Process Education and Constructive Alignment: The Challenge of Student Assessment Online

Presenter: Betty Lawrence Facilitator: Vickie Kelly

This presentation was based on a journal article of the same title recently published in the *International Journal of Process Education* (V1, Issue 1.) A quick review of the paper's contents was given, although it was assumed that participants had read the article before the session.

Specific reference was made to the original learning objectives for the course, Computer Information Systems, and the revised learning objectives after applying the approaches recommended by Process Education and constructive alignment (pp 28-29.)

To help participants engage with actual learning objectives, they were given one of the handouts given below (either Microcomputer Applications or Human Nutrition) as well as guidelines from the *Faculty Handbook* (also given below) as real examples to review.

Handout #1
Faculty Handbook
Quality Learning Outcomes
Criteria

Think about the tasks, work products, processes, skills, and attitudes exhibited by students in the course. To ensure a complete and robust list of qualities, generate and edit the list of qualities so that they meet the following criteria.

Descriptive they should convey an image of strong performance

Specific one should be able to imagine how students will manifest that quality in the

context of the course

Explicit they should leave very little room for misinterpretation

Simple novices in field should be able to understand them

Motivational they should communicate a goal that everyone would like to strive for

Linked each should connect to one or more learning outcomes for the course

Professional they should align with the core values of the discipline

Authentic that is, relevant to day-to-day practice in the discipline

From: 2.4.9 "Writing Performance Criteria for a Course" by Cheryl Hinton.

Worksheet 2a Challenges of Assessment in Online Learning Worksheet

Review the goals and learning objectives for the following course:

Human Nutrition

Goals

This course investigates the role of nutrition in health maintenance. Nutrients, and their digestion, metabolism, function and their sources in foods, are studied. Students also focus on practical aspects of nutrition and food selection. Social and economic forces that affect food intake and the causes of world hunger are examined. The nature of the science of nutrition - continuing, changing, growing, often controversial - is stressed. Critical thinking principles and techniques are illustrated, and students are asked to apply them.

Objectives

The student will learn to:

- 1. To gain an understanding of the basic scientific principles of nutrition.
- 2. To learn to use these principles in designing health promoting diets.
- 3. To develop a critical approach to information.
- 4. To understand the nature of the progress of nutrition science, and to understand the limitations of our current knowledge.
 - 5. To understand social, cultural, political and economic aspects of nutrition.
 - 6. To learn about the global implications of world hunger.
 - 7. To gain an understanding of health promotion and disease prevention theories and guidelines.
 - 8. To understand the use of scientific method.
 - 9. To develop and research a thesis statement paper on a topic associated with human nutrition.
 - 1. Apply the criteria from the *Faculty Handbook* to these course objectives, performing an SII.
 - 2. Revise the objectives.
 - 3. Identify learning activities that you believe will assess how well students have met these objectives (aim for at least one activity per objective.)

Worksheet 2b Challenges of Assessment in Online Learning Worksheet

Review the learning objectives for the following course:

Microcomputer Applications

Course Objectives

- * To learn about the operating system of your computer.
- * To learn word processing or presentation graphics, spreadsheet, and database software using the Microsoft Office program.
- * To learn how to create practical, working documents or presentations, spreadsheets, and databases for your personal, educational, and/or employment uses.
 - * To give you experience and practice learning "how to learn" a new software package.
 - 1. Apply the criteria from the *Faculty Handbook* to these course objectives, performing an SII.
 - 2. Revise the objectives.
 - 3. Identify learning activities that you believe will assess how well students have met these objectives (aim for at least one activity per objective.)

Reports from Working Groups

Groups were asked to report their SIIs first, their revised objectives and then their recommended activities to meet the revised activities. These are the summary notes from those group activities:

Microcomputer Applications:

Strengths: covered course; were simple and specific

Areas for Improvement: need more specific action verbs; need to be related to activities

Insight: It is easier to develop/refine objectives when you have specific activities in mind.

Suggested revised objectives:

- 1. Demonstrates an ability to use an operating system
- 2. Develops products using word processing and presentation graphics software
- 3. Creates projects for own personal, education and/or employment uses
- 4. Develops a methodology for learning a new software package

Recommended activities:

- 1. Compare use of wizard to how-to book such as Office for Dummies
- 2. Develop a resume
- 3. Develop a budget

Human Nutrition

Strengths: motivational language which inspires the learner; comprehensive; authentic

Areas for Improvement: need to be more explicit and more measurable; need outcomes that reflect learning

Insight: objectives are attractive to students

Suggested revised objectives:

- 1. apply principles of health and nutrition to different cultures, including an analysis of world hunger
- 2. construct and design health-promoting diets

Recommended activities:

- 1. Choose a country in Africa and analyze the causes for hunger
- 2. construct a diet for a specific age group
- 3. visit home for the elderly and analyze their diet; make recommendations

Closing Comments

Betty will share these notes with the area coordinators for these courses. There was general agreement that the exercise was helpful in raising awareness of the importance of good learning objectives, to provide clarity to students and instructors about the expectations for a course.