Planning Your Professional Learning Experiences

Presented by: Flavio Mendez

December 14, 2011
Planning Your Professional Learning Experiences

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http://learningcenter.nsta.org

Flavio Mendez
Senior Director
Agenda

- Your PL plans
- PD Plan & Portfolio Tool
- The NSTA Learning Center
- LC Resources, Library, and Forums

http://learningcenter.nsta.org
An opportunity:
- Plan (set goals)
- Implement
- Reflect and Document
- Report
What are your professional learning plans?
To enhance my...

<table>
<thead>
<tr>
<th>Content knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Content pedagogy</td>
<td></td>
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<tr>
<td>Assessment/evaluation skills</td>
<td></td>
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<tr>
<td>Technology skills</td>
<td></td>
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<tr>
<td>Leadership skills</td>
<td></td>
</tr>
<tr>
<td>Management skills</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
What are you going to do to achieve your professional learning plans?
<table>
<thead>
<tr>
<th>I plan to…</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-to-8 week university/community college course</td>
</tr>
<tr>
<td>2-week intensive course at local university, government program, or district office</td>
</tr>
<tr>
<td>DIY, self-pace online resources</td>
</tr>
<tr>
<td>Professional conferences/out-of-state programs</td>
</tr>
<tr>
<td>Local (one-day or 2-3 hours) workshops</td>
</tr>
<tr>
<td>Read</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
How are you going to document your professional learning experiences?
My PD Plan & Portfolio Tool
The NSTA Learning Center
My PD Plan and Portfolio Tool

Tool Overview

visit the Learning Center at http://learningcenter.nsta.org

http://learningcenter.nsta.org/PortfolioTool/videos/portfoliooverview/index.html
Goal: Earth and space science content knowledge.

Expected Date of Goal Completion: 8/27/2010

Goal Statement:
Increase my content knowledge in the area of Earth and space science during the summer of 2010 in preparation for the school year 2010-2011.

Why I chose this goal, and where I am now:
- Empty - Add information

Standards:
Earth and Space Science Content Standards, grades 6-8.

Visit the learning center search page where you can select and search resources to assist in your professional development goals.
Welcome to Your Personalized Learning Web Space!

Flavio, you've already earned 8205 Activity Points!

You've recently earned:
- Sapphire Aggregator
- Add Personal Resources

You're close to earning:
- Diamond Commenter
- Post 14 more comment/questions

Your Activity Matters! It Donates Produce!

With these resources you can build your professional development plan, track your activities and assess your progress. You can start at "Explore Learning Opportunities" below or by creating your game plan with the PD Plan and Portfolio tool. You may also review an archived Web Seminar or a multimedia overview of the Learning Center.
Name your Portfolio; your name is the default
PD Plan & Portfolio Tool

Steps 3-16 on the *How-To Guide* you do as homework after this seminar.

- Choose dates, goal category
- Create goal statement
- Create evidence-action pair(s)
- Upload evidences
- Generate PDF report
Welcome to My PD Plan & Portfolio Tool!

Welcome to My Professional Development Plan and Portfolio Tool. This flexible and easy-to-use tool collection represents web-based resources designed to help you reflect upon, plan, manage, organize, and report those experiences defining your own professional development journey across a specified time period. The tools help you complete the following steps in the creation of your own personal PD plan and portfolio:

- **Step One:** Identify your professional development (PD) goal categories
- **Step Two:** Describe your specific PD goals
- **Step Three:** Define action items and portfolio artifacts (evidence)
- **Step Four:** Upload evidence files
- **Step Five:** Review goal status and reflect on your accomplishments
- **Step Six:** Automatically generate your PD reports

Select the button below to begin (or continue) your PD plan and portfolio journey:

**My Portfolio**

Get started (or continue) using this tool!

**Tool Overview**

View a short animation describing the various features of this tool, or download the "Portfolio Help" PDF (0.5 MB) for assistance on how to get started.

**Sample Reports**

View a sample PD portfolio report (PDF file).
Select Professional Development Timeframes & Categories

This page represents the first step toward developing your professional development plan and portfolio (PDPP) using this NSTA PDPP set of web-based tools. As you review the specific professional development categories below, reflect upon those areas of your professional practice that you would like to improve. To help you organize and simplify your personal PDPP journey, you can select only those categories you intend to address in this plan to be displayed within your personal portfolio space. You can return to this screen at any time and add additional categories to your plan if needed.

Once you complete this page, you can define specific goals for each of the selected categories.

Select Timeframe

In addition to specifying personal goal categories for your portfolio, you can also identify the general timeframe that your portfolio will reflect by choosing a range of years below. Choose all that apply:

- Current and future years ...
  - □ 2009 □ 2010 □ 2011 □ 2012

- Past years (if you plan to document previously-completed PD activities) ...
  - □ 2002 □ 2003 □ 2004 □ 2005 □ 2006 □ 2007 □ 2008

Check PDPP categories to make visible in your Portfolio

<table>
<thead>
<tr>
<th>Visible</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>My Content Knowledge</td>
<td>Select this category if you plan to develop goals that address improving your understanding of content knowledge and concepts associated with a specific science content area (Earth/Space Science, Physical Science, Life Science). You may also want to consider goals associated with your understanding of the nature of science, inquiry, safety issues, and the role of science in the community.</td>
</tr>
<tr>
<td>□</td>
<td>My Content Pedagogy</td>
<td>This category of professional development goals might address improving your ability to design and implement instructional experiences using methods and strategies related to science instruction (i.e. inquiry-based learning, problem-based learning, etc.). Goals associated with general teaching skills as well as curriculum concerns might also be included in this category.</td>
</tr>
<tr>
<td>□</td>
<td>My Assessment/Evaluation Skills</td>
<td>Select this category if you hope to improve your ability to design, implement, and analyze strategies to measure and evaluate learning. Goals in this category might also address strategies for self-evaluation and continuous improvement methodologies.</td>
</tr>
</tbody>
</table>
Define/Measure Goals

Category: My Content Knowledge

My Tasks

Instructions

Click the button above to define a specific goal statement. Information from the following websites may help you define goals based on state/national standards:

- Review Your State Certification Requirements
- Standards for Professional Development for Teachers of Science
- Benchmarks for Scientific Literacy
- National Board for Professional Teaching Standards
- Partnership for 21st Century Skills
- Information and Communication Technology Literacy
- National Educational Technology Standards

My Content Knowledge

View "Creating a Goal" How-To Animation
Define Your Professional Development Goals

Overview
Category: My Content Knowledge

Goal

Goal Name (required):

Expected Date of Goal Completion (required):

Goal Statement (required):
(Describe a professional development goal for the selected category)

Characters Remaining: 

Why did I choose this goal, and where am I now? (optional):
(Reflect on your initial ability levels related to the stated goal)

Characters Remaining: 

Category: My Content Knowledge
Goal: Earth and space science content knowledge.

My Tasks:
- Define Evidence
- Edit Goal
- Delete Goal

Instructions and How To Animations

Identified Professional Development Resources
Visit the learning center search page where you can select and attach resources to assist in your professional development goals.

Expected Date of Goal Completion
8/27/2010

Goal Statement
Increase my content knowledge in the area of Earth and space science during the summer of 2010 in preparation for the school year 2010-2011.

Why I chose this goal, and where I am now
- Empty - Add information

Standards
Earth and Space Science Content Standards, grades 5-8.
My digital evidence might be…

<table>
<thead>
<tr>
<th>Course transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate of participation</td>
</tr>
<tr>
<td>Scanned agenda; photos</td>
</tr>
<tr>
<td>Samples of student work</td>
</tr>
<tr>
<td>Personal reflections</td>
</tr>
<tr>
<td>Completed assignments</td>
</tr>
<tr>
<td>Reports, reviews</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Overview

Category: My Content Knowledge
Goal: Earth and space science content knowledge.
Goal Stmt: Increase my content knowledge in the area of Earth and space science during the summer of 2010 in preparation ... [view full statement] [edit statement]

Evidence (Action Items and Portfolio Artifacts)

Evidence Name (required):

Select or Create Action Item(s) (required):
Suggested Action Items:
(Please check one)
- [ ] Successfully complete a college/university/NSTA or other professional organization course
- [ ] Participate in a district/division workshops
- [ ] Participate in NSTA or other conference workshops
- [ ] Present at a state or national conference
- [ ] Publish an article
- [ ] Complete the Graduate Record Exam (Content Test)
- [ ] Read a Professional journal/text

User Created Action Item(s):
(These might include actions related to measuring and reporting successful goal accomplishment. For example, creating new lesson material or developing and using comprehensive evaluation rubrics might constitute action items for you. Please enter the text of your action items here.)
Category: My Content Knowledge
Goal: Earth and space science content knowledge.
Evidence: Learning Center's SciPacks (2)

My Tasks:
- Upload File
- Add Note/Link
- View/Edit Evidence
- Delete Evidence

Instructions

Action Items
- Successfully complete Learning Center SciPack

Justification of Action Items
The Learning Center's SciPacks contain content knowledge that I must know as a science teacher. The SciPack are self-paced, giving me the freedom to complete them when it is convenient for me. They include quizzes and an embedded test to assess knowledge gain. It also has a content mentor feature that I can use to submit questions to an expert if needed.

Evidence of Action Items Completion
SciPack final assessment certificate (PDF).
### Key
- Green = PD goal successfully accomplished.
- Yellow = PD Goal identified, but not yet accomplished.
- Red = PD goal not yet accomplished AND due date is passed.

<table>
<thead>
<tr>
<th>Category</th>
<th>Goal</th>
<th>Action</th>
<th>Expected Date of Goal Completion</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Content Knowledge</td>
<td>Earth and space science content knowledge.</td>
<td>Edit Reflection</td>
<td>8/27/2010</td>
<td>Yellow</td>
</tr>
</tbody>
</table>
Let’s pause for questions about the Learning Center’s PD Plan & Portfolio tool
Has this ever happened to you?

You need to teach something for the first time or for the first time in a long time

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>
Personalized Professional Learning

- A community to share ideas, ask questions, and earn points
- Practical tools to help teachers organize, personalize, & document growth
- Over 7,400 resources
Welcome to Your Personalized Learning Web Space!

Flavio, you've already earned **8205 Activity Points**!

You've recently earned:
- **Sapphire Aggregator**
- **Add Personal Resources**

You're close to earning:
- **Diamond Commenter**
- **Post 14 more comment/questions**

Activity Progress Bar

Your Activity Matters!

It Donates Produce!

Kathryn Kennedy
Last Week's Top Disseminator

With these resources you can build your professional development plan, track your activities and assess your progress. You can start at "Explore Learning Opportunities" below or by creating your game plan with the PD Plan and Portfolio tool. You may also review an archived Web Seminar or a multimedia overview of the Learning Center.
What’s free in the NLC?

• NLC account  *you DO NOT need to be a member of NSTA to create one!*
• Over 2,300 resources
  – Science Objects
  – Web Seminars (live, archives, and podcasts)
  – Journal Articles (~900)
  – e-Book chapters (~150)
  – Symposia Archives
  – External Resources (NASA)
• All PD tools
• All public collections
• All public community forums
Lesson Plans

Journal Articles:
- Science and Children
- Science Scope
- The Science Teacher
- Journal of College Science Teaching

Over 950 free journal articles
Over 4,600 journal articles >> all free to NSTA members
Content Review

- Two-hour free online learning experience in a particular topic
- Based on science literacy goals in science education standards
- Eighty-seven (87) Science Objects currently available
Elements of a Science Object: 2-hour learning experience

- Videos
- Slide shows
- Images
- Hands-on activities
- Preconceptions boxes
- Simulations
- Assessment
Science Simulations and Animations
10-hour, self-paced, learning experience

SciPack

3-5 Science Objects

Assessment and Certification

Content Mentor
Email Support

Pedagogical Implications

FREE

FREE

FREE

FREE

FREE

FREE
My PD Record and Certificates

The PD Record tool allows you to generate a PDF report listing your completed NSTA professional development (PD) experiences. You receive certificates as you complete experiences at NSTA Conferences, Web Seminars, Online Short Courses, Symposia, and NSTA Academies. You also receive a certificate when you complete a SciPack.

You may also use our free PD Plan & Portfolio tool to plan and track your PD. Generate and store reflections about your PD experiences, upload images, student work samples, certificates, or point to URLs to document your growth. Generate a custom report (PDF document) to enhance your NSTA transcript.

If you have questions specifically about your Conference Transcript please contact Beverly Shaw at bshaw@nsta.org or via phone at 703-312-9232. For other questions, please contact the Help Desk at learningcenterhelp@nsta.org.

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<table>
<thead>
<tr>
<th>Symposia</th>
<th>SciPack Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferences</td>
<td>Regional Certificates</td>
</tr>
<tr>
<td>Web Seminars</td>
<td>Certificate</td>
</tr>
<tr>
<td>(NAEP) 101: Learning more about the NAEP 2009 Science Results</td>
<td>View</td>
</tr>
<tr>
<td>Celebrating Astronomy: A Star’s Story</td>
<td>View</td>
</tr>
</tbody>
</table>
Which SciPack title will you choose at the end of the program?

<table>
<thead>
<tr>
<th>Title</th>
<th>Title</th>
<th>Title</th>
<th>Title</th>
<th>Title</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth, Sun, and Moon</td>
<td>Gravity and Orbits</td>
<td>The Solar System</td>
<td>The Universe</td>
<td>Oceans Effect on Weather and Climate</td>
<td>Rock Cycle</td>
</tr>
<tr>
<td>Plate Tectonics</td>
<td>Earth’s Changing Surface</td>
<td>Force and Motion</td>
<td>Energy</td>
<td>Nature of Light</td>
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</tr>
<tr>
<td>Electric and Magnetic Forces</td>
<td>Cells Structure and Function</td>
<td>Coral Reef Ecosystems</td>
<td>Science of Food Safety</td>
<td>Resources and Human Impact</td>
<td>Nutrition</td>
</tr>
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<td>Cell Division and Differentiation</td>
<td>Explaining Matter with Elements, Atoms, and Molecules</td>
<td>Atomic Structure</td>
<td>Cells and Chemical Reactions</td>
<td>Flow of Matter and Energy in Ecosystems</td>
<td>Cell Division and Differentiation</td>
</tr>
</tbody>
</table>
Other e-PD resources:

• SciGuides
• Web Seminar Archives
• Podcasts
• eBook Chapters
• eBooks
• Online Short Courses
How to add individual resources and/or collections to your “Library”
Welcome to Your Personalized Learning Web Space!

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- Add Personal Resources

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- Post 14 more comment/questions

Activity Progress Bar
Your Activity Matters!
It Donates Produce!

With these resources you can build your professional development plan, track your activities and assess your progress. You can start at "Explore Learning Opportunities" below or by creating your game plan with the PD Plan and Portfolio tool. You may also review an archived Web Seminar or a multimedia overview of the Learning Center.
There are over 2,100 collections created by users.
Nature of Light: Light as Waves

Grade Level: Elementary School, Middle School

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 second of four Science Objects in the Nature of Light SciPack. It provides conceptual and real-world understanding of the idea that waves (including sound and seismic waves, waves on water, and light waves) have energy and can transfer energy when they interact with matter...

Price: Free via Your Subscription

Nature of Light: Light and Color

Grade Level: Elementary School, Middle School

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 Nature of Light SciPack.
Add resources to your “Library” now
Let’s pause for questions about the Learning Center’s e-PD resources
Using the Library
Welcome to Your Personalized Learning Web Space!

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Activity Progress Bar

Your Activity Matters!
It Donates Produce!

Welcome, Flavio

With these resources you can build your professional development plan, track your activities and assess your progress. You can start at "Explore Learning Opportunities" below or by creating your game plan with the PD Plan and Portfolio tool. You may also review an archived Web Seminar or a multimedia overview of the Learning Center.
# My Library: NSTA Resources

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.

## Do-it-Yourself Learning
- SciGuides (37 items)
- SciPacks (20 items)
- Science Objects (57 items)
- Podcasts (35 items)
- Web Seminar Archives (22 items)
- Symposia Archives (2 items)

## Books & Articles
- Book Chapters (26 items)
- Journal Articles (46 items)

## Live Online Seminars & Classes
- Web Seminars (1 item)

## In Person Experiences
- No Items

**Leave a message:**

**Hours of Operation**
Upload your own resources to *My Library*

- Word docs
- Excel files
- PPT pres.
- URLs
- Images
Community Forums

Collaborate with like-minded individuals
Community Forums *(asynchronous)*

<table>
<thead>
<tr>
<th>Public Forums</th>
<th>Last Post</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elementary Science</strong></td>
<td>15 Topics 293 Posts by Todd Redman Today, 12:43 PM</td>
</tr>
<tr>
<td><strong>Life Science</strong></td>
<td>43 Topics 813 Posts by Maureen Stover Today, 1:49 PM</td>
</tr>
<tr>
<td><strong>Physical Science</strong></td>
<td>39 Topics 502 Posts by Patricia Rourke Yesterday, 8:15 PM</td>
</tr>
<tr>
<td><strong>Earth and Space Science</strong></td>
<td>54 Topics 721 Posts by Dehrben Flores Yesterday, 10:50 AM</td>
</tr>
<tr>
<td><strong>General Science and Teaching</strong></td>
<td>121 Topics 1632 Posts by Steve Werner Today, 10:37 AM</td>
</tr>
<tr>
<td><strong>Professional Development</strong></td>
<td>16 Topics 223 Posts by Patricia Rourke Yesterday, 6:46 PM</td>
</tr>
<tr>
<td><strong>Evaluation and Assessment</strong></td>
<td>8 Topics 87 Posts by Carolyn Mohr Fri Jul 08, 2011 12:50 AM</td>
</tr>
<tr>
<td><strong>Research in Science Education</strong></td>
<td>6 Topics 66 Posts by Kathy Sparrow Yesterday, 1:40 PM</td>
</tr>
</tbody>
</table>

8 Forums

Over 600 Topics

Over 7,600 Posts
<table>
<thead>
<tr>
<th>Topic</th>
<th>Last Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>How states handle PD</td>
<td>4 Replies by Carolyn Mohr Wed Dec 07, 2011 12:14 PM</td>
</tr>
<tr>
<td>Classroom management</td>
<td>10 Replies by Mary Hannig Wed Dec 07, 2011 12:13 AM</td>
</tr>
<tr>
<td>background in Science</td>
<td>2 Replies by Tammi Kreckel Mon Dec 05, 2011 2:53 PM</td>
</tr>
<tr>
<td>WOW! And it is Free!!!</td>
<td>48 Replies by Lorrie Armfield Fri Dec 02, 2011 9:30 PM</td>
</tr>
<tr>
<td>Learning and Growing as Teachers</td>
<td>2 Replies by Carolyn Mohr Fri Dec 02, 2011 2:30 PM</td>
</tr>
<tr>
<td>When you leave your students in the hands of a substitute teacher, what advice do you have? What are your &quot;pet peeves?&quot; What do you appreciate the most as a professional?</td>
<td>40 Replies by Tammi Kreckel Thu Dec 01, 2011 10:11 PM</td>
</tr>
<tr>
<td>Free NSTA Webseminars</td>
<td>45 Replies by Alyce Dalzell Wed Nov 30, 2011 9:07 PM</td>
</tr>
</tbody>
</table>
While looking for something else I came across a great Podcast (7 minutes long) which provided insight on being a scientist and using the scientific method. It is a must for a teacher and students to hear. I suggest your listen to this scientist describe his involvement with the scientific method and then share your thoughts on this as well.

---

What an awesome discussion. I have spent time reading, researching and reflecting on this thread. There is part of the discussion that I think I disagree with:

"the scientific method is great for young children who have not developed a strong cognitive ability to think. It is the same as you have to learn to walk before you can run. The scientific method is a way for them to gain an understanding of the process. However, as they grow older and have more experiences and make more decisions they should be weaned off this and introduced to scientific inquiry."

I believe all children, even very young children can think scientifically and therefore engage in the inquiry process. I am attaching an article which talks about young children doing science inquiry and a graphic from one of my favorite authors, Karen Worth.

So what do others think?
Personalized Professional Learning

• A community to share ideas, ask questions, and earn points

• Practical tools to help teachers organize, personalize, & document growth

• Over 7,400 resources
Recognize Our Collaborators
Don’t forget the web seminar evaluation and your FREE SciPack

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<th>Physical</th>
<th>Life</th>
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<td>Earth, Sun &amp; Moon</td>
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</table>
Flavio Mendez
Senior Director
NSTA Learning Center

PH: 703-312-9250
Email: fmendez@nsta.org

Questions?
Thank you to the sponsor of tonight's Web Seminar:

This web seminar contains information about programs, products, and services offered by third parties, as well as links to third-party websites. The presence of a listing or such information does not constitute an endorsement by NSTA of a particular company or organization, or its programs, products, or services.
Welcome to Your Personalized Learning Web Space!

Paul, you've already earned 1015 Activity Points!

You've recently earned:
- Ruby Aggregator
- Add Personal Resources

You're close to earning:
- Ruby Commenter
- Post 5 more comment/questions

With these resources you can build your professional development plan, track your activities and assess your progress. You can start at “Explore Learning Opportunities” below or by creating your game plan with the PD Plan and Portfolio tool. You may also review an archived Web Seminar or a multimedia overview of the Learning Center.

http://learningcenter.nsta.org