Web Support for Teacher Preparation

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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)

To start …

Choose an expert
Enter your question

Or choose from Quick Questions

Or select from previous questions

informatics 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.
Example

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

Questions or Comments?
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THANK YOU!