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Elements of Paleontology

DINOSAURS

A Catalyst for Critical Thought

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Dinosaurs

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Abstract: University dinosaur courses provide an influential venue for developing aptitude beyond knowledge of terrestrial Mesozoic reptiles. Passion for dinosaurs, when properly directed, can trigger interest in science and be used to develop critical thinking skills. Examination of dinosaur paleontology can develop competence in information analysis, perception of flawed arguments, recognition of persuasion techniques, and application of disciplined thought processes. Three methods for developing critical thought are outlined. The first uses dinosaur paleontology to illustrate logical fallacies and flawed arguments. The second is a method for evaluating primary dinosaur literature by students of any major. The final example entails critique of dinosaur documentaries based on the appearance of dinosaurs and the disconnect between scientific fact and storytelling techniques. We owe our students more than dinosaur facts; we should foster a set of skills that equips students with the tools necessary to be perceptive citizens and science advocates.

Keywords: dinosaurs, critical thought, undergraduates, documentary, logical fallacy

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