STRATEGIC INITIATIVE GRANT **June 30, 2008**

Final Report: UMass Dartmouth Learning Objects
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This project explored new opportunities for building multi-layered learning and effective learning environments through the development of learning objects, web-based, self-contained learning units.

1) Project Deliverables:

"This project will result in learning objects that can be shared within and across departments. In addition, UMass Dartmouth will have the necessary tools and experience for faculty from all disciplines to construct many more reusable learning objects. Tentatively, we plan to use the out Luna software to catalogue and search the learning objects. Further, assessment of learning results will be used for conference presentations and to refine continued development of learning objects."

The major objective of creating diverse reusable learning objects was completed.

2. and 3.) Activities and Deliverables

(A CD is attached to this report to provide examples of this work.**)**

- **Scott Ahrens, Associate Professor of Visual Design, Digital Media Program,** developed a virtual world project, which became focused on the ancient city of Teotihuácan (Mexico) and its Temple of Quetzalcoatl. This was built on the UMassOnline SecondLife island.

- **Carlos Benavides, Associate Professor of Spanish & Linguistics, Department of Foreign Literature and Languages**, developed interactive "information gap" activities in Spanish using THE Wimba capture feature. 'Information gap' activities can be developed for any topic covered in a language class, such as shopping, scheduling, and travel planning.

- **Susan J. Leclair, Chancellor Professor, Department of Medical Laboratory Science,** developed learning objects to assist students to develop manipulative skills. Using video/ flash embedded in class web pages, the students see demonstrations of correct skill development in a virtual laboratory. CITS/ID was able to secure more funds to finish this project in AY 07-08.

- **Matt Sylvain, Assistant Reference/Instruction Librarian, Claire T. Carney Library**, developed two tutorials that teach students how to effectively search the ERIC, a database of articles.

- **Department of Chemistry and Biochemistry [worked as a group]** Professors in the department developed flash video/audio demonstrations/explanations of the methods of performing relevant manipulations, setups and calculations to chemical experiments. CITS/ID was able to secure more funds to finish this project in AY 07-08.

The original grant was reduced by $10,000.00. As a result, we limited the number of learning objects produced, did not develop a database and asked faculty to forgo Participant Stipend [all but one person agreed to this].

4. Assessment

Some preliminary use of the LOs was initiated in late spring but participants have not completed gathering information. All LOs for Chemistry and Med Lab Science will be completed in AY 08-09. We demonstrated the project at the UMass technology conference as well as NERCOMP.

5. Finding and Issues

1. One size does not fit all. It was hoped that some sort of standard format for learning object could be developed (Ahrens was the exception). Once our needs assessment was completed, however, it was clear that different software and formats were needed to meet the learning objectives.
2. Partnership of faculty (content) and staff (technology) worked well.
3. UMass Dartmouth, in the long run, needs to centralize and production of these learning objects. For example, file size of the CHEM and MLS LOs started to become too large. This was due, in part, to the fact that our graduate assistant was an art student and wanted to create interfaces that, while very aesthetic, became unwieldy when trying to move across servers.

6. Project Budget Expenditures

Budget Item	SIG Request	LO Expenditures
Participant Stipend $500.00 x 10	$ 5000.00	500.00
Technical assistance for faculty (student assistants):	$3800.00	$3800.00
SAN Storage	$4000.00	$0
Mac Pro Development Workstation & Monitor	$5000.00 (workstation)	$5000.00
Video Camera: Canon XL2 3CCD Black Pro Tripod	$4000.00 $450.00	$2000.00 Subsidized by UMassD
Instructional Software		$1000.00
Mac Laptop	$2700.00	$2700.00
Total	**$24,950.00**	**$15,000.00**

7. Comments

The SIGrant program is important to the UMass system because it allows campuses to experiment with technology to meet teaching and learning needs.