H22   Did I Teach Them That? Setting and Assessing Goals for Student Learning for an Introductory Forensic Anthropology Course

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After attending this presentation, attendees will be able to describe an appropriate goal for an introductory forensic anthropology course as well as the format of the assessment tool used in this presentation.

This presentation will impact the forensic science community by disseminating information regarding a technique for determining the effectiveness of forensic anthropology (or other science) courses.

In this presentation, a technique used for several years for assessing student learning in an introductory forensic anthropology course is described. This technique begins with a statement of the goals of the course, followed by design and implementation of a tool for determining if particular goals have been met. After viewing this presentation, observers should be able to describe an appropriate goal for an introductory forensic anthropology course and describe the format of the assessment tool used in this presentation. This presentation will have an impact on educators in the forensic science community by disseminating a technique for determining the effectiveness of forensic anthropology (or other science) courses.

Instruction of the course "Introduction to Forensic Anthropology" at the University of North Dakota is subject to learning goals occurring at the instructor, department, and university levels. Statement of the goals establishes the frame of reference for developing the assessment tool. Instructor level goals are public and private. Private goal setting is how instructors make clear to himself or herself the intent and significance of the course, and will affect the choice of course design (e.g., lecture, lecture with lab or hands-on activities, emphasis on videos, emphasis on small group activities), texts used, and frequency of offering. Institutionally based limits on course design should be reflected in departmental or institutional goals for the course. The instructor may set public goals, stated on the syllabus, based on criteria such as his or her own interest in what students should derive from the course, the content of the texts used in class, and/or requirements set by the department and institution. For example, a personal interest-derived goal for Introduction to Forensic Anthropology may be "Name and describe the contributions of famous forensic anthropologists." An institutional (department level) goal is "to demonstrate knowledge and understanding of the sources of biological and cultural variation and how these change over time." If a large number of public goals are applied, an overall assessment program may be needed to support inspection of different goals in different academic years, lest the assessment process become cumbersome.

The tool used to assess student learning is a test composed of Likert scale and short answer questions administered at the beginning and end of the course. The questions are designed to provide indirect (from the Likert questions) and direct (from the short answer questions) assessment data of the public goals for the course. For the tool to be relevant, the questions must be derived from the course goals and, as a consequence, may vary somewhat from year to year and are subject to revision. The Likert questions in this tool tend to demonstrate student confidence in knowledge. This is an indirect measure of student learning as it reflects only the student's opinion. The question, "I have a basic understanding of human skeletal anatomy, enough to name major bones," is answered with a spectrum of "describes me" responses. An appropriate short answer question provides data for the direct assessment, in this case being "Name all the long bones of your upper limb." Students may claim knowledge in the Likert, but then that knowledge must be demonstrated in the short answer. Here the instructor interprets the short answer response to determine if students can demonstrate the knowledge.

Once the tool is created, the greatest work in this process is in collating the data, but this is an appropriate project for a student worker sworn into Family Educational Rights and Privacy Act (FERPA) compliance. Likert questions can be collated in a spreadsheet program and meaningfully portrayed graphically. However, the short answer questions must be coded to allow the student worker to collate the data, which means the instructor must survey the responses and apply codes. Interpretation of the direct assessment data can be perfunctory to address student acquisition of knowledge (typically satisfying institutional goals) or rigorous (typically addressing private goals). In the long bone question, variation in the responses (such as inclusion of carpals and phalanges) may demonstrate that the test question should be reworded or vocabulary clarified in class. An assortment of course goal-Likert-short answer trios, and before-and-after results is presented in order to demonstrate the utility and format of the assessment tool.

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