

THE THREE P'S: PLANTS, PLANTING DESIGN, AND THE PROFESSIONAL

BRITTENUM, JUDY BYRD

University of Arkansas, 115 Vol Walker Hall Fayetteville, AR 72701, jbritten@uark.edu

1 ABSTRACT

Many of today's landscape architecture practitioners and students entered the profession because of their love of nature and plants. As universities address many changes in professional course content, some of the original hallmarks have been arguably marginalized. Are landscape architects slowly abandoning the very materials that separate them from other design professionals: plants and planting design? A CELA paper presented 22 years ago stated that "planting design has always been an essential component of landscape architecture as viewed by the public and those in the field" (Koepke and Myers, 1992). The paper investigated then-current planting design trends by identifying and interviewing eleven professionals who described the role of plants in practice. A 2012 study provided information about plant-based course requirements in 46 of 67 accredited landscape architecture degree programs in the United States (Brittenum, 2013). A wide array of plant-related course requirements was revealed. Findings from both studies indicated additional plant-based information from practitioners can clarify new educational directions. This paper presents information about plant usage in professional practice gathered through interviews with twenty-two landscape architecture practitioners. These recorded interviews were transcribed and analyzed to apprise educators about the role of plant-based information in today's professional practice. It provides annotated opinions of landscape architects and relevant insights that may serve to enlighten academics and highlight future demands on the profession and thus on graduates entering practice.

1.1 Keywords

plants, curriculum, landscape architecture professionals

2 INTRODUCTION

Landscape architecture educators and practitioners are currently discussing the role of plants and planting design in their discipline. For a profession that was founded on plant usage, reports of such discussions seem banal, but knowledge and use of plants in the profession has changed from its original plant application focus to other venues, thus prompting such conversations.

How use of plant materials in design has changed is largely a product of the advancement of science and technology and the demands of professional practice. Determining the prominence and breadth of plant-usage in practice should pertain directly and ideally to the way plants are taught in education—but does it?

Educators are trying to meet academic expectations in a myriad of ways, but the same advancements in technology have caused the body of landscape architecture information to burgeon. Student credit hours threaten to soar, and university administrators hold caps on degree requirements. Deciding what knowledge or skills can be compressed or sacrificed in these situations is a daunting challenge. A larger issue is whether reduced information will limit new graduates as they begin their careers.

Schools certainly have not abandoned the inclusion of plant materials and planting design in courses. In a 2012 survey about plant identification and planting design curriculum requirements, representatives in 46 of 68 accredited landscape architecture degrees responded about their respective curriculums (Brittenum, 2012). It was found that plant-based education is still a strong component in a professional degree but has diminished considerably from such course inclusions documented only forty years ago (Peters and Martin, 1974). While undergraduate schools still require traditional courses—albeit with reduced content/credit hours to comply with degree requirements today, graduate degrees have a new array of requirements and emphases—some with few or little plant coursework.

Because the schools surveyed did not report that their curriculum requirements paralleled practice demands, it is not clear why educators

have taken certain independent and divergent tracks concerning plant course requirements, their application and design. Would educators benefit by knowing more about current practice needs in order to guide plant-related course inclusions and tactics? Added information might also reveal particular challenges in the profession that would direct specialties suggested from any course changes.

2.1 2012 Survey

A pilot study entitled “The Current State of Teaching about Plants in Landscape Architecture Education and Its Relevance to the Needs of Today’s Practice,” determined the role plants and planting design had in professional landscape architecture education (Brittenuum, 2013). By soliciting all directors of accredited landscape architecture departments in the United States, it was found that the changing face of the discipline impacted classroom time spent on elementary knowledge and skills. The fine line between committing too much or too little time to discipline basics particularly impacted the two courses that had been historically central to landscape architecture education: plant identification and planting design.

The vital question for today’s landscape architecture schools is not only *what to teach* about plants, but *how to apply* broader precepts to contemporary concerns. Dual undergraduate and graduate curricula that serves the beginning undergraduate student who has little basic understanding about certain knowledge often must relate to those who come to graduate school as first professional degree candidates and share a common classroom.

The survey found that almost all undergraduate schools teach plant identification and have a planting design studio. However graduate schools lean toward teaching seminars and studios about plant ecology and larger planning issues rather than the nuances of plant culture, construction and design. Of the total reporting schools all but 12 have both plant identification and design requirements. Of those 12, 9 have plant identification required but not a separate planting design course.

The survey also revealed that Plant Identification courses ranged from those requiring 9 hours of credit to those only assigned 1.5 hours. The most common identification course prototype gave three hours of credit (in 25 schools). Planting Design courses in 31 schools ranged from requiring 6 hours to 1.5 hours-- with the most common credits being 3 or 4 credit hours. The schools in this mid-

range used the studio/lecture format. This format was also used by most schools, 38 of 59 reporting. A surprising finding showed that most Plant Identification classes were not outsourced to other departments, such as horticulture. Only 22 degree programs outsourced Plant Identification instruction. This information tends to imply that landscape architecture faculty still have *some expertise* with plants. It does not reveal how many faculty have a high level of plant expertise however.

Almost all respondent schools believed that landscape architects should be required to know botanical plant names as taught in Plant Identification course while not all believed that Planting Design was absolutely necessary as a separate course. Many of these schools reported that a planting design component was included in the general design studio at either one or all levels. How evaluations of the planting design component were qualified in a broader studio setting was not clear. Was it compromised when factored into the larger whole, thus diminishing the emphasis and assessment?

Some educators surveyed believed that professional landscape architects should be inextricably tied to their knowledge of plants and plant ecology. One open-ended survey response proclaimed: “LAs design within ecosystems. Knowledge of landscape ecology and its subset, plant ecology, is vital. Plant ecology, including plant identification and planting design, is the most distinctive and critical component within the discipline of Landscape Architecture, otherwise, we’re not much different than such disciplines as urban and regional design.” New technology taxes most landscape architecture course content. Plant-related courses could relieve that burden by including specialty content items such as roof gardens, green roofs, vertical walls, and bioswales.

2.2 2012 Survey: Syllabi

The 2012 survey data supplied only an initial view of today’s plant-based, curriculum requirements. Because each university has a variety of such required courses, the survey findings were strengthened by a second phase of information gathering. Syllabi for required plant-related courses were solicited from the same accredited schools in order to examine the contents of the respective courses. While the responses were considerably smaller than the first survey, it could be easily determined that graduate and undergraduate course contents were markedly different. Therefore it was important to establish what central plant knowledge provided the best means to prepare any degree candidate for

professional work. Both professional degrees — undergraduate and graduate — could strive for such inclusions. The question was — who, if not practitioners, could best provide that information?

2.3 Interviewing Professionals

The third phase of the original 2012 study focused on data-gathering from practitioners. Professionals could have been approached by using questionnaires, but the interview method has been shown to be more adaptable and flexible as a technique of data collection (Bell, 1993). Interviews also have been shown to allow researchers more entry to a broader array of comments due to its open approach. Two ways of interviewing, the formal structured interview and the informal unstructured, posed divergent methods (Burgess, 1984). The structured interview is closer to the questionnaire approach with questions and answers posed in a set way. However a pattern of questions administered by rote tends to be unnatural and thus not commonly used by researchers (Burgess, 1984). However, questions administered in an unstructured way are time consuming and difficult to organize for information commonalities (Bell, 1993). Ideally it is reported that research interviews are more successful when they bridge the two extremes, allowing the interviewee to talk freely but with a looser, semi-structured topics or questions, ensuring all issues are covered (Bell, 1993; Burgess, 1984; Oppenheim, 1992). This method of interviewing professionals appeared to be the best method to use for the third phase of the original study.

Common sense directed the selection of interviewees. Innovative professionals known for exemplary planting design expertise have a wide range of plant-based understanding and education. Rather than collecting data from a random array of landscape architects who may or may not have practices that use informed plant knowledge, it was determined that a sample of only those who had intimate, yet knowledgeable experience about plants and planting design would be petitioned. The chosen interviewees were well-regarded either for their award-winning designs, for plant expertise or for tandem practice and educational experience. Rational consideration about what plant knowledge was current information in practice would logically come from those who excelled at such. Under these conditions, comparisons between practice and existing planting design education would hopefully fuel new ideas about the basics of teaching planting design and of applying them to foundations of both undergraduate and graduate education.

3 METHODOLOGY

3.1 Semi-Structured Approach

A good relationship with respondents is important to semi-structured interviews, and interviewers who undertake this method benefit from an informal setting using a clear protocol for questions (Bell, 1993; Burgess, 1984). Personal contact in a setting of their choice tends to put respondents at ease, but distance and expenses could inhibit an interviewer's progress and number of possible interviewees. Because of the time-span allowed for the research to be collected, edited and analyzed (seven months), a combination of interpersonal settings was determined to be most productive and timely. Using on-site and technological visits through Skype, it was determined that practitioners could be more relaxed and conversational. The interviewee could also select the environment where most comfortable and private. Each was contacted personally by email or telephone, and after confirming their willingness to participate, a date and time was mutually selected for the interview. Interviewees signed an informed consent document developed mutually by the University of Arkansas and the researcher. They also completed a form that allowed them opportunity to record their opinion about plant and plant-based information, indicating a rank for items related to current practice and trends.

Aspects of good practice for semi-structured interviews identified by Bell (1993), Burgess (1994) and Oppenheim (1992) were used in these interviews. 1) Interview sessions were introduced by stating the aim and use of the information gathered; 2) interviews were recorded and timed according to a pre-prescribed range; 3) leading questions guiding interviews were used to instigate conversation; 4) topics for discussion were noted by interviewer for complete inclusion by all; and 5) interruption of responses was avoided if possible.

3.2 Practitioners Bring Relevance to Curriculum Requirements

The method of collecting data from professionals was framed to make connections to known plant course information from the 2012 survey and syllabi content submittals. To verify what landscape architecture practitioners considered necessary plant knowledge and skills, correlation between educational and professional needs could be more clearly addressed. This convergent information could direct the creation of relevant plant-based courses.

Practitioners representing varying parts of the United States were contacted in order to gather a range of information. During the interviews, each professional was asked predetermined, but open-ended, questions about their own education and practice and about their work experience with young professionals. Other questions sought opinions on current trends of plant use. All questions allowed participants to answer freely. Their interviews were later professionally transcribed and compared, developing a range of information sets and providing direction for final interpretation. To organize all interviews, answers were arranged by topic, allowing the research to follow a variety of findings, yet ultimately centralizing information into reliable categories. Over the course of seven months, over twenty practitioners were interviewed and data collected. Interviews lasted from 45 minutes to 1 ½ hours. Some professionals encouraged the interviewer to visit their landscape architecture projects or read books and articles they had authored. Some escorted the interviewer personally to important career projects and provided an orientation about the basis of the plants and design. While a list of the interviewees can be found at the end of this article, no comments have been attributed to any one individual in this report.

4 RESULTS: PROFESSIONAL INTER-VIEWS

All responses provided by professionals are arranged into four general topics: 1) General Professional Comments, 2) Professional Expertise Needed in Practice, 3) Faculty Knowledge and 4) Class-Related Information. They are categorically included below with pertinent samples of quotations that identify comment direction. An additional sub-topic category, Classroom Emphasis, further defined particular information for inclusion in courses, but it is not contained in this paper.

4.1 General Professional Comments

General Professional Comments had the least number of relevant responses, but one of the most important. Participants believed there was a need to establish professional planting design leaders today. It was a disconcerting comment as these persons were the leaders in that regard. Respondents believed that exemplary role models in planting design could potentially inspire and thus impact recognition of the importance of plant expertise in landscape architecture practice and education.

"They (schools) need to get more practitioners in to give. . . talks and create some

planting design (interest). Getting different voices is one thing I'd like to encourage. I don't feel that practitioners are being brought in to talk to students about it nearly enough."

The second most prevalent comment observed that plants had been largely lost as central elements in landscape architecture today, and landscape architecture professionals are not deemed as planting design experts today. In a narrative comment, a noted designer reported that he has been introduced by others at social gatherings as a landscape architect who "really knows something about plants too!"

When asked if they thought landscape architects could eventually be replaced by allied professions like engineers, horticulturists, and architects, over one-third answered in the affirmative. After some discussion, many of those first comments were expanded.

"I say we just always have to be vigilant and watch that (being displaced by others). A recent example, . . . a potential market share, is with green roofs Everybody seems to know it doesn't take much research to find out that sedums are the best thing (to use). . . . Why should somebody hire a landscape architect to design the plants when they can just go and find this information and basically call it out. So you always have to preach the value that you can bring to the project. I don't see that we're being misplaced or displaced, but I think we always have to be on guard."

Conversely, the professionals who did not believe landscape architects were endangered by allied professionals commented on their reasons. One conversation held that the landscape architects today had challenges but due to their education and capabilities, could measure up to those challenges.

"I've encountered very few engineers that think they can do it all, but they just think what they do is what is (more) important--that the rest of the stuff doesn't matter. . . .It really is mostly the architects . . . but I say we don't need to focus on the other professions as enemies. We've just got to lead . . . to step forward and take our role and not worry about it so much. . . As long as we keep doing it and expanding it and doing it better and growing ourselves and growing people as leaders, we don't have to worry about them trying to take some things away from us."

The end result of these conversations was that landscape architects had so much information that encompassed so many parts of design, they did not need to believe they could only get a small part of design practice. One professional commented; "Let's just make the pie bigger, let's

not fight over a piece of pie. We're the ones who are going to make the world better. . . and a big part of that has to be equity, social equity, cultural equity, economic equity." She added that landscape architects "aren't talking enough about the economic and cultural stuff. . .but the fact that "green sustainability has been our message" and now that others have embraced it, "we should regard that as huge success."

Landscape architects now are engaged more often with other professionals about design's big picture. "The architects are still the quarterback if the client hired them. But, we're just called upon to manage and be involved with many more things.

. . . because we're allowed to do it with state laws and even local regulations." Laws are key elements in most states to landscape architecture's role in obtaining work and managing it.

4.2 Professional Expertise Needed in Practice

The second topic heading, Professional Expertise Needed in Practice, contained three reoccurring comment categories: using plants in technological applications, actively branding and marketing the professional's plant expertise; and recognizing that landscape architects are *the only professionals* that are educated to use plant materials in design. They recognized that different USDA plant zones played into every school and professional office situation, but students should know where they might find new information if they move from one growing zone to another. Keeping abreast of new cultivars should be emphasized.

Professionals believed that work in their practice indicated students need to be introduced to a bounty of plants that cover ordinary situations and yet apply to new technological situations. They mentioned that traditional woody plant identification courses might include more than woody plants: some woody, some perennials, some herbaceous, and some grasses for particular applications. This abundance of plant identification items begs to increase the course load to more than one plant identification course however. They also mentioned that new graduate hires should reveal a passion in an area of practice to place themselves in an office. Plants link to almost any specialty. For example, "soils and geology and hydrology are clues to us of a student's interest. So try to cram more in, (but don't) dilute to a point that it could be detrimental to them."

Another question asked practitioners referred to changes in the profession since the time they entered it. All agreed that it had changed. When one respondent compared required plant-

based courses today to those he was expected to complete as an undergraduate, he remarked that there twice as many identification and planting design semesters that made up a richer curriculum twenty years ago. Professionals were all disappointed when told there were less, required plant courses. Those who were connected to education noted that some universities appear to have introduced more than the required plant courses. It was reported that one school provides an array of plant courses that enhance a student's particular level of interest, such as historic, urban or small-scale planting design. Many students transfer into degree programs with room for extra professional electives. The additional plant-course opportunities allow these students to take more electives and perhaps develop minors in planting design. That change toward more plant courses is a major development from only two or four required courses offered in many schools.

Professionals remarked that they wished students would come into practice with a love for plants. They appeared to look back on their plant-related, university experiences with fond memories. They remember details about plant courses that rendered them as lyrical and experimental experiences. These early experiences tend to mirror those first days in practice as well, revealing that the love of plants and experiences with them in class, transferred directly into their professional lives.

"There was a temporal dimension to the plants that was special in its implication. It was rhythmic, it was musical, and there were crescendos. All aspects of the plant, whether it was texture, flower, color, volumetric, all the cycles, was a much richer medium to work with. The planting plan was almost a conceptual understanding of what we would do in the field, and we implemented (plans) based on the material as it actually existed." Their descriptions of basic plant courses might invigorate and challenge many of the more ordinary plant-related studios of today.

Interest in plants has heightened recently for professionals, especially in the past six years. An American Society of Landscape Architects (ASLA), Planting Design Professional Practice Network has formed and national conference sessions on plants have risen from one to six offerings in that time. Louisiana State University is presently developing a Planting Design faculty chair, which will be fully endowed. Plantsmanship among landscape architecture professionals is definitely on the rise.

According to an interviewee, "I suspect the better firms are now looking at the richness of

understanding of plants within the composition--and their performance in various ways and not just plants as a horticultural element. These hybrid plants that seek to clean up sites, plants that (acclimate to) the subsurface conditions, plants in response to very particular circumstances are part of the vocabulary of practice. . . .I suspect they (offices) are looking not so much for a specific talent with plants but a comprehensive of how plants are a part of an expanded design palette over all.”

4.3 Faculty Knowledge Necessary

The third topic, Faculty Knowledge Necessary, had two major, but explicit, directives for schools. First, faculty should be well-grounded in horticulture expertise as well as other specialties so that they are ready to make critical links to plant applications no matter what the course content situation. Second, schools should make a conscious effort to hire new faculty with horticulture capabilities as older faculty retire. All those interviewed alluded to the need for a wide range of faculty competencies, but believed horticulture knowledge was key to a robust faculty profile.

One noted landscape architect commented on the direction that teaching about plants needs to go. “Plants are being seen more as parts of dynamic and changing systems, not visual elements that you plug into a design. In the old school way of learning about plants and landscape design you looked up a tree (in a resource book) and you saw it has a 25 to 30 foot spread and 60 feet tall, and you put it in a landscape with that in mind. (But) what you put in the landscape had about an eight foot spread and was about 12 feet tall. . . . The idea of plants as growing, changing, dynamic things I think is a relatively recent trend. That landscapes are dynamic systems that change, that shade develops over time and so the sun-loving plants that you put in are no longer appropriate for the landscape.”

The same plantsman also framed another opinion against his educational experience. In his discussion about how to teach about plants, he offered an observation comparing horticulture knowledge and ecological concerns. “I think back then -- I was at Penn with Ian McHarg -- and so you had the horticultural camp and you had the ecological camp. The ecological designers understood landscape as a living, dynamic system that was very complex and the horticultural designers saw things a little more simplified and didn’t really understand that (other) kind of thing. These two people didn’t talk to each other for a long time.”

4.4 Class-Related Comments

Finally, the fourth topic, Class-Related Comments, directed the most discussion. Comments centered around eight educational headings: 1) Students should receive critical information about plant ecosystems; 2) plant classes should be taught very early in the educational sequence; 3) schools should require both plant identification and planting design courses, 4) more than the required classes should be offered and encouraged as electives; 5) course interaction between horticulture and design students should be sought for emphasizing mutual learning experiences; 6) students should experience horticulture in natural settings and in a variety of situations; and 7) students should understand how planting design is executed in a variety of conditions, like engineered soils and restoration situations. One recurring notation was that students should be allowed to explore a variety of planting design experiences and solutions in the same situation—practicing design in one place/situation as layering systems in the four seasons.

Practitioners are generally concerned that students are not experiencing plants first-hand. Several stated that outdoor field trips and observation is key to understanding plants and their habitats. Sketching plants in the wild or as existing conditions on-site would make connections that no student can receive from researching plant material on-line on in a textbook.

One practitioner commented that educators should revere the role of landscape architects in plant-related practice. He said, “We are educating the future stewards, protectors, first responders, healers of the environment, built and natural landscape.” While others did not agree totally with him, they did respect his position, no matter how lofty. “We (landscape architects) can’t be everything but should be aware of what we are.

. . .for example, we (need to) look at systems because plants are involved in it. . . .and the clue is because we’re looking at it in terms of how those systems can work with other elements of the environment. . . .it needs to be worked into planting design.”

To garner more professional expertise, those interviewed believed that plants should be introduced as companions to growing technological knowledge. One respected professional observed that landscape architects should be more sensitive to water conservation issues and to regional appropriateness of plant selection therein, adding that water conservation measures are prime considerations and trends today. Parlaying plant

knowledge into systems management was key to a vital practice.

They also believed that working with other professionals was an important element for practice, saying that the breadth and depth of projects today require a broad platform containing many professionals. “We (have) worked with 20 scientists, everything from ornithologists to herbalists, . . . There was a tremendous interest in bees and pollination. . . . I do find (that) educating the public is (also) important. . . . I feel like I fight that battle (of educating the public) almost every day because the public and other professionals do not totally realize what landscape architects do.”

At times this practitioner had to charm the client into hiring the correct professional for each professional job. “I had to think about letting them (the client) know that I wanted to talk to her (as well as the architect) and then I made it awkward (purposely), saying it right in front of him (the architect). Finally, the way I did it was sideways. I said, ‘this part of the project is about engineers and that is about water engineers that are going to have to work this out. This is not about architects or landscape architects at this point.’ Ultimately, the client got the message.” The correct professional was hired for the job to be accomplished.

5 PLANT AND PLANTING TRENDS

Planting design trend predictions generally vary among professionals and the firms for which they work. Below is a list of trends, some mentioning larger and others more detailed trends. The list might include other items, but interviewees mentioned these most often:

- A. “The Native Movement has certainly mushroomed in the last five years. You have to kind of start with natives as your base—as your baseline—then know when to add exotics on top of that.”
- B. “Meadows and woodlands. . . . Whenever we’re working in those kinds of precarious environments or unique environments we usually will bring in a meadow specialist, (for a meadow) or a forester (for a woodland restoration). So know your limitations as a landscape architect.
Meadows aren’t easy. They are inexpensive but to get them to look like that is really not easy. . . .There is nothing easy about a meadow.”
- C. More limited irrigation application: “Even natives need water. . . .My reaction to irrigation is -- we like to put it in as insurance. Our clients are making a huge investment and you can lose it all if it’s

planted . . . then you go into a huge drought. . . . So we like to wean the gardens off irrigation (then). To get LEED points you’re allowed to have irrigation if you’re reusing surface water and storm water or if it’s temporary and once the plants are established using a plant palette that isn’t so dependent on watering.”

D. Sustainable design, water resource management, natural systems. “If you look at the topics of ASLA annual meetings for the last few years, there aren’t any sessions that don’t have sustainability in the title. It’s the big catch phrase (along with the sustainable SITES initiative). . . . and a sub-category would be water-wise xeriscaping. You know, you’ve got bruises on your forehead from hitting your head on the wall (with public water boards). . . but (finally) now you hear, ‘so I see that you do xeriscaping, that’s what we want!’ and that means natural systems. . . . (Doing that) is a better use of our resources as opposed to aesthetics—that’s just decorative arts or something.” Another comment detailed reduced use of lawn. “Lawn is becoming a difficult—it’s sort of becoming a no, no in some circles because it is such an energy user. . . .It requires a lot of watering. And you can’t put out the sheep any more.” She added, “There is more emphasis on green now. Every politician and every sort of two-bit marketing person goes, ‘Well, can we do something green?’ Well, yeah, we’ve been doing something green for 30 years.”

- E. Return to planting design applications and knowledge in practice. Since the public believes that landscape architects know a tremendous amount about gardens and plants, then this perception should be taken seriously. “We do ourselves a great injustice by not honoring the very thing that they (clients) believe we know so much about. It looks like we are missing knowledge about things (now). Being known for plant knowledge is the way to get into the door of many projects and then we can open up other avenues with the client. “ One practitioner remarked, “the general public is less engaged outdoors in everything. Gardens are declining, in statistics, and people have less time and their houses are still bigger generally. But we are *required and mandated* to be green these days, especially in public projects. I think planting design . . . the opportunity for

really interesting planting design— is much better in the public sector now.“

- F. Health, safety, welfare applications as it relates to planting design: A noted horticulturist/practitioner pointed to this triad. “it’s almost a richer time than ever from a plant point of view. Even absolutely related to health, safety and welfare. So it’s kind of surprising to me that schools back away from that.” Licensure issues are not linked directly to planting design now; questions related to plants are amalgamated into obtuse questions about law enforcement security. Only two states have plant-related additions to the national licensure examination. Because states with only title laws will be challenged on those grounds, tying planting design to health/safety/welfare is only a matter of time. Practitioners believe planting design expertise will be rewarded soon.
- G. International work. Until more international landscape architecture schools supply needed education opportunities, leaders in the professional realm will come from the United States. A US practitioner whose firm does much international work has recently “completed a series of guidelines for the US State Department called *Embassy Perimeter Improvement Concepts*. Planting applications were not done with species; it was done on the scale of massing and sustainability.“
- H. Use of specialists in practice. “Landscape architects need to be trained to call on specialists when we need them; I think we *need to know* when we need them and that means we have to be grounded in plants and soil and water and know how to use them effectively.” Landscape architects need to know when to sell themselves and do it actively.
- I. Urban ecology: All design professionals must muster the courage to broker ethical and practical means for healthy and socially acceptable environments. Ushering viable plant materials into cities is paramount in providing healthy living situations. On practitioner remarked; “(An understanding of) urban ecology as the way to be more sensitive to water conservation issues and to regional appropriateness of plant selection is obvious. Cities in the West, the dry West, require that water and water conservation

measures be taken into account in terms of plant selection.”

- J. Natural planting design: “This kind of design (natural planting) is based on a mixing of plants and not worrying about over composing. This type of design will ultimately have a sense of order to it, that’s part of the evolution. It doesn’t have everything lined up in a certain, overly naturalized way.” Overall, professionals believed that landscape architects need to study how plants acclimatize and morph into natural patterns. Students could begin this kind of understanding early in their education and be able to apply it in studio settings.
- K. Use of plants as a value-added component in construction. Plants can be assessed as part of things like: fire mitigation, environmental restoration, brown field reclamation, wetland mitigation and restoration.

One practitioner/educator summed up the many faces of horticultural design education simply. He believed that trends in landscape architecture which are tied directly to planting design in practice are “some of the toughest and most elusive things to teach and to do-- to practice. It so often falls to a subjective sense of things and those are hard things to get past in teaching—teaching from a rational, objective point of view. Sure there’s intuition but there’s got to be some strategy, there’s got to be some logic as to how you choose plants.”

6 SUMMARY

Professionals working today witness new planting design and sustainability trends and have important ideas about their own needs as well as educational direction. Therefore developing any new course that is relevant in either plant identification or design can benefit from information about professional, innovative standards of planting design.

Professionals seem to agree that landscape architects are capable of leading a design team. Whether managing a project that is about plants, storm drainage, runoff, or other important issues, they can act as generalists and perform as an umbrella might, housing other professions on the design team. However landscape architects “should not be too focused on one and not the other”. Knowledge bits are all related and require common sense—but educated common sense.

Most interviewees believed that there is much work on the horizon for practicing landscape

architects. "With the emphasis on 'green' and what we are seeing in practice, it is a good time for landscape architects."

Both educators and practitioners expressed high aspirations for their students and the profession. If their passion for landscape architecture can be channeled and become convergent goals, the profession will more likely meet the challenges of a more dynamic design world in the future. The next step is for educators and practitioners to agree upon and plan what core elements should be found in such a robust set of plant-related objectives.

6 ACKNOWLEDGEMENTS

The author wishes to thank the landscape architecture professionals who participated in these interviews: Sheila Brady, FASLA; Don Brigham, FASLA; Dana Nunez Brown, ASLA; Warren Byrd, FASLA; Eric Groft, FASLA; Faye Harwell, FASLA; Rick Kasenski; Brian Katen, ASLA; Margarite Koepke, ASLA; Mia Lehrer, FASLA; James Penrod, FASLA; Melissa Rainer; Thomas Rainer; Mark Robertson, FASLA; Steve Rodie, FASLA; Vaughn Rinner, FASLA; Terry Ryan, FASLA; Gary Smith, FASLA; Tom Tavella, FASLA; Christine Ten Eyck, FASLA; Jim Urban, FASLA.

8 REFERENCES

- Bell, J. (1993). *Doing Your Research Project. A Guide to First Time Researches in Education and Social Sciences*, 2nd Edition. Buckingham: Open University Press.
- Brittenum, J. B. (2013). Say it isn't so: Clarifying the role of plant knowledge and usage in landscape architecture education. *2013 Council of Educators in Landscape Architecture*, University of Texas, Austin.
- Brittenum, J. B. (2014). The current state of teaching about plants in landscape architecture education and its relevance to the needs of today's practice. *Off-Campus Duty Report*, University of Arkansas, Fayetteville, Arkansas.
- Burgess, R. G. (1984). *In the Field. An Introduction to Field Research*. London: Routledge.
- Koepke, M. L., & Myers, J. A. (1992). Trends in teaching planting design. *Proceedings, Council of Educators in Landscape Architecture*. University of Virginia, Charlottesville, VA.
- Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. New Edition. London: Pinter Published Ltd.
- Peters, O., & Martin, R. (1975). Core curriculum in landscape architectural education. *Proceedings, National Council of Instructors in Landscape Architecture*, Gainesville, Florida.