licensure reveals differing opinions nationwide and within state societies as to what should be the requirements for licensure in a state. The issue has been firmly settled in some states. It is a source of great debate in others. This article is not intended to create controversy in states that has had the controversy and has settled the requirements.

A person that does not have a degree or possesses a degree not accepted in a state of their residency or employment can always seek licensure in another state should they wish to show professional achievement. Of course, I must stress that a person working in one state

holding a survey license in another state cannot necessarily provide surveying services in the state where they work. The surveyor must hold a license in the state in which services are offered or performed.

I would also caution that in many states holding a valid survey license to practice in the state is not sufficient. The person must also hold a certificate of authorization (COA) or similar business license or work for a firm that does hold a certificate of authorization in the state. I have seen many disciplinary citations issued to out-of-state firms that incorrectly believed that they could provide services in a state by simply having an employee of that firm licensed in the state. I would also caution that the out-of-state firm must often pay income taxes to the state and in some case the municipality in which they performed their services and received payment. A most frustrating time in my past was when a municipality in a state I was not a resident demanded I pay an income tax on a small fee I received for services completed in that municipality. Had I been aware, I would have refused the services or doubled my fee to cover the frustration and time to do the extensive paperwork involved in paying a municipal income tax.

I would also like to dispel some misconceptions that surveying must be thought of as a 'lesser' profession or not a profession at all because individuals can be licensed without formal education in the professional field. I suppose some judges or legislatures feel and have ruled otherwise. Their position allows them to have an opinion that establishes the definition in that state. It is a fact of life that an opinion of a person in power means more than an opinion of some other person.

The fact is there are other professions that surveyors work alongside that permit licensure without a formal education. As I write this article, Washington, Vermont, California and Virginia allow an individual to become a member of the bar without graduation from a law school. Wyoming, New York and Maine allow individuals to be members of the bar without a juris doctorate (J.D.) degree so long as the individual has at least some law school courses.

Not all states require an engineering degree to become a professional engineer (P.E.). Some state permit engineering experience alone to qualify for licensure.

I am sure that some individuals reading this article will wonder what my opinion is regarding a requirement for formal education in order to obtain a survey licensure. I have five degrees and taught in a four-year surveying program for more than thirty years. My background would suggest I am a strong advocate for a degree requirement. Yet surprisingly, I am not in favor of mandating education in order to become licensed. My first surveying licensure was obtained based on my surveying experience alone. There is no question that I learned more about surveying by obtaining my B.S. degree. I also learned a lot more about surveying when obtaining my M.S. degree followed by my Ph.D., and, lastly, my law degree. The fact that I learned more about surveying upon attaining each degree, doesn't mean each degree should be required for licensing.

My opinion is that an individual that passes the fundamentals of surveying exam, professional surveying exam, and state specific exam has the knowledge necessary to competently practice surveying. Competent practice demands a minimum level of knowledge -

not retention of all knowledge possible. A degree will instill the information in less time, with a better understanding, and with more extensive knowledge. Yet, an intelligent individual, through self-study, and extensive experience can also gain the minimum level of knowledge for competent practice. I believe the important point is whether the individual has the knowledge, not the way the knowledge was acquired. Some of the best surveyors I have ever met or followed had no formal education or a two year degree only.

1 A search portal that provides ABET accredited surveying programs can be found at <https://amspub.abet.org/aps/category-search?disciplines=69&disciplines=67>

† Other books and articles by Knud can be found at <https://umaine.edu/svt/faculty/hermansen-articles/>