

**Filling the Gap: Landscape Horticulture Professional Development Opportunities for  
School-Based Agriculture Educators**

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## INNOVATIVE IDEA

### Filling the Gap: Landscape Horticulture Professional Development Opportunities for School-Based Agriculture Educators

#### Introduction

Horticulture is one of the agriculture career areas with the greatest opportunity for jobs and future importance as perceived by students, stakeholders, and school administrators. However, teachers may not be adequately prepared for instruction delivery of horticulture and green house facility use if specific courses in colleges and universities do not focus on greenhouses for education (Franklin, 2008). The AAAE Research Agenda Priority #5 addresses Efficient and Effective Agricultural Education Programs and includes the area of Professional Development. Once a teacher enters the classroom, their future development of knowledge and skills comes from professional development opportunities. However, know barriers to educator participation in professional development activities include registration costs (Drage, 2010), time of offering, and funds for travel to workshops (Irwin, 2018). We have found a professional development program focusing on horticulture topics, sponsored by industry, occurs during summer months, and is affordable to school-base agriculture educators.

Landscape Faculty Academy is an annual two-day conference that is open to instructors of high school and two and four-year institutions. The Faculty Academy is conducted and funded by the Irrigation Association (IA). Created in 2003, Faculty Academy started out as one event for landscape and agriculture instructors. In 2015, separate events were created for both agriculture and landscape instructors. Since the program's inception in 2003, over 500 educators have attended the annual events.

#### How it Works

The academy provides instructors with the opportunity to gain new ideas for their classroom, network with fellow academics, engage industry professionals, and gain hands-on experience with irrigation-related curriculum. The two-days are filled with lectures and labs, tours and a group dinner to encourage networking. The location changes annually so that educators can learn about different irrigation methods that are used throughout the United States.

#### Results to Date

Since 2015, Landscape Faculty Academy has hosted 154 attendees. The attendance each year includes repeat attendees as well as first-time attendees. Workshop topics and attendance (number) since inception of industry-sponsored professional development program by year are presented below:

Year	Topics		No.
2015	<ul style="list-style-type: none"><li>• Irrigation Scheduling</li><li>• Soil Sensor Technology</li><li>• Anatomy of an Irrigation System, beginner</li></ul>	<ul style="list-style-type: none"><li>• Constructing Above-Ground Zones for Teaching</li><li>• SLIDE Rules, advanced</li><li>• Landscape Drip Auditing</li></ul>	24
2016	<ul style="list-style-type: none"><li>• Landscape and Irrigation Codes</li><li>• Reading Irrigation Plan Packages</li></ul>	<ul style="list-style-type: none"><li>• Electrical Troubleshooting &amp; Lab</li><li>• PVC Pipe Welding</li></ul>	23

	<ul style="list-style-type: none"> <li>• Controller Programming</li> </ul>		
2017	<ul style="list-style-type: none"> <li>• Irrigation Maintenance at The Walt Disney World Resort</li> <li>• Pressure Regulation and Hands-on Activity</li> <li>• Anatomy of an Irrigation System</li> </ul>	<ul style="list-style-type: none"> <li>• Design Capacity</li> <li>• Pipe Sizing</li> <li>• Drip Conversion</li> </ul>	40
2018	<ul style="list-style-type: none"> <li>• Careers in Irrigation Consulting &amp; Design</li> <li>• Greenhouse Irrigation</li> <li>• Irrigation Best Management Practices Review</li> <li>• Irrigation Components</li> </ul>	<ul style="list-style-type: none"> <li>• PVC, Poly Pipe &amp; HDPE Installation Lab</li> <li>• Two-wire Systems Teaching Lab</li> <li>• Two-wire Troubleshooting Teaching Lab</li> </ul>	47
2019	<ul style="list-style-type: none"> <li>• Apprenticeships</li> <li>• Catch Can &amp; Soil Moisture Sensor Auditing</li> <li>• Controller Programming</li> </ul>	<ul style="list-style-type: none"> <li>• Intro to Sensors &amp; Scheduling</li> <li>• Irrigation 101</li> <li>• Irrigation Scheduling</li> <li>• Soil Moisture Sensor Lab</li> </ul>	20
2020	<ul style="list-style-type: none"> <li>• The Why behind Irrigation</li> <li>• Irrigation Components</li> <li>• Understanding Basic Pumping Systems</li> </ul>	<ul style="list-style-type: none"> <li>• Pump Sizing 101</li> <li>• Market Place Trends &amp; Regulatory Updates</li> <li>• Teaching Trends &amp; Discussion</li> </ul>	50

### **Future Plans/Advice to Others**

Announcements about the Landscape Academy are located on the Irrigation Association website, and email notifications have been made on the AAAE Listserv and NAAE Listserv. Interested attendees are encouraged to complete a provided budget to determine participant costs to attend. Selected participants are notified by email. It is recommended participants bring an extra bag or piece of luggage to pack all the free materials and teaching realia distributed during the workshops! For summer 2020, the Landscape Faculty Academy was transformed to a virtual webinar-format. The webinar was conducted over two-days and featured several seminars for interested participants. Follow-up survey responses and quotes from participants viewing the webinar included:

- 100% of survey respondents rated the overall experience as excellent or good.
- “For a virtual event it was well planned and organized. The materials were wonderful to receive and put together nicely. The presenters were knowledgeable and good speakers.”
- “Every time I attend, including the virtual one this time I end up with lists and pages of new ideas and ways to teach different irrigation components and the science of irrigation. This is relevant and in the field that I can transfer directly to my labs and teaching.”

### **Costs/Resources Needed**

Participant attendance and travel expenses are supported by the Irrigation Foundation. During the online registration process, participants are asked to complete an online budget to determine individual cost to attend the workshop. Variables include method and estimated cost of travel (i.e., air travel or car), lodging, meals, related travel expenses (parking, shuttle, etc.). This support eliminates the barrier of cost of professional development for the instructor.

## References

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