# Multimedia Production Crash Course

Kenneth Chan
Stanford University

About Me: Multimedia Services Manager for Academic Computing at Stanford.
Best part of my job: Toys and teaching toys

3D render by Yucel Yilmaz

# Stanford

* 6200 undergrads living on campus, 4700 grads living on campus
* 99% students own a computer, 90% own laptops

Photo by Kenneth Chan

# Residential Computer Consultants


* Distributed computer support model. Peers as resource and educators
* RCCs live with residents; approx. 1 RCC per 100 students

Photo by Jennifer Ly


* Why learn it? Why teach it? Digital media literacy is a basic skill.
* Applicable to coursework: 15-min doc, website portfolio for final project
* CS2C's mission: Get your feet wet, teach how to leverage resources, ignite passion

Photo by tatlin @ sxc.hu


# Implementation

Constantly taking inventory of goals, resources, culture. Experimental, with frequent revisions
Biggest change: Distributed vs. standardized lesson plans

Photo by 123dan321 @ sxc.hu

# Software


Software overview. Macs are key: consistency, features. iLife is preinstalled.
Stanford uses Coursework / Sakai for assignment delivery. http://coursework.stanford.edu

Logos by Apple, Adobe, and Stanford

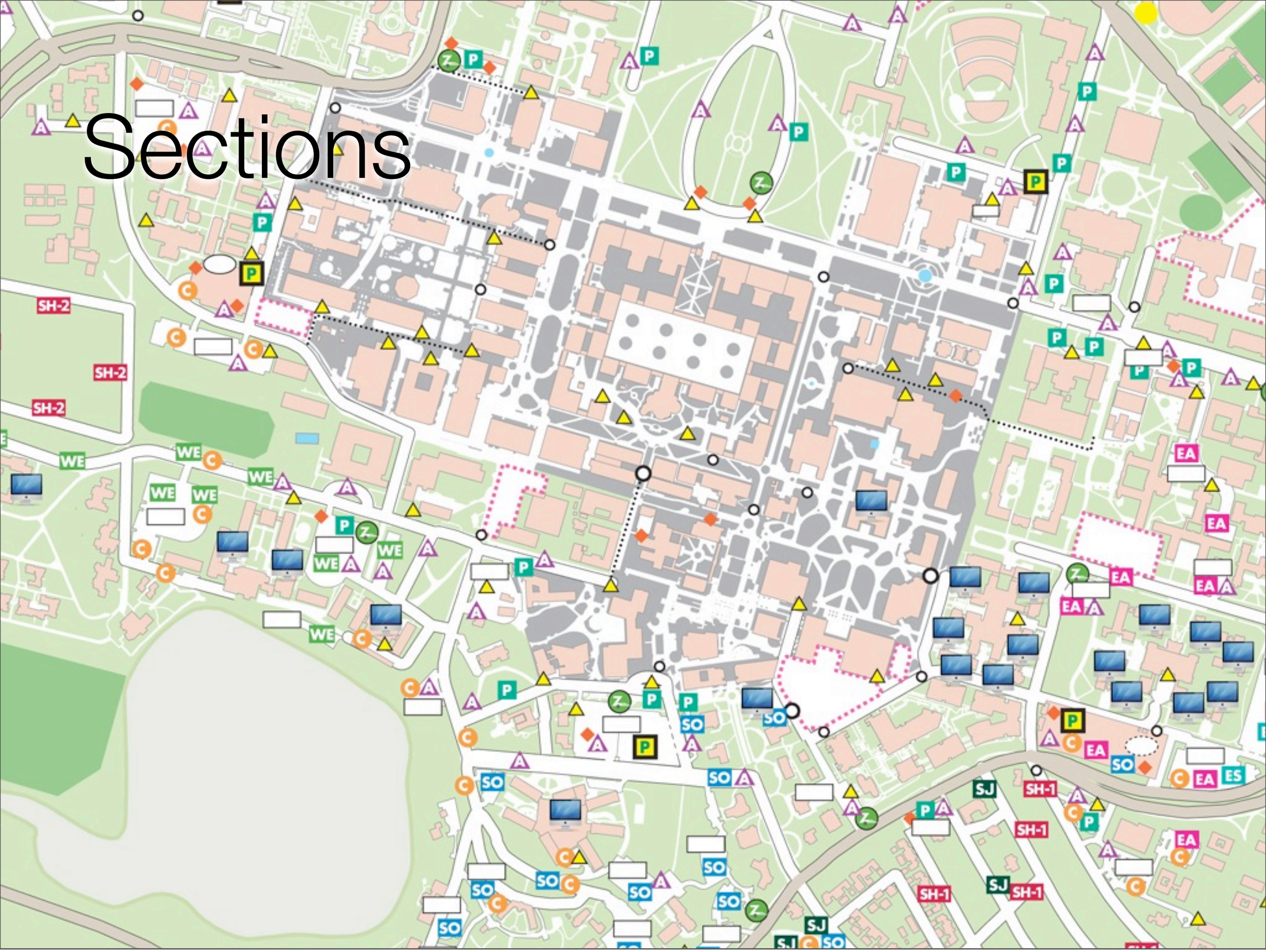
# Equipment


External HD: 500GB, USB/FW800.
Camcorders: Canon miniDV, Flip Video HD, Canon HF20
Microphone: Rode VideoMic. Projector: Dell m409wx.
Checked out to RCCs. Equip also available at Meyer Tech Desk.
Not shown: Macs

http://meyer.stanford.edu/equipment_checkout

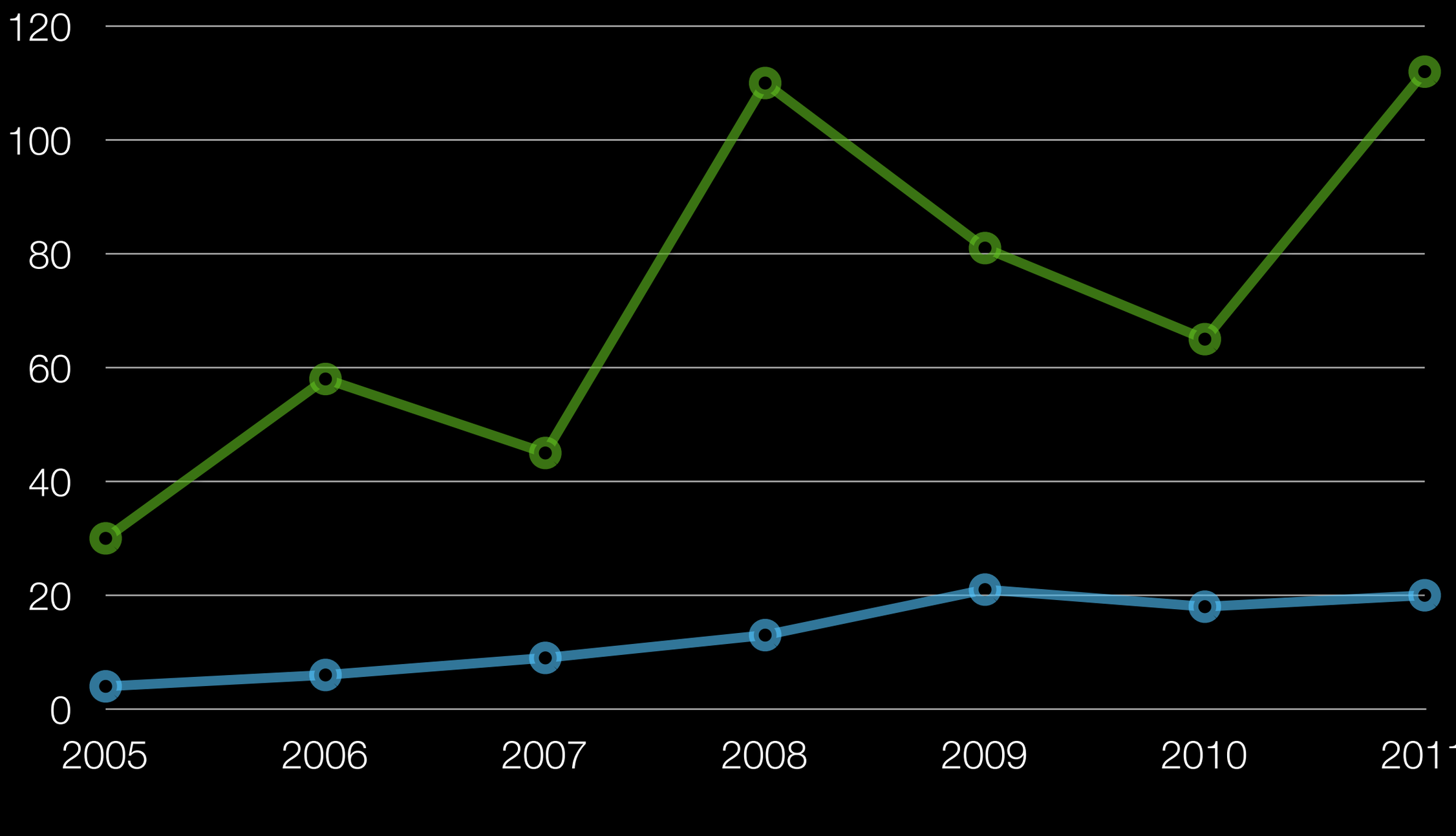
Photos by Canon, Cisco, Dell, Western Digital, Rode

# Sections




Standardized curriculum, distributed learning environment.
Number of students: 112. Audit? So long as not taken up Mac

# CS2C Class Sizes

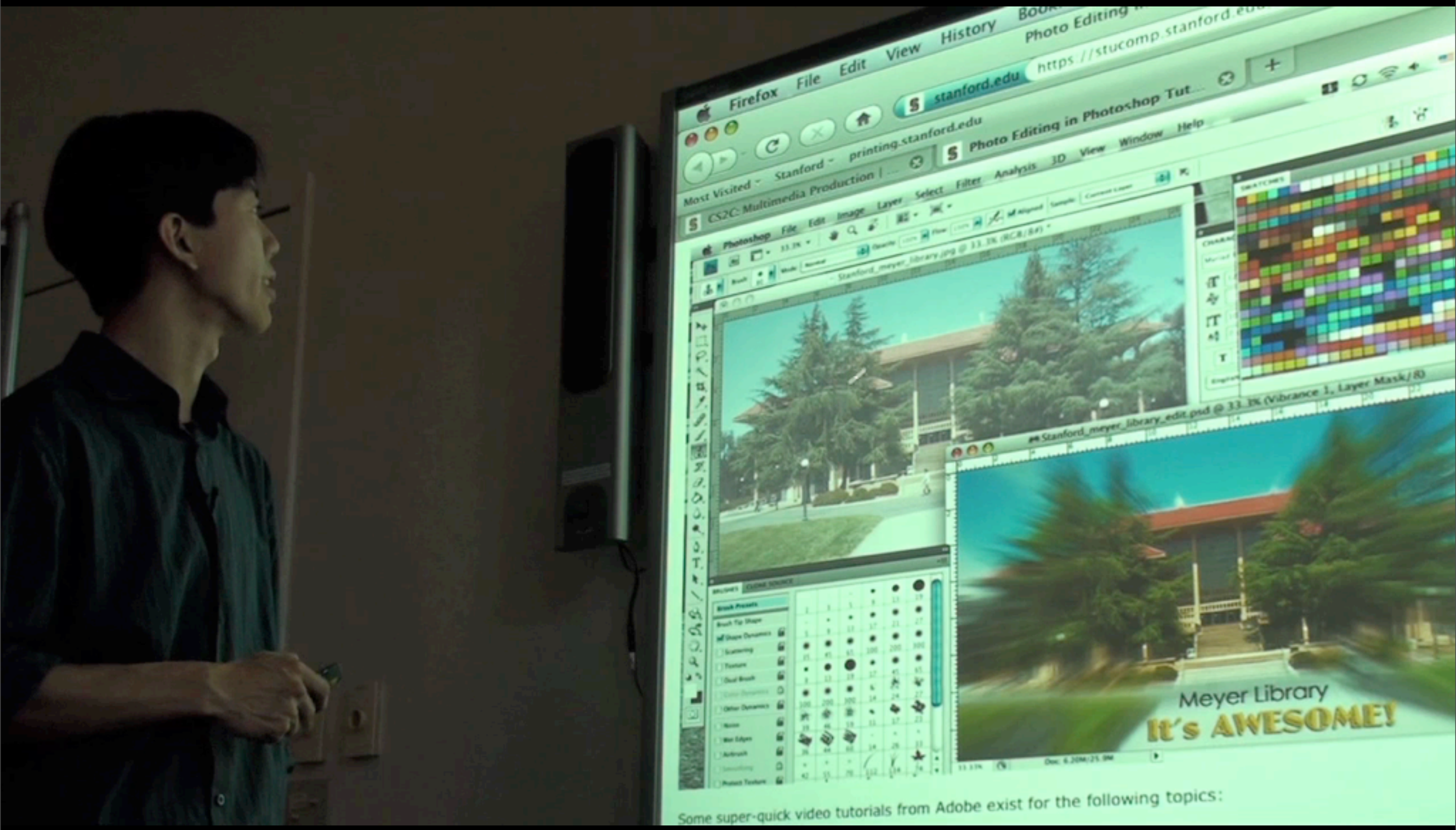



* Decreased numbers 2008-2010: Class got harder, more selective.
Passing Rate: 82% (Drops/Withdraws/Incompletes: students who got too behind)
* Presented at ResNet 2006: “Multimedia 101,” Year 2
* Another big change: Recognize two different mentalities: Tools and Projects
* Record high enrollment & completion rate this year!

2005: 4 sections, 30 students, 7.5 average students per section
2006: 6, 58, 9.7
2007: 9, 45, 5
2008: 13, 110, 8.5
2009: 21, 81, 3.9
2010: 18, 65, 3.6
2011: 20, 112, 5.6, 56 one-units, 56 two-units


* Approach: Modular curriculum of applicable skills
* 1-unit tutorials-only version of class
* Here is my vision of what the lecture/demo portion of class should be like...

Photo by John Nyberg




[Video] http://www.youtube.com/watch?v=pszsK6R1QtU
Interactive SmartBoard as cool teaching tool.
Invite students to solve tasks together.
Sections are self-paced. Everyone gets started, and RCC answers questions.

Video by Kim Hayworth

# Projects

2-unit tutorials + projects class. This is who we cater to. This is a production class. Expectation to create original work. Using the tools together. Watercolors: Not mixing. Play: Humor, fun. Complete class with real skills/work.

Photo by Zsuzsanna Kilian

# Music Composition

RCC's suggestion: Lower bar for admission. Make it fun.
Screenshot shows some requirements: blue track, green track, fades, 30 sec
[Music]

Cool GarageBand features: Multiple takes, Arrange Track, mix your own effects.

[Tutorial] http://acomp.stanford.edu/tutorials/garageband_music_composing

# Photo Editing

One photo only: Layer management, non-destructive editing
Apply adjustments, filters. Play with it. Try combinations of functions.
[Samples]

Cool Photoshop features: Layer masks, actions

[Tutorial] http://acomp.stanford.edu/tutorials/photoshop_photo_editing

Photo by Ellis Lau

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Photo by Ellis Lau


* Editing: The art of what to cut
* Meyer Closing Pilot. Voicemail

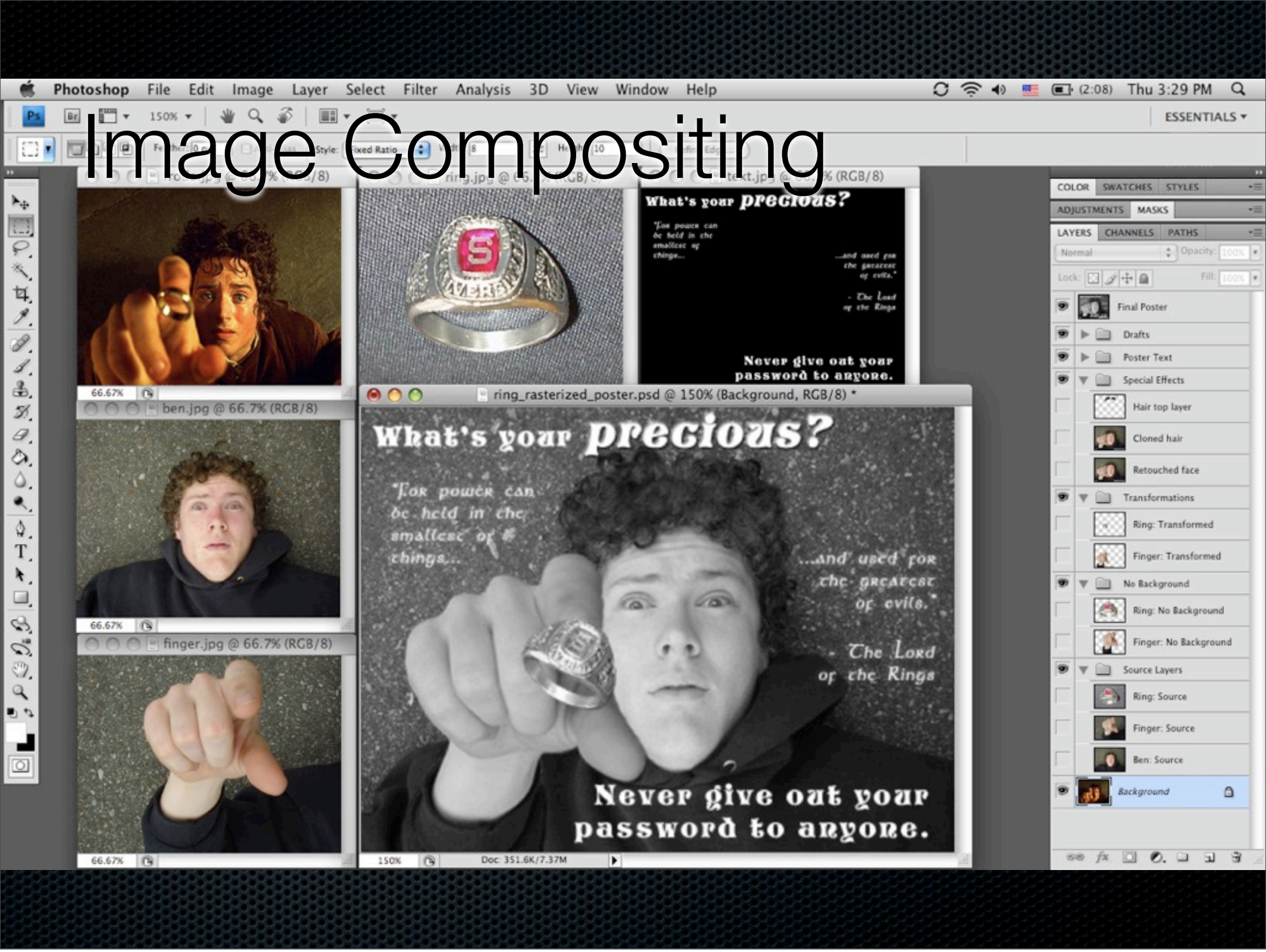
Cool GB features: Ducking is so-so. Enhanced tuning. Send Ringtone to iTunes.

[Tutorial] http://acomp.stanford.edu/tutorials/garageband_audio_editing

[Audio] http://www.youtube.com/watch?v=3808figJoBM
You can tell the work that went into audio project. Design and planning. Polish.

Photo by Fly For Fun @ Flickr.com

# Image Compositing




Continue layer management, non-destructive editing.
Montage/mashup. Video overview

Photoshop: Layer adjustments vs. adjustment layers.

[Tutorial] http://acomp.stanford.edu/tutorials/photoshop_image_compositing

# Image Compositing


[Video] http://www.youtube.com/watch?v=mp2nWSleE2c
30-second Photoshop Image Compositing Simulation done in Final Cut

Photos by Kenneth Chan


Create an ad for CS2C
Student Examples: Process

Photo by Qianwen Lin


Composites by CS2C students


Composites by CS2C students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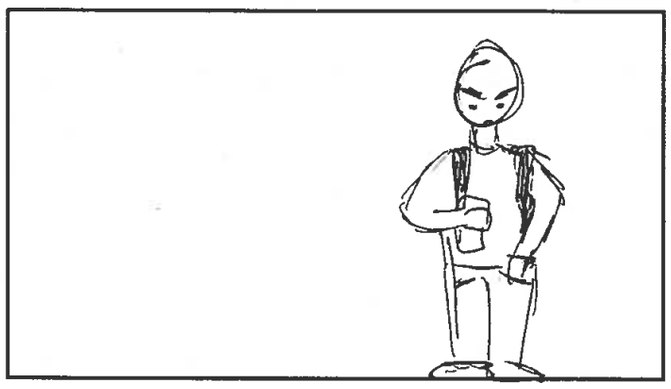
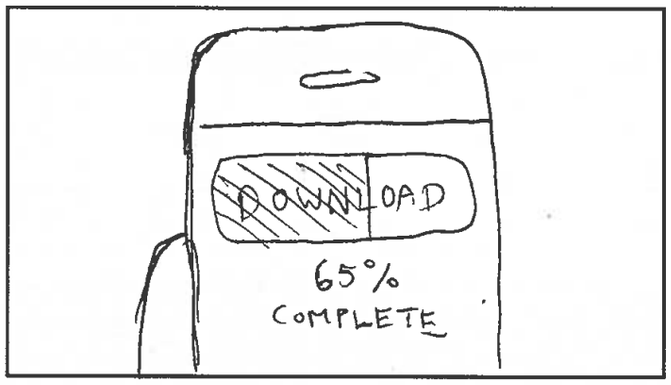
# Video Production

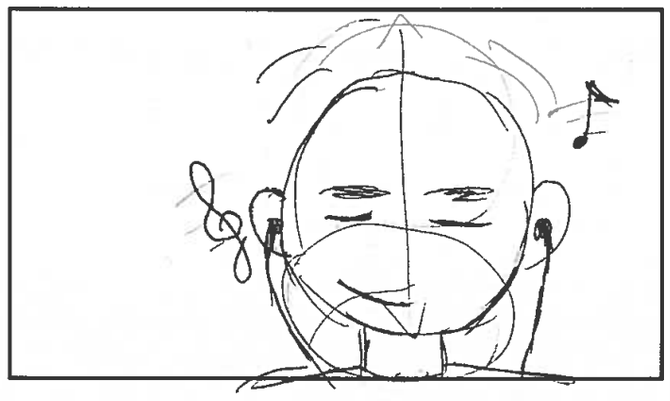

Mid-quarter: Video Pre/Production. Preparation and design process, before picking up camera. Foreign concepts.
Tutorial vids: Composition (rule of thirds), camera support, better audio, interviews
Pitch a one-liner, then build STORYboards: CS2C Trailer or title sequence: Camera POV. Story: Beginning, middle, and end

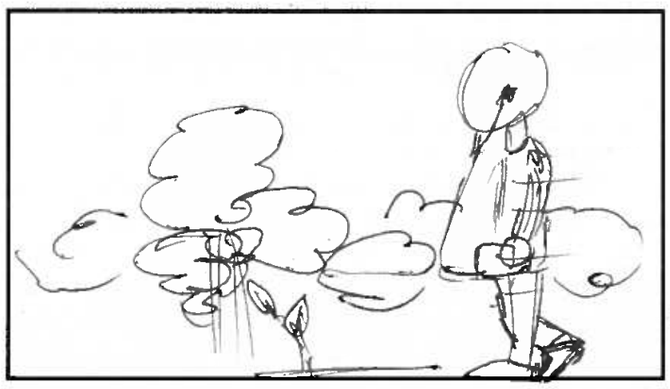
[Tutorial] http://acomp.stanford.edu/tutorials/video_production_basics

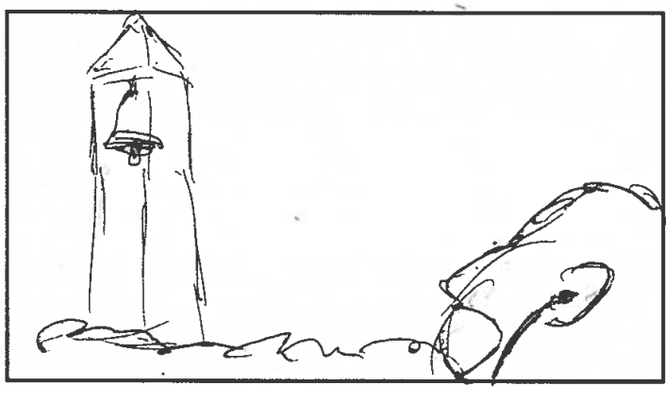
Photo by Trine de Florie

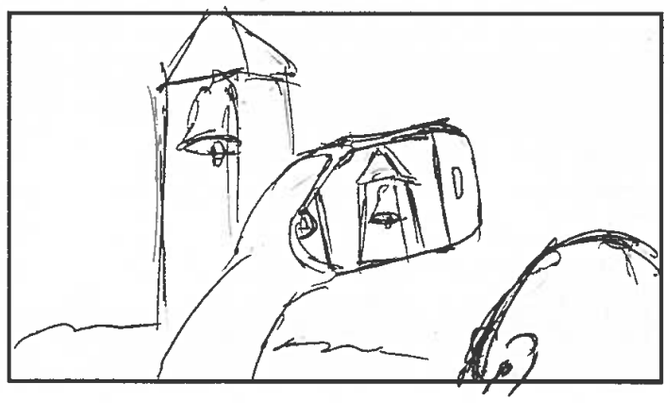


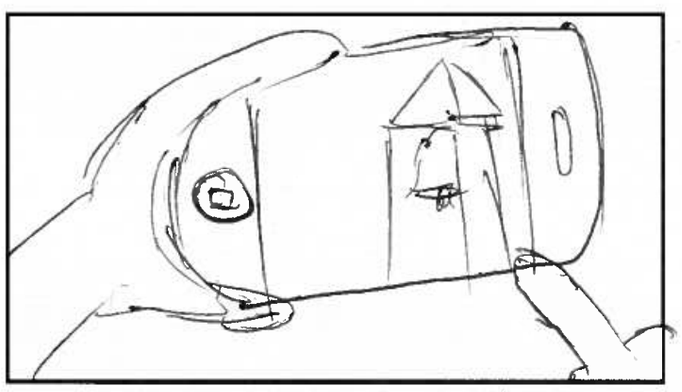











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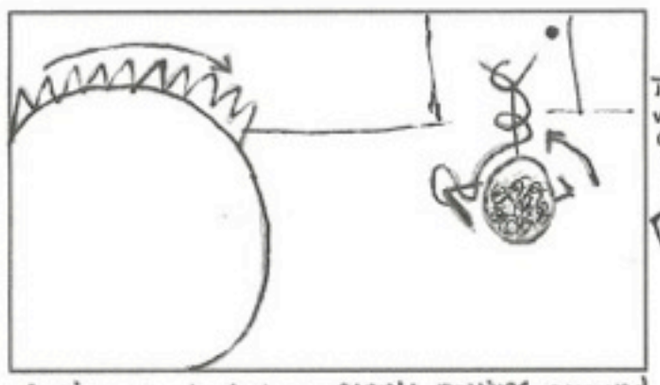
Editing genres; critique and revision

[Tutorial] http://acomp.stanford.edu/tutorials/storyboarding

Brian Guymon
CS2C "CS2CEPTION" Trailer
Project with:
Catherine Smith
Jake Harbour

Scenes: 17-265

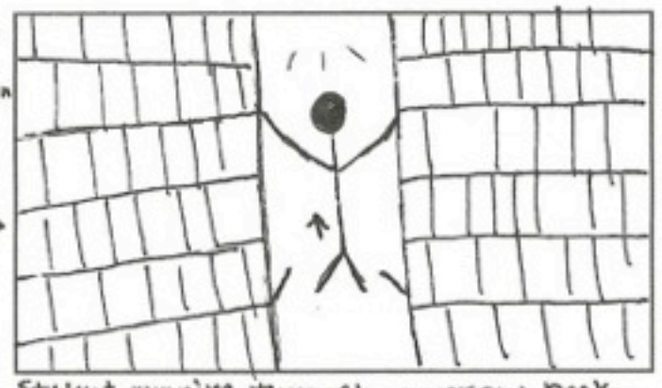
17.



Action shot of two people rolling around, tangled in computer cables. The person in the forground rolls right, while the person in the background rolls left. Takes place in computer cluster.

18.

Transition with actors name

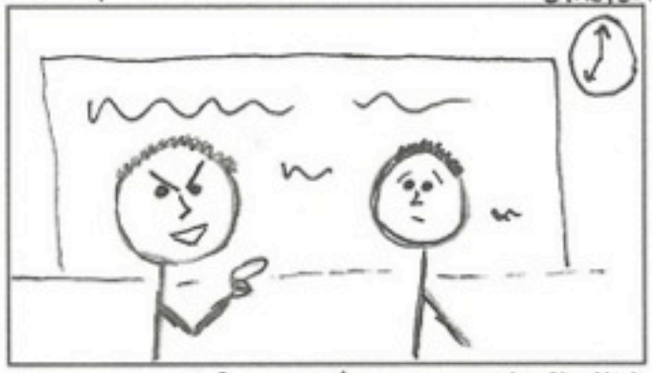


Student running through narrow book shelves. Voice over: "Photos look real when we edit them. Its only when we look at the layers we realize something is actually strange"

19.

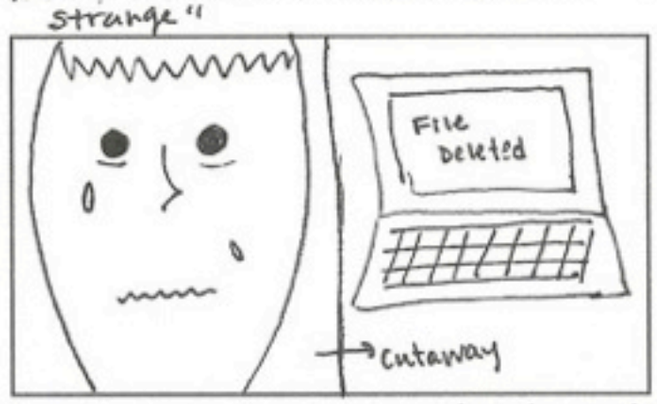

Conversation at Cotto. Establishing shot for conversation at Cotto, Finish voiceover and immidiatley cut to explosion on laptop for dramatic effect.

20.



Pan around from left to right. Student forcefully encouraging another to take CS2C saying "This is a great opportunity, anyone can do this!"

21.




Moment of sadness after a file is deleted. Close up on a crying character, zooming out. Followed by zoom in of screen showing file deleted.

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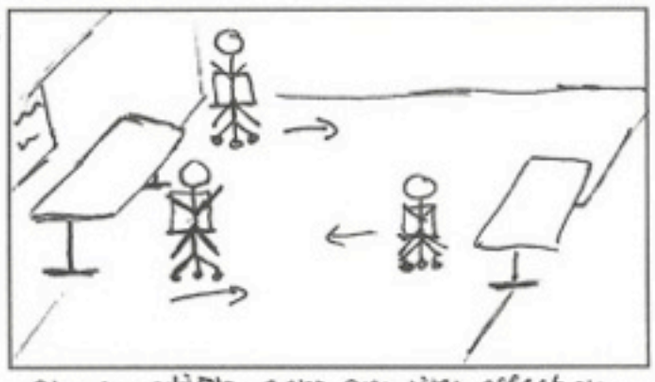
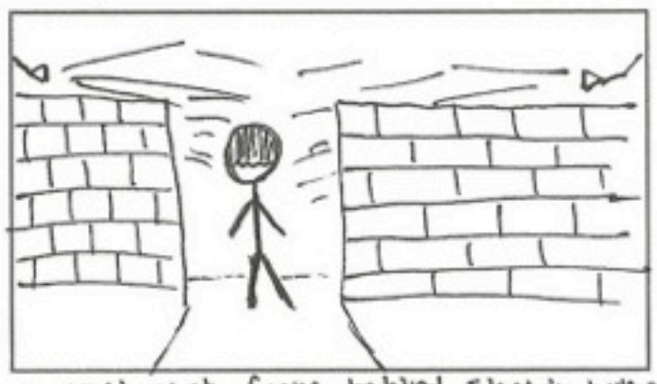


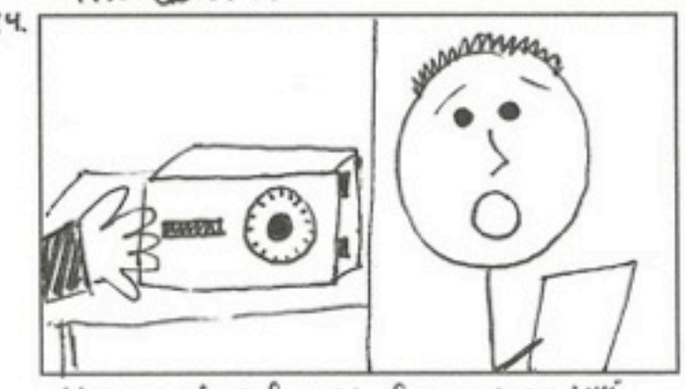
Slow motion, zero gravity effect on rolling chairs in computer cluster. Students start focused on computers then all at once thrust backwards for dramatic "explosion".

23



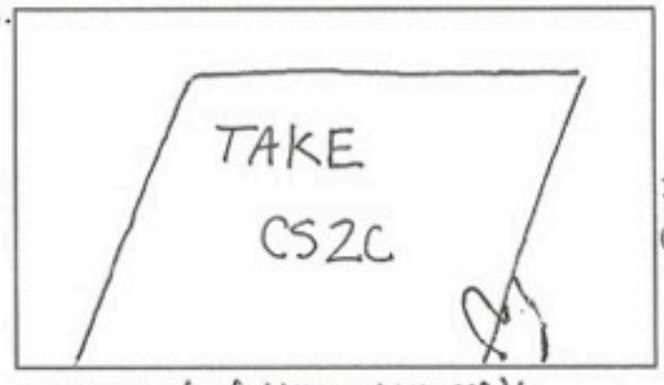
Centered shot from behind. Shot in bathroom, all showers running to show "dream" collapsing.

24.



Closeup of safe and from characters perspective opening the safe and pulling out whats inside. View of character holding folder with shocked look on face.

25.

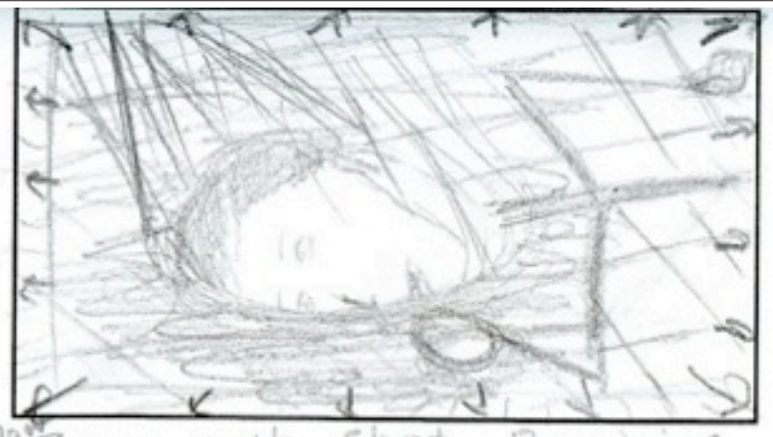



CS2CEPTION Title

Close up of folder which reads "TAKE CS2C" thus illustrating the CS2CEPTION which has taken place. Immidiatley fades to black for dramatic effect.

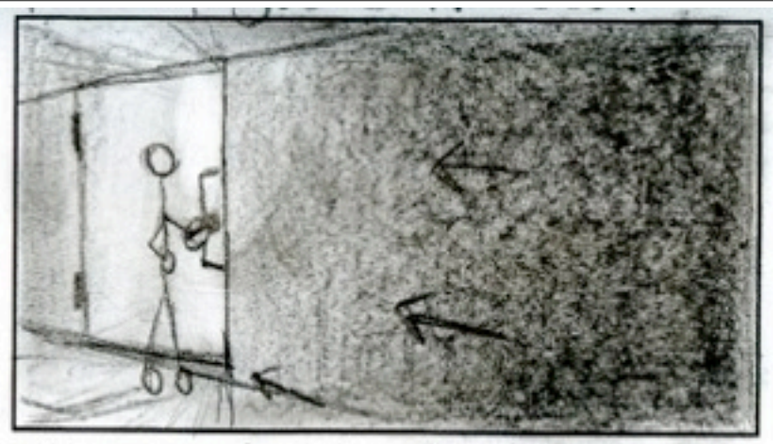
After approval, go out and shoot. Collaborate as group (good to define roles).
Editing genres; critique and revision

[Tutorial] http://acomp.stanford.edu/tutorials/storyboarding



Slow: Zoom out shot. Boy lying on floor of bathroom showers, water running.

New scene: Dark hallway. Move down hallway towards door as it is being opened.
(Dialogue over scene)

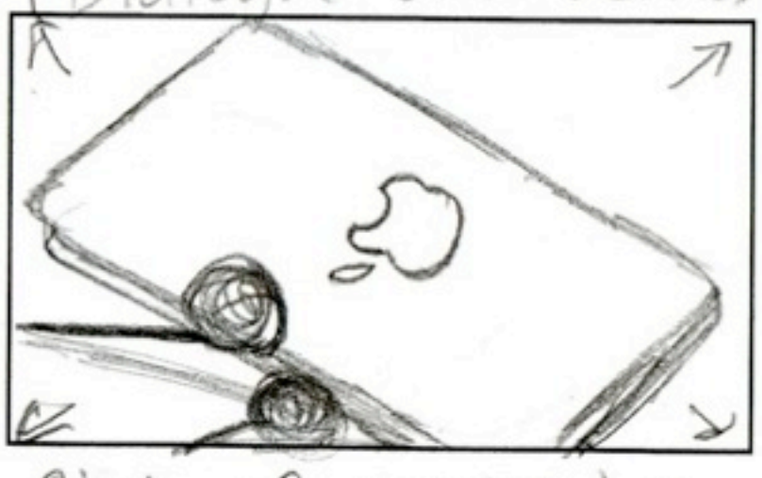


Move closer, slowly, as door opens and light spills into the hallway..

New scene: Plug going into socket. Steady shot. Spotlight on outlet.
(Dialogue over scene)

Fast zoom as cord is plugged in. Light increased.

New scene where dialogue has been taking place. Steady shot. Short. Sitting on couches in lounge.



Shot of opening laptop with two hands. Slow zoom out

Open laptop. stop zoom.

Angle: Back to couch seen. close shot, continuing dialogue slightly above subjects.

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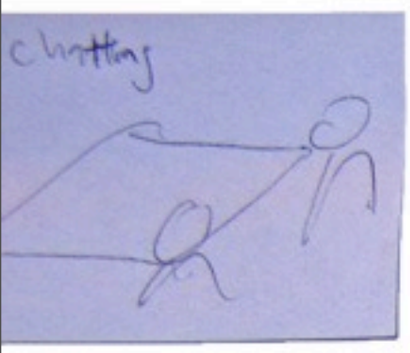


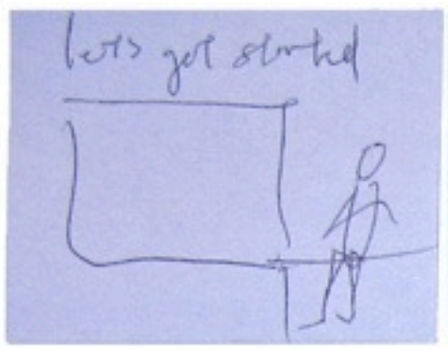


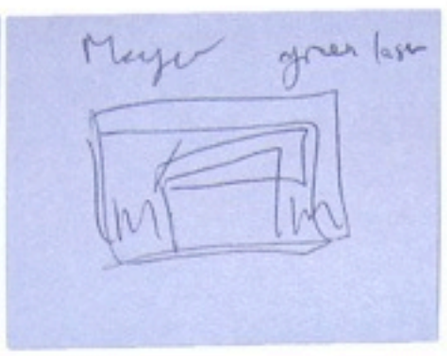



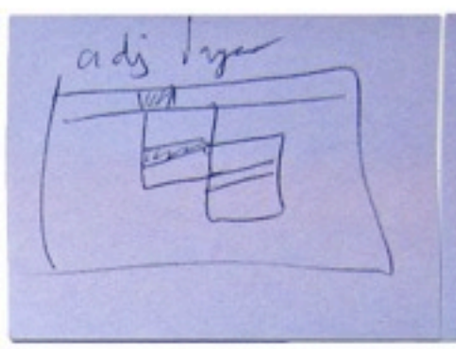


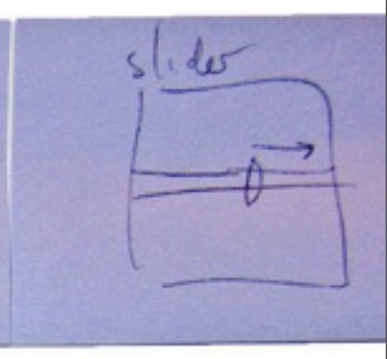


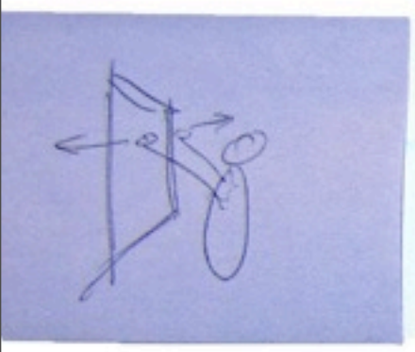

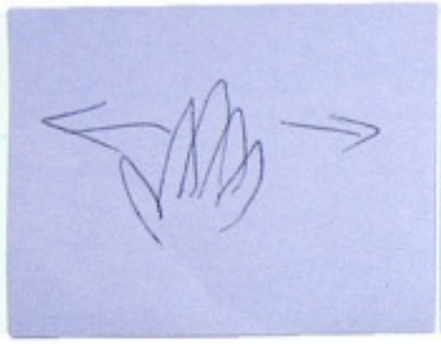

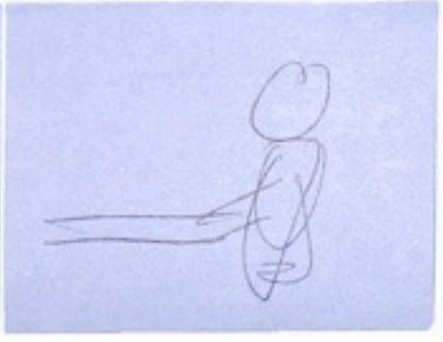

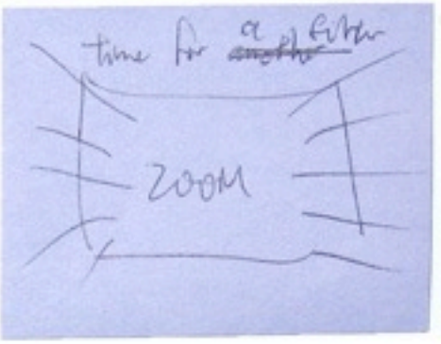


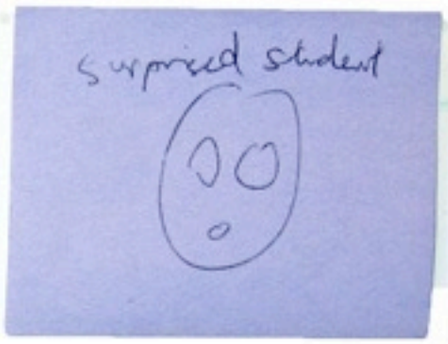


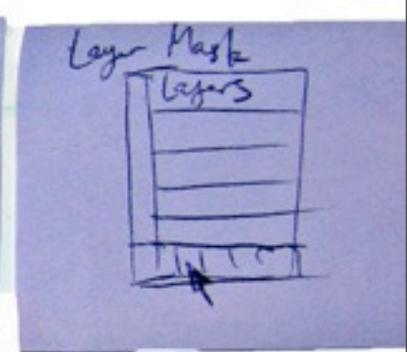


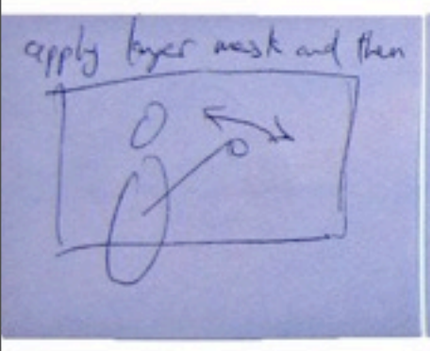


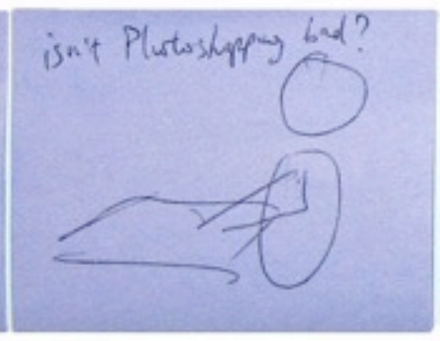




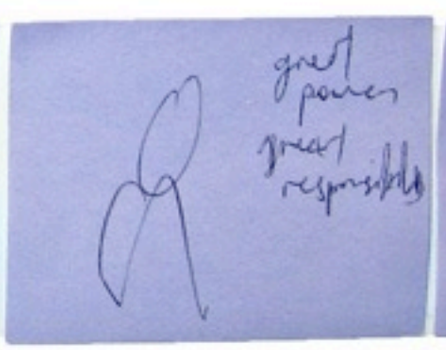


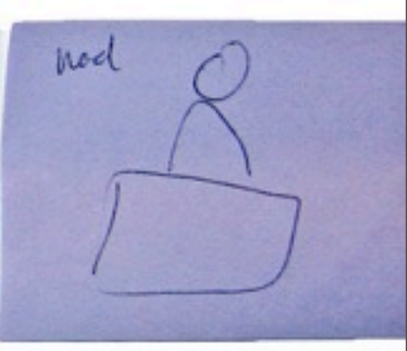


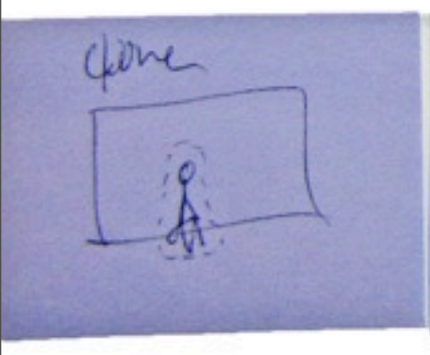



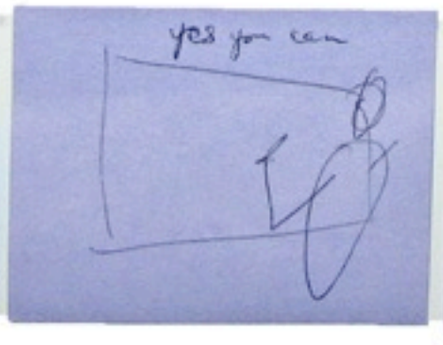




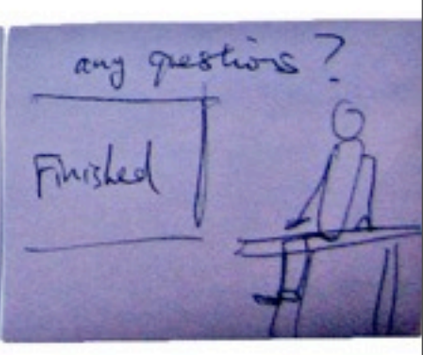


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Editing genres; critique and revision

[Tutorial] http://acomp.stanford.edu/tutorials/storyboarding

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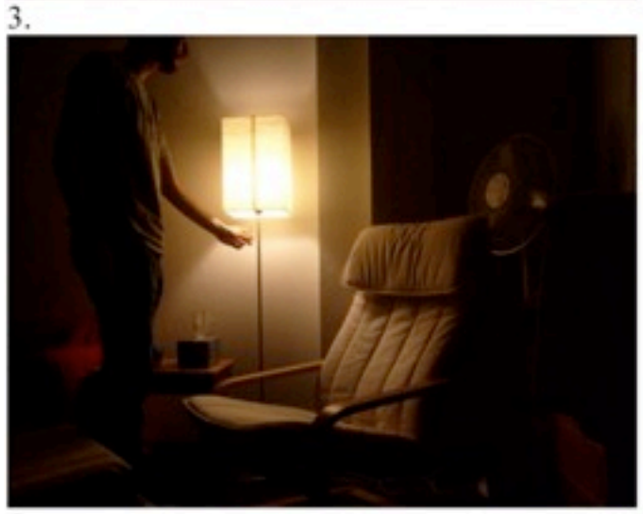

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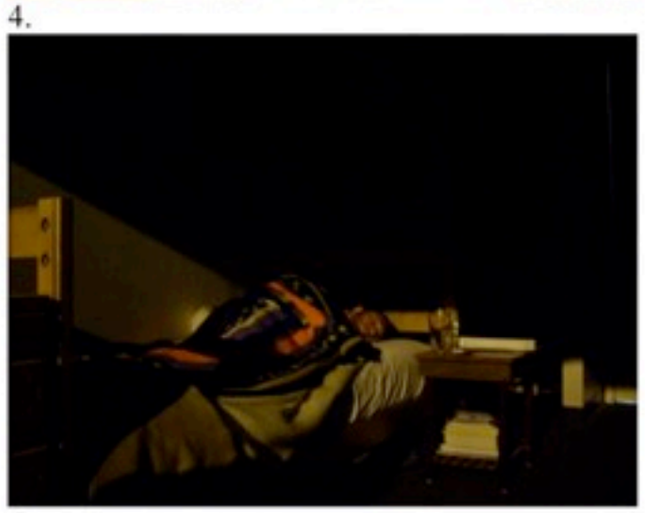

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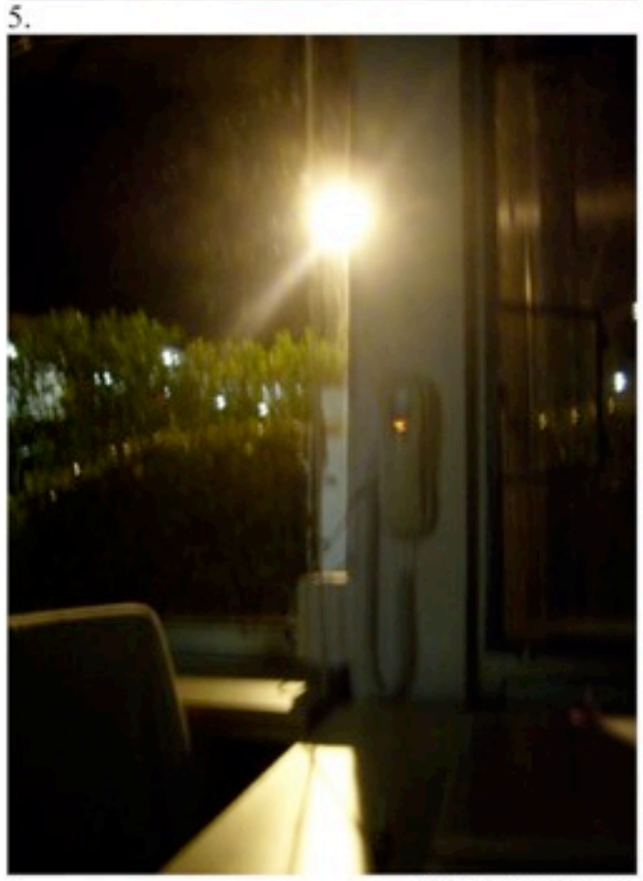

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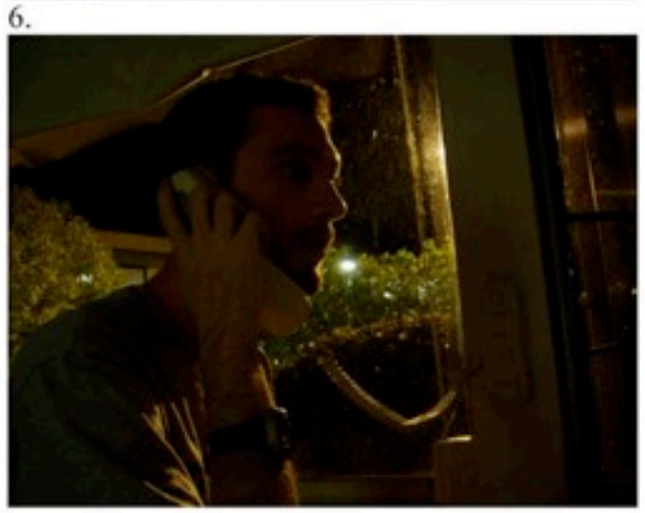



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# Video Editing


iMovie 11 & 09 superior to 08 and 06. Haven't tried Win MovieMaker in long time
Export to YouTube for CS2C playlist.

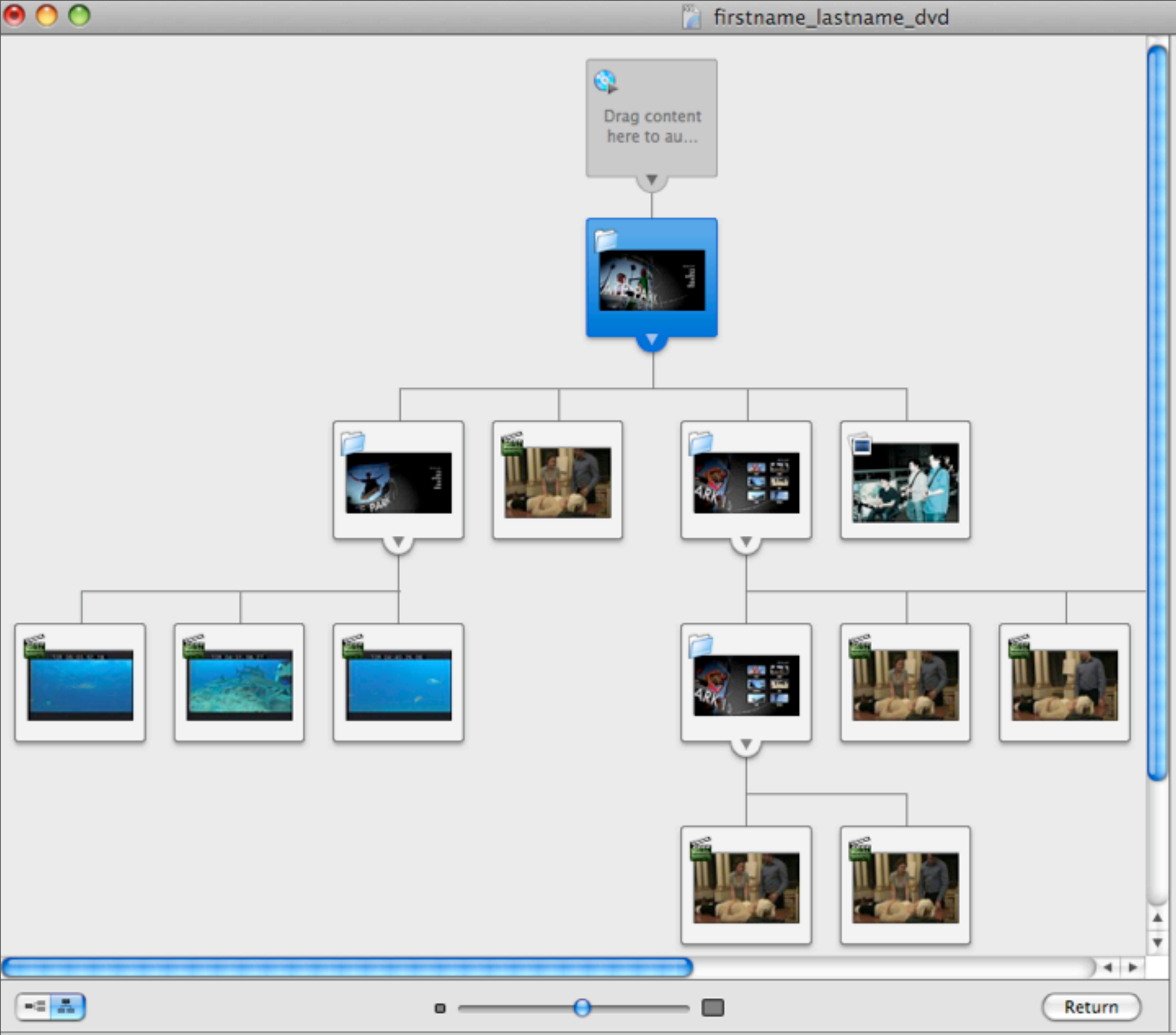
Cool iMovie 11 features: Green screen, audio waveforms, beat markers, timeline view, trailers,
Cool iMovie 09 featues: Pic-in-pic, animated travel maps, asset management, copy project to HD -- not just the project file!

[Tutorial] http://acomp.stanford.edu/tutorials/imovie_video_editing


Self-contained package. Gift for recipient, no worries about format.
Symphony of original projects, delivered as a tangible product.

Cool iDVD feature: Scene selection editing. Burn as Disk Image

[Tutorial] http://acomp.stanford.edu/tutorials/idvd_authoring




Screenshot to verify/enforce planning

Steve Jobs hinted at death of DVD in 2008


* PowerPoint, Keynote; Web design and authoring
* Main constraint: TIME
* Other resources on campus to learn

Photo by Patrick Moore

# What worked


Self-paced tutorials, take care of 1-unit.
Peer teaching; motivated RCCs, motivated students
Constraints on projects

Photo by Kenneth Chan

# Resource Challenges


Class growth limiters: qualified RCCs, marketing to increase demand.
Turnaround time for grading. Clear rubric.
Mass storage, equipment inexperience. Computer cluster differences. Google is your friend, usually.
TIME: training time, lab time, face time

Image by Mark Evans


Student perceptions of quality standards -- show examples of good work. When to ask for help. Commitment to amount of work.
Past problems: Copyright in mashups; Overly open-ended projects: no focus, double-dipping self-plagiarism
Empathy: The Struggle; understand your audience and how not to waste their time
* But what did the students think? Exit interview results

Photo by Steve Ford Elliott


[Video] http://www.youtube.com/watch?v=Cv0xSVD2ob4
* Shown at beginning of quarter

[Tutorial] http://acomp.stanford.edu/tutorials/screenshots

# Next Steps

Take what's working and go deeper with it.
Clearer expectations, well-defined assignment constraints, overarching goal -- the video. In-class brainstorming to stimulate ideas. Iterative process.
Better delivery and project presentation among peers. Efficient grading, allowing for feedback and revision loop.
Digital Media Consultants: Analogous to writing tutors. Mandatory consult and revision. http://hwc.stanford.edu
Faculty support, cross listing, must-take class.
Working with Academic Technology Lab http://acomp.stanford.edu/atl to develop "How to create a multimedia assignment" workshop for faculty.

Contests: Photoshop posters, Same Day Edits
CS3C: Feet wet, learned to swim. Who wants more?

Photo of Churaumi Aquarium by Fumio Kaneko

# Questions?

- Kenneth Chan, niftyken@stanford.edu
- Class: http://cs2c.stanford.edu
- Learn: http://www.apple.com/ilife/resources
- Stock photos and videos from http://www.sxc.hu, http://www.istockphoto.com, http://www.footagefirm.com, http://www.kennethphotography.com
- Eval: http://resnetsymposium.org/rspm/evaluation

The CS2C class site http://cs2c.stanford.edu presents syllabus, class expectations, grading criteria, recommended online resources, sample work.

Motion graphics by FootageFirm.com