PROFESSIONAL DEVELOPMENT IN LANDSCAPE ARCHITECTURE: PROFESSIONALIZATION, GEOGRAPHIC TRENDS, AND RESEARCH CONSUMPTION

BY

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THESIS

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Professor M. Elen Deming, Chair Professor Emeritus Robert Riley Visiting Designer in Residence Jessica Henson ABSTRACT By definition, landscape architecture is considered both a "profession and academic discipline" (Evert et al. 2010, 509). However, the status and the legitimacy of landscape architecture as a true discipline has been somewhat contested in the past (Riley 1990, 47). According to Carr-Saunders's seminal 1933 book, The Professions, part of what separates practicing professionals from vocational tradesmen is lifelong training and intellectual learning (Carr-Saunders and Wilson 1933, 285). In landscape architecture, professional development can take many forms including reading academic or professional literature, entering speculative design competitions, pursuing advanced degrees, or attending professional conferences. However, there are few available studies on the current (or historical) status of professional development in the field of landscape architecture. This thesis investigates the value(s) placed on professional development by landscape architects in order to determine why practicing landscape architects partake in professional development activities through practitioner surveys and interviews. Two research strategies are utilized in this study: description and interpretation. Data collection is based on an online survey with selected follow-up interviews. The results of this thesis have potential implications for both academics and professionals in landscape architecture. Developing a better understanding of continuing professional learning may help identify weaknesses and strengths in the relationship between professionals and academics, which would potentially strengthen landscape architecture as a profession and as a discipline.

KEYWORDS professional development, research consumption, academic literacy, professional literacy, landscape profession

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INTRODUCTION

To many, landscape architecture is considered "a profession and academic discipline" (Evert et al. 2010, 509). However, as landscape architecture has evolved as a profession, the relationship between professional practice and academic practice in landscape architecture has become somewhat vague. Academia and practice both fall under the umbrella of *discipline*, but the relationship between the two is complex (Figure 1). Both sectors are influenced by the new knowledge they consume and the work they produce. Between the lines of practice and academia, there is a shared goal in advancing the discipline, but there are barriers as well.

In the traditional understanding of landscape architecture, the respective modes of production are clear: practitioners design, and academics teach and conduct research (Figure 1). However, the line between practice and academia becomes more blurred when practitioners are influenced directly by the academy through the consumption of research (Figure 1).

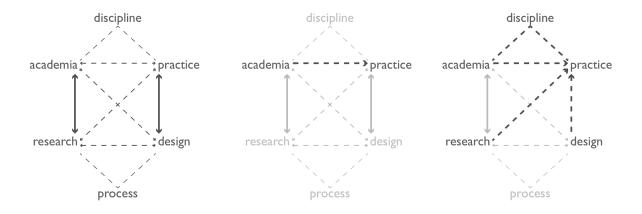


Figure 1. Exploratory expanded field diagram of the relationships in the field of landscape architecture. Diagram by the author, adapted from Krauss 1979.

Similarly, the modes of consumption relative to these hybrid practices seem relatively straightforward: practitioners consume new knowledge about design and design techniques, and academics consume literature regarding the research and teaching. These "traditional" modes of consumption lead to an oversimplified view of the stakeholders in field of landscape architecture: "clients want reports, professionals have magazines, and scholars have journals" (Benson 1998, 200). However, as practitioners and academics step out of typical modes of production and consumption, their need to explore and produce new types of work may increase. For instance, as practitioners are challenged to practice using more evidence-based design, and landscape architecture academics are pushed to publish more on the efficacy of built projects, it becomes necessary for researchers and practitioners to share information (Brown and Corry 2011, 328).

Especially because of the broad nature of the field, the expectations for professional growth in landscape architecture are increasing. As rhetoric is shifted to global issues such as climate change and habitat loss, it is expected that landscape architects should be prepared to help tackle these issues through the use of evidence-based design, requiring an understanding of the available literature and existing designs (Brown and Corry 2011, 327). Evidence-based practice requires a solid understanding of the efficacy of existing designs, meaning such design work requires more than intuition in order to produce more beneficial work (Brown and Corry 2011, 327). Especially for those practices moving toward evidence-based design, regular professional development is vital.

Statement of purpose

As landscape architecture evolves as a profession, especially in a fast-changing world, so should its professional development. Identifying strong points and inadequacies in the professional development of landscape architects is a starting ground for improvement in the resources available for practitioners, which might help them improve their work and advance the profession. This thesis investigates the views of current practitioners on professional development in the context of other influential factors, such as geographic trends and professionalization, through a survey of practitioners and follow up interviews.

Research questions

Objectives of this thesis:

- Identify historic patterns of professional development
- Determine how and why practitioners partake in professional development activities
- Understand professional attitudes toward professional development in general and toward consumption of academic research in particular
- Identify hurdles and obstacles to professional development
- Explore how professional development affects or is likely to affect the discipline

 In order to target the specific context within which practitioners engage professional development the following preliminary questions were developed:
 - 1. In general, what resources do practitioners of landscape architecture utilize for professional growth?
 - 2. In particular, do practicing landscape architects consume academic literature?
 - 3. Does professional development affect (stimulate or limit) the status and growth of the profession? If so, how?

Research strategy

The aim of the study is to describe the current professional development of practicing landscape architects and interpret the data in the context of historic patterns and geographic trends. Therefore, two research strategies are utilized in this study: description and interpretation (Figure 2).

	INDUCTIVE	ABDUCTIVE	DEDUCTIVE
OBJECTIVIST	Description	Modelling & Correlation	Experimentation
CONSTRUCTIONIST	Classification	Interpretation	Evaluation & Diagnosis
SUBJECTIVIST	Engaged action	Projective design	Logical systems

Figure 2. Chart of research strategies as outlined by Deming and Swaffield 2011, Figure 1.1.8.

A descriptive strategy is used to "produce new knowledge by systematically collecting and recording information that is observable or tangible" (Deming and Swaffield 2011, 50).

Through the use of a survey, a baseline for professional development among practicing landscape architects is described.

An interpretive research strategy "produces knowledge by identifying, naming, and assigning new significance or meanings to dimensions, themes, or narratives within a data set (Deming and Swaffield 2011, 51). This strategy is used to observe patterns in the data collected, in the context of different practice sectors and office sizes, and to gain a better understanding of why practitioners consume literature. This in turn helps to shed light on what role, if any, literature consumption plays in the field of landscape architecture.

THEORETICAL CONTEXT

This thesis examines professional development through the lens of the sociology of the professions, overarching theory in landscape architecture, and current theory of landscape architecture in the 21st century.

Sociology of the professions

The study of the professions has a long history. The first use of the term "profession" dates back to the early 16th century, when clergymen *professed* their consecrated vows (Freidson 1971, 21). Although the term was almost exclusively used for clergy, lawyers, and doctors in the 16th century, the word profession was extended to nearly all occupations in the late 16th century (Freidson 1971, 22). The term became more exclusionary in the 19th century, but it was opened to blue-collar professions than in the early 16th century (Freidson 1971, 23).

A subset of sociology, the sociology of the professions is considered the study of a social construct, as opposed to an economic phenomenon (Pavalko 1971, 1, 7). The sociology of the professions aims to decode some of the professional roles humans play in the workplace, where they spend a majority of their time (Pavalko 1971, 3). One major category of the sociology of the professions is the study of the "professional," as opposed to the skilled workers or clerical workers (Pavalko 1971, 12). Professional roles are investigated through social interactions, personal identities, and roles in society at large (Pavalko 1971, 4).

Related to professional development is the idea of "professionalization," which marks the shift from an occupation to a true profession (Pavalko 1971, 16). Those who are considered professionals "convey the idea of great skill or proficiency at performing some task" (Pavalko 1971, 17). One of the biggest benefits of being a true profession is to "convey a sense"

of competence and generate a sense of confidence and trust among potential customers," which has clear market benefits (Pavalko 1971, 17).

There are also theories under the umbrella of the sociology of the professions that treat professionals as a group of people who share specific knowledge, rather than sharing social, political, or organizational ties. Freidson suggests that being part of a profession implies a "method of gaining a living while serving as an agent of formal knowledge" (Freidson 1971, 20).

Theory in landscape architecture

Because the sociology of the professions is a broad lens, it is important to contextualize it within the field of landscape architecture. Theory in landscape architecture is in an "evolutionary state" (Murphy 2005, I). Landscape architecture serves individual clients, as well as society at large. According to Michael Murphy, the practice of landscape architecture involves the use of "design of the landscape" for "guiding change to improve the human condition" (Murphy 2005, I). Much theory in landscape architecture "forms the basis for determining how to design well, to bring about successful change in the landscape" (Murphy 2005, I).

There is theory behind the *practice* of landscape architecture, but there is also theory behind *landscape* itself. In essence, "landscape" could be almost anything, as it is "a broad term encompassing the totality of our physical surroundings (Murphy 2005, 11). According to James Corner, "landscape is less a quantifiable object than it is an *idea*, a cultural way of seeing" (Corner 1999). Landscape architecture is considered a "service profession," providing "planning and design services" (Murphy 2005, 2). Because landscape architecture is a service

profession, the theory behind landscape architecture must describe not only design principles, but also must embrace "core beliefs about the nature of the world" (Murphy 2005, 3).

Landscape architecture in the 21st century

With pressing issues such as climate change, exponential population growth, and loss of natural habitat, landscape architects are faced with increasingly complex challenges. These challenges are woven into practice today, even in the official definition of landscape architecture. In 1975, the ASLA expanded the definition of landscape architecture:

Landscape Architecture is the art of design, planning, or management of the land, arrangement of natural and manmade elements thereon through application of cultural and scientific knowledge, with concern for resource conservation and stewardship, to the end that the resultant environment serves useful and enjoyable purpose. (Marshall 1981,6)

No longer is landscape architecture solely the "art of arranging the land," it also encompasses "cultural and scientific knowledge" to combat environmental and social issues (Marshall 1981, 6). Because of the challenges facing landscape architects, there has been a push to incorporate evidence-based design into the profession to "provide a sound footing" for design decisions (Brown and Corry 2011, 328). Lamba and Graffam argue "in order to keep our profession relevant...scholars and leading practitioners have advocated the integration of practice and research" (2012). Integrating research into practice has been embraced by some practitioners and also by advocacy organizations. Part of the mission of the Landscape Architecture Foundation (LAF) is to support the profession by investing "in research and scholarship to

increase our collective capacity to achieve sustainability" (LAF 2014). Riley suggests that scholarship in landscape architecture should "provide a knowledge base for...design" (Riley 1990, 50). The goals of landscape architecture are changing as the "emphasis shifts from landscape as a product of culture to landscape as an agent producing and enriching culture" (Corner 1999, 4).

Variants and critiques

Because of the extreme variation among professions, one of the weak points in the sociology of the professions is the inability to directly measure or compare different professions. All professions have developed in specific social constructs, technological history, and socioeconomical environments. Although there are specific milestones that are vital to the professionalization of every profession, much of the research generated regarding professions is a reflection of each specific professions' "aspirations and self-concepts," not by baseline standards of the profession (Pavalko 1971, 17).

Not only is comparing different professions difficult within the sociology of the professions, but agreeing on a definition of what composes a profession is a challenge. While Pavalko focuses more on the direct social ties within a working group, Freidson focuses more on the ties formed by sharing a common knowledge. Although the sociology of the professions provides a lens to analyze landscape architecture, it is inherently, because of its breadth, a blurry lens.

Similar to landscape architecture, other professions, are subject to periods of growth, decline, and restructuring. Although the study of the sociology of the professions and the field of landscape architecture seem intangible, they help explain tangible shifts in the profession such as changes in status, income, and regulations.

TOPICAL BACKGROUND

Consumption of new knowledge is vital to the continued development of any field, landscape architecture included. Practitioners in landscape architecture, as with other professions, are set apart from vocational tradesman by their "specialized intellectual training" (Carr-Saunders and Wilson 1933, 285). In a broad field such as landscape architecture, the forms that professional growth may take are quite diverse. In the first chapter of the first edition of The Professional Practice of Landscape Architecture, Walter Rogers suggests, "every profession is bound together by specific technical knowledge and skills and by a bond among its practitioners...landscape architecture is no exception" (Rogers 1997, 1). One is not considered a professional practitioner solely based on obtaining a college degree or certification by a professional organization, but also by the "training [that is]...intellectual, prolonged, and based on exploration" (Carr-Saunders and Wilson 1933, 286). Rogers dedicates a small section of his first chapter to "Professional Development," which he defines as "the term used to describe the landscape architect's continued honing of his or her skills and interests in the profession and the broadening of his or her professional expertise" (Rogers 1997, 17). Rogers lists several types of potential professional development: learning new methods or techniques, acquiring a specialty, taking a college course, involvement with a professional association, or becoming involved in a local development plan (Rogers 1997, 17). Rogers' description of professional development describes one of the more normative relationships in the expanded field of landscape architecture: practitioners consume design and design techniques.

Professionalization in landscape architecture

During the 1800s in America, there was a shift from 'occupations' to more specialized 'professions' (Baird and Szczygiel 2006, 3). Studying "professionalization" is a "heuristic device

[which] makes it possible to examine changes in the organization and meaning or work activities" (Pavalko 1971, 12). Although there are several methods of tracking professionalization, the "Temporal Sequence of Professionalization," is a common method of tracking important milestones (Pavalko 1971, 28). Wilensky 1964 offers five initial milestones for professionalization:

- 1. Substantial number of people practicing full time
- 2. Establishment of a training school
- 3. Professional organization
- 4. Support and protection by law
- 5. Code of ethics

While Wilensky's list is not considered exhaustive, it is a commonly used basis for initial professionalization.

The field of landscape architecture is a relatively young profession with a long period of professionalization. Landscape architecture, according to Norman T. Newton, became a modern profession in America with the work of Frederick Law Olmsted in 1863 (Newton 1971). However, landscape architecture as a profession has roots dating back to 1804, when Jean-Marie Morel coined the term 'architecte-paysagiste,' which translates to 'landscape architect' (Turner 2008; Figure 3). It was not until 1858 that Frederick Law Olmsted referred to himself as a "landscape architect" (Vernon 1987; Figure 5).

Figure 3. Timeline callout of the foundation of landscape architecture. Diagram by the author with resources from Turner 2008 and Vernon 1987.

The foundation of the professional society of landscape architects in America, the American Society of Landscape Architects (ASLA 2013), was founded in 1899 with eleven members (ASLA 2013). The current mission of the ASLA is as follows:

The Society's mission is to lead, to educate, and to participate in the careful stewardship, wise planning, and artful design of our cultural and natural environments. (asla.org)

Soon after the founding of the ASLA in 1899, the first academic landscape architecture program was founded at Harvard in 1900. Shortly after, the ASLA released a definition of landscape architecture (Marshall 1981, 6):

Landscape Architecture is the art of fitting land for human use and enjoyment.

During this period of initial professionalization, there are several other milestones, including the founding of *Landscape Architecture Magazine*, accreditation, and licensure regulations (Figure 4). This order of professional events would be considered out of sequence according to Wilensky 1964. Typically, there is a "substantial number of people" working full time in the profession before training schools, or professional associations are formed (Wilensky 1964). However, the American Society of Landscape Architects was formed in 1899 with only eleven members, and the membership stayed relatively low until the 1920's (ASLA

2013). Usually training schools precede professional organizations, but the first landscape architecture program was founded one year after the formation of the first professional organization. Typically, a code of ethics is the final stage in professionalization, but registration (support of the law) began 26 years after the code of ethics was adopted by ASLA. Although landscape architecture took a somewhat unorthodox path to professionalization, it is in 1953 when practitioners first register as licensed landscape architects in the state of California.

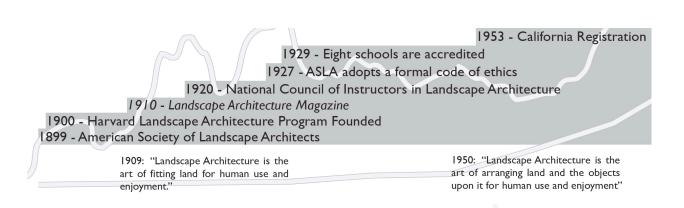


Figure 4. Timeline callout of the professionalization of landscape architecture. Diagram by the author with resources from Baird, C. Szczygiel 2006, Marshall 1981, and asla.org.

Many of the organizations that influence the profession today were founded in the 1960s and 1970s (Figure 4). The Landscape Architecture Foundation (LAF), founded in 1966, and the Council of Educators in Landscape Architecture (CELA), founded in 1976, play support roles for the profession. LAF supports the profession by "investing in research and scholarship to increase our collective capacity to achieve sustainability" (Landscape Architecture Foundation 2014). CELA supports academic research in the field of landscape architecture by publishing Landscape Journal, "the highest quality research conducted in the profession" (CELA 2012). The Council of Landscape Architecture Registration Board (CLARB), founded in 1961, and the Landscape Architecture Accreditation Board (LAAB), founded in 1978, serve as regulatory

bodies for the profession. CLARB, an independent organization, "is dedicated to ensuring that all individuals who affect the natural and built environment through the practice of landscape architecture are sufficiently qualified to do so" (CLARB 2009). Under the guidance of the ASLA Board of Trustees, LAAB "develops and promulgates the accreditation standards, rules and procedures for conducting the accreditation process" (ASLA 2014).

1978 - Landscape Architecture Accreditation Board
 1976 - Council of Educators in Landscape Architecture
 1966 - Landscape Architecture Foundation
 1961 - Council of Landscape Architecture Registration Boards

1975: "Landscape Architecture is the art of design, planning, or management of the land, arrangement of natural and manmade elements thereon through application of cultural and scientific knowledge, with concern for resource conservation and stewardship, to the end that the resultant environment serves useful and enjoyable purpose."

Figure 5. Timeline callout of the professionalization of landscape architecture. Diagram by the author with resources from asla.org.

In recent decades, several landscape architecture journals have been founded (Figure 6). Landscape Journal, the preeminent peer-reviewed landscape architecture publication in America, supports the profession by offering "in-depth exploration of ideas and challenges that are central to contemporary design, planning, and teaching" (Board of Regents of the University of Wisconsin System 2014). The Journal of Landscape Architecture, founded in 2006, and Landscape Review, founded in 1995, are also important publications for landscape architecture, but are published in the United Kingdom, and New Zealand respectively (European Council of Landscape Architects 2014, Landscape Review 2014).



Figure 6. Timeline callout of professionalization of landscape architecture. Diagram by the author with resources from Powers and Walker 2009.

Although the timeline is not an exhaustive representation of every event in the professionalization of landscape architecture, noting key events improves understanding of the profession and illuminates patterns in professionalization.

Professionalism

Landscape architecture has clearly reached the organizational and disciplinary milestones that are required to become a true profession (Figure 7). Much like medicine or law, landscape architecture has developed its own code of ethics, an accreditation process, professional licensure, etc. Being a part of a true profession, as opposed to an occupation, not only has legislative consequences, but also brings about "dignity, prestige, and respect" (Pavalko 1971, 16).

			hitecture
	firefighter	LandscapeA	nc. Redicine
PROFESSIONAL MATURITY	king	Lan	460
Initial Professional Education		Χ	Χ
Accreditation		X	X
Skills Development	Χ	Χ	X
Certification	Χ	Χ	X
Licensing		Χ	X
Professional Development	Χ	Χ	X
Professional Societies	Χ	Χ	X
Code of Ethics	X	Χ	X

Figure 7. Chart of professionalization milestones. Diagram adapted from National Initiative for Cybersecurity Education 2013.

From its inception as an autonomous profession, landscape architecture took nearly a century to mature. Growth in the profession has occurred in spurts: invention, professionalization, organization, and intellectualization. Although landscape architecture has proliferated, some would argue that the profession has not achieved a vital step in professionalization, "public approbation" (Baird and Szczygiel 2006). Although other professions are widely recognized and accepted by the public such as law, medicine, and architecture, "landscape architecture, to date, has not achieved the same level of public understanding and approbation" (Baird and Szczygiel 2006, 3). According to Brown 2011, landscape architecture has only reached the level of professionalization equivalent to the discovery of antibiotics in medicine (Brown 2011, 328).

In contrast to other occupations that professionalised at the same time - such as law, medicine or engineering - landscape architecture failed to develop a clear, concise public image (Baird and Szczygiel 2006, 4).

Landscape architecture is a broad profession, somewhat misunderstood by the general public.

Parents fear their children are working towards a future of "landscaping," and will forever work mowing lawns. The mission of medical doctors is relatively straightforward – help patients improve their health. However, landscape architects have much broader goals, which is evident in the definition of landscape architecture released by the American Society of Landscape Architects in 1975, the definition which still stands today:

Landscape Architecture is the art of design, planning, or management of the land, arrangement of natural and manmade elements thereon through application of cultural and scientific knowledge, with concern for resource conservation and

stewardship, to the end that the resultant environment serves useful and enjoyable purpose (Marshall 1981, 6).

Compared with the original definition of landscape architecture, released in 1909:

Landscape Architecture is the art of arranging land and the objects upon it for human use and enjoyment (Marshall 1981, 6).

the current definition as asking a lot from practitioners. Landscape architecture is no longer simply an "art of arranging," it requires "art..., design..., planning..., (land) management..., cultural and scientific knowledge..., [and] stewardship" (Marshall 1981, 6). Working to achieve such high goals will require constant growth, making professional development an essential part of practice. In order to convince a public that the profession is ready to accept the challenges facing society today, practitioners must prove their worth to the public. The thought of mastering the breadth of the skills listed in the current definition of landscape architecture while in school seems unfathomable. Evolution of the profession was mentioned several times by interviewees (Figure 28). Landscape architecture requires constant growth to stay current. Not only did interviewees state that professional development is important for practitioners in an evolving profession, but that the profession could "die off" without it (Figure 28). Interviewees found that professional development increased their proficiency, helped them learn new techniques, and improved their overall work (Figure 28). It is expected that doctors follow innovations in treatments and that lawyers learn recent case law - landscape architects should also pursue new techniques, improved materials, more efficient software, etc.

Regionalism in landscape architecture

Because landscape architecture is a place-based profession, differences in geography are important to the profession. Markets vary from place to place, the needs of the clients change, local and regional regulations are inconsistent, and physical/climatic challenges can vary greatly. Because practice can vary so significantly even in one country, it is important to understand the geography of practitioners in order to work towards improving their resources for professional development. The professional development for a practitioner working for the National Park System in Utah may be completely different form than a practitioner working at a design firm in New York City. Professional practice varies tremendously; therefore, professional development is not necessarily one size fits all. Understanding the basic differences among practitioners across the country is one step toward identifying how to improve professional development for practitioners.

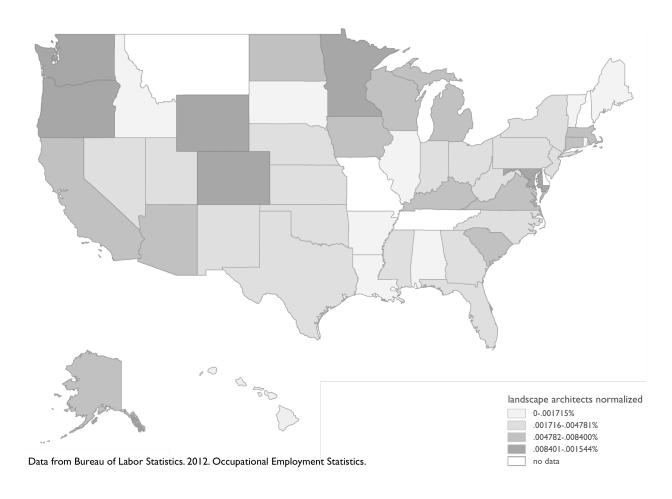


Figure 8. Map of the number of landscape architects in the United States normalized by the population of each state. Diagram by the author with resources from US Bureau of Labor Statistics 2012.

Because landscape architecture is a relatively small profession, with only 20,100 landscape architects nationally, there is not a very high percentage of landscape architects in any state (US Bureau of Labor Statistics 2012). However, there are considerable differences in the number of landscape architects per capita between states. For example, there are roughly eight times more landscape architects per capita in Colorado than in Illinois (Figure 8). The highest concentrations of landscape architects are in states with relatively small metropolitan areas, such as Wyoming, Minnesota, and North Dakota (Figure 8).

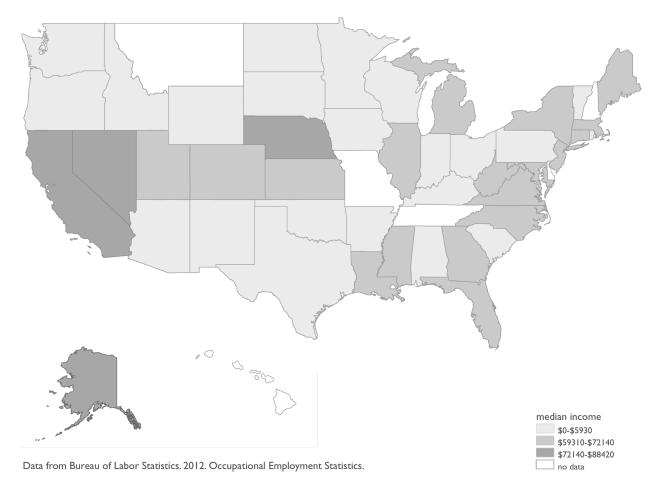


Figure 9. Map of the median income of landscape architects in the United States by state. Diagram by the author with resources from US Bureau of Labor Statistics 2012.

The median income of landscape architects also varies state to state (Figure 14). Many states, including Texas, Ohio, Pennsylvania, and Washington have a median income of about \$60,000 or less for landscape architects. Many landscape architects, especially on the east coast, have a slightly higher median income, of about \$60,000 - \$72,000. The highest median income for landscape architects, at roughly \$72,000 - \$88,000, is only found in a few states, including California, Nevada, and Alaska. The median income varies by state; however, changes in income do not necessarily reflect changes in the cost of living (Figure 9). Nebraska has one of the highest median income ranges (\$72,140-\$88,420) for landscape architects, yet it has a

relatively low cost of living (Figure 9). Alternatively, Rhode Island has one of the highest costs of living, but landscape architects in Rhode Island have one of the lowest median income ranges (>\$59,30) (Figure 9).

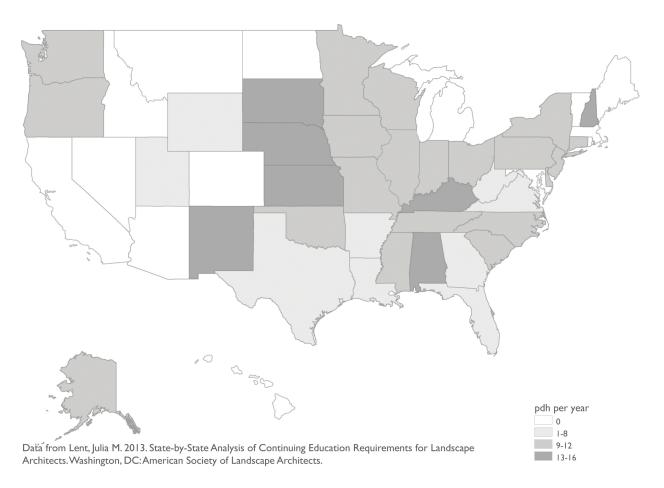


Figure 10. Map of the number of the number of Professional Development Hours required by licensed landscape architects to keep their registration current. Diagram by the author with resources from Lent 2013.

In addition to differences in income and density among states, there are also regulatory differences from state to state in landscape architecture. Licensure of landscape architects is regulated by individual states; therefore, rules and regulations for continuing education differ among states (Figure 10). Some states require no continuing education, such as Colorado,

California, and Maine. States that require continuing education track progress through "professional development hours" (Lent 2013). Many states track this progress annually, others biennially. For the purposes of illustrating a comparison, states which regulate professional development hours biennially have been graphically represented with half of the required professional development hours (Figure 10). There is a range in the number of professional development hours required for retaining licensure, from 8-16 per year (Figure 10).

Research discourse

As previously mentioned, professional development can take many forms. However, there are certain aspects of professional development that are expected by several parties, ranging from registration boards to editors, either explicitly or implicitly.

Expectations of professional development

Lifelong learning is a general requirement of true professionals (Carr-Saunders and Wilson 1933, 286). However, different parties in the profession have different expectations for practitioners (Figure 11). There is a range in the types of education from normative to constitutive. Normative expectations for professional development are those that ensure baseline competency and best practices in the profession, such as an understanding of grading and drainage principles or storm water management. Regulatory bodies such as the American Society of Landscape Architects (ASLA, the Council of Landscape Architecture Registration Board (CLARB), and state legislatures set minimum standards for practitioners. According to the ASLA Code of Professional Ethics, "Members shall continually seek to raise the standards of aesthetic, ecological, and cultural excellence through compliance with applicable state

requirements for continuing professional education" (ASLA 2009, 4). However, professional development is highly suggested by many groups.

Advocates of the profession, such as landscape architecture scholars and organizations such as the Landscape Architecture Foundation encourage practitioners to consume research. Constitutive practices push the profession forward by forming new types of works – innovative designs and concepts. At the constitutive end of the spectrum, highly motivated practitioners lead by example. Forward-thinking firms such as Scape, OLIN, Hilderbrand, and SWA Group encourage other practitioners to grow professionally by disseminating their work.

Disseminating high quality work can inspire fellow designers to improve their own work.

Continued learning through speculative design work, research, or teaching is alternative professional development that not only improves individual practitioners, but also has the potential to improve the entire profession.

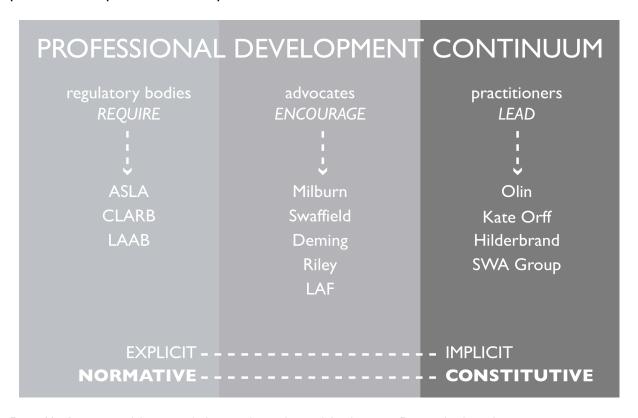


Figure 11. Continuum of the types of advocates for professional development. Diagram by the author.

Landscape Architecture Continuing Education System

Continuing education requirements differ greatly by state, but the Landscape Architecture

Continuing Education System (LACES) is program is a collaborative effort between ASLA,

CSLA, CELA, CLARB, LAAB, and LAF. LACES creates and maintains the guidelines for

professional development in landscape architecture (ASLA 2013, 1). Not only are practitioners

expected to take part in professional growth, many states now require registered landscape

architects to obtain continuing education credits or units (CE or CEUs).

Continuing education has never been more important for professionals; it is needed to stay up to date in the profession, to develop new areas of expertise, and is mandated for maintaining licensure in many jurisdictions (ASLA 2013, 1).

Continuing education credits are standardized professional development activities offered to landscape architects by professional organizations at the state and national level, as well as by individual groups or firms. LACES defines "continuing professional education" as "learning experiences that enhance and expand the skills, knowledge, and abilities of practicing landscape architects to remain current and render competent professional service to clients and the public" (ASLA 2013, 2). LACES suggests that this definition should be "viewed broadly" (ASLA 2013, 2). The content of these courses ranges from learning or improving technical skills to discussing ecological principles. The American Society of Landscape Architects, through the Landscape Architecture Continuing Education Systems (LACES), and the Council of Landscape Architectural Registration Board (CLARB), which regulates landscape architecture licensure, monitors the quality of professional development materials.

There are somewhat opposing views on the standardization of professional development. Regulated professional development in some ways "emphasises the importance of individuals developing and maintaining their professional knowledge and expertise on a lifelong basis" (Tobias 2003, 450). In New Zealand, Tobias found that regulated professional development has "played a key role in raising the standards of competence of members" of professional groups (Tobias 2003, 451). As all members of a profession learn, the whole profession improves. However, some worry that required, standardized professional development can "limit creativity, restrict the pursuit of excellence, [and] preserve mediocrity" (Tobias 2003, 452).

Academic literacy

In addition to the expected professional growth outlined by Rogers and the requirement for continuing education credits by states, there is also some expectation that landscape architects will consume academic and professional literature. For example, the content and impact of Landscape Journal, the premier peer-reviewed scholarly journal for landscape architects, is aimed in part at informing practitioners; this is clear from its mission statement:

Landscape Journal is dedicated to the dissemination of the results of academic research and scholarly investigation of interest to practitioners, academicians, and students of landscape architecture.

As outlined by Gobster et al., one of the goals of *Landscape Journal* "has always been to affect the practice of design, planning, and management of the land" (Gobster et al. 2010, 68). It is important to recognize that the potential for conflict within the discipline of landscape

architecture only worsens between academia and practice when the expectations, standards, and procedures for professional growth differ between these two sectors of practice.

The assumption that professional development of practitioners is limited by the more traditional modes of growth outlined by Rogers in 1997 may no longer be adequate or appropriate for the contemporary discipline of landscape architecture. As the modes of production of landscape architects shift to more research-oriented practices, it can and should be expected that the modes of consumption will shift as well. However, even in the updated edition (2011) of Professional Practice of Landscape Architecture by Rogers, there is little revision to the tenets of professional development. Although nearly 15 years passed between Rogers' editions, most of the section on professional development simply reproduces the first edition; the only obvious revision is an increase in the mention of the importance of developing software skills. However, one may hope that as the profession of landscape architecture has evolved, it should be assumed that professional development should evolve with it. As a popular text for professional practice, Rogers' work should challenge future and current landscape architects to grow professionally in order to advance the profession. Although Landscape Journal and Rogers' Professional Practice of Landscape Architecture have seemingly similar overarching goals - advancing the profession, their work does not necessarily align.

Professional development can take many forms, from workshops to websites. However, an important source for professional learning is professional literature. Although common methods of professional development such as attending workshops or conferences are important, "reading professional literature" is a "necessary complement to these sources" (Sanacore 1996, 404). Including professional literature in a professional development regiment "stresses intrinsic motivation" and supports "lifetime professional growth" (Sanacore 1996, 404).

Academic literature serves an important role in landscape architecture because it helps inform practitioners of new research in the field. According to a Milburn et al. 2001, "educators in landscape architecture have a generally positive attitude toward research and its importance to the profession" (Milburn et al. 2001, 61). Although academics do not necessarily produce research exclusively for practitioners, practitioners are considered part of the audience of academic publications.

Professional development is expected from practitioners, not only in a theoretical context, but also from regulatory bodies and from groups within the discipline. Professional development is an integral part of being a true "professional," and in many cases, it is required for practitioners to retain their licensure. However, it is also important for practitioners to access literature and other professional development resources to stay current with the profession and push the profession to grow.

RESEARCH DESIGN & METHODS

The research framework for this thesis is based on a survey of practitioners, an analysis of geographic trends, an interpretation of patterns in qualitative responses to the survey and follow up interviews. Many existing resources on professional development in landscape architecture in the United States focus on structured continuing education, describing the professional development of practitioners through the use of a survey was necessary to understand broader patterns.

Survey methods

The practitioner survey included both a web-based questionnaire and selected follow-up interviews. The target population for the sample included registered landscape architects working for design firms, design-build firms, multidisciplinary firms, public sector agencies, and not-for-profit organizations that are landscape architecture-oriented. In addition, a self-identified sub-population of professionals that in some form advertise their interest in or commitment to research in their practices was included. The survey serves as a preliminary investigative tool in search of broad patterns or trends, not as a baseline census. In particular, because the online questionnaire I analyzed was sent under the auspices of a larger research umbrella, it targeted a specific population of landscape architects. I

Although the topic of this thesis deals with the professional world of landscape architecture, this thesis is written from a newcomers's point of view. As a student who has not yet entered the professional world, I am relying on information from other professionals. This thesis was developed in concert with the research of Professor Elen Deming of the University of Illinois at Urbana-Champaign, and Professor Simon Swaffield of Lincoln University, New Zealand. Their work in progress, tentatively titled Research in Practice, studies the culture and role of research in contemporary landscape architectural practices. In serving as a Research Assistant for their project (2013-14), my thesis has both contributed to and has been influenced by their work.

Because the survey is concerned with human subjects and their attitudes, the initial research complied all protocols and best practices of a research university. The survey and potential follow up interviews were completely voluntary. Subjects were apprised of their rights to privacy; in particular they were informed that all raw and reported data would be kept anonymous. In the analysis, results of the survey were only described in the aggregate. Interview subjects were not identified by name or firm, only by practice sector. Interview results were reported using codes, not raw transcripts to prevent the dissemination of any identifying information.

The online survey was constructed and disseminated (May to October 2013) using the SurveyMonkey™ questionnaire tool. Data was collected and analyzed using the automatic functions of SurveyMonkey™, along with some additional heuristics developed by the researcher. The total online survey comprised 6 sections with 33 questions and required about 20 minutes to complete. The portion of the survey that addressed this thesis questions was integral to the larger survey, with only eight questions directly informed this thesis (Appendix 2).

Respondent groups

The survey was disseminated to three groups of practitioners: practitioners who had publically expressed an interest in or a commitment to integrate research in their practices, elected leaders of ASLA, and members of three (3) different ASLA Professional Practice Networks (PPNs) (Figure 12). The survey was initiated as preliminary research for the Research in Practice team. Therefore, the first respondent group, the "research" group was the initial target. The ASLA leadership and Professional Practice Network groups were later selected in order to expand the reach of the survey and diversify the respondent groups.

Survey Respondent Groups

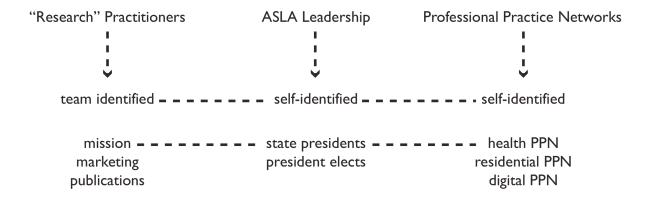


Figure 12. Electronic survey respondent groups. Diagram by the author.

The "research" respondent group was a group of landscape architecture practitioners identified by the Research in Practice Team (Deming, Swaffield, and Moen). Approximately 200 firms, non-profit organizations, and public agencies were targeted for recruitment. Survey participants were identified in Spring 2013 through a series of systematic web searches using keywords, by searching historic and current professional awards and case studies, and through professional networks and contacts. Several criteria helped in determining whether or not to include firms or organizations in the survey.

The preliminary search for participants began with collecting the names of design firms, public sector agencies, or non-profit organizations identified by students enrolled in a preparatory thesis course, *Introduction to Research Design & Methods in Landscape Architecture* (LA599A—Thesis Prep). Students in Spring terms of 2012 and 2013 were asked to submit 2-3 design firms, public sector agencies, or non-profit organizations that claimed or appeared to conduct research in Landscape Architecture.

Using this list as a launch, the search for participants was then extended to design firms, public sector agencies, or non-profit organizations that had been recognized by the Landscape Architecture Foundation (LAF) or the American Society of Landscape Architects (ASLA) for research awards or case studies. Case Study Investigations (CSI) is a relatively new project conducted by the Landscape Architecture Foundation, in which landscape architecture faculty, students and design firms collaborate to develop case studies. Firms selected by LAF to participate in the CSI project were included in the list of participants for the study. Participants were also identified by searching ASLA professional awards for Analysis and Planning, Communications, and Research from 1981-2012.

After exhausting the awards and case studies by ASLA and LAF, a systematic web search was used to increase the number of participants. For each of the participants identified, the organization's LinkedIn™ webpage was recorded in the database. LinkedIn™ is a social media database primarily used for professional networking. Each company page on LinkedIn™ has a small section devoted to a service referred to as "Insights." The "Insights" service provides a list of similar companies, non-profit organizations, government agencies, or associations. Several of the participants were identified using the "Insights" service via LinkedIn™ (Figure 13). "Research interest" was positively identified if the potential participant referenced "research" (or relevant synonyms for research) in their firm profile or mission statement on the website, or if there was some form of a "research" or "publication" page as part of their website.

People Also Viewed



Figure 13. Screenshot of LinkedIn™ "Insights," which prompts users to view similar pages.

Not every search led to a useful participant. In order to limit the list of participants to those who advertised some interest in research activities, some of the potential participants found in the LinkedIn™ and Landscape Architecture Thesis course had to be excluded. A majority of the potential participants discovered through LinkedIn™, and a few of the resources provided by students in the thesis course either did not have a strong web presence indicating their research interests or were not landscape architecture practitioners. Many results found through LinkedIn™ were firms or organizations that almost exclusively employed architects, urban planners, environmental consultants, horticulturalists, but not landscape architects. If no signs of either research in landscape architecture, or landscape architects as employees were found, the participants were removed from the list. Several of the students included researchers who are exclusively employed by academic institutions. Because the target subpopulation for the survey is professionals in landscape architecture, not academics, those potential participants were removed from the list.

The initial questionnaire was limited to a sub-population of landscape architects – those who exhibited and/or expressed an interest in research, for instance, through their own websites, speaking practices, and promotional materials. Although the administration of the questionnaire was eventually expanded to other groups of landscape architects in other specialties and regions, the questions remained the same. Keeping the questions the same allows for comparison among the groups; however, the initial questions were written for a "research" group audience of practitioners.

The second and third groups of respondents were self-identified. The ASLA leaders were identified through state chapter and national leadership announced on the Internet. The survey was sent to current presidents and president-elects of state and regional chapters. The survey was also sent to select ASLA Professional Practice Networks (PPN). Enrollment in one PPN is included with full ASLA membership. The survey was sent to three PPNs: Residential Landscape Architecture, Digital Technology, and Healthcare and Therapeutic Design.

Interview methods

Following the close of the online questionnaire in October 2013, follow up interviews were planned partially to verify the questionnaire results, and partially to gain new insights on some of the inconsistencies of the questionnaire results. Five short follow-up interviews were conducted. Interviewees were identified through opportunistic meetings at the ASLA National Meeting in 2013 and through professional contacts. Interviews lasted roughly 8-10 minutes. All interviewees were asked questions from the same bank of questions (Appendix 3).

Interviews were recorded via a digital voice recorder. The interviews were later transcribed manually, with the help of transcription software. The software, $InqScribe^{TM}$, is a

playback service, which has the ability to slow audio and enables key commands for easy pausing. Interview responses then were coded. In an effort to maintain privacy and ensure unbiased coding, the identities of the interviewees were detached from responses and remain anonymous. Every response was entered into a Microsoft Excel™ spreadsheet without any contact information attached to the responses. Each response was coded, separated into subcategories and categories, and finally themes were identified from the categories. Codes were drawn from the responses by identifying key words and phrases, with any additional context phrases attached. For example, if an interviewee stated she had "recently participated in an ASLA webinar," a potential code would be "webinar." To add context to the code, the phrase "ASLA" would be attached using brackets (webinar [ASLA]). A potential subcategory for this code, (webinar [ASLA]), could be "online resource," which could fall under the category "types of professional development resources." After all of the responses were coded and categorized, themes were drawn from the categories.

RESULTS

Survey response rates

Response rates were adjusted to account for "false respondents" (Figure 14). Upon receiving the link to the online survey, respondents could either open the survey or choose to opt out — meaning they would no longer receive reminders or notices from our team. Only 17 individuals chose to refuse participation in the survey. However, there were some respondents who agreed to participate in the survey, but subsequently did not answer any questions. Survey Monkey™ counted these individuals as respondents. In order to adjust for false respondents, response rates were calculated by dividing the number of individuals by the number of survey invitations sent out (Figure 14). Response rates varied among respondent groups (Figure 14). The ASLA State Presidents group had the highest true response rate, at 17% (Figure 14). The Residential Professional Practice Network (PPN) group had the lowest true response rate, at 3% (Figure 14). However, the Residential PPN group had a relatively high number of true respondents, at 28 (Figure 14). The response rate was the lowest because the Resident PPN group also had the highest survey population, at 856 (Figure 14). The overall true response rate of all of the respondent groups was 7%, with 110 true respondents (Figure 14).

	Group	Survey Population	Opt Outs	Total Respondents	True Respondants	True Response Rate
Professional	Health PPN	260	2	34	23	9%
Practice	Digital PPN	224	0	21	14	6%
Networks	Residential PPN	856	13	50	28	3%

A	Total PPN	1340	15	105	65	5%
Groups	Presidents	95	2	22	16	17%
Groups	Research	195	0	37	29	15%
	Sum	1630	17	164	110	7%

Figure 14. Response rates from online survey. Table by the author.

Online questionnaire results

Because the respondent populations, research group, ASLA State Presidents, and Professional Practice Networks were not equal in size, the questionnaire results are represented with percent of true respondents for each question, rather than raw counts. For each question, the numbers of responses were divided by the total number of true respondents for each respondent group. In order to keep the analysis graphs legible, the three PPN groups were combined into one respondent group. Finally, in order to see whether or not the differences between the respondent groups were meaningful, the individual groups were compared with the total of all respondents.

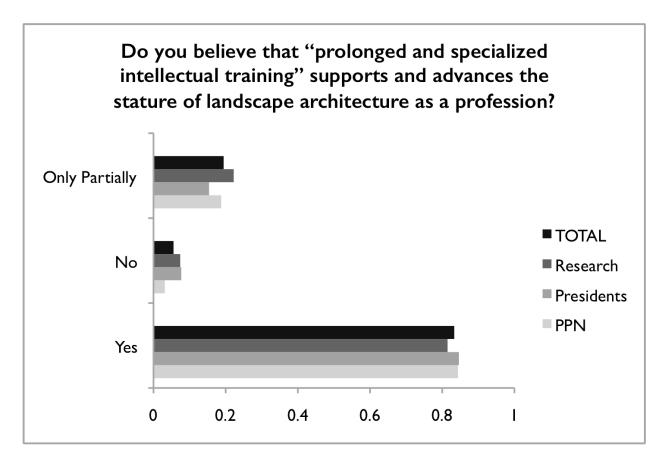


Figure 15. Percentage of respondents who believe that "prolonged and specialized intellectual training" supports and advances the stature of landscape architecture as a profession. Chart by the author.

Roughly 80% of respondents agreed that "prolonged and specialized intellectual training" (Carr and Wilson 1933, 285) supports and advances the stature of landscape architecture as a profession (Figure 15). Overall, all respondent groups showed similar responses. Respondents were given the option to supplement their answers by choosing the "other" option.

Respondent remarks were then coded using qualitative methods.²

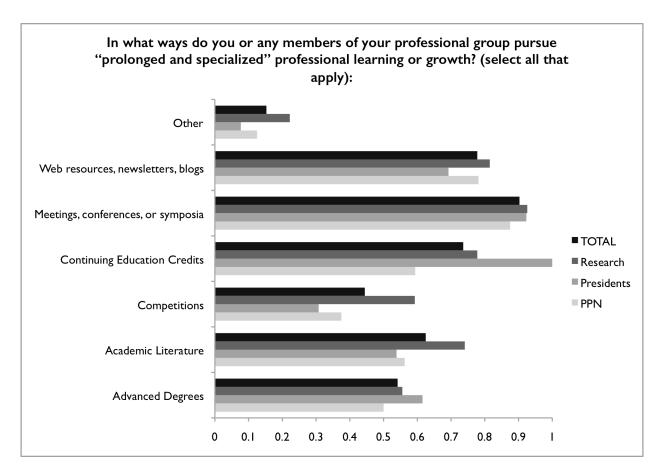


Figure 16. Percentage of respondents who pursue specific professional development activities. Chart by the author.

² While the survey was primarily quantitative, for several of the questions, respondents could choose to further elaborate their answers in a short answer box. This data was coded for the larger Research in Practice project. The themes that emerged from these codes supported descriptive statistics and will be used to help mature future investigation for the Research in Practice team.

Respondents were asked about the types of professional development they pursue for professional growth (Figure 16). There was a considerable amount of fluctuation between respondents groups on the types of professional development. Over 80% of all respondent groups reported attending meetings, conferences, or symposia as a professional development activity. Reading web resources, newsletters, and blogs along with more formal continuing education credits were also popular methods of professional development among respondents. Using competitions as a method for professional growth was the least popular overall, along with pursuing advanced degrees and reading academic literature.

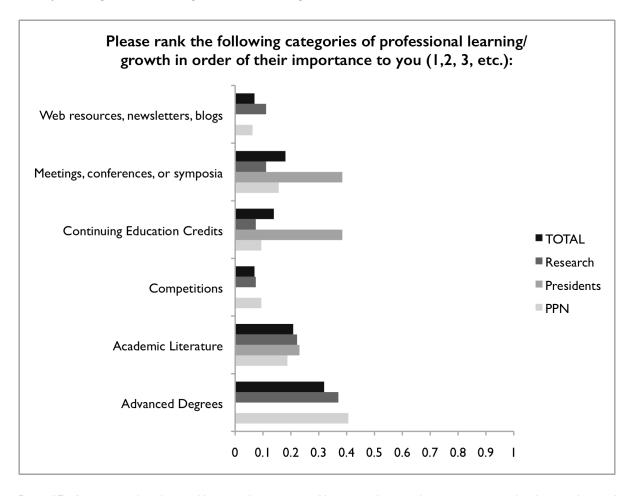


Figure 17. Categories of professional learning that were rated by respondents as the most important for their professional learning. Chart by the author.

Figure 17 represents which categories respondents listed as the most important category of professional learning. There was not a dominant category of professional learning that was ranked as most important by the total respondents; however, the total of all respondents slightly favored advanced degrees as most important at 30% (Figure 17). No respondents from the ASLA presidents group selected academic degrees as the most important (Figure 17). The ASLA presidents group respondents were also outliers in their ranking of meetings, conferences, and symposia, and continuing education credits. Few respondents from other groups rated these as most important, while 30% the ASLA presidents group ranked Meetings, conferences, and symposia as most important, and another 30% ranked continuing education credits most important (Figure 17). For nearly all groups, competitions and web resources, newsletters and blogs were the least likely to be the most important.

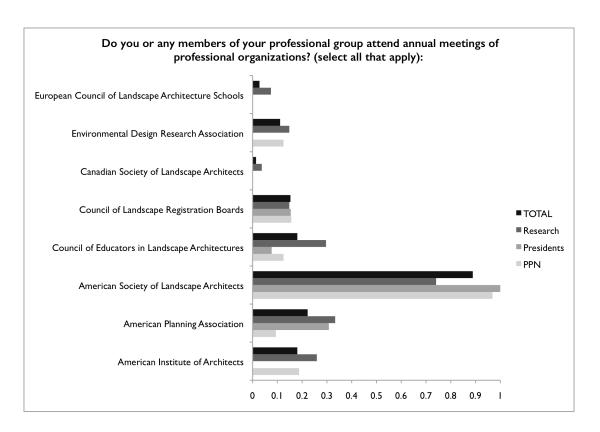


Figure 18. Attendance of respondents of professional meetings. Chart by the author.

When asked which annual meetings respondents attend, the annual meeting of the American Society of Landscape Architects was by far more popular than any other organization (Figure 18). One hundred percent of the ASLA Presidents reported attending the ASLA conference, compared with a little over 70% of the research group (Figure 18). However, while 30% of the Research group reported attending the Council of Educators in Landscape Architecture (CELA), less than 10% of the ASLA Presidents reported attending CELA (Figure 18). The ASLA Presidents did not report attending the American Institute of Architects, the Canadian Society of Landscape Architects, the Environmental Design Research Association, or the European Council of Landscape Architecture Schools (Figure 18). Even if only a small percentage, research group respondents reported attending every conference listed (Figure 18).

	Group	Reponse
	I .	Green Build
		DBIA
		Engagement Scholarship Consortium
		ECLAS
		ISA
		PPA
	D . I . I DDNI	PLANET
	Residential PPN	Washington Association of Landscape Professionals
		American Council of Engineering Companies
		National Society of Pro. Engineers
		American Public Works Assiciation
		National Recreation and Park Association
	Digital PPN	American Trails
		ULI
		Society of wetland scientists
		Greenbuild
		Irrigation Association
		ASCE
		ASBPA
		SOC
		NAI
	ASLA State	ISA
Q16. "other" professional	Presidents	American Forestry
meetings		Climate Change Academy
		Western Adaptation Alliance
		Arizona Hydrological Society
		Arizona Streets Conference
		Arizona Rural Development Conference
		Arizona Nursery Association Conference
		Desert Horticulture Conference
		Urban Land Institute
		EFLA
		Green Roofs for Healthy Cities
		Architects Newspaper Education Symposia
		Harvard GSD continuing Education coursework
		Riparian Seminars
		National Trust
	Research	Historical Commission
	Research	GreenBuild
		USGBC
		International Academy of Design and Health
		International Federation of Landscape Architects
		·
		American Hort Therapy Assn
		NYS Association of Transportation Engineers Urban Forestry
		Green Roofs for Healthy Cities

Figure 19. Additional conferences, meetings, and symposia attended by respondents. The responses represented are verbatim from respondents. Chart by the author.

Respondents asked to list provide conferences, meetings or symposia they attend that were not listed in the survey (Figure 19). In total, respondents listed 46 conferences, meetings or symposia that were not included in the choices provided. Some of the conferences reported were regional, for instance the Arizona Hydrological Society and the Washington Association of Landscape Professionals (Figure 19). However, other were well-known national or international conferences, including the International Academy of Design and Health, and the International Federation of Landscape Architects (Figure 19). Many reported conferences were of allied professions, such as the International Society of Arborists, The National Recreation and Park Association, and the National Society of Professional Engineers (Figure 19).

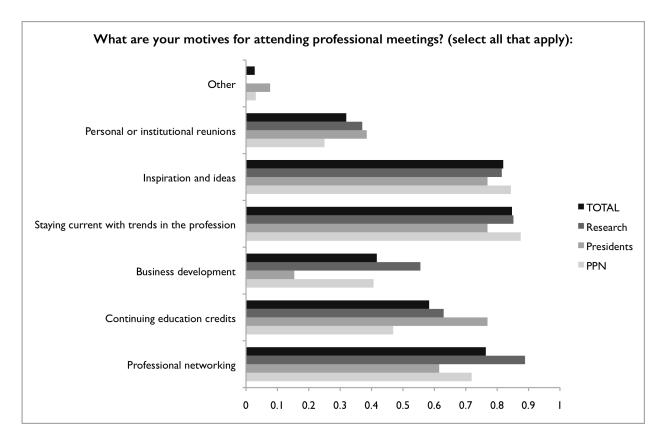


Figure 20. Motives of respondents for attending professional meetings. Chart by the author.

Respondents reported multiple motives for attending professional meetings; however, gaining inspiration and ideas, and staying current with trends in the profession were the two most widely reported motives within most of the respondent groups (Figure 20). Professional networking and working towards continuing education credits were also highly reported motives.

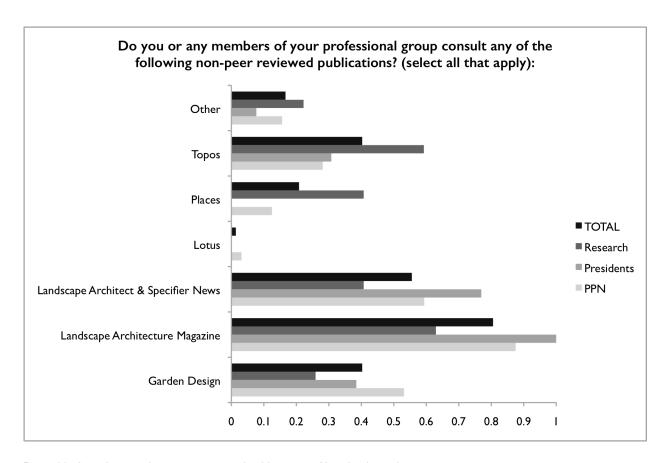


Figure 21. Consultation of non-peer reviewed publications. Chart by the author.

Many respondent groups reported that they consulted Landscape Architecture Magazine (Figure 21). Topos, Landscape Architect & Specifier News, and Garden Design were also popular among many groups. In general, there was some variation in the consultation of non-peer reviewed publications among respondent groups. Some publications, such as Topos and Places were popular among the research group, and were less popular among the ASLA presidents and Professional Practice Network groups.

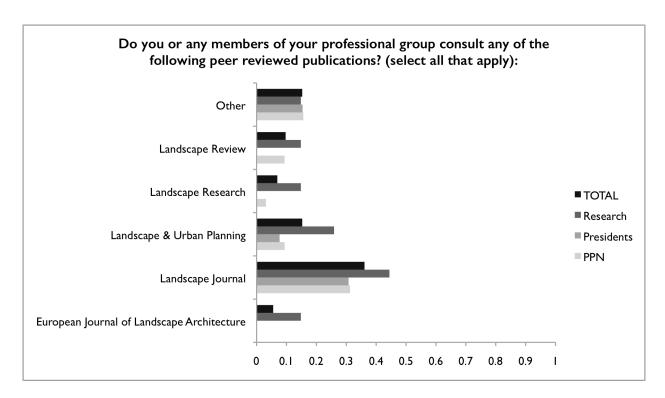


Figure 22. Consultation of peer reviewed publications. Chart by author.

Fewer than 50% of any respondent group reported that they consulted any of the listed peer reviewed publications (Figure 22). The most-consulted publication of any respondent group was Landscape Journal. However, for the other publications, such as Landscape Research and Landscape & Urban Planning, respondent groups varied highly on which peer-reviewed publications they consult.

	Group	Reponse		
	Health PPN	Arcade Magazine		
	Health PPIN	JOLA		
		AMERICAN CONCRETE INSTITUTE		
		CONSTRUCTION SPECIFICATION INSTITUTE		
	 Residential PPN	American Gardener		
	Residential PPIN	Fine Gardening		
		Horticulture		
		ENR Southwest		
		Parks & Recreation		
	Digital PPN	Governing Daily		
		Next City		
	ASLA State	Western arborist		
Q18. "other" non-peer	Presidents	Arborist News		
review	Fresidents	GRIST		
		LAF		
		HERD Journal		
		Journal of Therapeutic Horticulture		
		Healthcare Design magazine		
		World Health Design magazine		
	Research	t-18		
	Research	Tasarim		
		World LAndscape Architecture		
		Goood		
		Onsite review		
		Ampersand Michigan		
		Kerb Journal		
	Health PPN	Gardens Illustrated		
Q19. "other" peer review	ASLA State	JAPA		
	Presidents	Environmental Health Perspectives		

Figure 23. Additional publications accessed by respondents. The responses represented are verbatim from respondents. Chart by the author.

Respondents were able to supplement the list of non-peer reviewed and peer reviewed literature. Respondents listed 26 additional non-peer reviewed publications, and 3 peer-reviewed publications. Many of the additional publications were from allied professions, especially horticulture, including *Fine Gardening, American Gardener*, and *Horticulture* (Figure 23).

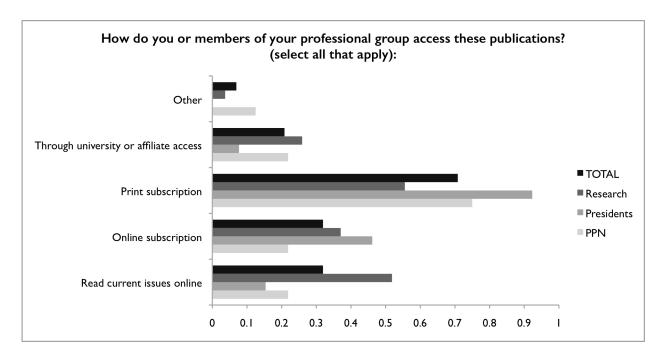


Figure 24. Types of access to non-peer reviewed and peer reviewed publications.

Most respondents view publications through print subscriptions (Figure 24). However, respondents also reported accessing publications through online subscriptions, reading current issues online, and through university or affiliate access.

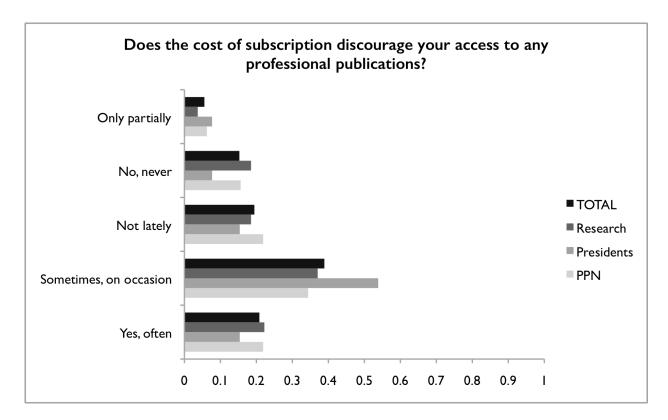


Figure 25. Cost of subscriptions and access to professional publications.

Roughly 40% of respondents reported that the cost of publications can discourage access "on occasion" (Figure 25). However, over 50% ASLA presidents group reported that the cost of subscription can discourage access to publications (Figure 25).

Interview results

As interview transcripts were categorized by code, five themes emerged from the coded data:

- 1. Preferred avenues for professional development
- 2. Professional development resources
- 3. Professional development values
- 4. Critiques of professional development
- 5. Hurdles to professional development

Within each of these themes there were 2-5 categories. Each category was subdivided by 2-6 subcategories. The number of codes, which supported each theme, ranged from 18-32. All codes were categorized to be mutually exclusive, and therefore no code was duplicated by theme or category. The "Critiques" theme was the least supported with 18 codes, and the "Values" theme was the best supported with 32 codes.

When asked about preferred methods of professional development, two clear patterns emerged, experiential learning and the dominance of the ASLA (Figure 26). Interviewees listed activities such as attending classes, conferences, and learning directly from others for their professional development, all of which include a face-to-face interaction (Figure 26). Resources from the national chapter of ASLA emerged as a preferred source for professional development (Figure 26). One interviewee goes "there [ASLA] every year," and another interviewee found that "ASLA professional development has helped" (Figure 26). Although interviewees mentioned local resources, no other organization was directly mentioned as a preferred provider of professional development (Figure 26).

Theme	Category	Subcategory	Code
			classes [preferred]
		Classes	Classes [not necessarily taught by ASLA]
			courses [new skills]
			Conferences [preferred]
			conference
			Conferences [preferred]
		Conferences	conferences [prefer]
	Experiential		state conference [in the event I can afford]
	learning		conferences
	learning		conference availability [office provides]
		First hand experience	learning [from people]
Preferred avenues for			first hand experience [most valuable]
professional			day to day tasks
development			experience [getting more from others]
development			more experienced [more important for them]
		Workshops	topical seminars [UCLA]
		VVOI IGITOP3	workshops [come up with ideas]
			ASLA
			ASLA [primary one]
		ASLA professional development	Primary one [ASLA]
		ASEA professional development	ASLA [involved]
	ASLA		ASLA professional development [has helped]
			ASLA National [in the event I can afford]
	1		go there every year [ASLA]
	1	ASLA Conference	ASLA conference [pretty cool]
			best way to network [ASLA]

Figure 26. Code array: professional development preferences of interviewees. Table by the author.

Interviewees mentioned several additional sources and support systems for professional development (Figure 27). Publications, including those from allied professions such as architecture or engineering as well as general professional magazines, were reported by interviewees (Figure 27). Local resources such as university classes and programming through local ASLA chapters were mentioned as a resource (Figure 27). Specific online resources were mentioned by interviewees, as well as the use of general web resources (Figure 27). Specific online resources included webinars and Red Vector (Figure 27). Online access to professional development was considered an "improvement" according to one interviewee because it provides access that one "can't get locally" (Figure 27). General employer support of professional development and internal office resources for professional development were mentioned by interviewees (Figure 27). Interviewees found that internal resource make professional development "accessible" and the specific resources such as an office intranet

system is something that could be "check[ed] out everyday" (Figure 27). Interviewees reported support through general "encouragement" and also through employer funding for professional development activities (Figure 27). Interviewees reported general financial support for professional development and employer funding to attend the ASLA National Meeting (Figure 27).

Theme	Category	Subcategory	Code
	Local resources	Local university	local university [classes]
	Local resources	Local chapter	local chapter [provide programming]
		Webinar	webinar [ASLA]
			access online [improvement]
		Access online	access online [can't get locally]
	Online resources	Access of life	online resources
			some online resources
		Red vector	red vector [easiest]
		Red vector	red vector [collects continuing ed information]
		Encourage professional	firm is supportive [of professional development]
		development	encourage [(professional development)]
Resources	Employer Support	Conference funding	pick a few people [for ASLA conference]
			lottery [for ASLA conference]
			Funding employees [cost
		Office makes resources accessible	resources[within my office]
	Internal resources		office makes it accessible [(professional development resources) accessible]
	litternar resources		adequate supplies [office provides]
		Intranet	intranet [check it out everyday]
		Allied profession publications	architecture [others]
			engineering [others]
	Publications		reading [not always from academia]
			articles [find it useful]
			professional magazines [prefer]

Figure 27. Code array: professional development resources of interviewees. Table by the author.

Interviewees stated two general modes of value statements: self-driven professional development and motives for professional development (Figure 28). Interviewees stated that professional development is somewhat of an "individual activity," in which practitioners "seek out" resources and must "take the first step" (Figure 28). Interviewees also stated an interest in finding other to partake in professional development activities, such as "sharing articles" (Figure 28). Interviewees also shared their motives for taking part in professional development activities (Figure 28). Some reported that professional development helped to improve their

professional work more generally, others reported taking part in professional development to learn new skills or techniques, and also, interviewees reported that professional development was beneficial for career advancement (Figure 28). Interviewees reported that professional development is an inspiration for their work and help "with ideas" (Figure 28). In general, respondents also reported a "value" in professional development, suggesting that there is "value in improvement" (Figure 28).

Theme	Category	Subcategory	Code
		Individual activity	do that on our own [continuing education]
ĺ			individual activity [(professional development)]
			do it yourself [(professional development)]
	Self-driven		seek out [resources]
	professional	Seeking out resources	take the first step [(for professional development)]
	development	Seeking out resources	push yourself [towards doing that kind of stuff (professional development)]
			focused on a goal [LARE]
		Finding others to work with	people with same interests
		I Inding others to work with	share articles
			learning
		Learning new skills	new techniques
			new processes
			improving [practice]
			improving [work]
		General improvement	getting more proficient
Values			improve beyond [need outside sources]
values			improve my talents [read a lot more books]
			improve yourself [good thing]
		Fine value in professional development	really helps [professional development]
			value [in it (professional development)]
	Motives		value in improvement [employers see it]
			very important [professional development]
			feel fulfilled [after each time I study]
		Career advancement	advance [(within) profession]
			younger designer [entry level]
			inspiration [look to publications]
		Inspiration	come up with ideas [based on what we read]
		Inspiration	practice [profession is evolving]
			changing of technology [profession is evolving]
		Profession evolving	always evolving [the profession]
			profession is evolving [pretty quickly]
			die off [profession (without) professional development]

Figure 28. Code array: values of profession development of interviewees. Table by the author.

Interviewees shared critiques about professional development in landscape architecture (Figure 29). Some shared general dissatisfaction with professional development, such as inadequate content, or hurdles to access (Figure 29). Others offered critique of the Landscape Architecture Registration Exam (LARE), such as general problems with the process and spending an excessive amount of time preparing (Figure 29). Others expressed an interest in spending more time on professional development, looking to "do more hours" (Figure 29).

Theme	Category	Subcategory	Code
		Issues with content	not always fun [to do that stuff (professional development)]
	Professional		a bit dry [curriculum]
	development		not that comprehensive
	resource issues	Access issues	need better ways to look [for them (professional development resources)]
		Access issues	don't feel like they're that adequate [ways to look for them]
		Issues with process	don't totally agree [LARE]
	Issues with	Excessive time spent	holding me up [LARE]
	LARE		limiting [me from doing other types of professional development (LARE]
Critiques			taking forever [LARE]
Critiques			big task [LARE]
		Would like to do more	should be doing more [than (I hour a week)]
	Want more		would like to do more [professional development]
			more opportunities [for professional developmentonce you get past that (LARE)]
	time spent on		do more hours [would definitely]
	professional		ideal [fiver hours per week]
	development	Current time spent	I-2 [month on average]
			an hour a week [on average]
			two hours [per week]

Figure 29. Code array: critiques of professional development of interviewees. Table by the author.

Interviewees identified hurdles to their professional development (Figure 30).

Interviewees reported having problems with Professional Development Hour tracking through and issues in the approval process for hours (Figure 30). Interviewees also identified resource allocation as a hurdle to professional development (Figure 30). Losing billable hours to professional development, finding time for professional development, and funding the cost of professional development activities were reported by interviewees as hurdles (Figure 30).

Interviewees identified office culture as a potential hurdle to professional development (Figure 30). Working on professional development "outside of work hours" after many times working an "8 hour plus day" was seen to "cut into personal time" (Figure 30). Office size was considered an issue by interviewees as smaller offices may have a less infrastructure or support for professional development (Figure 30). Because interviewees reported busy schedules, sometimes professional development becomes less of a priority (Figure 30).

Theme	Category	Subcategory	Code
			hard to get certain programs approved
			rejected CEU's
	Professional	Issue with approval process	approval process [butts out some (presentations)]
	development hour		hours [15 in Kentucky, 16 every two years in Florida, (difference in PDH)]
	issues		CEU's [getting rejected]
		PDH tracking	track hours [maybe a better system]
		1 DI I d'acking	maybe a better system [track hours]
		Billable hours	billable hours
		billable flours	billable hours
			time [time is money]
	Allocation of	Time	time [where do we find the time]
	resources		time [do (professional development) on our own]
Hurdles	1 000 01 000		time [sheer amount I've been doing it now]
i idi dies		Direct cost	cost [biggest issue]
			out of pocket [can be challenging]
			financial consequence [don't know]
			outside of work hours
		Professional development outside of work hours	outside of work hours [cuts into personal time]
			study different programs [last thing I want to do (after work)]
			8 plus hours per day [working]
	Office culture	Smaller office may have less	smaller offices [assume have more difficultly with (making resources accessible)]
		developed infrastructure for	sheer size [smaller offices have more difficultly with (making resources accessible)]
		professional development	amount of staff [smaller offices have more difficultly (making resources accessible)]
		Low priority	we get too busy [depends on our schedule]
			forget about it [sometimes we get too busy]
			takes a lot of time [studying]

Figure 30. Code array: hurdles to professional development of interviewees. Table by the author.

DISCUSSION

Three themes have emerged from this thesis research in regards to professional development: the importance of regionalism in the profession of landscape architecture, the room for improvement in research discourse among stakeholders of professional development, and the everyday obstacles and hurdles that practitioners face when partaking in professional development.

Regionalism in landscape architecture

Even in a global age, regional forces such as natural landscape features, local economies, and regulations affect the practice of landscape architecture. As a practice that completely relies on external capital, especially from booms in redevelopment, the distribution of practitioners and their salaries vary from region to region (Figure 8, Figure 9). Professional regulations, dependent on state legislature, also vary depending on the state and their interactions with other competing professional groups (Figure 10).

Despite the hypothetical tie between regionalism and professional development, there is essentially no relationship between median income and the number of professional development hours required annually for licensure (Figure 31). Practitioners in states requiring the highest number of professional development hours, have the lowest median salaries (Figure 31). Alternatively, practitioners in states with no professional development hour requirements have one of the higher median incomes (Figure 31). Although median income is far from the only parameter to analyze the local or regional state of the profession, the lack of the relationship between number of professional development hours required and median income is certainly not helping the case for the regulation of professional development.

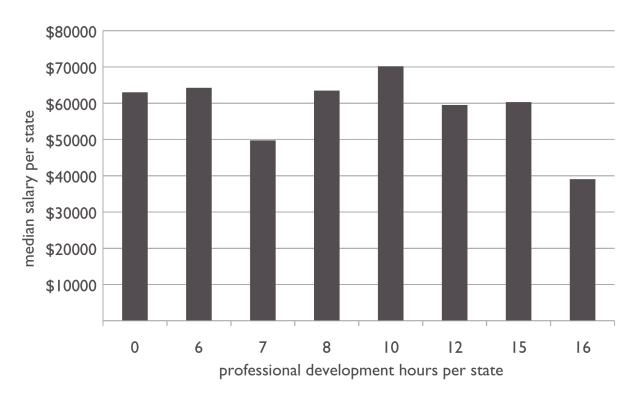


Figure 31. Chart of the relationship between the annualized number of professional development hours and the median income by state. Diagram by the author with resources from Lent 2013 and US Bureau of Labor Statistics 2012.

Local professional development resources

Regionalism is evident in some sources of professional development. Landscape architects are expected to respond to local and regional conditions; therefore locally or regionally focused professional development materials are beneficial to practitioners. Survey respondents amended the provided list of conferences, symposia, and meetings with regional and local events, such as the Arizona Hydrological Society (Figure 19). Interviewees also reported utilizing resources from local universities and local ASLA chapters for professional development opportunities (Figure 27).

Regional events offer local expertise that may be invaluable to local practitioners, but which would perhaps not be appropriate at for a national audience. Local or regional events

held through professional organizations or universities not only offer local expertise, they are many times less expensive than national conferences or meetings (Figure 26). Not only is the registration typically lower at regional events, practitioners also save money on travel expenses and travel time. Because the loss of billable hours and the cost of partaking in professional development activities were reported hurdles of the interviewees, local events may serve as appropriate venues for accessible professional development (Figure 30). Attending a local conference for an afternoon could fulfill professional development hour requirements and expand practitioner knowledge without effecting the loss of billable hours as much as a week long conference. An understandable drawback to emphasizing local conferences could be the lack of social benefits, as national events are venues for professional reunions and networking.

Role of ASLA

Although local resources may be of benefit to practitioners, in general, the ASLA clearly dominates as a source for professional development through the Annual National Meeting, the popularity of the *Landscape Architecture Magazine*, and through the general dissemination of professional development resources (Figure 17, Figure 21, Figure 26). Nearly 90% of respondents reported attending meetings and conferences as part of their professional development (Figure 16). Respondents reported the American Society of Landscape Architects annual meeting as the most attended conference (Figure 18). Nearly 90% of respondents attend the ASLA meeting (100% of the presidents group), compared to less than 40% attending the Council of Educators in Landscape Architecture (CELA) (Figure 18). Between the popularity of the ASLA annual meeting and the organization publication, *Landscape Architecture Magazine* among respondents and interviewees, ASLA completely dominates as the source for professional development in the United States. A strong national organization such as ASLA is

is much needed for professional stature through public visibility, advocacy, networking, etc.

However, in the context of a place-based profession, ASLA may not be able to best serve the professional development needs of practitioners in a country with extremely diverse practices.

Research discourse

Research consumption allows practitioners to stay current in the profession by absorbing new information from both researchers and designers (Figure I). As the exchange between practice and academia may not have yet found its best format, practitioners may feel as though academics are not producing resources that are relevant to their practice. Even if applicable research is produced, practitioners may not have access to the research, or even know of its existence. Poor communication and understanding among stakeholders including practitioners, academics, professional development providers, professional organizations, and regulators may negatively affect quality and accessibility of professional development resources.

Experiential learning

Perhaps because of the experiences of studio learning, experiential learning is an important aspect of professional development for landscape architects. Nearly 90% of survey respondents reported attending meetings, conferences, or symposia for their professional development (Figure 16). From both the comments from the survey respondents and from interviewees, experiential learning was an integral part of professional development (Figure 26, Figure 32). According to survey respondents and interviewees, experiential learning takes place in day-to-day practice, as well as through workshops and conferences (Figure 26, Figure 32).

		working with the land [master the craft]		
	Hands-on learning	hands on profession		
Experiential learning		learning [in the field]		
Experiential learning	On-site education	field experience		
		hands on profession physical experience [included] learning [in the field] field experience education [on-site] day to day activities [most important source]		
	Practice learning	day to day activities [most important source]		
	ir ractice lear filling	learned in practice [landscape architecture]		

Figure 32. Coded responses from survey. Table by the author.

If practitioners learn primarily through experiential learning, rather than typical or traditional modes of research production, such as journal articles, may not adequately serve their audience (which includes practitioners). Researchers may reach a much wider audience by engaging with practitioners through hosting a workshop or field trip, rather than publishing work in a more typical setting. However, it is worth noting that taking part in experiential learning in a workshop or seminar setting may vary greatly from learning experiences in "day to day activities" (Figure 32). Whether or not practitioners are truly staying current and developing their skills through daily practice depends on the type of practice and the practitioner's status in the profession. A practitioner who is striving to learn new techniques or software through daily practice would benefit greatly from day-to-day experiential learning; however, a practitioner who relies solely on skills and knowledge learned long ago is not likely to learn as much from daily practice. Learning from day-to-day practice could be valuable to highly motivated individuals looking for a challenge, but for those practitioners who find themselves falling into a career rut, other modes of professional development are likely to be more valuable.

Conferences, meeting, and symposia are forms of experiential learning. Although many respondents reported attending conferences, less than 60% of the total respondents claimed

working towards continuing education credits as one of their motives for attending professional meetings (Figure 20). Even though attending conferences is important for respondents for staying current with trends in the profession and as a source for new inspiration, attendees may not be relying on these conferences for continuing education credits (Figure 20). Either respondents are working towards their continuing education credits in other ways, or they are not required to track the continuing education credit hours. Landscape architects clearly find value in attending conferences, meetings, and symposia, but motives for attendance suggest that they might not be the best venue for regulated professional development.

Academic literacy

Reading publications, both peer reviewed and non-peer reviewed, is a form of professional development that also serves as a connection between landscape scholars and practitioners. In a survey of landscape architecture faculty Milburn et al. 2001 found, that faculty "feel research is useful in solving real-life problems and that both theoretical and applied research...have value to the profession" (Milburn et al. 2001, 61). However, Research in Practice survey participants were less affirmative regarding academic literature. When asked which types of professional development respondents pursued, attending meetings and conferences and accessing web resources such as newsletters and blogs were more highly reported than reading academic literature (Figure 16). Almost 90% of the total respondents reported attending meetings, conferences, or symposia, while only roughly 60% of the total respondents reported reading academic literature (Figure 16). However, when asked to rank the same categories of professional develop in order of their importance, the ASLA presidents respondent group was the only group to rank attending meetings, conferences, or symposia as the most important type of professional development (Figure 17). Despite strong overall support for experiential

learning through professional development activities such as conferences or workshops, survey respondents still found academic literature to be more important for their professional development (Figure 17).

More respondents from the research group and Professional Practice Network groups reported pursuing advanced degrees as the most important method of professional development, rather than attending meetings, conferences, or symposia, and accessing web resources such as newsletters, and blogs (Figure 21). Reading academic literature was ranked as most important for roughly the same percentage or respondents in the research and Professional Practice Network groups as attending meetings, conferences, or symposia. Respondents did not necessarily find the professional development activities they pursued as the most important form of professional development. The perceived value of professional development activities, such as that of academic literature, may not align with the realities of practice. Although professional literature may seem to be of the utmost importance for professional growth, in reality, it may not be the most effective or accessible type of professional development for practitioners.

Although there were some general trends in the literature that respondents accessed, there was variation between respondent groups. Landscape Architecture Magazine was the most consulted of the non-peer reviewed literature. While the ASLA presidents group reported 100% of respondents accessed Landscape Architecture Magazine, only a little over 60% of the research group reported accessing Landscape Architecture Magazine (Figure 21). The research group favored Landscape Architecture Magazine, Topos, and Places, while the ASLA Presidents and Professional Practice Network groups favored Landscape Architecture Magazine, Landscape

Architecture & Specifier News, and Garden Design (Figure 21). Different practice types have varying needs and interests – which creates a market for different ranges of publications.

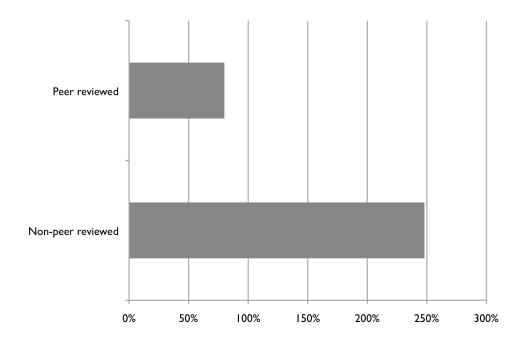


Figure 33. Summary of the peer reviewed publications and the non-peer reviewed publications accessed by respondents. Chart by the author.³

³ The total publications accessed by respondents were compounded by publication type (Figure 33). Because respondents were allowed to "check all that apply," the percentage of accessed materials could exceed one hundred percent (Figure 33).

In general, non-peer reviewed publications were much more popular among respondents than peer reviewed literature (Figure 33). Although 80% of total respondents reported accessing Landscape Architecture Magazine (and some respondent groups reported 100% accessed Landscape Architecture Magazine), less than 50% of any of the respondent group reported accessing any of the peer-reviewed literature sources (Figure 21, Figure 22). Despite peer-reviewed literature being less popular among respondents than non-peer reviewed literature, over 40% of the research group respondents reported accessing Landscape Journal, along with roughly 30% of the president and Professional Practice Network group respondents. Overall, the presidents respondent group reported accessing less peer-reviewed literature than any other respondent group; no respondents from that group reported accessing Landscape Review, Landscape Research, Landscape and Urban Planning, or European Journal of Landscape Architecture (Figure 22). Although the results of the survey seem to perpetuate the idea that "practitioners have magazines and scholars have journals" (Riley 1990, 48), it is noteworthy that 35% of the total respondents reported accessing the peer-reviewed Landscape Journal (Figure 25). Academic literacy is an important aspect of professional development. Keeping current with new research can help practitioners development new tools for practice. Academic literature is also an opportunity for discourse between practitioners and scholars.

Although practitioners are part of the audience for academic literature, improvements could be made to improve the reach of literature. Sanacore suggests that in order to increase professional literacy, literature should be deconstructed in some form to appeal to professionals. For example, instead of offering "typical" workshops, planning workshops directly related to recent academic literature may be of more benefit. The literature is broken down into a digestible amount of information, and the workshop is better supported by the literature (Sanacore 1996).

Obstacles

Although practitioners find value in professional development, obvious obstacles, such as financial, and perhaps less obvious obstacles, such as office culture, may prevent practitioners from taking part in professional development activities.

Financial resources

As a profession that primarily operates under the infrastructure of billable hours, any time taken away from those hours, including professional development hours, is essentially money lost (Figure 30). In a world where time is money, in the short term, it makes sense for practitioners to maximize billable hours (Figure 30). Not only are the loss of billable hours an issue, but also the direct cost of professional development activities and resources can high (Figure 30).

The cost per issue of landscape architecture publications varies (Figure 33). Even if practitioners are interested in accessing Landscape Journal or Topos, the cost per issue may be prohibitive, especially compared to the popular Landscape Architecture Magazine. Even in a digital age, respondents reported that print subscriptions were still the most popular method of accessing publications (Figure 24). However, some publications offer free access to the most recent volume, such as Landscape Journal, and others offer reduced digital subscription rates, such as Topos. In comparison to the Professional Practice Network or the presidents group, the research group was more likely to access content by reading current issues online, perhaps taking advantage of a resource which might not be well advertised (Figure 24).

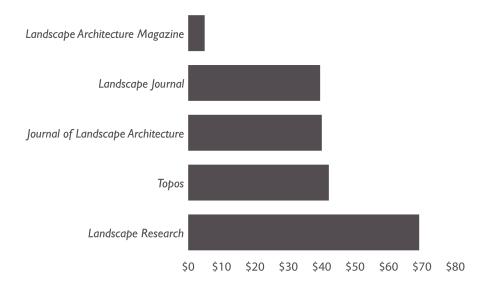


Figure 34. Cost per issue with a print subscription of selected publication. Chart by the author.

Office culture

Although financial hurdles to professional development might be the most visible, office culture may also hamper practitioners' access to professional development. Because professional development is not a "billable" activity in most cases, practitioners find themselves working towards professional development outside of work hours (Figure 30). Working on professional development outside of work could have the potential to affect the status of professional development, as it may be viewed as a low priority, extra-curricular activity (Figure 30). As professional development is shifted away from offices, the financial burden may fall on practitioners (Figure 30).

Although some offices are extremely supportive of professional development, others struggle to provide access to professional development because of the size of the office (Figure 26, Figure 30). As a small office, it may be hard to justify diverting any resources to professional development, whereas a large firm with an extensive infrastructure may have no problem providing employees with resources.

Conclusions & implications

Not only should practitioners challenge themselves with professional development, but researchers and organization leaders should ensure that the work they are producing and presenting is appropriate for their audience. Landscape architecture practice is inherently broad, and not all forms of research may be relevant or accessible to many practitioners.

Targeting specific groups of practitioners with appropriate levels of professional development could potentially be more effective than casting a broad net at national events.

Regionalism is an important concept in landscape architecture practice and scholarship. However, the ASLA national chapter dominates as a source for professional development resources. As an organization, the ASLA national chapter may not have the resources or infrastructure to provide comprehensive local or regional programming. Local or regional chapters of the ASLA could be a great avenue for professional development, but proactive steps must be made. As the local and regional chapters of ASLA may fluctuate, the national ASLA chapter might act as a stronger player in facilitating local and regional professional development.

A tension exists between those disseminating professional and academic literature and those consuming it for professional development purposes. Although reading professional literature is an integral part of professional development, landscape architects gravitate towards experiential learning. Despite perceived tension between parties, there is room for improved communication among groups regarding effective and accessible professional development activities. Improving the discourse among practitioners, academics, regulators, and professional organizations could strengthen the necessary ties to produce comprehensive, quality professional development.

In order to stimulate long-term intellectual growth, investing in professional development may be worth the initial loss in billable hours or overcoming non-supportive office

culture. As employees use professional development time to improve the techniques and to find inspiration for their design, there is a great potential for improvement in practice.

Normative practice is not inherently less important, but it does not necessarily work to push the profession forward. Moving forward requires professional growth beyond day-to-day practice. Offices that do not push their practitioners to grow may eventually lose business to competing offices that embrace strong professional development. Especially in an age of evidence-based design, clients expect a certain level of expertise from landscape architects, beyond their design intuition. Landscape architecture is an increasingly complex profession, struggling to find public approbation. As a profession, landscape architecture has the potential to tackle complex issues, ranging from global habitat destruction to human health crises. To remain relevant, landscape architects must push themselves to meet new and emerging challenges.

APPENDICES

Appendix I. Timeline of professionalization

Attached document titled "Moen_Bridgette_Appendix I.pdf" contains a timeline of the professionalization of landscape architecture, from 1804 – present. The timeline includes dates regarding the invention, professionalization, organization, and intellectualization of the profession of landscape architecture. Included in the graphic are trends in ASLA membership, the use of "landscape architecture" in publications, and the evolution of definitions of "landscape architecture" as defined by the ASLA.

Appendix 2. Online questionnaire

The following questions, disseminated through an online survey, are nested within the larger umbrella of Research in Practice (Deming and Swaffied), but directly inform this thesis.

RIP
Professional Growth
In their now-classic work, Carr-Saunders & Wilson (1933) define one central characteristic of all forms of professionalism as "a prolonged and specialized intellectual training" (285). This characteristic of professionalism underlies many individual state requirements for continuing education in support of professional licensure.
13. Do you believe that "prolonged and specialized intellectual training" supports and advances the stature of landscape architecture as a profession?
○ Yes
○ No
Only partially (please explain)
Y
14. In what ways do you or any members of your professional group pursue "prolonged and specialized" professional learning or growth? (select all that apply):
☐ Advanced degrees
□ Academic literature
□ Competitions
□ Continuing education credits or courses (CEUs)
☐ Meetings, conferences or symposia
☐ Web resources, newsletters, or blogs (e.g. Bustler, DIRT, Archinect, etc)
OTHER (please describe)

lP				
	Please rank the following categories of professional learning/growth in order of their			
L L	ortance to you (1,2, 3, etc.): Advanced degrees			
_	Academic literature			
_	Competitions			
_	Continuing education credits or courses (CEUs)			
_	Continuing discussion ordate of occasion (egos)			
	Meetings, conferences or symposia			
	▼ Web resources, newsletters, or blogs (e.g. Bustler, DIRT, Archinect, etc)			
	Do you or any members of your professional group attend annual meetings of fessional organizations? (select all that apply):			
л о П	American Institute of Architects			
	American Planning Association			
	American Society of Landscape Architects			
	Council of Educators in Landscape Architecture			
	Council of Landscape Architectural Registration Boards			
	Canadian Society of Landscape Architects			
	Environmental Design Research Association			
	European Council of Landscape Architecture Schools			
Oth	er? Please specify			
	Y			
7.	What are your motives for attending professional meetings? (select all that apply):			
	Professional networking			
	Continuing education credits			
	Business development			
	Staying current with trends in the professions			
	Inspiration and ideas			
	Personal or institutional reunions			
Oth	er? Please specify			
	A			
	Y .			

RIP	
Professional Literature	
18. Do you or any members of your propeer reviewed publications? (select all	fessional group consult any of the following non- that apply):
☐ Garden Design	
☐ Landscape Architecture Magazine	
☐ Landscape Architect & Specifier News	
Lotus	
□ Places	
☐ Topos	
Other? please specify	
	F Y
19. Do you or any members of your pro reviewed publications? (select all that ☐ European Journal of Landscape Architecture	fessional group consult any of the following peer apply):
Landscape Journal	
☐ Landscape & Urban Planning	
☐ Landscape Research	
☐ Landscape Review	
Other? please specify	
	Y
20. Why are these publications importa	nt to your operation? (select all that apply):
☐ Supports internal research	
☐ Inspires/informs design	
□ Supports academic pursuits of employees	
☐ Fosters more well-rounded employees	
□ Not important to firm mission	
Other? Please specify	
·	F Y

Appendix 3. Face to face interview question bank

- 1. What is your preferred method of professional development?
- 2. On average, how much time do you spend per month taking part in professional development activities?
- 3. Have you ever taken part in the LA CES program?
 - a. If so, what was your experience with the program?
 - b. How do you think the program could be improved?
- 4. If you only go to one conference, which would you to and why?
- 5. Which publication is the most valuable to you, and why?
- 6. Do you feel that the resources available to you for professional development are adequate?
- 7. Do you feel your practice benefits from professional development? If so, how, if not, why not?
- 8. How has professional development affected the quality of your work?
- 9. Is there a monetary benefit linked to professional development activities?
- 10. Are there any obstacles you or your firm face during professional development?

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