Collaborative Classroom Panel and Presentation

SPEAKERS: Kent Gardner, Director of Instructional Technology, University of Louisville, School of Medicine; Jeremy Todd, Director, OCM- Academic Support Resources, University of Minnesota; Cassidy Hall, Clinical Asst. Professor, University of Idaho, Doceo College of Education
Notes from AV Summit agenda

Collaborative Classroom Presentation and Panel

Team-based learning is here to stay and requires a robust AV and IT backbone to implement securely and reliably. These spaces may physically look similar while utilizing varied AV and network strategies to accomplish the university’s specific goals. Hear from three universities with this room type and throw your best questions at them!
University of Minnesota: A.L.I.V.E. for Learning

Jeremy Todd, Director, OCM- Academic Support Resources, University of Minnesota
Commitment to Innovative Learning Spaces

• A.L.I.V.E. advances the University’s continuing commitment to innovation in learning.

• 2007 – Office of Classroom Management (OCM) designs and builds pilot general use Active Learning Classrooms.
  
  
  – OCM provides technical and pedagogical support for all users.
Commitment to Innovative Learning Spaces

- 2007 – Formal evaluation of ALC user (instructor and student) experience and satisfaction was conducted.
- ALC is extremely popular with both faculty and students.
- A very few design and technology concerns are raised and addressed. (Example, glare from glass marker boards.)
Commitment to Innovative Learning Spaces

• There are 16 ALC learning spaces on the Twin Cities Campus.

• A freshman entering the University today is likely to have multiple classes in ALC spaces.

• Continuing evaluation shows that ALC improves:
  – Student engagement.
  – Learning outcomes.
  – Grade performance.

For more information:
“The University of Minnesota’s Active Learning Classrooms,”
http://www.pkallsc.org/basic-page/lsc-guide-essay-university-minnesota
Commitment to Innovative Learning Spaces

https://sites.google.com/a/umn.edu/umn-alcs/
If existing ALC is working, why create something new?
College of Pharmacy

- Doctorate of Pharmacy (Pharm.D.) program undergoes a major curriculum revision.
- New curriculum transforms the pedagogical model, emphasizing Team Based Learning (TBL) and student generated knowledge.
- Curriculum will rolled out with the class of 2017.
- Pharm.D. bridges the University of MN Twin Cities and Duluth campuses.
- Design of existing ALC spaces on campus will not meet the unique needs of this program.
What Pharm.D. Needed:

- Bridge University of Minnesota Duluth and Twin Cities campuses with state-of-the-art ITV.
- Full BYOD (bring your own device) capability, for existing and new devices.
- Enhanced audio and visual clarity.
  - Facilitate group work across distance.
  - Easy peer-to-peer sharing.
  - Everyone can see and understand whomever is speaking.
- Enhanced display of models, documents and other shared materials.
The Solution:
A.L.I.V.E. for Learning

• Weaver Densford Hall 7-135, a 117 seat classroom, is transformed into the University’s first Active Learning and Interactive Video Environment.
• Pharm.D. students on the Twin Cities and Duluth campuses learn together.
WDH 7-135:
A.L.I.V.E. for Learning

Our new Pharm.D. curriculum puts emphasis on active and peer learning, and this is fully reflected in the redesigned classroom. Students can work in small groups, and the state-of-the art AV technology is designed to facilitate active discussion in a large class – over 150 students -- and across the two campuses.
A.L.I.V.E. Room Features

- 13 Active Learning “Pods” (9 students), each with:
  - Digital and analog inputs for each 3 person subgroup.
  - Dual flat-screen displays for video and media.
  - 3 cameras and 3 microphones per pod.
  - Standard and USB power for each student.
A.L.I.V.E. Room Features

• A teaching station in the center of the room with simple but powerful user interface to allow for sharing of local, table-specific student media across the room and at distance.

• Instructor PC, stylus tablet, and additional inputs to facilitate distance sharing of all media.
A.L.I.V.E. Room Features

• State-of-the art automated cameras, and a video production station.
• Video Conferencing capabilities including Cisco HD Codec, Google Hangout, Webex, Skype, and flexible hardware to accommodate many other video platforms.
A.L.I.V.E. Provides:

• A robust Active Learning environment.
• Cooperative learning environments that encourage student collaboration and peer teaching.
• Technology that allows students to easily present work for review by peers and instructors.
• Furniture designed to facilitate small-group work.
• The ability for instructors to interactively coach students during activities.
• New options for student interaction and class structure.
WDH 7-135 A.L.I.V.E.
Equipment Specifics

• 13 Tables or “Pods” (with touch panels) of 9 students
• 39 individual student cameras
• 3 instructors cameras
• 14 AMX ENOVA DVX 3155 processors
• 1 AMX Enova DGX 32X32 Router/controller
  – 98 separate inputs selectable
  – 31 outputs
• Continual CODEC operation for each class
University of Idaho
Doceo Center
for Innovation + Learning

Cassidy Hall, Clinical Asst. Professor, University of Idaho, College of Education
The Doceo Center Lab serves as the hub of our center but was designed as a space for:

❖ EDCI 410: Teaching & Learning with Technology
❖ Technology integration workshops for k-12 teachers and higher faculty
❖ Experimenting with technologies for k-12 applications
Beyond the College of Education

Space also gets utilized for the following purposes:

- multiple courses that have an active learning style or needs not met in other spaces
- hosting events/meetings
- highlighted space for tours
- testing out technologies for university classrooms
Limitations

The current, temporary space has numerous drawbacks:

❖ lighting
❖ pillar
❖ limited space
❖ basement
❖ low traffic
❖ odd location
Contents

❖ Five tables of 6 seats each with interactive flat panels for collaborative group activities, a local pc, ports for power, and usb hook-ups for 5 devices
❖ Total control from the lectern iPad with local pc, Apple TV, blu ray player, video recorder, camera, microphone and speaker control, etc.
❖ Ability to send any source to one or more displays or send to all.
❖ For equipment list and more: http://www.compview.com/portfolio/index/id/54
Future Doceo Center

- Control content from portable device
- No front of the room
- Eliminate video recorder
- Eliminate cables where possible
- Reduce # of ports
- Improve switching
- Simplify
- Mic for each table
- Upgrade speaker system
- Vary interactive flat panels
- Vary table heights

Current equipment will be moved to science classroom.
University of Louisville

Kent Gardner, Director of Instructional Technology, University of Louisville, School of Medicine
Slides and video created by: David Aylor, Assistant Director of Technology
Instructional Building Foyer

8 Months of planning, 10 weeks of renovation between spring and fall semesters, contractors and technologists working days, nights, and weekends and the $8.1 Million project finished on time for fall semester.
Breakout rooms are equipped with modular tables, dry-erase glass boards, and duel monitors for displaying content from a central facilitator or local content from student devices.
Collaboration Hall

Collaboration pods provide flexible Problem Based Learning stations equipped with dual monitors for displaying content from the facilitator podium and content from student devices.
Two flat-panel screens and “push to share content” cables provide Bring Your Own device (BYOD) connectivity for virtual co-creation.
An AMX DGX 64 x 64 video switcher enables the instructor to send any device to any screen in the facility from a mobile tablet or room touch panel.
A Modero X Touch Panel with Multi Preview Live allows professors to easily view the content at the pod prior to sending the content to their controlled displays.
The Lecture Hall provides optimal conditions for local and remote instructional environments equipped with 4 Projection Screens, 3 Confidence Monitors, 3 PTZ Video Conferencing Cameras, and 5 omni-directional room microphones.
Shared Experiences and Q & A time