LIVE INTERACTIVE LEARNING @ YOUR DESKTOP

New Resources and Tools

February 25, 2010

Presented by: Flavio Mendez
Senior Director

http://learningcenter.nsta.org
Agenda

- Learning Center Overview
- New resources
- Using the “My Library” Tool
- See you in Philadelphia?

http://learningcenter.nsta.org
Overview
NSTA’s e-PD portal designed to help science teachers address their content/classroom needs.

With over 4,500 resources and practical tools to help you organize, personalize, and document your PD growth over time.

http://learningcenter.nsta.org
Feb. 25, 2010:

Over 58,000 active users with over 393,000 resources across their libraries.
The Learning Center has over 4,500 resources

<table>
<thead>
<tr>
<th>Do-It-Yourself Learning</th>
<th>Live Online Seminars &amp; Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Objects [67]</td>
<td>Short Courses [20+/year]</td>
</tr>
<tr>
<td>SciPacks [17]</td>
<td></td>
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<tr>
<td>Archived Seminars/Podcast [350+]</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Books &amp; Articles</th>
<th>In Person Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Articles [2800+]</td>
<td>Symposia [6-10/year]</td>
</tr>
<tr>
<td>NSTA Press Books [250+]</td>
<td>PD Institutes [6-10/year]</td>
</tr>
<tr>
<td>e-Books [125+]</td>
<td></td>
</tr>
<tr>
<td>e-Chapters [780+]</td>
<td></td>
</tr>
</tbody>
</table>

Over 1,300 resources are FREE to all teachers!
I have used the following resources from the LC

<table>
<thead>
<tr>
<th>Science Objects</th>
<th>Journal Articles</th>
<th>Web Seminars</th>
<th>Web Seminar Archives</th>
<th>Podcasts</th>
<th>Online Short Courses</th>
<th>SciPacks</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>Courses</td>
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<td>Courses</td>
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<tr>
<td></td>
<td>SciGuides</td>
<td>e-Chapters</td>
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<tr>
<td>e-Books</td>
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</table>
The NSTA Learning Center

http://learningcenter.nsta.org
Featured e-PD resources

Free NSTA Science Objects

SciPacks

SciGuides

supported by

NSF
NASA
NOAA
FDA

S.D. Bechtel Jr. Foundation
Hewlett Foundation
U.S. Department of Transportation
National Highway Traffic Safety Administration
Agilent Technologies Foundation

GE Foundation

NSTA
2-hour free, self-paced, learning experience

Interactive simulations

Questions to promote interaction and learning

Based on science education standards

Sixty-seven currently available
Animation Analysis

The following animation shows a ball rolling along a track. Replay the motion a number of times and then answer the multiple-choice questions that follow. In answering those questions, feel free to replay the animation if necessary. Select the icon to launch the animation in a new window.

Figure 5.2 Ball on Complex Track
Animation
For those unable to engage with the interactive component, select this link for a long text description:
Text Description

Practice

Okay, now that those mental wheels are turning, see if you can answer these questions. If you miss an answer or two or three, it might be worth your while to review the appropriate sections of this Science Object.

What is the approximate position of Point E in relationship to Point A?

- E is about 350 centimeters away from A, at an angle of about 80 degrees with respect to Line Y.
Interactive Simulations

NSLA SCIENCE SIMULATION: Make a Reef

CONTROL PANEL
- pH
- Temperature
- Light
- Salinity
- pH: 4
- Temperature: 10 - 17 °C
- Light: Clear
- Salinity: 10 - 24 ppt

INSTRUCTIONS
What type of pattern did you observe?

- I didn’t run the simulation, but I can imagine what will happen.
- The more the track changed in shape, the higher the ball rose in vertical height at the end of the track.
- The ball would rise to a different vertical height at the end of the track depending on the track chosen.
- The ball rose to approximately the same vertical height no matter what track was used in the simulation.

Tries Remaining: 3

Hands-On Activity

You can do this simulation in real life. All you need is a section of Hot Wheels® track, a marble or ball bearing, a ruler, and a friend to help. Then select the link to go to the Activity:

Hands-On Activity

Press "Next" at the top of this window to go on to What’s the Point?.
I have used science simulations from the LC with my students

<table>
<thead>
<tr>
<th>Yes</th>
<th>No. But I think I will.</th>
<th>No. I do not think it would be useful.</th>
<th>I need to learn more</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
Featured e-PD resources

supported by
- 10-Hour Online, self-paced, mini-courses
- 3-5 Science Objects, plus
  - Individualized email support via Mentor
  - Pedagogical Implications component
  - Embedded Final Assessment w/Certificate
3-5 Science Objects

Unlimited Content
Mentor Email Support

SciPack

Assessment and Certification Opportunity

Pedagogical Implications Component
Welcome

To access your SciPack, refer to the Table of Contents below.

1. Select your SciPack from the Select drop-down list
2. Click Find
3. To expand the SciPack Table of Contents, click on the SciPack title or click the + next to the SciPack title
4. Click the name of the section you would like to view

When you have only one SciPack, start with Step 3 above.

Table of Contents

Select: Force and Motion  Find

SciPack | Completion | Last Accessed
--------|------------|--------------
Orientaion | Not Accessed |
Force and Motion | | 07/10/07 8:44 AM
Position and Motion | Not Accessed |
Newton's First Law | | Not Accessed
Newton's Second Law | Not Accessed |
Newton's Third Law | Not Accessed |
Force and Motion Final Assessment | Not Accessed |
Glossary | Not Accessed |
Pedagogical Implications | Not Accessed |
Special Aids | Not Accessed |

Links

Help Desk
NSTA Learning Center
Featured e-PD resources

Supported by

[Logos of various organizations]
Valuable classroom resources for science teachers interested in integrating the web into their teaching

- Each SciGuide consists of:
  - Customized lesson plans using selected web resources
  - Approximately 100 standards-aligned web-accessible resources
  - Teacher media vignettes describing and showcasing the lessons
  - Samples of student work
  - Interactives utilized in SciPack on same topic
Let’s pause for general questions about the Learning Center
What’s new?
• Electric and Magnetic Forces
• Chemical Reactions
• Nature of Light
Electric and Magnetic Forces

Science Objects:
• Electric Charges
• Electrostatics and Current Electricity
• Electromagnetism
Chemical Reactions

Science Objects:
• A World of Reactions
• Categorizing Chemical Reactions
• Rates of Chemical Reactions
• Matter and Energy in Reactions
Nature of Light

Science Objects:
• Characteristics of Light
• Light as Waves
• Light and Color
• So, What is Light?
Let’s see a new Interactive Simulation

**Electric Forces**

1. Predict what will happen when two objects with negative charges are in close contact with each other?

- They will attract
- They will repel
- There will be no interaction between the objects

**RUN TEST**
Add Science Objects to your "Library"
Go to Learning Center Home Page

http://learningcenter.nsta.org
See All Science Objects or Display Science Objects by Subject Area

The NSTA Learning Center

Ready When You Are — for Free!
You're teaching a subject for the first time, or for the first time in a long time. You need a content refresher now. Where can you find help that's engaging, high-quality, easy to access—and affordable, too?

From NSTA's latest ready resource: Science Objects! Science Objects are two hour on-line interactive inquiry-based content modules that help you better understand the science content you teach.

With support from sponsors, Science Objects provide all teachers of science open access to these valuable new resources—at no cost!

The system check will detect your current browser settings and plug-ins you have on your computer as are required to access the rich media content in the Science Objects, such as the Flash and QuickTime media players.

[Learn More]

Featured Science Objects
Click on any of the titles below, to launch the Science Object:

- Coral Reef Ecosystems
- Ocean's Effect on Weather and Climate

[THE LIVING REEF]
Add a Science Object to Library

Chemical Reactions: Rates of Chemical Reactions

Science Object

Science Objects are two hour on-line interactive inquiry-based content modules that help teachers better understand the science content they teach. This Science Object is the third of four Science Objects in the Chemical Reactions SciPack. It demonstrates...

Member Price: Free  Nonmember Price: Free

Grade Level: Elementary School, Middle School
Which of the new SciPack titles are you going to try first?

<table>
<thead>
<tr>
<th>Electric and Magnetic Forces</th>
<th>Chemical Reactions</th>
<th>Nature of Light</th>
<th>I would like to try a different SciPack title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Electric and Magnetic Forces
• Chemical Reactions
• Nature of Light
• Nutrition: Grades 5-8
• Journal Articles
• Podcasts
• Online Courses
Add other resources to your "Library"
Go to Learning Center Home Page

http://learningcenter.nsta.org
Find resources by:

• Subject
• Learning Resources & Opportunities
• All FREE Resources
• Advanced Search
• Grade Level
• State Standards
• Learning Preference

Now you try it!
Let’s pause for questions about resources in the Learning Center
Using the Learning Center Library
My Library

• Store and create notes for individual resources
• Upload your own resources
• Create collections of resources
• Share your collections with colleagues
Upload your own resources to *My Library*

- Word docs
- Excel files
- PPT pres.
- URLs
- Images
Resource Upload

New to the Learning Center! Enjoy the convenience of having all your electronic resources in one location. Upload up to 1.5 GB of your resources to your Learning Center library, add them to your collections, create notes about them, and e-mail them to your friends. File formats include PowerPoint presentations, Word documents, Excel spreadsheets, PDF files, image files, and more. Each file must be 10 MB in size or smaller. Please read the Terms and Conditions.

Upload a Resource

You are currently using 0.2% of your 1.5 GB

You have 1.50 GB of available space

My Uploaded Resources

- NSTA Learning Center
  - This is the URL for the NSTA Learning Center.
  - Email to a Friend
  - Modify Collection
  - Create Note
  - Delete this Resource

- NSTA Learning Center Marketing Brochure.pdf
  - PDF file of the NSTA LC Marketing Brochure.
  - Email to a Friend
  - Modify Collection
  - Create Note
  - Delete this Resource

- ASTC
  - Association for Science and Technology Centers home page.
  - Email to a Friend
  - Add to Collection
  - Create Note
  - Delete this Resource

- NASA Jet Propulsion Laboratory
  - The Jet Propulsion Laboratory is the NASA Center responsible for Solar System exploration.
  - Email to a Friend
  - Modify Collection
  - Create Note
  - Delete this Resource

- Sample Agenda for APS Implementations.doc
  - Sample agenda created for APS administrators to run implementation workshops.
  - Email to a Friend
  - Modify Collection
  - Create Note
  - Delete this Resource
Try it!
Add a personal resource, or a URL to your “Library”
What type of resources did you add to your “Library”?  

<table>
<thead>
<tr>
<th>Word documents</th>
<th>PPT presentations</th>
<th>URLs</th>
<th>Images</th>
<th>Excel spreadsheets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
Create a Collection of resources

- Enhanced!
- Add the same resource to more than one collection
- Share collections with one person or many
### My Learning Center

Welcome to your collection of professional development resources. Select from the links and tabs below to access your NSTA resources, your uploaded items, organize them into collections, and then share your collections with others.

The NSTA Learning Center provides a platform for educators to share and access resources efficiently. It allows users to manage their collection of learning materials, including both uploaded and NSTA-provided resources. This feature is particularly useful for educators looking to organize and share resources with colleagues.

#### Collections Features

- **Start a New Collection**
- **Sort By:** Title

#### Collections Table

<table>
<thead>
<tr>
<th>Title</th>
<th>Created</th>
<th>Currently Sharing With</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>sample group</td>
<td>5/21/2009</td>
<td>NA</td>
<td>edit name, delete</td>
</tr>
<tr>
<td>Test</td>
<td>9/30/2009</td>
<td>NA</td>
<td>edit name, delete</td>
</tr>
</tbody>
</table>
Steps to Create a LC collection

1. Go to “My Library”
2. Click on “Resource Collections” tab
3. Type the name of your collection & click the “Add” button
4. Click on “NSTA Resources” tab
5. Choose a Resource type, i.e., SciPacks
6. Choose a Resource title & click on the “Add to Collection” link to the right of the resource title
7. A window will open...follow the instructions
8. Repeat steps 5-7 to add more resources to your collection
Share your Collection with a colleague
Click the title of the collection to share
Click on “Share this Collection”
My Learning Center

Welcome to your collection of professional development resources. Select from the links and tabs below to access your NSTA resources, your uploaded items, organize them into collections, and then share your collections with others.

NSTA Resources  New Uploaded Resources  Resource Collections  Collections: Shared With Me

View all collections

Test

Need to share with one person?

- Email of recipient:
- Additional notes: (optional)

Need to share with multiple people?

Copy the URL below and paste it into your email client. You are free to share this URL with anyone. When the recipient visits the link, they will be taken to a view of this collection. They will be able to save the collection to their own library if they log in or register.


Currently displaying items: 1 - 3 of 3

Archive: Discover the Universe - From Galileo to Today,
December 16, 2008
Type: Web Seminar Archive
Days Remaining: Unlimited
Grade: Elementary School, Middle School, High School
Summary: This Web Seminar took place on December 16, 2008, from 6:30 p.m. to 8:00 p.m. Eastern Time. Presenting was Dr. Bryan Mendez, Education and Public Outreach Specialist at the Center for Science Education at UC Berkeley’s Space Sciences Laboratory. Dr. Mendez...

Egg Bungee Jump
Type: Journal Article
Days Remaining: Unlimited
Grade: Middle School
Summary: Not only Humpty-Dumpty had known about the egg bungee jump... This engaging activity helps students experience science in a constructivist, inquiry-oriented manner and has the added benefit of providing a concrete context within which students can explore...
Steps to Share a LC collection

1. Go to “My Library”
2. Click on “Resource Collections” tab
3. Click on the collection you would like to share
4. Click on “Share this Collection” link
5. Follow the instructions...if sending to one person, enter the person’s e-mail address and a personal message and click on “Share”.
Let’s pause for questions about your Learning Center Library
See you in Philadelphia?
Are you going to the NSTA National Conference in Philadelphia next month?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

NSTA Learning Center activities:

- Exhibit booth
- Session
  - Friday, March 19
  - 12:30 – 1:30 pm
  - Rm 307 Convention Center
NSTA Learning Center Cohort Sites
Don’t forget the web seminar evaluation
and your FREE SciPack

<table>
<thead>
<tr>
<th>Completed</th>
<th>Earth &amp; Space 8 Topics</th>
<th>Physical 5 Topics</th>
<th>Life 4 Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth, Sun &amp; Moon</td>
<td>Force &amp; Motion</td>
<td>Cell Structure &amp; Function</td>
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</tr>
<tr>
<td>Gravity &amp; Orbits</td>
<td>Energy</td>
<td>Coral Reef Ecosystems</td>
<td></td>
</tr>
<tr>
<td>The Solar System</td>
<td>Nature of Light</td>
<td>Science of Food Safety</td>
<td></td>
</tr>
<tr>
<td>The Universe</td>
<td>Chemical Reactions</td>
<td>Resources &amp; Human Impact</td>
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<tr>
<td>Weather &amp; Climate</td>
<td>Electric and Magnetic Forces</td>
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<td>Rock Cycle</td>
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<td>Plate Tectonics</td>
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<tr>
<td>Earth’s Changing Surface</td>
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</tbody>
</table>
Collaborators
Flavio Mendez  
Senior Director  
NSTA Learning Center  
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Email: fmendez@nsta.org  
Questions?

http://learningcenter.nsta.org
Thank you to the sponsor of tonight's Web Seminar:

The NSTA Learning Center
Welcome to Your Professional Development

The Learning Center is NSTA's e-professional development portal to help you address your classroom needs and busy schedule. You can gain access to more than 3,300 different resources that cater to your preference for learning. Over 925 resources, such as journal articles, science objects and web seminars are available for free. A suite of practical tools such as My Library, My Transcript, and My Professional Development Plan and Portfolio tool helps you organize, personalize, and document your growth over time. If desired, you may review an archived Web Seminar overview of the NSTA Learning Center, or download the "How to Guide" PDF (2.7 MB).

Explore Learning Opportunities

By Subject
- Earth & Space Science
- Life Science
- Physical Science

By Grade Level
- Elementary
- Middle School
- High School
- College

By State Standards

Do-It-Yourself Learning
Learn at your own pace online with these 1-2 or 6-10 hour interactive activities.

Live Online Seminars & Classes
Learn online from certified instructors with your colleagues. 1-2 hour seminars, week and month long courses are available. Earn state

Visit the Learning Center
For more information about the Learning Center, visit the website at www.learningcenter.nsta.org

http://learningcenter.nsta.org
http://www.elluminate.com
NSTA Web Seminars
Paul Tingler, Director
Jeff Layman, Technical Coordinator