

Translated Content from the Oregon Master Gardener Program for Entry-level Nursery Employee Education Programs

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SUMMARY. Meeting the needs of changing clientele can be achieved by modifying current extension programs such as the Master Gardener program. In Oregon 90% of the nursery industry workforce is comprised of Hispanics who speak Spanish and have a limited understanding of English. Translating the content of selected chapters from the Oregon-Washington Master Gardener Handbook into Spanish creates a new training tool that can be used throughout the industry. By providing technical training in the basics of plant science, nursery employees will have a better understanding of the work they are doing and gain job satisfaction.

The nursery industry in Oregon is an essential component to the Oregon economy. In 1999 it generated more than \$560 million in sales and will likely top \$600 million in 2000 (Aguirre, 2000). The majority of the industry is concentrated in the Portland metropolitan area and supports

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roughly 1,000 green industry related firms including, ornamental nursery and greenhouse production, landscaping, lawn care and arborists (Aguirre, 2000). Collectively these firms employ approximately 10,000 people.

Within the nursery segment of the green industry, 90% of the work force are Hispanics whose primary language is Spanish and who speak and understand little English (Mathers, 2000a, 2000b). These employees are involved in every aspect of the nursery industry including general production, pest control, propagation, customer service, media and soil preparation, irrigation and pruning (Fig. 1).

One of the keys to success for any business is to have well-trained and motivated employees. In 1995, Mendoza (Mendoza, 1995) reported there was limited information about training programs designed for the Hispanic population. He further noted Hispanics had a low level of involvement in existing green industry training and certification programs. In developing training programs for Hispanic employees, language is not the only consideration. Educational materials may need to be modified in format and content to meet the average level of employee education (Mendoza, 1995). Cultural and self-esteem issues may also affect their interest and desire to gain additional training (Battle, 1981) and should be considered when motivating employees.

Currently in Oregon, a number of educational opportunities are available to English speaking employees through the state nursery association and community colleges. However, for Spanish speaking employees there is limited technical horticulture information available and few, albeit increasing, educational opportunities. Some employers have noted a need for better training in order to help their employees improve job performance and job satisfaction. To achieve this, a few of the industry leaders in Oregon have developed extensive, on-site employee training programs.

Current training programs

Through these training programs, employees can receive training on a variety of topics ranging from English as a second language, citizenship, basic computer skills, skills for agriculture supervisors, and mathematics for

nursery employees (A. Wenner and L. Casey-White, personal communication). Often this training is delivered on site by bilingual employees, however some training is also available through local community colleges.

To date there has been little collaborative effort between the nursery industry and Oregon State University (OSU) Extension Service to offer this type of training. Since the OSU Extension Service mandate is to extend university, research-based information to citizens of the state, it makes good sense for the OSU Extension Service to evaluate current programming and develop new ways, and new formats, to deliver basic horticulture science information to employees of the nursery industry.

Training development in progress

The OSU Extension Service Master Gardener program is one such program that lends itself to this new type of delivery. Entry level volunteers in the Master Gardener program need a basic understanding of technical information and how to apply it; entry level employees in horticulture production need similar training. A collaborative project is under way between the OSU Master Gardener program and an ornamental nursery near the Portland metropolitan area.

In November 1999 the basic botany chapter of the Oregon-Washington Master Gardener Handbook was edited and revised, and in January 2000 it was made available on-line for training new Master Gardeners and for use by the general public. It is currently being translated to Spanish for use in training sessions for Spanish speaking employees. The premise for this project is that if employees have a better understanding of why they do the tasks they do, they will be able to make better decisions, effectively troubleshoot a situation and have more job satisfaction. Obviously the first two items are beneficial to the company's bottom line, however the third benefit is likely the one of most importance, yet the most difficult to measure.

The project team, including staff members from the nursery, a bilingual educator from a local community college and a subject matter expert from extension, have evaluated the on-line

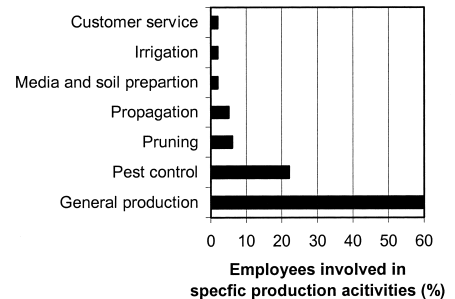


Fig. 1. Breakdown of production activities for Hispanic nursery employees in Oregon.

botany training module and the text from the handbook. They have selected four key areas from the module to use as part of the employee training program. These include, external plant parts, internal plant parts, major plant process (photosynthesis, transpiration, and respiration) and, the role of hormones in plant growth and development. Individual training modules will be developed based on these topics. The content will be edited for brevity and modified to meet the reading and comprehension level of the average employee. Textual changes will be made to the existing graphics and illustrations and graphics will be added to complement specific examples pertinent to nursery production. The end product will be two, 3-h Spanish training modules that will enhance the understanding of basic plant science for nursery employees. These modules are scheduled to be taught in February 2001.

Future projects will include using a similar protocol to develop a module on soils and water and a third module on insects and diseases. The content for these modules will also come from the Oregon-Washington Master Gardener handbook and will be developed using a similar team of educators and professionals.

After employees participate in the training and have the opportunity to synthesize and incorporate the information into their daily work, we will evaluate the modules. We will gather information via small group interviews during on-farm visits and through individual surveys completed by the employees. Two on-farm interviews will be completed; one with crew leaders or forepersons that supervise the participating employees, and a second with the employees themselves.

Conclusions

Developing collaborative projects between the Oregon nursery industry and OSU extension provides an excellent opportunity to meet the needs of our Hispanic nursery workforce and to further the educational outreach mission of extension. For extension to remain relevant, we must adapt and modify our current mode of operation to meet the changing needs of our clientele. The Oregon nursery industry needs well-trained and satisfied employees to sustain the level of growth it has experienced in the past 10 years and to remain competitive in national and international markets. This goal can be achieved and the Oregon nursery industry can move swiftly and successfully into the 21st century with planning, curriculum development, implementation, and support from industry and the university.

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