Collaboration at San José State University

Enabling an **Unbounded** University

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AGENDA

SJSU Goals, Strategy, Approach

Realizing our Unbounded University

Lessons Learned from our Journey / Q&A

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San José State University Background

- **Member of the CSU system**
  - 23 campuses
  - 400k+ students
  - 44k faculty
  - Largest, most diverse, in the US
  - One of the most affordable

- **SJSU**
  - #1 supplier of graduates in engineering, computer science, education and business to Silicon Valley
  - ~ 30k students
  - ~ 1.9k faculty
  - On campus residents

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Strategic Plan: Vision 2017

Campus Guiding Principles

- **Unbounded Learning**
  - SJSU is an innovative, engaged learning community …
  - Our highly regarded faculty members facilitate unbounded learning by **actively** engaging with students to provide a wide range of access to and delivery of learning content through in- and out-of-the classroom experiences.

- **Strong and Unique sense of place**

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Strategic Plan: Vision 2017

Learning Pyramid — Average Retention Rate

Level	Average Retention Rate
Lecture	5%
Reading	10%
Audio-Visual	20%
Demonstration	30%
Discussion Group	50%
Practice by Doing	75%
Teach Others/Immediate Use	90%

Traditional Passive / Active

RFID Revolution RFID Essentials →

Source: National Training Laboratories, Bethel, Maine
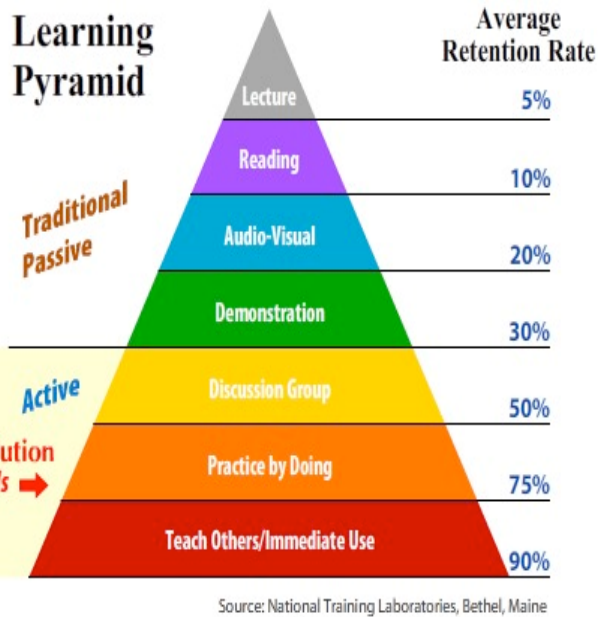
Campus Goals

•Unbounded Learning
- Enhance student success through continuous learning innovations
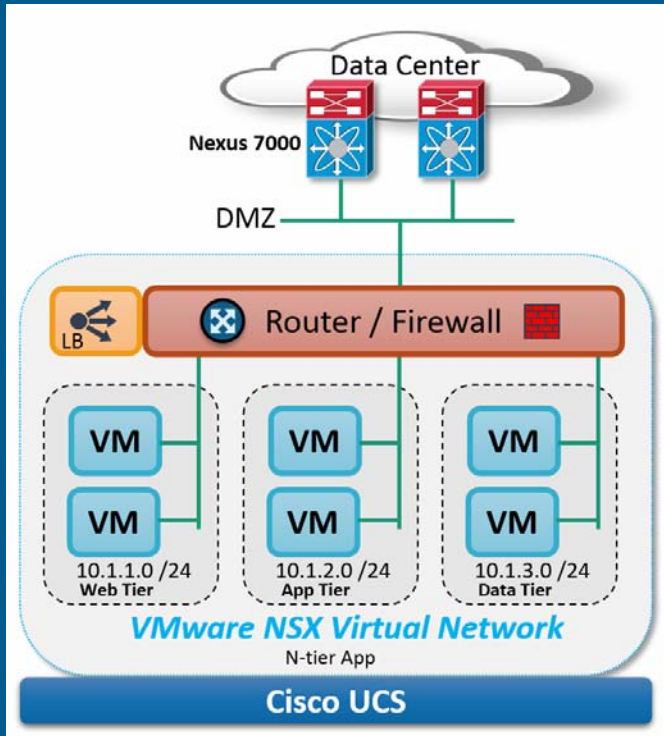
•Agility through Technology
- Improve organizational responsiveness
- Advanced technology infrastructure
- Eliminate procedural obstacles

•21st Century Spaces
- Up to date facilities
- Classrooms that enable collaboration

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IT Strategy

- Reduce the mixed environment
- Define success criteria
- Partner with vendors: Cisco, Adobe, Apple
- Buy integrated solutions
  - Proven elsewhere
  - Coordinated upgrade paths
- Seek single point of contact for support
  - Reduce risk to SJSU
  - Reduce finger pointing

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Infrastructure Principles: Technology Drivers

- **Collaboration -** Working together is enhanced with technologies that work well together .

- **Integration –** Make products easy for user…make IT easy for people

- **Mobility –** Access anytime, anywhere devices, and mobile devices.

- **Security -** Assets are assessed, secured, and monitored

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Designing the Unbounded Campus Infrastructure

Next Gen IT Infrastructure

VoIP

Telepresence

WebEx

Network

Collaboration Technologies

- **VoIP**
- **Telepresence**
- **Lecture Capture**
- **WebEx**
- **Jabber**
- **Next Gen Network**
  - Bandwidth
  - Switch, route
  - Wi-Fi

Engineering the Next Gen Classroom

Next Gen Classroom

Video Conferencing

Classroom

Desktop Collaboration

WebEx , Jabber

Lecture Capture

TODAY'S LESSON

- **HD Video to the classroom** – Enable outside experts to visit with students without limitations of distance

- **Lecture/Capture Capability** – record lessons to enable new pedagogies such as flipped classroom

- **Desktop Collaboration** – enable video & desktop collaboration from the classroom to remote students/professors
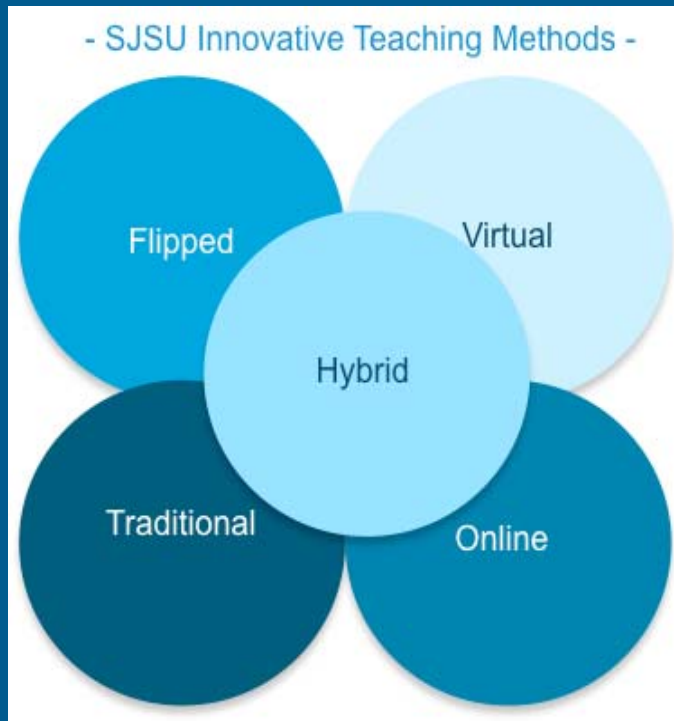
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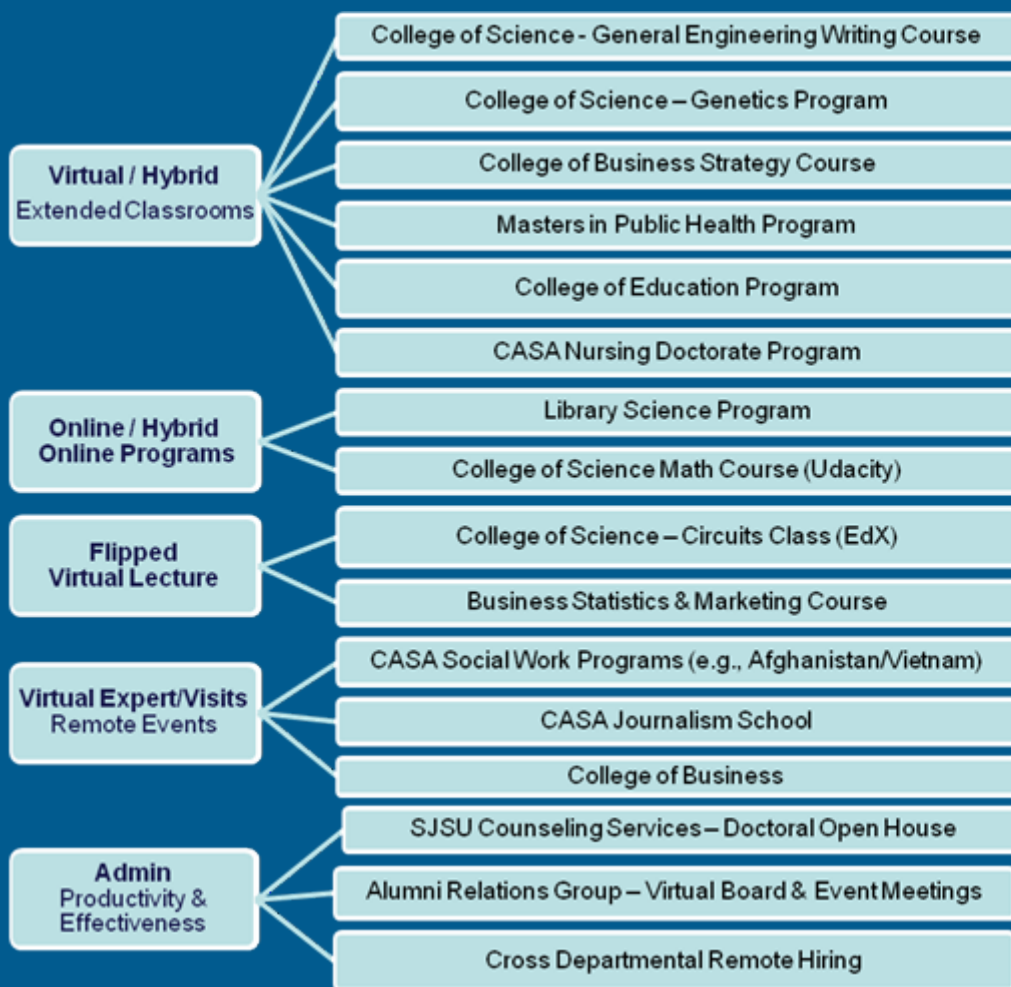
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- SJSU has invested in a campus-wide collaboration platform to stimulate innovation in the classroom

- Professors are encouraged to think creatively about best instructional methods, tools, etc.

- SJSU is testing many different innovative academic pedagogical approaches

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Next Gen Classroom

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SJSU's Journey is underway with a # of Unbounded programs

Examples of Unbounded Programs

Virtual / Hybrid Extended Classrooms
- College of Science - General Engineering Writing Course
- College of Science – Genetics Program
- College of Business Strategy Course
- Masters in Public Health Program
- College of Education Program
- CASA Nursing Doctorate Program

Online / Hybrid Online Programs
- Library Science Program
- College of Science Math Course (Udacity)

Flipped Virtual Lecture
- College of Science – Circuits Class (EdX)
- Business Statistics & Marketing Course

Virtual Expert/Visits Remote Events
- CASA Social Work Programs (e.g., Afghanistan/Vietnam)
- CASA Journalism School
- College of Business

Admin Productivity & Effectiveness
- SJSU Counseling Services – Doctoral Open House
- Alumni Relations Group – Virtual Board & Event Meetings
- Cross Departmental Remote Hiring

- Piloting collaboration-enabled pedagogies across colleges

- Virtual experts enhance the learning experiences for our students

- Extend existing programs through online courses to remote or other challenged students

- Extend the reach of the university to alumni, CSU community, partners, etc.

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Example: Journalism and Mass Communication Class Hosts Guest Experts

Journalism and Mass Communication

- Student's group advertising projects
- Feedback from New York Ad Agency – industry experts
- Previously: Filmed and sent to New York
- Previously: Feedback coming days or weeks later

Next Gen Classroom Solution

- Classroom connection with New York Ad Agency via Telepresence
- Recording for playback later
- Demonstrating to University administration solutions IT can deliver – indirect support of the academic mission
- More collaborative relationship with deans, provost, academic community

Results: Enhanced experiential learning capabilities; Real-time feedback from industry experts; Ability to watch feedback from industry experts again, later.

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Example: College of Education is creating the 21st Century Educators using Next Gen / 21st Century Classrooms

Video Conferencing

Virtual Classroom

College of Education's Goal/Efforts

- Develop tomorrow's leading educators

- 4 years ago started the "21st Century Classroom" program

- Co-teaching program to bring SJSU innovation to today's classrooms

Next Gen Classroom Solution

- Classroom solution includes **SmartBoards**, mobile/flexible furniture, room 'archetypes', WiFi, **Mediascape** video booths

- CoE instituted collaborative applications such as **Skype, Webex, LMS (D2L -> Canvas)** to extend the classroom

- CoE adopted a 'flipped classroom' approach

Results: The College of Education is establishing a research effort to evaluate the qualitative and quantitative impacts of their 21st Century Classroom Program

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Lessons from our Unbounded University Journey

Transformation of a university is more than a technical challenge, the journey requires strong academic leadership, change management, communication and coordination

- Academic Leadership needs to establish a culture of innovation and break down the institutional barriers

- Solutions must be simple to adopt/integrate

- SJSU's diversified structure requires IT to effectively communicate

- IT must be sensitive to campus activities – making implementation scheduling a critical factor

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Lessons from our Unbounded University Journey

Worked Well

- Culture of collaboration with Academic leadership
  - What are their success criteria?
  - Help them be successful
  - When an innovation occurs in one area of a university, it needs to be nurtured and promoted so that it spreads across the entire university
- Customer Service
  - Good enough vs. perfection
  - Get to Yes
- Agility
  - IT is about technology, process, people
  - As we experience technology, or processes, or people in positions, when they aren't working, we need to move on, make changes toward the goal, and don't insist you keep using them
- Collaboration with with vendors
  - Keep vendors invested in your success, partner with them, let them know what's working, what's not, how it's impacting you

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Lessons from our Unbounded University Journey

Opportunities

- Learning new technologies
    - Large changes in technology architecture means even the most proficient IT staff have opportunities to learn new technologies
    - Change is harder for some than others
    - Consider consulting, best job fit
- Promotion of services to constituents
- Break down the barriers
    - All about collaboration
    - Open Forums
    - Newsletters
    - More communication!

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Summary

Enabling our Unbounded university is a transformation made possible by collaboration between ITS, Administrative Leadership, Academic Leadership and Students

- Our campus strategic plan creates focus and direction to meet our goals

- Infrastructure enables the technologies at the foundation of our Unbounded university (e.g., Wi-Fi, Classroom Technology: Lecture Capture, Video Conferencing, WebEx, Virtual Lab & Virtualized Data Center)

- Collaboration platform stimulates innovation in the classroom

- Communication, marketing / promotion shares it

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Q&A

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