

Welcome to MATEC NetWorks Webinar

Learning Objects:

What are they? How do you use them?

MATEC NetWorks is an NSF funded ATE Center supporting faculty in Semiconductor, Automated Manufacturing, and Electronics education

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COLLEGES**

NetWorks is a part of MATEC, a member of
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at the
Maricopa Community College District.



National
Science
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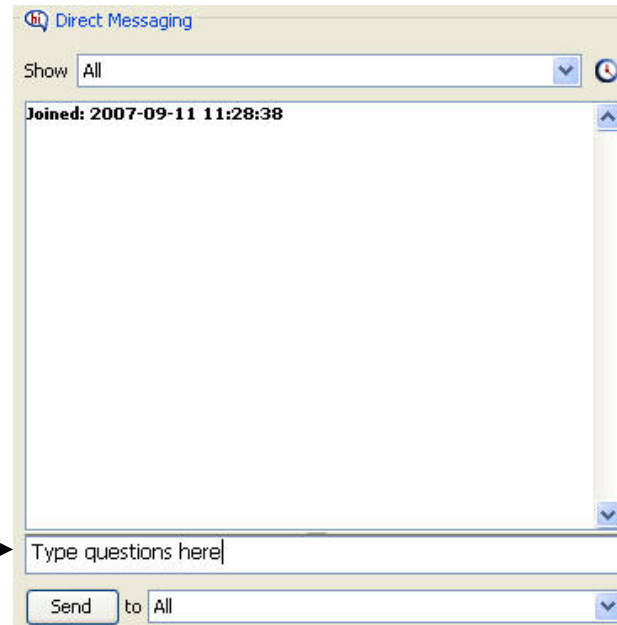


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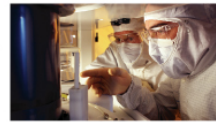


Webinar Procedures

- If you are listening by phone, please mute your phone by pressing #5.
- If you have questions during the presentation, please submit them to “All” in the **Chat Box** so that others can follow along with the Question and Answer.
- We will answer questions as time permits and may further address them at a later date.



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Poll

Participants

- Mark Viquesney (Moderator, Me)

1 Participant

Raise hand/smile/clap

Chat

Show All

Joined on February 25, 2009 at 1:08 PM

Chat

Send to This Room

Audio

Microphone Speaker

Ctrl+F2

Whiteboard - Main Room

15/29 Welcome to MATEC NetWorks Webinar

Follow Moderator Roam

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NetWorks Webinar

June 18, 2009

Learning Objects:

What are they? How do you use them?



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NetWorks Webinar Presenters



Terry Bartelt has been an instructor at Fox Valley Technical College in Appleton, Wisconsin since 1981. In 2005, he received a second NSF grant to produce learning objects for the advanced courses in the Electromechanical Technology program.

920-735-4867

Barteltt@fvtc.edu



Josh
Janikowski

Dean
Lodes

Multimedia Developers creating eLearning material (animation, audio, video, etc.) for educational purposes



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Terry's Introduction to Learning Objects

7 years ago...



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Terry's Introduction to Learning Objects

No idea...



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Learning Object is

A learning object is not a complete lesson



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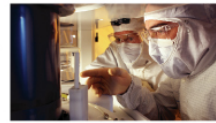
Learning Object is

a brief presentation on a computer that addresses at least one concept, and possibly up to five of them.

They are granular



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Learning Objects

often use animations.
Effective for visual
learners.



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Learning Object Example

Forklift LO

http://www.wisc-online.com/objects/index_tj.asp?objID=SFT4705



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Learning Objects

Textbook example



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Optional Features

Animations

Video Clips

Audio

Simulations

Interactive



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Questions from the Audience



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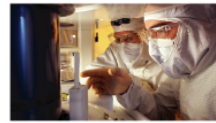


Learning Object Enthusiasm

Because I had to...



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Learning Object Enthusiasm

Student feedback



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Come Again?

Same question 4X this week...



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Come Again?

Test Questions



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More Grants

NSF Program Officer Visit



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More Grants

Electromechanical Program Audit



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NSF Funded

<http://wisc-online.com/bartelt>

Search Learning Objects

GO

Automation

Process Control

DC Electronics

AC Electronics

Solid State

Digital

Ladder/PLC's

Mechanical Drives

Mechanical Linkages

Hydraulics

Pneumatics

Robotics

Sensors

Generators/Distribution

Electric Motors

Variable Speed Drives

Wisconline.org
gets 6.1 million
hits per month



Home

Assessment

Partners

About Our Digital Library

Click on the green buttons on the left to view the learning objects in those categories.

These interactive learning objects focus on concepts that cover a broad-based electromechanical program. The majority of these objects have been created for electronics, but during the next three years (until 2008), at least 300 more objects will be built that will focus on other topic areas such as hydraulics, pneumatics, mechanical design, and process control (see complete list on the left side of this page).

Instructors from Fox Valley Technical College and other colleges in the Wisconsin Technical College System are creating these objects. FVTC has partnered with four other colleges throughout the United States that will be contributing to this repository. The effectiveness of learning objects was demonstrated in an evaluation conducted at FVTC during the 2004-2005 academic year. A brief summary of the evaluation can be read by clicking on the Assessment button on this Home Page.

These objects can also be found on the Wisc-Online digital library at www.wisconline.org. Learning objects are available to be used at no cost by teachers and students worldwide via the Internet. For more information about these learning objects, contact Terry Bartelt, electromechanical technology instructor, 920-735-4867, barteltt@fvtc.edu.

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In cooperation with:



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Questions from the Audience



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How Can Learning Objects be used?

Assigned



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How Can Learning Objects be used?

Improve efficiency of instructor's time

- 4th Question in 2 weeks
- 2 Lines for calculators



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How Can Learning Objects be used?

To peak interest of students

- **Electromagnetic Waves**

http://www.wisc-online.com/objects/index_tj.asp?objID=DCE15006



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How Can Learning Objects be used?

Applied Math

- **Circuit Protection**

http://www.wisc-online.com/objects/index_tj.asp?objID=DCE602



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How Can Learning Objects be used?

Worksheets

Microscope example

http://www.wisc-online.com/objects/index_tj.asp?objID=BIO905



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How Can Learning Objects be used?

Review Instruments

Oscilloscope example



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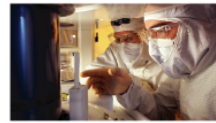


How Can Learning Objects be used?

Lecture



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How Can Learning Objects be used?

Tutorials

- 15 Steps to set-up Ethernet communications



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How Can Learning Objects be used?

Review Materials

- Concepts
- Job interview written examination

http://www.wisc-online.com/objects/index_tj.asp?objID=SSE4803



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How Can Learning Objects be used?

Your own website



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Questions from the Audience



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Wisc-online

2350 Learning Objects

http://www.wisc-online.com/objects/index_tj.asp?objID=AP1101

www.wisconline.org

6.1 Million Hits in October 2008



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Roles of the Wisconline Team

Author

Multimedia Technicians

Editor



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New Multimedia Instruments



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Games

Josh Janikowski



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New Multimedia Features

Dean Lodes



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Questions from the Audience



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Impacts of Learning Objects

Case Studies

Circuit Assembly

http://www.wisc-online.com/objects/index_tj.asp?objID=DCE7004

Energizing Time Constants of an RL Circuit

http://www.wisc-online.com/objects/index_tj.asp?objID=ACE4903



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Impacts of Learning Objects

Evaluation for First NSF Grant



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Questions from the Audience



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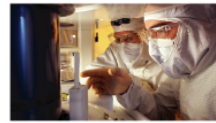


Future Webinars

- Coming soon the 2009/10 schedule – watch for the schedule at www.MATECNetWorks.org



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Join Us in Scottsdale, AZ on July 19-22, 2009



<http://www.highimpact-tec.org/>



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Webinar Recordings

To access this recording,
visit matecnetworks.org,
in the Keyword Search:
“learning objects webinar”.



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