Writing Assignments for Horticulture Courses

David J. Wehner

Additional index words. education

Summary. Writing in horticulture courses helps students develop a better understanding of the subject matter and prepares them for careers where they must communicate with the general public. Three writing assignments that can be modified for use in a wide range of horticulture courses are presented, along with grading sheets. The writing assignments simulate situations that horticulturists encounter frequently; i.e., answering questions about plant materials and their utilization and maintenance or proposing site improvements or additional expenditures for maintenance programs.

Traditional writing exercises in horticulture courses include term papers, essay questions, and laboratory reports. These writing exercises help students develop mastery of the subject matter and demonstrate this mastery to the teacher. Students also should develop their ability to communicate information about horticulture to the general public. Success in the student's chosen career often will depend on selling a product or service or explaining activities to individuals who are not trained in horticulture, such as homeowners, boards of directors, supervisors, or companies soliciting bids for services.

There are constraints on the traditional writing exercises that restrict their usefulness in helping students develop their ability to communicate to a general audience. Term papers may be too technical and are difficult to assign in an introductory course, where students lack a sufficient information base to write a quality paper. Often, term papers are due at the end of the course or they are collected,

graded, and returned so there is no feedback or provision for revising the paper. Laboratory reports reinforce the student's understanding of a principal or theory in plant science, but may not reflect the broad nature of communications with the public. Essay questions on exams, because they frequently must be completed in a limited time, do not allow the student a chance to refine the presentation of the information.

Over the past few years, most universities have realized the need to

improve the communication skills of students so that they can function better in an increasingly complex society. Writing-across-the-curriculum programs have been instituted, along with writing centers where students can obtain help in developing and refining their writing skills. There are many opportunities in horticultural courses to add short (two to four pages), meaningful writing assignments.

Berghage and Lownds (1991) addressed the need to incorporate writing into horticultural education and

Table 1. *Writing assignment covering plant selection.*

A new neighbor has moved into the house next to yours. The house does not have a lawn, but the neighbor wants to plant grass as soon as possible (she cannot afford to buy sod). The home is in (city name), faces west, is a two-story structure, and there are no trees. The soil is composed of 6-8 inches of topsoil over a clay subsoil. The neighbor knows that you have training in horticulture and has come to you for help. Please write the neighbor a letter giving two different possibilities for turfgrasses that might be used in this location. The choices should be two different species or combination of species.

Include the following: 1. Describe the characteristics of the two choices. Present information about the turf that will help the neighbor decide what to use. This information should include adaptation, care, special characteristics, and special problems. 2. Make a recommendation as to which species you think is the best choice. You are the expert. The neighbor has come to you for specific advice. 3. Give information as to where the neighbor might obtain seed.

Length: The letter should be no longer than two single-spaced typed pages.

Style and Tone: Remember, you are writing a letter to someone who is not an expert in agriculture. Explain any horticultural terms that you use in responding to the inquiry. However, this individual is a lawyer, so do not treat her as an uneducated individual. You are presenting species choices for her to consider, not giving directions on how to establish the lawn.

Grading Sheet

Points awarded

1. Technical Content (Have you presented correct information? Are the species adapted to the site?)

Species #1	0	1	2	3	4	5
Species #2	0	1	2	3	4	5

2. Tone of the Letter (Is the letter appropriate for an educated individual without experience in horticulture? Is it friendly? Have you demonstrated your interest in helping this person?)

0	1	2	3	4
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3. Clarity (Have you clearly and concisely communicated the information? Is the vocabulary appropriate for an individual without horticultural experience?)

0	1	2	3	4	5
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4. Organization (Have you covered everything necessary to make the choice?)

0	1	2	3	4	5
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5. Spelling, Punctuation, Grammar

0	1	2
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6. Format

0	1	2
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Total points awarded (30 maximum) _____

presented ideas for writing assignments. They suggested several writing genres related to horticultural occupations in addition to using journals and "micro-themes." Bean et al. (1982) described several types of microthemes that can be used as writing exercises.

The following three writing assignments have been used in introductory and advanced turfgrass management courses at the Univ. of Illinois. The first two can be modified easily for use in almost any horticulture course by changing the circumstances and plant material references. The third assignment is written in a generic form. The assignments are aimed at giving the student experience in answering questions about the utilization and maintenance of plant material and proposal writing.

Assignment #1- plant selection. The first writing assignment (Table 1) is from an introductory turfgrass management course and deals with species selection. This assignment is most useful if it requires the student to interpret and collate information about different plant species rather than simply copying information from a plant materials handbook. The assignment could be used for an advanced course by setting up an unusual set of circumstances that requires the students to research the species selections thoroughly.

Students are encouraged to have an acquaintance who is not a horticulture student read their response and make comments. This helps the student determine if the response is written clearly. Because this is the first writing assignment in the course, students are given the chance to revise their responses after the assignment is discussed in class. During the discussion, several of the best responses (with student names removed) are presented via overhead projector, and grading is explained. The grade on the revision can be increased to within one point of the highest score given in the class on the first version.

Assignment #2- responding to a complaint. The second writing assignment (Table 2) is used in an advanced turfgrass science course comprised mostly of students who are interested in golf course management and have had summer experience on a golf course. It simulates the current trend of golfers to want their home courses in the same condition as tour-

nament golf courses. The students are given some background to help them recall information presented in the introductory turfgrass management

course. The assignment requires a response synthesized after considering the limitations imposed by the growth habit of the turfgrass, the amount of

Table 2. *Writing assignment covering response to a complaint.*

Dr. R.T. Jones, a low-handicap golfer, has played at some of the best golf courses in the United States. He is a member of the golf course where you are the superintendent. Dr. Jones is a well-respected member of the club, reasonable, and has previously served on the greens committee. He has expressed concern that the speed of the putting greens is not adequate for a club that desires to enhance its reputation as one of the better courses in (state name). You basically agree with Dr. Jones and you have some money available in the budget to make some changes. However, changes take time to implement and you want Dr. Jones to understand this. Since you are very professional in your dealings at the club, you decide to write Dr. Jones a letter explaining why the greens are not as fast as he wishes and outlining some potential changes in the maintenance program that will increase the speed of the greens.

Background information: As you know, the speed of the putting green is how far the ball will roll as determined with a Stimpmeter. The speed of the green is influenced by factors such as the height of cut and mowing frequency, level off fertilization, and frequency of top-dressing. You are currently mowing the greens at 3/16", applying 5 lb of N per 1000 square feet per year, and topdressing two times during the season. The golf course has USGA specification greens and receives 26,000 rounds per year.

Include the following: 1. Present some background information so that Dr. Jones can understand what is involved in changing the speed of the greens. 2. Explain why your greens are not as fast as those at some of the other clubs. 3. Outline the changes that you are considering that will increase the speed of the greens.

Length: The letter should be no longer than two single-spaced typed pages.

Style and Tone: Remember, you are writing a letter to an important person at your club. The complaint was not a personal attack against you, but rather, is based on a sincere interest in improving the golf course. The letter should demonstrate your respect for his opinion, your appreciation of his interest, and your willingness to hear from him again. Dr. Jones has served on the greens committee; he is somewhat familiar with *your* maintenance operation.

Grading Sheet

Points awarded

1. Technical Content (1. Have you correctly indicated the advantages and disadvantages of your maintenance practices as they relate to putting green speed? 2. Have you given a logical explanation as to why your greens are not as fast as those at other clubs? 3. Are the changes you propose sound from the standpoint of agronomics?)

Response to question #1	0	1	2	3	4	5
Response to question #2	0	1	2	3	4	5
Response to question #3	0	1	2	3	4	5

2. Tone of Letter (Is the letter appropriate for Dr. Jones, an avid golfer and an important person at the club? Does it show respect? Does it demonstrate your enthusiasm?)

0	1	2	3
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3. Information delivery (Have you clearly and concisely communicated the information?)

0	1	2	3
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4. Organization (Is the letter well organized?)

0	1	2	3
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5. Spelling, Punctuation, Grammar

0	2	4
---	---	---

6. Format

0	1	2
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Total points awarded (30 maximum) _____

traffic the green receives, budget, and cultural practices.

This exercise could be modified to a situation where a plant has died and a dissatisfied customer is unaware that several factors interacted to cause the death of the plant. Another possibility would be a situation where an individual is unhappy with a landscape maintenance program or a landscape design and there are complex reasons why it would be difficult to change the program or design. It is important to stress to the student that the response must explain the circumstances and also preserve the relationship with the clientele.

Assignment #3- preparing a proposal. Many horticulture graduates will be faced with writing proposals or bids to secure business or to make changes in existing site conditions. The third writing assignment (Table 3) suggests a proposal format and requires development of a project for a significant expenditure. The proposal format and level of expenditure can be modified easily. The instructor has the option to require an accurate budget by either providing catalogs to the students or by having them contact local suppliers.

Past experience with this assignment indicates that simple equipment purchases should not be allowed. Purchasing a new tractor with improved features, for example, does not require justification other than the old one is worn out. Equipment purchases that improve productivity or allow a new product or service to be offered usually encourage the student to address adequately the justification section of the proposal.

Grading sheets. Writing assignments are meant to help the students refine their ability to communicate—not guess what the teacher is looking for. Therefore, detailed grading sheets should be provided to the student at the time the assignment is made. Some students have not taken a technical writing course before they encounter writing in horticulture. These students may be at a disadvantage unless some guidance is provided; an ambiguous assignment will frustrate the students, in addition to wasting their time. The grading sheets for the assignments put 60% credit toward the technical content of the writing (e.g., correct information presented) and 50% toward writing style (e.g., organization, clarity,

Table 3. Writing assignment covering proposal development.

On most sites, the manager is aware of something that can be done to improve the overall quality or appearance of the site or enjoyment of the facility. Often, the manager does not have budget control making it necessary to request an increase to implement a project or to add a major piece of equipment. The purpose of this writing assignment is to gain experience in preparing proposals for submission to a board of directors, supervisor, owner, etc. A typical proposal will introduce the expenditure, justify the need for it, contain a budget, and present a plan for implementation that tells of any disruptions in the use of the facility that will occur and how these disruptions will be handled. Prepare a proposal for an improvement or piece of equipment that will cost at least \$20,000 using the format described below.

Title- A brief title describing the project or expenditure

Introduction- A brief overview of what is covered in the proposal

Justification- The rationale behind the improvement or purchase. The justification should present the agronomic reasons for the project as well as other considerations such as aesthetics, an increase in value of the facility, etc.

Budget -A list of the costs involved and any explanation necessary to understand the costs. Frequently, a project will be implemented in stages and the budget will show expenditures over several years. The budget should cover labor and materials and should be as accurate as possible. It may be necessary to call some local suppliers to determine material costs. Report the source for any price quotes

Plan for implementation- Covers how the project will be accomplished, the timetable for the project, and what problems are anticipated and how they will be handled.

Length: This assignment should be a minimum of two and a maximum of four single-spaced typed pages. There will be the opportunity to gain additional bonus points based on the scope of the project that is proposed. A more extensive project will be given additional bonus points compared to a simple equipment purchase.

Grading Sheet

Points awarded

- 1. Technical Content** (1. Have you presented adequate justification for the project? 2. Have you correctly presented the agronomic concepts related to the project? 3. Have you explained how the project will be implemented?)

Response to question #1	0	1	2	3	4	5
Response to question #2	0	1	2	3	4	5
Response to question #3	0	1	2	3	4	5

- 2. Information Delivery** (Have you clearly and concisely communicated the information?)

	0	1	2	3	4	5	6
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- 3. Appearance** (Does your proposal have a professional appearance?)

	0	1	2	3
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- 4. Format** (Have you used the correct format?)

	0	1	2	3
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- 5. Spelling, Punctuation, Grammar**

	0	1	2	3
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Points Awarded _____

Bonus Points (How extensive is the project?) 2 4 6 8

Total Points Awarded _____

ity, format, etc.). The grading sheets help the instructor evaluate the papers and, in addition to comments in the margins, help the students understand what areas need improvement.

Many faculty members have con-

centrated their activities in horticulture and believe that they are unprepared to work with students on their writing. Most faculty, however, spend a considerable amount of time writing. It is easy to recognize a good response

to these assignments. The good responses can be used as a yardstick to grade the other responses and, as mentioned earlier, they can be presented to the students to demonstrate how their writing can be improved.

Including short writing assignments in horticulture classes has an additional benefit. Just as students differ in their learning styles, there are differences in students' abilities to take tests and quizzes. Students who do well on writing assignments may or may not be those who score highest on traditional exams. By providing an additional avenue for students to demonstrate their knowledge, the instructor can increase student satisfaction with the course. Finally, writing assignments can substitute for a quiz, test, or laboratory report, and thus can be incorporated into a course without dramatically increasing the work load.

Literature Cited

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