FEATURED STORY

From Videotaped Lessons to Streaming on Demand: The Evolution of MediaFlow

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Stanford University's School of Medicine has been recording its required curriculum and posting the videos securely online for matriculated students since 1999.

A quarter of a million views later, MediaFlow as we know it today is a fixture of the SoM learning experience.

The system was designed and developed within Stanford. With the launch of MediaFlow in 2010, the School of Medicine's automated capture system (then codenamed

Monitoring live streams from different classrooms in the Li Ka Shing Learning and Knowledge Center Control Room at the launch of MediaFlow in 2010.

Maestro) evolved from the human-controlled camera and the transfer from tape to CD, to MediaFlow, which captures content automatically per the schedule — now, the content reaches faculty, course coordinators, staff, clinicians, and the general public.

Q: What are some of the ways MediaFlow brings value to the School of Medicine?

A: MediaFlow brings value to Stanford Medicine students by allowing them to asynchronously engage in classroom lectures, presentation slides, and supplemental materials from anywhere they have an internet connection, or to download lectures and materials for viewing anytime and anywhere.

MediaFlow archives curricular content for up to five years, allowing students to have on-demand access to course content throughout their Stanford Medicine academic experience.

MediaFlow also brings value to faculty and staff by delivering automated video capture and hosting for lectures, team meetings, conferences, and other special events held in Stanford Medicine spaces. And, since content is archived for up to five years, media can easily be located and re-used or re-mixed.

Q: You must have some impressive numbers to share over the past 10 years.

A: Yes, we do! Stats from the start of the current system (Fall 2014) through Jan. 31 are as follows:
Number of presentations recorded: 19,132
Time of content recorded: 31,001 hours, 13 minutes, 28 seconds
Number of views: 251,184
Amount of time spent watching videos: 110,124 hours, 49 minutes, 9 seconds
Number of unique viewers: 8,025

Q: How does MediaFlow work?

A: Any session scheduled in the high-tech classrooms of the Li Ka Shing Learning and Knowledge Center (LKSC) space can request capture with their space reservation. If capture is requested when a room reservation is made, MediaFlow starts recording at the session start time and stops recording at the session end time. MediaFlow also provides for uploading of related session content by course teams.

The recordings, along with links to the uploaded session content, are made available within a few hours of the end of the session. For our matriculated students, the materials are automatically routed and accessible through Canvas, Stanford's learning management system. For others the materials are accessible through a system-generated web page.

The increase in automation of the capture process over the past quarter century, afforded by the technology built into the LKSC and custom development by our Academic Apps team, has allowed scaling of video capture to any session that requests it with their LKSC learning space reservation.

Q: What challenges have you faced implementing MediaFlow?

A: MediaFlow integrates multiple third-party technologies, both hardware and software, with custom development by TDS.

As with any complex integration, any points where the systems connect are possible points of failure. But we have a comprehensive set of alerts built in to notify the team should any issues occur. In addition, if any client-facing part of MediaFlow goes down, we hear very quickly from the students! Outages are infrequent and quickly resolved. We also have multiple different manual work-arounds at our disposal including a full back-up recording system.

Cameras like this capture lectures that are made available to viewers along with course content within a few hours of the end of the session.

Q: What changes do you see ahead for MediaFlow?

A: The next significant update to MediaFlow would be to add automated captioning and transcription capabilities. Allowing users to view captioning in the videos or to download transcriptions is something both students and faculty have been requesting and would honor EdTech's commitment to Diversity, Equity, and Inclusion in the solutions we support.

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