Introduction

This report contains statistical data about the media equipped general assignment classrooms at UCLA, and presents information about the state of the classrooms. It also describes the development issues facing the Classroom Services unit, current and upcoming projects, and information about procedures and equipment.

As of Spring 2005…

There are approximately 200 General Assignment Classrooms available for instruction. The number varies as much as 10% annually due to construction, seismic retrofitting, and maintenance.

- 96% have network and Internet access,
- 85% have installed video playback equipment, including
- 35% with installed data projection capability,
- 29% have installed slide projectors,
- 15% have installed classroom computers.

During the 2004-2005 Academic Year OID…

- obtained a new funding commitment to increase the number of media equipped classrooms,
- completed media equipment installation in 9 classrooms in two newly constructed buildings: Physics and Astronomy and LaKretz Hall,
- completed media equipment installation in 2 classrooms in the renovated Kaufmann Hall,
- finished the upgrade process to full media classroom status for 9 rooms in Math Sciences and Public Policy,
- continued installing direct service telephones in media classrooms,
- completed the installation of projectors in six classrooms in Math Sciences,
- upgraded DVD players in classrooms and on portable equipment to maximize ease of use,
- continued to research and develop new classroom technologies to enhance instruction,
- completed the beta testing phase of the new integrated classroom remote control and monitoring system.

During the 2005-2006 Academic Year OID will…

- upgrade Franz 1260 to a media lecture hall,
- upgrade Broad Art Center 2160, the largest lecture hall on campus, with new projection and control equipment,
- upgrade two additional media classrooms in Public Policy,
- renovate the media installations in two large lecture halls, Math Sciences 4000A and Dodd 121,
- replace 6 obsolete CRT projectors with the latest digital technology,
- complete media equipment installation in 14 rooms in the Humanities building,
- equip and test the new OID Training and Demonstration classroom in Powell Library,
- install equipment to support the BruinCast course Webcasting pilot, for both audio and video streaming directly from the classroom to the internet,
- convert additional rooms to the new integrated classroom remote control and monitoring system.

Classroom Equipment Statistics, as of Spring 2005

Classroom Size	# of Rooms	Overhead Projector	Network Connection	Video Playback	Data Projection	Slide Projection	Media Amplification	Voice Amplification
10-19	20	20	19	19	0	0	0	0
20-39	82	82	78	62	8	9	8	0
40-59	43	43	41	40	18	7	18	6
60-99	20	20	20	15	13	15	13	12
100-149	14	14	14	13	13	11	14	14
150-199	6	6	6	6	6	4	6	6
200-299	5	5	5	5	5	5	5	5
300+	6	6	6	6	6	5	6	6
Totals	**196**	**196**	**189**	**166**	**69**	**56**	**70**	**49**
%		**100%**	**96%**	**85%**	**35%**	**29%**	**36%**	**25%**

Media Classroom Construction and Upgrades, 2005-2006

Building	Room	Capacity
Broad Art Center	2160	450
Franz Hall	1260	131
Knudsen (Kinsey Lecture Hall)	1200	108
Knudsen (Kinsey Lecture Hall)	1220	160
Knudsen (Kinsey Lecture Hall)	1240	108
Math Sciences	4000A	210
Dodd Hall	121	157
Public Policy	2214	89
Public Policy	2232	57
Humanities	32	32
Humanities	38	16
Humanities	40	25
Humanities	46	20
Humanities	50	25
Humanities	51	288
Humanities	54	25
Humanities	58	20
Humanities	64	20
Humanities	68	25
Humanities	71	100
Humanities	76	25
Humanities	141	114
Humanities	169	114

Room capacities for Broad Art Center and Humanities are estimates.

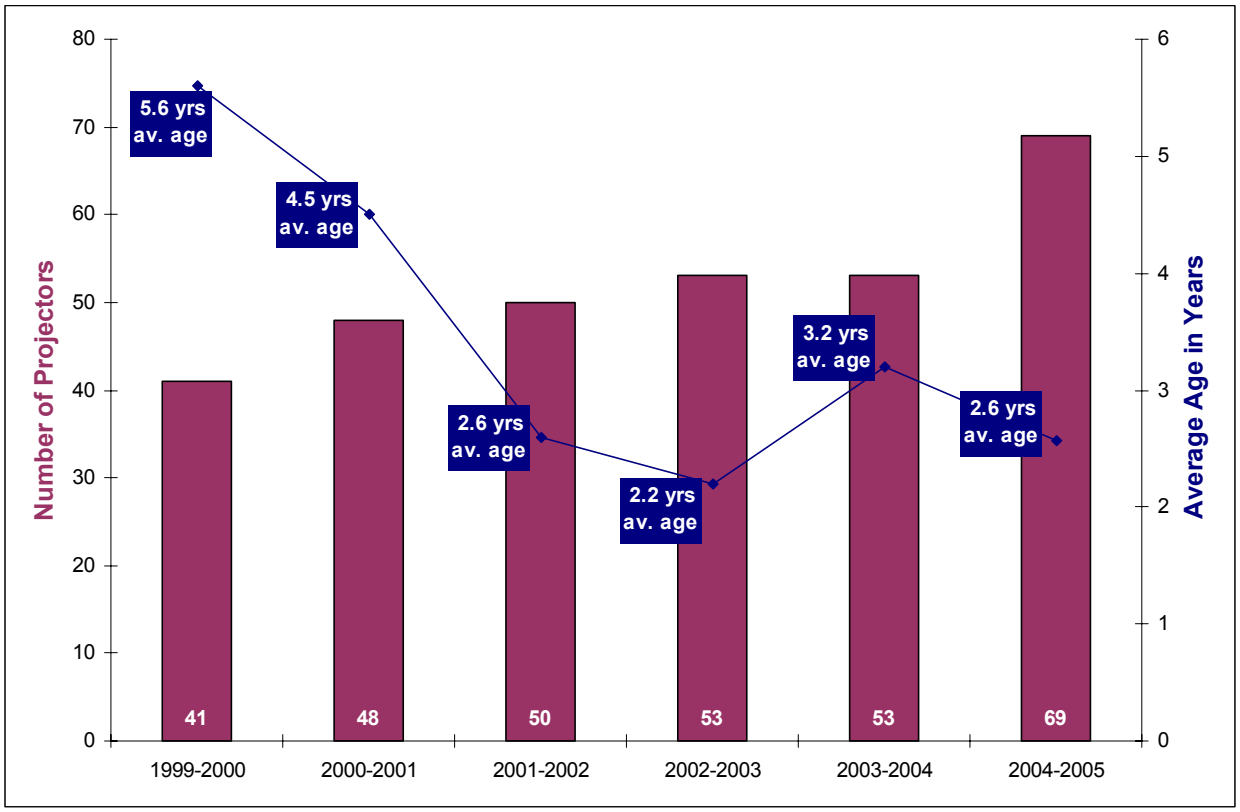
The State of General Assignment Classrooms at UCLA

UCLA has approximately 200 General Assignment Classrooms. The number varies due to renovation and construction. In 2005-2006, for example, the completion of the seismic renovation project in the Humanities building, (formerly Kinsey Hall,) will return 14 rooms to the inventory. Additional renovation projects in which OID will participate will cause rooms in Knudsen Hall, the Broad art Center, and the Geology building to be unavailable for instruction for portions of the academic year.

OID Classroom Services provides media equipment to all GA classrooms. Classroom maintenance is the purview of Facilities management, with whom OID works closely in the upgrade process. To provide these classrooms with media equipment, OID has had an annual allocation of $453,000 since 1994. This includes the purchase of portable equipment made available to instruction by the Audio-Visual Services unit. Annual maintenance and repair costs account for nearly $150,000 of the total, including $75,000 in lamp replacement costs alone. Labor costs for installation and upgrading account for another $100,000. For the 2005-2006 fiscal year, the Chancellor's Office increased the annual funding for classroom equipment by $300,000. Assuming an average cost of approximately $35,000 per classroom for installation or upgrade, OID anticipates processing an additional 6-8 classrooms per year. The long-term plans have been adjusted to take this new funding into account, and the annual goal is now 14-15 upgrade and renovation projects. An additional desirable outcome of the funding increase will be the ability to investigate technologies that had been beyond the financial reach in previous years. These technologies include Webcasting in both video and audio formats, student feedback systems, "smart" whiteboards and tablets for presentation, and more sophisticated projection systems that will provide higher resolution with lower weight and profile.

While the additional funding has improved the situation compared to previous years, OID is still not in a position to keep up with the true needs of the campus instructional program. In the last report, it was stated that the upgrade cycle for all media rooms on campus was between 25-30 years. Assuming for the moment that all rooms are capable of supporting installed media, the new financial situation implies that the time between upgrades for each of the 200 classrooms is now approximately 15 years. Although a significant improvement, this cycle is still well beyond the average life of the equipment, and certainly behind the pace of technical innovation in the field.

Age of Installed Data/Video Projectors



Classroom Services 3 Year Planning

In 2004-2005, Classroom Services added 21 media classrooms to the inventory, bringing the total to over 70. As this number approached the support capacity of the current service and maintenance infrastructure, in 2005-2006 there had been no plans to add any new rooms. The focus was to replace older equipment and upgrade monitoring and control systems. The new systems should extend the reach of the infrastructure to support additional classrooms. However, with an increase in funding, plans to add additional rooms, as well as increasing the pace of the upgrades, has become possible. Also, the completion date of the seismic renovation of the renamed Humanities Building, formerly Kinsey Hall has moved up from 2006-2007 to the current year. In 2006-2007 and beyond, the goal is to continue the three part plan of adding new rooms, upgrading currently installed control and monitoring systems, and replacing outdated equipment

The current plans for the next three fiscal years:

2005-2006

- Upgrade six classrooms that currently have obsolete CRT Projectors:
    - Botany 325
    - Dodd 161
    - Math Sciences 5200
    - Perloff 1100
    - Rolfe 1200
    - Royce 190.
- Upgrade Franz 1260 to a media lecture hall.
- Complete the upgrades in the Kinsey Lecture Halls, in Knudsen Hall.
- Upgrade Broad Art Center 2160, the largest lecture hall on campus, with new projection and control equipment.
- Upgrade two additional media classrooms in Public Policy.
- Renovate the media installations in two large lecture halls, Math Sciences 4000A and Dodd 121.
- Complete media equipment installation in 14 rooms in the Humanities building.
- Equip and test the new OID Training and Demonstration classroom in Powell Library.
- Install equipment to support the BruinCast course Webcasting pilot, for both audio and video streaming directly from the classroom to the internet.
- Convert additional rooms to the new integrated classroom remote control and monitoring system.

2006-2007

- Replace the large format projectors in 4 lecture halls with newer models
- Upgrade four additional media classrooms in Math Sciences.
- Upgrade four additional media classrooms in Rolfe Hall.
- Upgrade four additional media classrooms in Public Policy.
- Upgrade one additional media classroom in Geology, and renovate a current installation in the same building.
- Install additional equipment to support BruinCast course Webcasting, for both audio and video streaming directly from the classroom to the internet.

- Convert additional rooms to the new integrated classroom remote control and monitoring system.
- Participate in the planning and re-configuration of the OID Media Laboratory.

2007-2008

- Upgrade four additional media classrooms in Boelter Hall.
- Upgrade four additional media classrooms in Dodd Hall.
- Upgrade four additional media classrooms in Bunche Hall.
- Renovate and upgrade the media equipment installation in the three large lecture halls in the Court of Sciences: CS24, CS50, and CS75.
- Install additional equipment to support BruinCast course Webcasting, for both audio and video streaming directly from the classroom to the internet.
- Convert additional rooms to the new integrated classroom remote control and monitoring system.

BruinCast: Undergraduate Course Webcasting

In the Fall of 2005, The Office of Instructional Development (OID) announced the beginning of a pilot program featuring the recording and Webcasting of undergraduate course lectures at UCLA. OID has monitored the use of this service at several campuses, including UC Berkeley, as well as running a test course in Political Science last year. This emerging technology, called BruinCast, will allow students to access lectures over the web at a later time, and use them for review purposes. This capability has proven to be extremely popular with students, and faculty report that it reduces the amount of time spent reviewing materials in class. Students whose first language is not English seem to have especially benefited from the opportunity to review parts or all of their lectures. OID Classroom Services has installed the infrastructure to allow recording lectures in both Haines 39 and Lakretz 110 for later encoding and Webcasting.

The OID goal for BruinCast is to use Internet streaming media to allow students to review material from a lecture anytime, anywhere. Archiving lectures has the potential tol solve many problems for students, including the difficulty of capturing hand-written or typed notes that accurately represent the lecture material presented. BruinCast will offer a solution to this and other problems superior to other approaches such as audio or video taping lectures and using commercial note-taking services. A major advantage to Internet streaming media is that the actual lecture can be viewed at any time on any computer, as long as adequate bandwidth is available. Other initiatives in OID have

also found that lecture Webcasting has advantages when instructors want to provide material outside of class meeting times, such as when preparing supplementary lectures for exam review or helping students who are having trouble with particular class topics. The UCLA campus' experience with the recent Blended Instruction Case Studies has shown that students and faculty both have been very positive about these types of enhancements. Access to the courses can be limited to current students or open to all—the pilot program will include both models. Students will be able to view the materials at any time they choose, from home, the residence halls, or campus computing commons such as CLICC. Plans are in place to develop further rooms for Webcasting, as well as creating portable systems that can be used where a fixed installation is not appropriate.

New Equipment for Classroom Use

Niagara 4225RW Rack Mount Streaming System

As part of the BruinCast course Webcasting project, certain lecture halls are being equipped with integrated webstreaming capability for rapid turnaround of classroom presentations to the internet. The Niagara 4225RW allows direct connection of the digital video camera to bypass use of tapes and manual encoding in a seperate studio.

Sony Digital Video Camera

While the existing stock of Panasonic Digital Video Cameras is adequate for most applications, recording of courses for webcasting required the research and purchase of a camera capable of higher resolution and connection to an installed encoder (see above) allowing direct transfer of data to the internet. Classroom services has purchased three of these cameras to support the BruinCast course Webcasting project.

Panasonic TV/DVD/VCR Combination

Although many rooms have installed projection systems, a large number still rely on the use of television monitors for video. These new units allow Classroom Services to combine all the sources required in a single package.

Research & Development

Barix Instreamer

The Barix Instreamer or MP3 audio encoder is an intelligent streaming component that converts analog and digital audio into MP3 format which it then transmits into the network. When placed in the audio feed line, the Instreamer allows the signal to go straight to the desired location without need for encoding or editing. This equipment is already in use at other campuses, including UC Davis, for serving audio recordings of courses. OID plans to use it to implement course Podcasting as part of the BruinCast project.

SMART Technologies 3000i Rear Projection Interactive Whiteboard

The SMART 3000i is an integrated, high-resolution projector, integrated sound system and touch control system, all in one mobile cabinet. Used for presentations, instruction, and videoconferencing, the 3000i allows information to be quickly shared by switching between an internal computer, a laptop or other device. This equipment has many potential instructional applications, and is currently being investigated for installation in the new OID Training and Demonstration Classroom.

Further information about General Assignment Classrooms can by found at www.oid.ucla.edu.