

Value of hands-on education

STUDENTS THAT PURSUE AN EDUCATION IN TURFGRASS MANAGEMENT have multiple choices on what type of education they will receive, and how they want to receive their education. Traditionally students may start learning about turfgrass management in a high school horticulture program, through family members involved with the business, or participation in a community activity. These introductory programs are extremely beneficial to students that see an interest in some type of horticulture field, specifically in turfgrass management.

Students that choose a career in horticulture have many educational options, including 1-year diplomas; 2-year Applied Science degrees; 4-year bachelor's degrees, master's degrees; and, doctorate degrees—along with a

multitude of continuing education courses. The unique part about education is that each and every student is different and may decide to attend college for factors such as location, expense, reputation, and educational course work.

Students who decide to attend institutions that offer Applied Science degrees or hands-

on learning opportunities are the students with whom I have the most interaction in my position as Assistant Professor, Golf Course and Athletic Turfgrass Management at Kirkwood Community College, a 2-year community college located in Cedar Rapids, IA. The college offers a competitive turfgrass management program, along with landscap-



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- » **Above:** Students work on residential irrigation installation around the horticulture building. Students take an irrigation installation and repair course that allow them to install, maintain, audit and troubleshoot all irrigation systems.
- » **Below:** Students work on pitching mound repair at the Kirkwood Baseball Field.



ing, and parks and natural resources programs. All three programs are offered in the Horticulture department and serve around 275 students total.

Kirkwood recruits students that enjoy learning through hands-on education practices and see their future in the turfgrass profession. Kirkwood serves seven counties located in eastern Iowa (Benton, Cedar, Iowa, Johnson, Jones, Linn (Main Campus), and Washington counties. Most students that attend Kirkwood's programs are from the state of Iowa, with a heavier concentration of students in eastern Iowa. Kirkwood students reach throughout Iowa's 99 counties, and in fall of 2009 the college's International program included 532 students from 86 countries.

Kirkwood students enrolled in the 2-year Golf Course and Athletic Turfgrass Management program take a multitude of courses and upon graduation will have 68 credits resulting in an Associate of Applied Science (A.A.S.) degree. During students' first year of study, they will enroll in horticulture common courses which include the general course requirements like Soil and Water Conservation, Plant Material Maintenance, and Introduction to Turfgrass Management.

Once a student has completed 32 of their 68 credits, they will conduct a paid spring/summer internship after their freshman year and before they begin their sophomore year of studies. Upon return of their sophomore year, students then take second year specialty courses including: Athletic Turfgrass Maintenance, Irrigation Installation and Repair; and Advanced Turfgrass Management. These programs have proven to be successful for students to achieve their educational objectives and the course work is based on individual student success, while meeting local industry's expectations; and, focuses on the important

In my opinion, knowing what is expected of an employee in the field needs to be reflected in the classroom and embraced as the student moves forward into their new career.



» Students get an opportunity to fertilize soccer field with walk-behind spreaders. Before fertilizing students had to select the product, budget for the application and calibrate the spreaders.

directions provided by the advisory council and their unique industry needs and perspectives they provide to the college and the students.

Kirkwood Golf Course and Athletic Turfgrass Management graduates are ready to enter the workforce. Most build their resumes and begin job seeking months before graduation. Others will transfer to attain their 4-year degree in turfgrass management or related fields. The statistics of students finding careers in the turf field have been successful; however, just like anything as the economic situation changes, so do job possibilities for students that graduate with an Applied Science degree in a specific field like turfgrass management.

Lately Kirkwood faculty has begun to encourage the students to consider other educational endeavors and pursue more education outside of their 2-year degree. Students have risen to the challenge and are considering more than ever the importance of transferring to complete their 4-year degree.

STUDENT BENEFITS

Now that you have an idea how this hands-on education curriculum works, I want to share how, from a classroom perspective, students benefit from hands-on education. As the semester begins to wind down and the course work comes to a conclusion, I ask each student to provide a "self-reflection" that discusses one hands-on lab exercise that benefited them the most during their course of studies. It is interesting to note that 95% of the students self-identify by recalling an outdoor lab activity that inspired them to want to learn more, or provided an opportunity for learning that they will never forget. Here are two comments from former students that accurately represent a great majority of students in this program:

"I thought that the residential pipe installation irrigation lab was the most beneficial. I had no idea that pipe can go into the ground that smoothly."

The baseball mound bricking lab was great. This activity is something I am planning on helping with at my hometown field now that I have the experience."

I know from many other student self-reflections that the hand-on activities not only provided in the classroom, but from other hands-on opportunities, including: internships, workshops, and on the job experience are beneficial hands-on activities that foster a tremendous learning environment.

I provide this challenge to you: think back to an activity that influenced your career, or an activity is engraved in your mind. These education scenarios are among the most effective methods of training individuals and in addition to their use in schools, many organizations use these types of learning activities for employee orientations and other training opportunities. Research shows that teachers, curriculum developers and other experts agree that educational experiences that actively involve people manipulating objects give students knowledge and understanding about their education.

The emphasis behind hands-on education is that students are able to realize that the jobs they will pursue will not require them to be behind a desk all day; rather, provide understanding that they are expected to maintain an active part in all the daily operations and generally require manual labor to accomplish these tasks. In my opinion,

knowing what is expected of an employee in the field needs to be reflected in the classroom and embraced as the student moves forward into their new career.

For example, in this industry, an employee will routinely find themselves mowing, so in the classroom and during hands-on learning activities, the college operates, troubleshoots, and maintains both reel and rotary mowers, along with different manufacturers and configurations for these machines. Active learning allows students to be familiar with these practices, preparing them for what may happen in their field of work. This is something that no book can give anyone that level of hands-on experience. Students will often say that there is no better feeling than having their boss trusting them and having confidence to perform a task that you have experienced hands-on during your college career. It is how students can be most effective when they enter the workforce fully prepared and ready for success!

Students feel confident with their knowledge about the turf industry and have given their employer a sense of security knowing that they understand what is going on and how to work within the task assigned. Graduates from these programs have been able to successfully obtain full time turf management positions and move through the ranks just like every other student enrolled in a college program.

Overall, people are beginning to understand that education is becoming even more important for today's industries. While education comes in many different forms, there is an increasing value being dis-



» Students get every opportunity to run various turf related equipment. Students are sweeping cores following ¾-in. core aerations on a baseball field.

covered through use of hands-on. This delivery method has made a lasting impression on today's turf managers and will continue to be an avenue for interested students to pursue. ■

Troy McQuillen is assistant professor, Golf Course Athletic Turfgrass Management Program, Kirkwood Community College, Cedar Rapids, IA.

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