

Teaching Tips/Notes



A Novel Approach to Learning Base Knowledge

Many students in an introductory science class are consumed with learning facts and base knowledge that will be useful to them once they take advanced courses in their major. Base knowledge learning can seem like a tedious task and often students lack the motivation to fully learn required information and therefore struggle in more advanced courses. This teaching tip describes a novel approach to teaching and learning base knowledge for a science curriculum that has been implemented for several semesters in an introductory equine science class. This project allows students some flexibility and control over their learning.

In an attempt to excite students about basic equine science knowledge, a project was designed that required each student to work independently to create a one or two page educational bulletin for each of eight main topics studied during a semester long course. The main topics were related to basic horse management and science identified by the instructor as the most important topics to learn in an introductory horse science class. Educational bulletin topics included: identification, behavior, health, nutrition, activity, hoof care, parasite/disease, and reproduction. Students are allowed to pick the specific area the bulletin attempts to educate about within those eight main topics. This allows the students some flexibility and ownership over their projects.

Instructions for the bulletin are as follows: Each student will prepare 8 bulletins in PDF format suitable for publication and distribution that can be used as a tool for educating horse enthusiasts about a topic covered in class. The flyer should be easy to read and understand, contain important take home messages about the topic, have quality and relevant graphics, consist of 1 or 2 regular (8½ by 11) sheet(s) of paper, and contain verbiage that is concise, pertinent, and to the point. The flyer should be flat, not brochure style.

Students are provided with a grading rubric to improve their bulletins (Table 1). Grading categories on the rubric are horse-themed for fun. Students have access to the rubric prior to making their bulletin and after turned in; the instructor grades the bulletin using the rubric and gives the completed rubric and bulletin back to the student.

A crucial component to student success is to provide examples of “good,” “bad” and “average” bulletins. It is not enough to show students a graded bulletin, but rather a bulletin and the associated rubric with notes so they have an idea of the positive and negative portions of each bulletin and specifically what the instructor is looking for. Additionally, several of the “best” bulletins from each topic are selected by the instructor and displayed in the equine hallway of the animal science building each semester. Those bulletins are also shared on the equine webpage to help educate real horse owners. Both of these instances allow students a competitive incentive to work hard and create an outstanding bulletin.

The Equine Educational Bulletin cultivates basic equine knowledge that is essential to success in advanced equine courses. Students are given ownership over their learning and grade, which has been well received by students for three semesters. Anecdotally, students taking advanced equine courses report that they have learned and retained the specific information from their bulletins, even several semesters removed from the project.

Table 1. Equine themed Introductory Equine Science Educational Bulletin Rubric

Points:	Rookie 0-7	Novice 8-15	Apprentice 16-21	Non-Pro 22-24	Professional 25	Total Points
Educational Component	No evidence that the flyers purpose is to educate; or very minimal evidence	Flyer tries to educate, but contains major errors	Flyer is suitable for educating horse enthusiasts about a topic covered in class, but contains some errors	Flyer is suitable for educating horse enthusiasts about a topic covered in class	The flyer clearly demonstrates thoughtful consideration and does an outstanding job educating about the topic	
Verbiage	Verbiage on the flyer is either not concise, pertinent or to the point	Verbiage attempts to be concise and pertinent, but contains major errors	Verbiage on flyer is concise, pertinent, and to the point, but contains some errors	Verbiage on flyer is concise, pertinent, and to the point	Verbiage on flyer includes noticeable depth while being succinct and has supporting evidence	
Readability	The flyer is not easy to read or understand at all	The flyer is somewhat easy to read, but contains major errors	The flyer is easy to read and understand, but contains some errors	The flyer is easy to read and understand	The flyer is inviting to read and exceptionally easy to understand	
Graphics	The flyer does not contain graphics, or extremely poor graphics	Graphics are present but may not be quality or relevant	The flyer contains quality and relevant graphics, but contains some errors	The flyer contains quality and relevant graphics	The flyer contains excellent graphics that are thoughtful and relevant	
Final Score						

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