



Web Support for Teacher Preparation

Brian Adrian & Dean Zollman
Kansas State University
and
Scott Stevens
Carnegie Mellon

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We can all use help sometime

- Everyone
 - New teachers
 - New-to-physics teachers
 - Experienced teachers
- With different aspects
 - Getting started
 - Expertise
 - Fresh perspectives



What resources do we have?

- Printed material
- Web resources
- Experience
- Co-workers
- Each other
- Mentors
- Experts



Physics Teaching Web Advisory PATHWAY

- Proof-of-concept demonstration of a new type of digital library for physics teaching.
- Combining
 - CMU digital video library technology
 - KSU Physics Education expertise
 - Materials contributed by teachers



More than a collection

- Builds on a unique collaboration
 - Digital video libraries
 - Advanced distance learning & collaboration technologies
 - Nationally known experts in physics pedagogy and high quality content.
- Continuously improving assistance and expertise for teachers of all levels



PATHWAY Components

- Synthetic Interviews
- Digital Video Data Base
- Connections to
 - National Science Education Standards
 - Research in Physics Education
 - Helpful Web sites
 - National Science Digital Library



Synthetic Interviews (1 of 3)

- Have been created for
 - medical advice
 - “conversing with entertainment, sports and historical figures.”
- PATHWAY builds on these experiences.

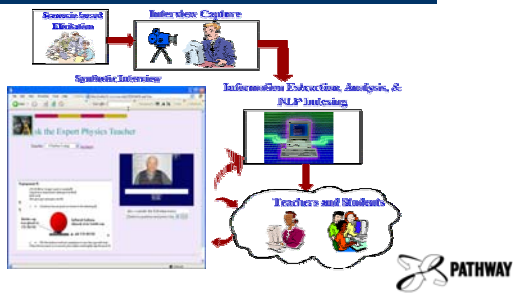


Synthetic Interviews (2 of 3)

- Interface very similar to *conversing* with an expert
- Video and other information stored in a database
- Selected & presented when a teacher asks a question.



Synthetic Interviews (3 of 3)



Question:



To start ...



Please select who you would like to answer your question:
[Paul Hewitt] v

Question: [What math background is needed to study kinematics?]

Quick Questions:
[Acceleration...] v

History:
[Select one...] v



Choose an expert



Please select who you would like to answer your question:
[Paul Hewitt] v
[Roberta Lang] v
[Paul Hewitt] v
[Chuck Lang] v

Question: [What math background is needed to study kinematics?]

Quick Questions:
[Acceleration...] v

History:
[Select one...] v



Enter your question



Please select who you would like to answer your question:

Paul Hewitt

Question: [What math background is needed to study kinematics?]

Ask

Quick Questions:

Acceleration...

History:

Select one...



Or choose from Quick Questions



Please select who you would like to answer your question:

Paul Hewitt

Question: [What math background is needed to study kinematics?]

Ask

Quick Questions:

Acceleration...

Select one:

Teaching kinematics...

Constant force...

Acceleration...



Or select from previous questions



Please select who you would like to answer your question:

Paul Hewitt

Question: [What math background is needed to study kinematics?]

Ask

Quick Questions:

Acceleration...

History:

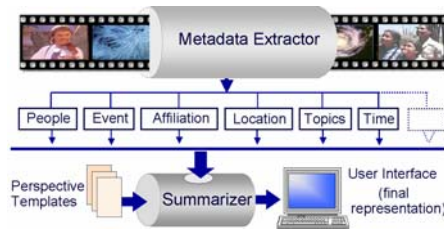
Select one

Select one

When do you teach vectors?

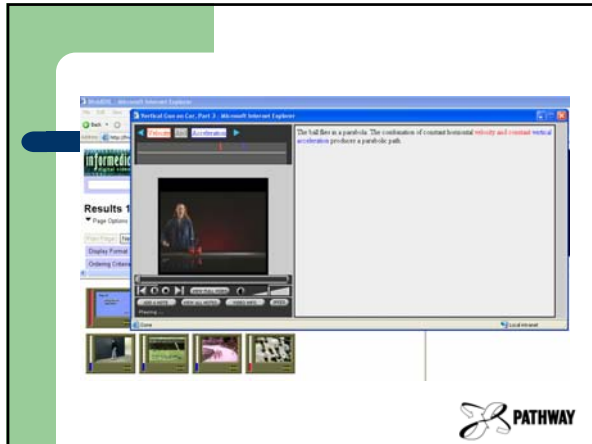


informedia digital library




- Automatically extracts metadata from video and audio.
- Information used to create a database of video information
- Can be searched in a variety of ways.





You can help

- Suggest questions to ask the experienced teachers
 - Kinematics and Dynamics
 - Other topics later
- Try the system
 - Available now at www.physicspathway.org
- Give us feedback




Project Website


<http://www.physicspathway.org>

Physics Teaching Web Advisory

[>> Ask Questions about Physics Teaching](#)

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Best View: 1024x768, IE 5.0 or better | Last Updated: 20091218 | Created and Maintained by Chih-yu Chao | 



Questions or Comments?

- Brian Adrian
- badrian@phys.ksu.edu
- www.physicspathway.org

THANK YOU!

