Introduction

Constructing Effective Assignments, Problem Sets, and Exam Questions
Best Practices for Teaching and Learning

Welcome to this session on constructing effective assignments, problems sets, and exam questions. In this session, we will have an introduction to this session's goals and learning objectives. Then we will discuss the logistics of implementing assessments in your course, and end with the development of effective assessment questions.

The goal of this session is to illustrate how to apply Bloom's Taxonomy to design effective homework and exam questions. We will discuss how to create effective questions that reach all cognitive levels of Bloom's Taxonomy, especially the higher cognitive levels, which can be very difficult. Our goal in this session is to create questions that will assess whether our students have met our learning objectives.

The learning objectives of this session are that by the end of this session, you will have considered ways to: one, formulate and organize the use of assignments in your course to enhance student learning; two, evaluate homework and exam problems using Bloom's Taxonomy; three, create homework and exam problems that align with your learning objectives. This session will provide you with many opportunities for hands-on activities as you work on evaluating questions, and constructing your own effective assessment questions. Let's start this session by brainstorming the characteristics of effective assessment methods. What do you think are characteristics of effective problem set or exam questions? Pause the video now while you write down your ideas.

Now that you've had a chance to think of some of the characteristics of effective assessment questions, let's go through a few of our ideas together. Effective assignment questions are clearly written, and the expectations of the students' answers are well defined. Instructions, if necessary, are clearly written.

Effective questions provide just the right amount of challenge to the students, and are neither too hard nor too easy. In some cases, you may choose to have extra challenging questions that may be worth bonus points at the end of an assignment. You can inspire your students by incorporating real world problems and authentic situations into your assignments. Finally, it is important to remember that effective questions are related to the course material, or their reasons for diverging are clearly specified.

In this session, we are going to continue our discussion of the backward design process, and talk about the creation of effective assignments, problem set, and exam questions to determine whether students get the material. The first step of the backward design process, which is the creation of learning objectives or goals, for the things that you would like your students to know and be able to do by the end of the course. In this session, we will discuss the creation of effective assessments to determine whether your students have reached your intended learning objectives. Then in other sessions, we will discuss the creation of instructional experiences to help your students reach your intended learning objectives.