Pedagogies in Action: A Community Service Weaving Teaching Methods to Examples for Learning

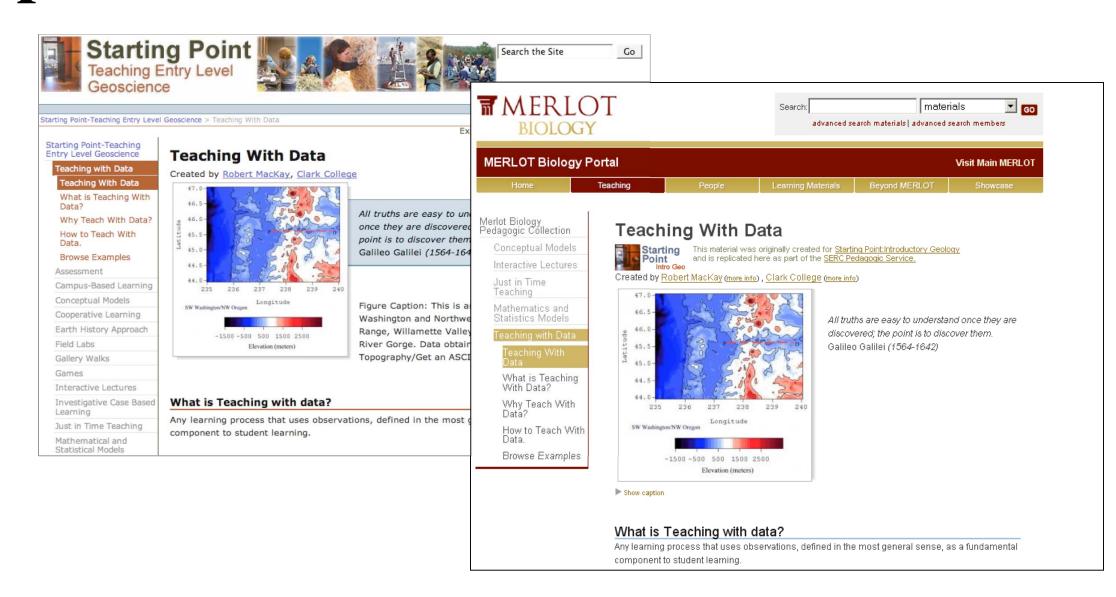
Cathryn Manduca, Sean Fox, Ellen Iverson Science Education Resource Center, Carleton College

The Pedagogic Service allows institutional and digital library partners to integrate information about effective pedagogy into their websites.

The Library — Connecting Theory to Classroom Practice Teaching Methods The What, Why and How. Activities Direct from the Classroom A Bibliography of the Print and Web literature The Pedagogic Service — Create, Contribute, Customize Share Your Community's Expertise Contribute an Individual Activity Integrate the Library into your Oligital Library Campus Learning Initiative Education Project Learn about our Existing Partners Search the Site > News Welcome to the newly launched Pedagogy in Action site. Our library provides a comprehensive view into the work of our partners in developing modules that explicate the how, what and why of a range for pedagogic techniques. Our partners are engaging their communities in documenting examples of these pedagogies in action: activities that educators are using in their classrooms today. The Pedagogic Service — Create, Contribute, Customize The Pedagogic Service — Create, Contribute, Cust

Information about effective teaching practices...

- Customization services allow partners to seamlessly integrate pedagogic content into their existing website.
- •Partners can draw from, and contribute to a growing library of pedagogical content: 48 modules, each describing the what, why, and how of a particular teaching method.



...intimately tied to a customized collection of activities...

- Each pedagogic module includes a collection of teaching activities that exemplify the pedagogy. Partners choose the set of activities most relevant to their audience.
- •Each activity is presented in a standard format that includes goals, context for use, assessment, and tips for use and adaptation.
- Activities draw from and build on existing resources in the partners' collections and serve as a bridge between the partners' collections and pedagogic guidance.

...with tools to engage your community.

- The service includes tools that support on-line submission, development, editing and review of activities and pedagogic modules.
- •We also provide models for activity development workshops.

| *COMPADRE This material was originally developed through comPADRE as part of its collaboration with the SERC Pedagogic Service. | n with comPADRE at the University of Oklahoma. |
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| as part of its collaboration with the SERC Pedagogic Service. | |
| Summary | |
| As a class, models of the hydrogen atom are explored using an online java applet in this activity. Real-time spectrometer outputs, visual representations, and energy level diagrams (where appropriate) of the following models are compared and contrasted: Billiard Ball, Plum Pudding, Classical Solar System, Bohr, deBroglie, and Schrödinger. | ▶ Show image info |
| corning Cools | |
| earning Goals y the completion of this activity, students should be able to | |
| Distinguish between several models of the hydrogen atom visually | and conceptually. |
| Compare and contrast the accuracy and usefulness (including the | |
| Relate spectrometer outputs and transitions represented on ener atom. | COLUMN DE AGE CONTRA DE 15 ET 1800 DE COLUMN EN PRESENTA DE 15 EN |
| Context for Use | |
| Educational level: High School/Undergraduate/Upper Level Physic | S |
| Setting: Modern Physics or Chemistry Class lecture | |
| Time required: 40+ minutes | |
| Special equipment: Internet/Java capable computer, digital proje | ctor |
| Pre-requisite knowledge: EM spectrum, Rutherford's model of the | atom |
| | |
| Description and Teaching Materials ETUP AND INTRODUCTION | |
| | |

| n creating an a | ctivity sheet. |
|-------------------------------------|--|
| More Information | on on Authoring Activity Sheets |
| Activity sheets | rivity Sheets are one page summaries of teaching activities in a standardized format. Teaching activities in this context includes a 5 minute in-class exercise to an extended student project. |
| Show more | |
| Contributing Pro Carleton Colleg | · |
| Ceaching Methor Quantitative Wr | itingitle |
| how up in plac | be evocative of the main point(s) of the activity. It needs to communicate the full context of the activity on its own as it will es like search returns (e.g. Google) where people won't have any contextual clues. So it should convey the idea that this is a y, what the subject matter is and what the relevant pedagogical focus is. For example: Solar Radiation: Sample Socratic |
| Title | |
| Author | tution of author(s) of the activity and any other appropriate attribution information. If the page is based on materials |
| | ed elsewhere that should be noted with attribution given to the original authors and links provided to the original materials. |
| Name and insti | ed elsewhere that should be noted with attribution given to the original authors and links provided to the original materials. |

Key Outcomes of Current Partnerships

- •Partners improved their processes for developing and disseminating content, broadened their networks (across disciplines and geographically), and were able to disseminate their resources to a wider, more diverse audience.
- •Workshops provided a means to connect with users, drive traffic to their websites, and develop content for modules and activities.
- •Information on teaching methods is of high interest to many library users. Over a half million visitors a year view the Pedagogies in Action materials. The pedagogic content presented through the service complemented the content resources already available in partner libraries.
- •The service integrates the pedagogic content into the look, feel, and navigation of partner sites so that users initially drawn to the pedagogic materials move naturally to explore the rest of the site. Partners using the service saw over 50 thousand users to the pedagogic content embedded in their sites in the last year.

Interested in learning more about the service and opportunities for partnership?

Contact Us:

cmanduca@carleton.edu

• Explore the Pedagogy in Action portal which provides a comprehensive view of the contributions from partners across the STEM disciplines:

Faching Methods

Each predapopic approach is suscinctly described so you can quickly understand how the technique might be relevant to your teaching. Written by fellow educators, these descriptions include typs for effectively using each technique, related research on their impacts on learning as well as a set of example activities.

This list is by no means comprehensive. It reflects the interests and priorities of the partners and projects that have contributed to be library so fire. If you'd like to contribute to the library and relegate students are contributed to be library so fire. If you'd like to contribute to the library and relegate students and contributed to be library so fire. If you'd like to contribute to the library and relegate students and projects that have a set of example cannot be contributed by the partners and projects that have a set of example cannot be contributed by the partners and projects that have a set of example cannot be contributed by the partners and projects by the partners and projects of the partners and projects that have a set of the partners and projects that have a set of example cannot be contributed by the partners and projects that have a set of example cannot be contributed by the partners and projects that have a set of example cannot be contributed by the partners and research cannot be contributed by the partners and the partne

http://serc.carleton.edu/sp

Contributing Partners Include:



TeachingWithData.

















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