Student Participation in Syllabus Development as a Student-centered Learning Technique in Horticulture Classes

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SUMMARY. Student-centered learning means having students actively engaged in many aspects of a course to promote learning. Allowing students to participate in syllabus development is a method that involves students in the course and, in the process, assume responsibility for much of their learning. Students can help set course objectives, decide what is the evaluation criteria and who evaluates, determine and deliver some of the course content, and approve the code of conduct for the class. By helping with the aforementioned areas, students can see the relevance of the course to their needs and interests. They tend to take a greater interest in the course and participate more actively in the class. The process of student involvement in syllabus development requires several steps and utilizes techniques that are presented in the following paper.

Since 1996, several faculty in the College of Food, Agricultural, and Environmental Sciences, the School of Natural Resources, and other colleges at The Ohio State University have been participating in a program that trains teachers to engage students in the learning process. The program is supported by the Kellogg Foundation (Battle Creek, Mich.) and is known as the Student-Centered Learning Initiative. Student-centered learning (SCL) redirects education emphasis from teaching to learning. As a part of the process, students are given the right to work with the teacher to determine some of the direction and content of a course. As a consequence of the right to participate in the course, students have to assume responsibility for their own learning. Although a student-centered approach to learning can enable students to learn more, understand better, and retain information longer (Barr and Tagg, 1995), often it is very difficult for students and faculty to embrace the concept.

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Most college students are most comfortable when information is presented to them in the lecture or demonstration format. They prefer to receive the information passively and then take a test to demonstrate that they retained the information. They are afraid to do something unknown or unfamiliar to them. Helping them to see the relevance of being active learners in relation to their success as both students and professionals is the first step in gaining their willingness to participate. When students participate in course syllabus development, many of their fears begin to recede.

Syllabus as a contract

Although a classroom does not and should not mimic a workplace, relating classroom activities to those in a real world business setting can help students understand how their learning will help them to succeed as professionals. Syllabus development can very easily be made relevant to real world situations.

Faculty who are hesitant to let students participate actively should understand that the roles of students and faculty are separate, but equally important. Thinking of a syllabus as a contract and work plan between the faculty member and students can make the idea of student involvement more acceptable to both faculty and students. Allowing flexibility in the syllabus also may be reassuring to both sides.

In business, an entire fiscal quarter is not planned in an immutable schedule. Employees and managers often sit down together to prepare a schedule, then regularly review it to make adjustments if necessary. Like a work plan, the syllabus may have to be reviewed and revised at some time during the term. Knowing that review and revision is possible helps reduce fears that a mistake will be made that cannot be corrected.

Along with schedules, managers and often employees are involved in developing a contract between their company and a client. When students are asked to help develop the syllabus, they are told to think of the syllabus as a contract with the faculty member. Each agrees to do their part to set and achieve the objectives of the class. That contract includes a schedule of activities designed to meet the objectives. By allowing the students to see the relevance between course content and their future success, hopefully, the contract becomes important to them.

Most students find it unnerving to receive an incomplete syllabus the first day, especially those in introductory classes or those who have not had previous experience with syllabus development. The idea of a syllabus as a contract is new. Many students

have reported in their course evaluations that they were very skeptical about the process. It is up to the instructor to make sure the students understand that the instructor is taking student involvement in syllabus development seriously. The instructor has to be willing to accept some things that may not have been exactly what the instructor had in mind for the course. However, if the content of the syllabus appears to be in line with the overall purpose of the course, then the instructor should be able to accept the alternatives offered by the students.

Some portions of the syllabus are not negotiable, e.g., information about instructor(s), class meeting time and location, university or college policies, etc. Other parts of the syllabus can easily reflect student input. These sections include goals or objectives, evaluation criteria and weight toward the final grade, evaluators, some of the topics covered and parties responsible for gathering and disseminating the topics to the class, and the code of conduct governing the class.

Involving students in the process takes time at the beginning of a term, but after several years and courses where the author has used this technique, student response indicates it is a very effective means of engaging students, even the apprehensive ones, in the learning process. By engaging the students, teaching may become more effective and efficient. The majority of the written evaluations from students at the end of the term indicate that the students feel they have learned as much or more from the course as what they expected to learn.

The techniques reported are those used by the author in courses that range from introductory to senior capstone classes. Student reactions and comments are those observed by the author or reported by students in class evaluations.

Techniques and implementation

Several techniques can be used to help students actively participate in developing the syllabus. The following techniques and descriptions of student participation and comments come from the author's experience with three years of using SCL in several courses at the sophomore, junior, and senior levels.

Explain the process

The first and most crucial step in any course that uses SCL is to explain carefully the process; tell the students what you are doing and why. With a good explanation that shows why the methods you will be using are relevant, students are much less resistant than if they are just told what to do. Students want

and deserve to know why they are doing something that may be very different for them.

Setting course objectives

One of the easiest ways to get student involvement is to use an information form. Most instructors already use one. It should include name, phone number, e-mail address, major and class level as well as asking what the students would like to learn from the course. This will give the instructor an idea of what the students believe they will be learning during the term. Quite often what they want is very much in line with what the instructor has in mind. Sometimes, though, the student has a concept that does not match the purpose of the course. Both types of information are useful as the latter can be used to explain what they can and cannot expect to learn in the class. Knowing what they can expect helps to keep them from being disgruntled by the end of the term. The former can be used to help set the objectives of the class. The points are listed and grouped by similarity. The most frequently requested ones can give the basis for setting objectives. By listing the wants of the students and noting frequency, the instructor can formulate the course objectives. Often a student will express an objective in a way that is more descriptive than the instructor's word choice. Use the students' exact words for the syllabus. Seeing their own words or those of their friends lets the students know that the instructor is taking their ideas and needs seriously.

When distributing the information sheets, remind the students that even in a required class the student is not without choices. Because of their career choice, most chose a specific major at a specific university because they felt they would get an education that would help them to succeed. That university and major requires the class they are now taking because many people over several years have determined that the class will help students succeed in their careers. The student accepted those requirements when choosing where to pursue their education. Once that is understood, the relevance of the course becomes more important and students take the information sheets more seriously.

While it may take a couple of class sessions to get all the information sheets collected and the information synthe-

sized, much of the remaining syllabus development can take place more immediately.

Determining evaluation criteria and evaluator

Setting the evaluation criteria is done during the first class. The instructor gives a brief overview of what components make up the class, e.g., lecture, lab, discussion, class presentations, or others. From that information the students are asked how they would like to be evaluated for each component. The class is allowed and encouraged to discuss freely, and then choose their options. For example, if midterm and final examinations are a part of the evaluation criteria students decide how many midterms they would like (within a range acceptable to the instructor) and how much each midterm and final should be worth toward the final grade. The same goes for lab exercises, homework, presentations, etc.

The category that has stymied my classes the most is the one that evaluates how much effort a student has put into the class. They cannot agree on how to evaluate such things as attendance and participation. So far, each class has decided that personal effort is how the category should be described. Deciding the weight of this category also has been difficult, both for the students and the instructor. The weight has ranged from 5% to 15%. The upper limit has now been set at 10%.

An instructor may be apprehensive about allowing the class to determine the evaluation criteria. However, in the experience of the author, the class as a whole is capable of helping set the evaluation criteria. The instructor can reserve the right to amend and has final approval, but this has not been necessary. If instructor amendments become necessary, they must be made with the knowledge and, if at all possible, the approval of the class.

Determining the evaluator

Determining the proper evaluator is something most students say they have never thought about since most evaluation has been the responsibility of the instructor. When asked if they thought instructors are the best evaluators of criteria such as group presentations they usually respond that they have felt that the instructor had no clue about who did what on the project. After a discussion of each cri-

teria and who would be the best evaluator, the wisdom of the class seems to universally prevail. The students in my classes have chosen the instructors to grade and evaluate examinations and most lab and homework assignments. At times, students wanted to help evaluate homework, especially writing assignments. In most classes, students decide that individual presentations should be evaluated by students and instructors. Group presentations are evaluated externally by instructors and other students and internally by members of the group.

Choosing the evaluator for the effort category has been very difficult for students. However, without exception, each class has decided that each individual is the best evaluator of personal effort. The effort is documented and given to the instructor in the form of a report. By comparing the report to an annual report that most employees must submit as middle/upper management personnel, students understand how their reports not only will influence their grade but will prepare them for a career. Students have taken the report seriously. In an introductory class with 90 students, every student turned in their report on time. Most were very well written and appeared to be honest assessments of their effort.

One of the benefits of having students assume responsibility for convincing the teacher that effort was put forth is that students can be reminded throughout the term that the report is due. Students report that by knowing they have to report on themselves, they give the class a higher priority when their schedules get very busy. By giving the class priority, students say they learn more.

Determining and delivering course content

In upper level classes students can be actively involved in determining and delivering much of the course content based on topics of their interest and relevance to the course. The instructor's primary role is to present foundation information and give students a template to develop their own initiatives. By accepting the right to choose subject matter, students also accept the responsibility to help research (easy task) and deliver (much more difficult) the information on the chosen subjects.

The choosing of appropriate topics is difficult, but there are techniques that can be used. The author's choice is having the students individually list as many topics germane to the class that they find interesting. From the list students decide what topics will be covered. Affinity diagrams (Langford, 1996) allow topic selection to be accomplished easily. An affinity diagram is developed by using the following steps: 1) listing favorite topics individually on paper (small sticky notes work well for this); 2) assembling the notes, placing duplicates together (this can be done by groups to save time); and 3) posting all the topics on a wall or chalkboard with the separate topics placed side by side. Duplicates are placed in a column under the original.

The number of potential topics is large. In a floriculture production class the number of requested crops have ranged from 50 to 75. In a capstone class, there have been no less than 20 issues of interest. The class has to choose which topics get covered. Students have always decided, with complete consensus, to choose the most frequently requested topics. To date, the chosen topics have been appropriate for the class and instructor intervention has not been necessary.

Student approval of code of conduct

The last portion of the syllabus that the author requires students to express an opinion is in the acceptance of the Code of Conduct that states how all those who are participating in the class, including instructors, stu-

dents, and any guests, will behave while in the class. The statement is based on showing respect, fully participating, and doing one's work honestly and with integrity. It includes the academic misconduct statement usually required in syllabi, but does not focus on it. The class has to vote to accept the statement. Voting is done by a show of hands. The instructor has recently started asking anyone who cannot accept the statement to write and sign an explanation of his or her objections. Unless objections are received, it is assumed that acceptance by each class is unanimous.

Justification

The involvement of students in syllabus development may seem to be time-consuming and a waste of instruction time. However, the techniques mentioned can be accomplished during the first week of the term when there is usually a flurry of activity as students add and drop classes and other administrative duties associated with the beginning of a term are happening. The overall gains that occur when students realize they are being respected for their intelligence, experiences, and are truly allowed to participate in the course outweigh the negatives.

Literature cited

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