OEIT President's Report 2008-09

Appendix A: OEIT Impact Activities/Outcomes Matrix

Initiatives	Outputs	Outcomes/Impact	Sopperson	Sent contraction	parties of the service of the servic	Site of the second second	Strateger and service	a foots and a set of the set of t	and a surger of the second	adustic
Initiatives	Outputs	Outcomes/Impact								
Video Content Tools and Services Including lecture capture (spoken lecture) and video workflow (podcast producer/opencast)	SLB for MIT SL Transcription Service Video Workflow	SLB in GIR(8.02); 2.03 (Kim Vandiver)	Y	Y		Y		Y		
2 Multimedia Content Tools and Services including Moonbeam, Edgerton Phase II, VCID Next Gen, ARTstor, etc. Marketing and project development in new domains including Architecture and Planning, BCS, etc	SpokenMedia OCW "NextGeneration" Proposal to NSF to create "study guides" around introductory science, mathematics and engineering courses Link OCW to National Science Digital Library Beginnings of discussion of new tools and services to overlay on OCW as part of Content, Curriculum and Community thrust Shakespeare In Asia VCID v1 "dust off" ARTstor				Y		Y			
3 IDD - Experimentation with desktop and mobile tool integration particularly in support of image content and image content authoring tools.	SearchParty - OS embedded search framework		Y			Y	Y			
4 "Collective Intelligence" Systems, (was "Recommender Services")						Y				
5 Network for Content and Curriculum	Recommender Services & Apps		Y				Y			
6 The STAR program for bridging research and learning	Software tools(STAR)	Haad by 200 at Just in 2	Y	Y	Y	Y				
	StarBiogene (2007)	(7.01x) subjects Genomics analysis								
	StarGenetics (2009)									
	StarHydro (2007)	Used by students in Intro to Hydrology subject								

	StarHPC (2008) StarMolSim (2008) used with EC2 in	Parallel Programming – MPI and OpenMP development environments Materials Science –				
	1.021/3.021/10.333/18.361/22.00	Molecular Dynamics simulations of both classical				
	StarWorkFlow being developed to better integrate with distributed systems and offer advanced workflow features					
	StarOpenReadingFrame(StarORF) has been developed to help in DNA identification work.					
	Outreach to undergraduate and K-12 institutions in New England.	Suffolk University, Leslie University, FIU, WH Freeman publishers, Workshops for high school teachers in NH, for gifted high school students(sponsor Whitehead)				
	Outreach for STAR products	*Presentation on StarBiochem at the June 2009 New Media Center Conference * Presentation on StarCluster at CRIB seminar in Sep 09 *Part of NERCOMP SIG Workshop on Cloud Computing in 2010				
Develop and support Geographic Information Systems (GIS) applications for use in MIT's education and research activities.	GIS Lab in 7-238 in collaboration with Libraries: Maintenance and development in association with the Libraries. Training in the use of GIS, software such as ArcGIS GeoWeb, a web interface to search, view, and download data and view metadata from the MIT Geodata Bearchter:	Creating and supporting a sustainable GIS service.	Y	Y	Y	
	Specific support for the Terrascope freshman year program. Supporting the 1.016 field trip, presenting material based on the 12.000 GIS workshop, helping students compile an online, spatially focused diary. With Professors Sam Bowring and Charlie Harvey	For Terrascope, a key freshman year program.				
	Specific development and support for subjects such as 1.016, 11.952, 12.000, 12.840, 16.A48 and for faculty in EAPS, CEE, and DUSP. Includes developing and teaching class and lab exercises and introduction to technology such as raster GIS tools. With Lecturer Juan Carlos Vargas-Moreno and Professors Mike Flaxman and Joe Ferreira. Support for Course 4 Masters of Engineering thesis projects supervised by Pete Shanahan, Dara Entekhabi, and Eric Adams. This follows up on Course IE specific GIS workshops presented during fall semester 2008.	*Pedagogic support for 11.952, a project-based learning subject(Task Force) that has about 100 graduate students. *Last year about 10% of EAPS undergraduates came through 12.840, a freshman advising seminar.				
	Support for UROP projects, e.g., the iHouse MIT @Lawrence experience, following on work with 16.448, a freshman advising seminar taught by Professor Wesley Harris. Teaching GIS workshops that prepare the UROPs to plan and execute a field season in Lawrence. With Professors Wesley Harris and Leon Trilling	For UROPs, a key component of the undergraduate experience				

		Upcoming: *Developing iPod Touch/iPhone based digital Brunton data collection tool for EAPS Geology Field Camp (Professor Clark Burchfiel) with applications throughout EAPS, DUSP, and CEE. *Planning for implementation of lab exercises based on Matlab/ArcGIS based Elevation Profiler tool for Introduction to Geomorphology. Professor Taylor Perron.				
8	Flexible Learning Spaces to support		v		v	¥7
	* Management, system administration		Y		¥	 1
	and operation of four learning spaces					
	>>New pedagogies(1-142)	Operating spaces that support curriculum innovation, e.g., Project-Based Learning approach for 6.071/HST-4101 taught by Professor Freeman. Other subjects include 6.021J, 3.155/6.152J, 6.521J, and 12.040A from EECS and EAPS taught by Professors/Instructors Freeman, Sheehan, Voldman, and Poesse.				
	>>Flexible laptops	Provide 'mobile-lab' classroom support and configuration services for subjects such as HST-S83 and 6,963, and for K9- 12 and undergraduate outreach. For DLCs such as the MIT Museum/STAR, Whitehead (Outreach/STAR), HST, EECS, OEIT, and DUE. Professors involved: Gollub, Johnson, Kaiser,				
	>>2D Visualization(37-312)	Walker Vanitiver Supporting advanced visualization for subjects in EAPS, MechE, DUSP, Physics, Architecture, and Aero&Astro taught by Professors Ferreira, Flaxman, Darmofal, Techet, Newman, and Wisdom for subjects such as 11.520/11.521/11.524/11.523, 2.00/16.00AJ, 8.351, 11.188, 11.913, 12.008, 12.620, 16.100				
	>>New Media Center(26-139)	Frovating oppolutiny ito students to experiment with new media. Supporting DLCs such as the Edgerton Center, CMS, DUSP, HST, 21A, 21M and 21W and subjects such as SP.747, SP.757, CMS.405, SP.712, SP.791, SP.785, HSSP (ESP), 21M.733, 11.423, HST.583, 21W.763J/CMS.940, and 21A.780, Professors/Instructors involved: Mislick, Vandiver, Shepardson, Kim, Motola-Barnes, Ivanova, Ptotnikov, Brown, Martin, Gollub, Walley				
	>>Digital I/O Facility(4-035)			 		
		Support digital media production and training.				
	*New initiative: Advanced Innovative Learning Environments(AILEs) project in collaboration with SA+P to support emerging nedagogy at MIT.	Prototype new learning space models. Create design documents. Incubate new teaching methods. Explore blended learning orerations(with Second Life, e.g.)	Y		Y	Y
	1	1				

Educational Outreach to support adoption and diffusion of educational computing initiatives.	*OEIT website migrate to Drupal CMS, brochure, Ed Tech Times , gallery of projects , staff bio page *Case studies of educational transformation * Events for the community, e.g., CrossTalks, Conferences such as AcademiX09 and NCC, at the MIT Museum with Kathy Vandiver, Ed Tech Fair, IAP classes, vendor training. Some professors involved: Gollub, Johnson, Kaiser, Walker, Vandiver. * Technology enablers in support of	Fostering communities of educational innovation and practice.	Y		Y			
	*iCampus student innovation award(sponsored by MITCET)	Encouraging students to participate in educational innovation						
* Web portal	Visual Arts and Media for Teaching and Learning web portal							
* Mathlets	Helping Professor Haynes Miller with his outreach effort for the d'Arbeloff funded Mathlets project, as well as using the KEEP toolkit to document how they have been co-developed and used by other faculty/depts., e.g., Peter Dourmashin at Physics and Karen Willcox at Aero-Astro in collaboration with Haynes Miller.	Helping promote interdisciplinary conversations and cross- departmental knowledge sharing.						
Educational Technology Consulting in support of the educational technology needs of MIT's academic departments and faculty. *Supporting faculty on educational tools and technologies	Supporting specific collaboration tools such as wikis, and site licensed software - Matlab, Mathematica, SolidWorks. Handling the RT queue and phone line for FL requests. *Supporting DLCs : EAPS, HST, MechE. Subjects: 12.000, 12.040A, 12.804, HST.060, 2.671. Professors/Instructors :Bowring, Epstein, Illari, Kettyle, Hughey, Hunter * Russian History Portal with Professor Wood(Alumni Grant)	Educational technology enhances student learning experience in subjects such as HST.060, HST.583, 12.040A, 2.671, 6.963, and in the Terrascope program. Faculty clients include and selected award recipients of the Alumni Grants, as well as Deshpande Center staff.	Y	Y		Y		
	Alumni Grant funded projects with Professors Pritchard, Wilson, Walley from DLCs such as Physics, BCS, and							
	 Working with Vendors such as The MathWorks, SolidWorks, AutoDesk, Wolfram Research, HP, Apple *Coordinate vendor training sessions and tutorials for students, staff and faculty. 							
	Working with vendors to provide equipment (hardware, software, furniture, network equipment)							
Online Subject Evaluation/Who's Teaching What project in collaboration with OFS(business owner) and IS&T(technology provider) to:		Aligning student educational services so as to efficiently and effectively support their learning experience	Y			Y		
*Move subjects and departments using the paper-based system to an online system	*Implement pilot online subject evaluation system							
*Move towards standardizing collection of teaching data	*Develop improved Who's Teaching What(WTW) data collection tool and process							
ACCORD	* Updated Teaching with Technology website					Y	Y	

* Aligning academic computing/educational technology providers across campus.	* Developing the community of Accordiacs(35-40 individuals across campus)	Faculty and students at MIT get seamless and responsive service in the academic computing domain.			
	* Launching the Image Tools Initiative to support faculty in their usage of images for scholarly work and teaching.				
	* Creating strategy for transitioning services				
	* Use case group: Stellar/OCW/Dspace				