

References Related to Calibrated Peer Review (CPR)

Problem-based writing with peer review improves academic performance in physiology. By: Pelaez, Nancy J. *Advances in Physiology Education*, Sep2002, Vol. 26 Issue 3, p174.

The aim of this study was to determine whether problem-based writing with *peer review* (PW-PR) improves undergraduate student performance on physiology exams. Didactic lectures were replaced with assignments to give students practice explaining their reasoning while solving qualitative problems, thus transferring the responsibility for abstraction and generalization to the students. Performance on exam items about concepts taught using PW-PR was compared with performance on concepts taught using didactic lectures followed by group work. *Calibrated Peer Review*TM, a Web-delivered program, was used to collect student essays and to manage anonymous *peer review* after students "passed" three calibration *peer reviews*. Results show that the students had difficulty relating concepts. Relationship errors were categorized as 1) problems recognizing levels of organization, 2) problems with cause/effect, and 3) overgeneralizations. For example, some described cells as molecules; others thought that vesicles transport materials through the extracellular fluid. With PW-PR, class discussion was used to confront and resolve such difficulties. Both multiple-choice and essay exam results were better with PW-PR instead of lecture.

An Application To Increase Student Reading & Writing Skills. By: Robinson, Ralph. *American Biology Teacher*, Sep2001, Vol. 63 Issue 7, p474.

Focuses on the *Calibrated Peer Review* (CPR), an online application program designed to increase student reading and writing skills in the sciences, particularly biology. How CPR works; Criteria used to grade student performance; Drawbacks and benefits of CPR.

The End of Education As We Know It? By: Moore, John W. *Journal of Chemical Education*, Oct2000, Vol. 77 Issue 10, p1255.

Editorial. Comments on the impact of technological innovations in telecommunication on the instructional system of chemistry courses in the United States. Importance of the Internet to individualized learning; Benefits of the *Calibrated Peer Review* computer system; Implication of communication technology for the chemistry teaching profession.