

# Writing assignments boost critical thinking skills for landscape design students

April 1 2011

---



In a reflective writing assignment, students write a detailed description of this landscape, followed by how design principles are evidenced in the landscape, then detail how historical garden eras influenced the landscape. Credit: Photo courtesy of Ann Marie VanDerZanden

Dr. Ann Marie VanDerZanden is preparing students in her horticulture classes for challenging careers by boosting their critical thinking capacity. "Horticulture graduates entering the field of landscape design and installation must be able to integrate technical skills with practical applications. This requires higher-order thinking skills such as analysis and synthesis", VanDerZanden explained. The Iowa State University professor designed a curriculum that integrates reflective writing into a landscape design course and discovered that students' quiz scores increased significantly after they completed the writing exercises.

Landscape design and installation is a fast-growing and profitable segment of the horticulture industry. As the profession becomes more sophisticated, the demand for employees who can integrate technical knowledge with practical application increases. "Providing opportunities for students to develop these skills is an essential part of their undergraduate education", said VanDerZanden. "Research suggests that reflective writing can be an effective [teaching method](#) in agriculture-related fields."

In a report published in [HortTechnology](#), VanDerZanden evaluated the effectiveness of using reflective writing assignments in her Beginning Garden Composition class, a two-credit course at Iowa State that covers the basics of landscape design. For the first assignment, students were asked to describe a selected landscape image using as much detail as possible. The second assignment required students to describe how the seven principles of design, which were previously discussed in class, were evidenced in the landscape image, and for the third assignment students described how historical garden eras influenced the selected image. The assignments were designed to encourage students to write about technical content covered in the course while drawing from their background and experiences.

To evaluate the impact of the writing assignments, VanDerZanden compared students' scores on an 18-point quiz question from two years of classes when the reflective writing assignments were not part of the course and three years when the assignments were used (for a total of 110 students enrolled from 2005). She found that scores on the quiz question increased significantly for the students who completed the reflective writing assignments (average of 16.2 out of 18) compared with students who did not complete the assignments as part of the course (average 10.2 out of 18). As a result of the significant increase in scores, two additional reflective writing assignments were added to the course in 2010.

VanDerZanden noted that the use of reflective writing assignments can be incorporated into any technical course. "This method of teaching provides an opportunity for the instructor and [students](#) to approach a technical subject in a creative and engaging way", she concluded.

**More information:** [horttech.ashspublications.org/ ...  
nt/abstract/20/4/668](http://horttech.ashspublications.org/...nt/abstract/20/4/668)

Provided by American Society for Horticultural Science

Citation: Writing assignments boost critical thinking skills for landscape design students (2011, April 1) retrieved 25 April 2024 from <https://phys.org/news/2011-04-assignments-boost-critical-skills-landscape.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--