Assessment of Interactive Computer Modules and Student Learning in Introductory Soil Science. (A01-kettler160615-Poster)

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Abstract:

Learning styles and outcomes of students using two teaching methods to study soil erosion were compared. Methods used were; 1) traditional, utilizing textbook, worksheets, and small group discussion, and 2) a computer-based interactive learning module utilizing photographs, illustrations, animations, and an interactive model that allowed students to manipulate factors influencing erosion. Students took a pre-test followed by a post-test and a comprehensive survey (SALG-Student Assessment of Learning Gains) upon module completion. Both pre- and post-tests consisted of ten objective questions. Student performance on the pre- and post-tests were compared between teaching method. Student perceptions were compared between teaching method and SALG survey. Students completing the computer module rated the following higher than those using the traditional method; 1) the module helped your learning, 2) the resources within the module helped your learning, 3) your understanding of the competencies within the learning module, and 4) gains in learning the competencies within this module. There were no differences between pre- and post-tests scores when comparing the two teaching methods used.

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