

Online Support for New Physics Teachers

Brian Adrian and Dean Zollman

Kansas State University
and

Scott Stevens
Carnegie Mellon University



Supported by the National Science Foundation under grant numbers DUE-0226157, DUE-0226219, ESI-0455772 & ESI-0455813

Saturday, Oct 27, 2006

AOK Emporia State



Physics Teaching Web Advisory PATHWAY

- A new type of digital library for physics teaching
- Combining
 - CMU digital video library technology
 - KSU Physics Education expertise
 - Materials contributed by teachers
- Offering continuously improving* web-based assistance and expertise for teachers of all levels

* mostly

www.physicspathway.org



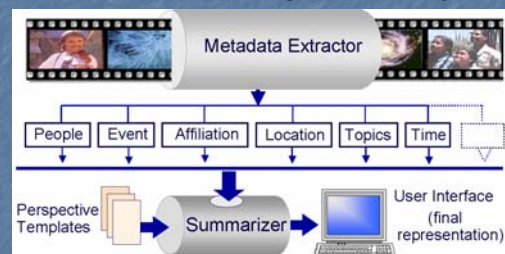
PATHWAY Components

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

www.physicspathway.org



informedia digital library



www.physicspathway.org



www.physicspathway.org



www.physicspathway.org



Right now

- Over 100 clips
- 20 from the Video Encyclopedia of Physics Demonstrations
- Not downloadable

www.physicspathway.org



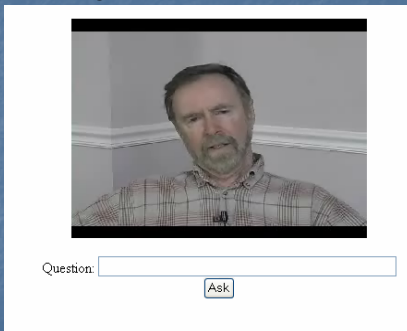
Soon*

- Add Paul Hewitt Workshops
 - 8 lessons on teaching conceptually
 - 1 lesson on cartooning
- Add contributed videos
- Perhaps add some SI videos

www.physicspathway.org



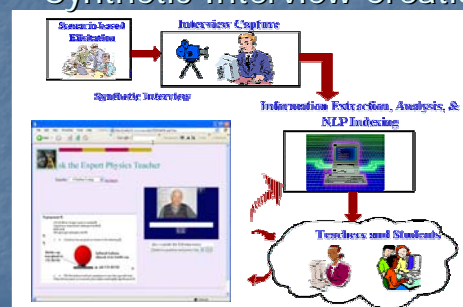
A Synthetic Interview



www.physicspathway.org



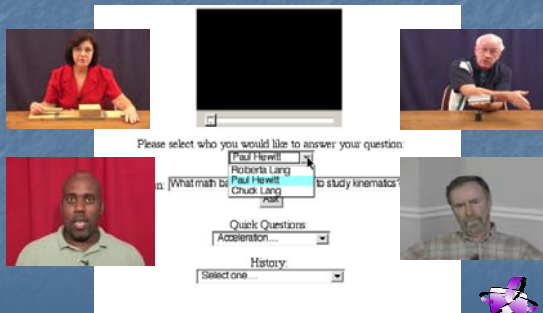
Synthetic Interview Creation



www.physicspathway.org



We Offer Multiple Personalities



www.physicspathway.org



Responses Available Now

- Global answers
- Answers to background questions
- Answers about tools
- Many kinematics answers
- We have answers to more than 1,000 questions!

www.physicspathway.org



Who is asking questions?

- Pre- and In-service teachers
- Meeting attendees
- Workshop participants
- Others
 - Project staff
 - Testers
 - Random people?

www.physicspathway.org



What are they asking? n=2498 questions

- 70% pedagogical
- 12% content
- 8.0% single word or concept
- 6.3% miscellaneous
- 2.0% demonstrations
- 1.4% activities
- 0.2% assessment

www.physicspathway.org



Features to add

- Literature info
- Associated media
- Science Standards
- Feedback links
- FAQ list
- Topics list



www.physicspathway.org



We would like your help

- Suggest features or questions
- Try the system at www.physicspathway.org
- A workshop today at 4:00
- Give us feedback
 - Follow link on SI page
 - Fill out form now
 - Email badrian@phys.ksu.edu

www.physicspathway.org



Questions or Comments?

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

THANK YOU!

www.physicspathway.org

