Using Flash
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ICTCM – Workshop
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Our Visual World

- Visual communication
- Visual understanding
- Visual IQ
- Visual Mathematics

The Visual Student
Toward visualization - 1900-2000

- Textbooks then and now
- Graphics/Charts
  - Graphing calculators
  - Computer Algebra Systems
- Animations
- Visual interactivity
Animations - Static

- Static – one way communication
  - Animated GIF's
  - AVI, MOV, WMV, RN
Animations - interactivity

- JAVA
- Maple – Mapletts
- MATLAB – GUI
- Geometer Sketchpad – Java applets
- Mathematica
- FLASH
Levels of Interactivity

Level 1 – A static image or animation – the student views passively

Level 2 – The student presses a button or location for some effect

Level 3 – The application interacts with the student conditionally

Level 4 – The application interacts conditionally and maintains database records
FLASH design

- Visual effects
- Interactivity
- Animation
- Internet
FLASH - features

- Full mathematics functionality
- No client expense
- Uniform cross-browser functionality
FLASH - application

- Simplicity
- Menu driven animations
- Full programming language – Action Script
- Huge support services
FLASH - technical

- Made by Macromedia
- PC and MAC versions
- Flawless operation
- Inexpensive (< $100 academic)
FLASH - Questions

What can Flash do easily?
What can Flash do - period? – pushing the envelop
What can Flash do in the mathematics classroom?
What can Flash do that the instructor cannot? – the hope of technology
Flash – learning curve

This workshop
- Level 1 – basic animations
- Level 2 – limited interactivity

When you return home...
- Level 3 – actual conditional interaction
- Level 4 – advanced applications
This workshop

- Demonstrations
- Hands on working
- Project oriented
- Self-paced
- Individual help on projects
Flash in your Future

Presentations at ...
- ICTCM, AMATYC, MAA meetings

Classroom
- Better instruction of your students
- Showing colleagues the “better” path

Publications
- Joma
- Math/Sci Newsletter