Lecture Capture Capability (East Bay Replay)
One Time Additional Funding Request to support plans at CSUEB to Improve Graduation Rates
Submitted by Roger Parker: ITS Media and Academic Technology Services 4/26/2010

Total Funds Requested: @ 35,000.00
This project proposes to expand lecture capability, now available in 27 lecture rooms, into an additional 20 classrooms, add additional devices to rooms already equipped for lecture capture to improve their capability and enhance one existing smart classroom in order to improve its functionality and the quality of the lecture capture product in that room. Items include additional sound recording devices, document cameras, an upgraded 2 projector capability in one smart classroom and additional storage. Many of these upgrades will be of benefit to all faculty using lecture capture rooms regardless of their teaching methodology. Additional funding of this proposal would permit more rooms to be enabled. Funding to expand the East Bay Replay pilot effort and adjust it, based on what we have learned from the pilot, has been severely restricted due to recent budget constraints.

Project Description
Campuses throughout the country are deploying lecture capture as a tactic for addressing student success, retention, time to degree and graduation rates. We have branded our pilot lecture capture effort at CSU East Bay, “East Bay Replay.”
(SFSU has adopted it part of their time to degree initiative, based on their experience of our effort.)
Lecture capture automatically records the VGA output of the computer (power points, web sites, Blackboard etc), the audio of the lecture and, where a camera is available, the chalk or whiteboard. The lecture is automatically posted to the Blackboard course site for students to review by streaming the lectured or download as a podcast at the instructor’s discretion. To date over 50 faculty have participated in the pilot. Faculty and students both strongly recommend that the capability be added to more courses, particularly those in the sciences, an area which tracks to our STEM initiative. Of note, is that this is all achieved with little or no impact on faculty time. It is essentially “taskless” from the faculty point of view.
(Please see faculty and student comments below in the appendix.)
Two lecture capture examples, provided with faculty permissions, from large lecture room at CSU East Bay:

Expected Outcomes
By increasing the potential for student success, lecture capture can potentially increase a student’s odds of completing a class the first time they enroll instead of dropping the class and retaking it in subsequent quarters or giving up and choosing a major less demanding instead. The quarter system is particularly vulnerable to this since it is very easy for a student to fall behind in a course due to illness, family and other personal issues. Lecture capture also enhances the potential for success for students struggling with difficult material in general, for ESL students as well as students with learning disabilities, increasing their potential for success and enhancing their potential for graduating in a timely manner. Other campuses report that it reduces the amount of time needed for remedial counseling and advising and has the effect of creating more time for instructors, particularly in large enrollment classes. The following reference, provided by an East Bay Faculty participant, points to another area of concern- underrepresented groups in
the STEM curriculum. “A study at U-M, for example, found that underrepresented minority students were more likely to view screencasts, and students in one engineering department accessed screencasts more than all of the other engineering majors combined (Pinder-Grover, Millunchick, Bierwert, & Shuller, 2009).”

http://www.crlt.umich.edu/publinks/CRLT_no27.pdf

Target Audience
All faculty and students with an emphasis on those teaching and learning in large lecture introductory courses, in STEM curriculum courses and in those courses developing competencies for student success in general. Faculty in other than these categories can also take advantage of lecture capture in the rooms where the capacity is activated with little impact on the level of support needed from support staff.

Strategic Impact/benefits
The distribution of this capability is aligned with the “time to degree” objectives of the university and helps address issues of remediation in students not necessarily prepared for college level curricula particular in demanding subject areas. It also relieves faculty from some of the pressures and workload of advising and reviewing difficult concepts with students. The lecture capture pilot has, and will continue, to specifically target STEM curriculum which is in line with the university’s strategic initiatives while making it available to faculty also scheduled in lecture capture enabled rooms.
Lecture capture has the potential dealing with academic continuity in emergency situations. Lecture capture is also used for developing content for online and hybrid classes. Several CSU East Bay faculty have used lecture capture in their on-grounds course as the core content for an on-line course simultaneously offered to a separate audiences. Captured content from previous quarters has also been offered in subsequent quarters as an online course. This is in line with the university's online campus development initiative.

Timeline:
The majority of the installations can be accomplished during Summer 10/11 and ongoing throughout 10/11. Improvements can be available for faculty use in Fall 10/11. Expanded capability and improvements should be available for fall quarter utilization. The installations in the majority of cases build on the existing smart classroom infrastructure already in place.

Potential Barriers to Success
Delay in receiving funding.

Footnotes:
Appendix

East Bay Replay

East Bay Faculty Comments: April 2010 Spring Quarter

“It is the best technological advance in the classroom. I can have my students watch and listen to lectures that they miss. I hope more classrooms get equipped.”

“I can report that many of my students used and were happy with lecture capture. The system required only minor modifications to my teaching style and I was happy to use it.”

“My students *loved* the east bay replay. The main reason that I used it so many times was that firstly it was extremely easy to use, but secondly because they kept asking for it. I think it’s a great service and definitely worth continuing. I hope to be able to continue using it for my classes that want it.”

“When I had East Bay Replay available in my classroom, students were united in their appreciation of it. I polled them informally, and almost all indicated that they used it to study for exams. It’s not a stretch to say that all of the material that I made available to them, East Bay Replay was THE most valuable resource. “

“In addition, the ability for me to re-use/recycle lectures that I’ve previously given is a very efficient teaching strategy. In addition, each archived lecture becomes a sort of “Best of...” resource. When I need to make background material available to a class, without having to take from classroom time, grabbing an East Bay Replay lecture and posting it to Blackboard is a convenient way to present the topic.”

“It does not seem to impact class attendance. Foreign students seem to appreciate it most. On one occasion I had a couple of panicked students when it did not record properly. That says it.”

“It was great for students who missed classes because they were travelling on work, and for all students to review material for the exams. It was not intrusive so did not hamper my teaching. I would like the opportunity to use it again.”

“my experience with the lecture-capture program we used for my hybrid courses was most satisfactory. My students had (literally) no complaints that I know of. It was nice that they could see me, the white board, and the PowerPoint slides at the same time and that they could search the slides and move to points in the lecture. The materials were always available on Blackboard right away and easily accessible for my students. “

“I look forward to recording more lectures in the future “

“East Bay Replay was far easier and required little time and effort on my part. This is the greatest tool I have ever seen (next to ELMO). The students, even when using Replay, attended lecture in the usual numbers. They told me they used Replay to check their notes. This is a fantastic tool, please expand to all lecture rooms.”

“It has been encouraging to see the quick improvement in the technology - both capture capabilities and the speed in which the lectures are posted to BB. I really enjoy having the doc cam at my disposal in MI 2002. Paired with an explanatory power point slide, it allows me to work out a problem as the students will have to do in a way that all the students can see in lecture, and again. “

“With regard to having the lectures posted, it is a big help. Not only can I refer students to worked out problems that I have posted in written form, I can also refer them to particular lectures where I describe how I am solving similar problems. Also, when students miss lectures, I can always tell them to watch them online and ask if they have any questions. As a professor of classes between 150 - 250 students over the past two years, being able to help students help themselves with readily available materials on BB has been key. “

“My general impression from the students was that it was very convenient for them to use and they liked having it available after lectures… overall I think it worked well with the course. I would use it again in the future for large lecture classes.”

“I am a strong advocate of making EB Replay more broadly available and can document that students find EB Replay to be an important tool in their learning. I would experience a substantial reduction in the quality of my course if EB Replay were to vanish. Thanks again for all your efforts to make EB Replay available to my students. It makes a big difference!”
Student Comments about East Bay Replay Lecture Capture

I completely appreciate East Bay Replay (EBR). EBR is really helpful and I want to thank very much all the people who helped to put it together. I really appreciate EBR and I hope more classes will get it because it's really helpful. Thank you very much for everything, I can't wait for next quarter.

Loved it! Please bring it to other major courses such as this one. An ingenious tool for students trying to excel in their subject material

I LOVED having East Bay Replay. As the parent of a small child, it was helpful when I had to miss class AND was a great tool for review. I am so grateful!

I would love to have East Bay replay for all of my biology classes. Students could definitely benefit from it.

Replay is a great feature and wish many other classes would use it. It makes listening to what the professor is teaching a lot easier and the ability to go back and hear it again makes the material more concrete. Please add to other classes

I listened to almost every lecture over using this system I think this system definitely helped me remember concepts more clearly and I would love to see it expand to my other classes. Thank you so much!

It helps in study groups, we all get together and listen together; it really helped a lot.

I think having this on almost all classes would help a lot of students on they're studies. Students like me would increase knowledge and if we missed the important part of lectures we would be able to listen to the whole lecture and add it on ours.

I would love it if all my classes had this, … having it so far in two classes-both more challenging science based classes- made a world of difference for me

I wish we could have this capability available for my science classes. Not that we don't have great professors. It is the subject matter that is more challenging and demanding.

This program is very helpful. I love it.

Should be in all science classes at a minimum.

Should be used for Bio1401,1402,1403 at a minimum. I hope that all classes can be able to use this service

Some of us are parents and most are commuters. Missing a class can create anxiety, especially if it meets once a week. I prefer to be in class, but if something comes up, it's the next best thing.

East Bay replay was very helpful and should be available in many other classes.

Replay is a great feature and wish many other classes would use it. It makes listening to what the professor is teaching a lot easier and the ability to go back and hear it again makes the material more concrete. Please add to other classes