Designing Innovative Science Instruction Supported by Multimedia Technology for Students With and Without Disabilities

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This paper describes the ongoing work of faculty and education students from Carthage College in designing, implementing, and evaluating instructional research projects in which they work collaboratively with elementary and middle school science teachers to develop and teach thematic units which incorporates multimedia technology as tools for students with and without learning disabilities. These instructional materials and lessons reflect national and state standards in science and mathematics education and are grounded in the most recent advances in research in learning and teaching. Multimedia technology is as a tool for the students to acquire knowledge and to express or demonstrate their knowledge using multimedia application programs to create multimedia compositions and presentations. These units have documented the powerful impact of integrating multimedia technology for motivating students to become actively involved in learning and for improving students’ perceptions of themselves as learners.