Increasing Access to Quality Learning Through Peer Feedback in Online Discussions

FIPSE is often asked to give an example of a project that was not only well-designed and administered but was also effectively evaluated. Purdue University’s 2006 Comprehensive Grant directed by Project Director Jennifer Richardson and Project Co-Director Peggy Ertmer is an exemplary project. The goal of the project is to prepare students for today’s electronically interconnected workplace by promoting student learning, critical thinking, and self-direction in selected disciplines through the use of online class discussions augmented by a peer feedback strategy.

In this project content-based online discussions are used to augment in-class coverage of topics and focus students on the application, synthesis, and evaluation of subject matter information in order to solve problems relevant to the discipline. Peer feedback is employed as a way to improve the overall quality of the online discussions, and so lead to greater student learning, while reducing the demands on the instructor to provide individualized feedback to students. The peer feedback strategy includes use of an electronic tool modeled after the kinds of Web-based feedback systems used by online retailers (e.g. Amazon.com).

In the spring of 2008, a pilot test using peer feedback within online discussions was implemented in the same courses. Half of the course sections had online discussion with peer feedback and half had online discussions without peer feedback, allowing for comparisons of the effects of the peer feedback. Quantitative data collection included measures of student achievement, critical thinking, and self-directed learning. Qualitative measures, including interviews and surveys, were also employed to examine students’ and instructors’ perceptions of the efficacy and value of the peer feedback strategy, the use of online discussions to prepare students to work on projects in virtual teams, and suggestions for improvement for the peer feedback tool and strategy.

The learning outcomes from 196 students enrolled in the fall of 2008 undergraduate educational technology course required of all teacher education majors are analyzed and (large undergraduate lecture courses in Engineering and Education) during the spring of 2007, prior to the integration of online discussions and peer feedback. Fall 2007 saw the integration of the online discussions as a formal part of each course, the first condition that project staff members looked at in accordance with the project’s research design.

As we went to press, the Department of Education was operating under a Continuing Resolution. As soon as we have more information about grant competitions, that information will appear in the “What’s New” box on the FIPSE homepage located at www.ed.gov/fipse.
In Memoriam

Dr. Virginia B. Smith passed away on August 27, 2010 at age 87. A visionary leader, Dr. Smith lay the groundwork for FIPSE’s operating philosophy and principles during her tenure as FIPSE’s first director from 1972 to 1977. She was president emerita of both Vassar and Mills Colleges and a noted thinker and leader in American education. According to her obituary in the New York Times, “As president of Vassar, in Poughkeepsie, N.Y., from 1977 to 1986, Ms. Smith led a $100 million fund-raising drive, recruited students from community colleges, increased the endowment, raised faculty salaries and reinforced the college’s commitment to minorities.”

Dr. Smith earned bachelor’s, master’s and law degrees from the University of Washington. She taught economics at what are now the University of Puget Sound and Seattle Pacific University. In 1952, she joined the Institute of Industrial Relations at the University of California, Berkeley, where she was an instructor and director of public programs. In 1965, Dr. Smith became one of the first women in senior leadership in the University of California System when she became assistant vice president. Two years later she joined the Carnegie Commission on Higher Education as a researcher and later became its associate director. The commission made recommendations that continue to be influential, including ones on how to better categorize colleges and universities.

In 1975, during her tenure at FIPSE, Dr. Smith was named by Change magazine as among the 44 most important leaders in higher education in the United States. She left FIPSE in 1977 to become president of Vassar, a position she held until she retired in 1986. She came out of retirement for a year to serve as interim president of Mills College in 1990 when campus protest broke out over the trustees’ decision to take the college co-ed. The trustees subsequently reversed that decision, an act which Dr. Smith applauded.

In the New York Times, Terry W. Hartle, senior vice president of the American Council on Education, which represents 2,000 colleges and universities, said of Dr. Smith, “At a time when many educators assumed that high-quality education and widespread access to it were mutually exclusive, she devoted her career on and off the campus to proving them wrong … It was the combination of things she did, her leadership in every position she held.” She will continue to be remembered in higher education circles for The Virginia B. Smith Innovative Leadership Award. The award, given annually by the National Center for Public Policy and Higher Education, was established in 1999 as an endowed award to encourage leadership and innovation in American higher education.

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FIPSE Facts

Comprehensive Program Invitational Priorities in Historical Perspective

FIPSE’s flagship program is the Comprehensive Program. As FIPSE heads towards its 40th anniversary in 2012, we thought it would be interesting to look at where we have been. In this issue we present a review of the invitational funding priorities that FIPSE has used in the area of institutional mission and capacity building between 1973 and 2010. Though applicants have never been obligated to address invitational priorities in their applications, and they receive no additional points from reviewers for doing so, a look at the invitational priorities over time gives a sense of the educational trends that were considered important by FIPSE staff, Department of Education officials, Congress, and the field.

FIPSE Comprehensive Invitational Funding Priorities from 1973 to 2010

Category 3: Institutional Mission & Capacity Building

As we have begun reassigning all his duties we have come to realize how much we depended on him. We will miss him dearly and wish him all the best in his retirement.

In light of all the changes to FIPSE and in preparation for the Comprehensive Program Project Directors’ Meeting, we have been updating many of our Web pages. There is information you need to know about FIPSE competitive priorities on the revised Welcome and Overview Page. Some of the evaluation requirements and expectations have also changed, so please take the time to review the revised documents on the Evaluation Resources page. The FIPSE Google Maps and Grants in Action pages have also recently been updated by Christopher McCormick of our staff. Lastly, but perhaps most importantly, the FIPSE grant database is now permanently located at the following address: http://fipsedatabase.ed.gov. Holders of Congressionally-directed Grants should go to their new Web address: http://directedgrants.ed.gov.

As always, please feel free to send us your suggestions and requests for items that would interest you as a former or current FIPSE grantee, former FIPSE employee, or interested reader from the higher education community. Please also feel free to forward this newsletter to colleagues.

Best,
Dr. Susan Lehmann, Education Research Analyst, FIPSE
susan.lehmann@ed.gov
available online in Jennifer C. Richardson and Phil Ice’s “Investigating Students’ Level of Critical Thinking Across Instructional Strategies in Online Discussions” which appeared in a 2010 issue of the peer-reviewed journal *Internet in Higher Education* 13, 52-59.

The peer feedback strategy and tool were fully implemented in the fall of 2008 in three disciplines (Engineering, Education, and English courses). Spring 2009 saw the addition of two more discipline areas: Speech, Language, and Hearing Sciences (SLHS) and Veterinary Medicine. Two additional courses/disciplines (Educational Psychology and English as a Second Language) were added in the fall of 2009, allowing for collection of important comparison data.

The project directors facilitated a “Technology-Mediated Feedback” conference strand at Purdue University in April 2009 that brought together researchers working on related projects from other institutions. The conference resulted in multiple connections and a special issue devoted to technology-mediated feedback in the *Journal of Educational Computing Research* published in the fall of 2010. Additional findings on student learning from the FIPSE Comprehensive project appear in “Peer Feedback in a Large Undergraduate Blended Course: Perceptions of Value and Learning” contained in that issue: 43(1), 67-88. Several additional conference presentations can be downloaded from the project’s Web site. One of the reasons that this is an exemplary FIPSE project is that the data on student learning are timely and readily available to the public.

Though Purdue’s grant is winding down, the project team continues to refine training materials to facilitate dissemination of the peer feedback approach in online discussions more broadly. Materials being developed include recommendations for use of the peer feedback tool for instructors, video tutorials for the set-up and implementation of the tool within online discussions, and guidelines for participation in online discussions and use of the peer feedback tool for students. These will also be available on the project’s Web site. For those lucky enough to be attending the 5th International Conference on Design Principles and Practices in Rome, Italy in February of 2011, look for a presentation by the grantees entitled “Designing effective question prompts to facilitate critical thinking in online discussions.”

# WEB SITES REFERENCED IN THIS ARTICLE:

## 2006 FIPSE Project
http://fipsedatabase.ed.gov/grantshow.cfm?grantNumber=P1168060421

## Project Web site
http://www.edci.purdue.edu/fipse/index.htm

## Project Publications and Presentations
http://www.edci.purdue.edu/fipse/research.htm

## Internet in Higher Education Article
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6W4X-4XJG5S1-7&_user=3806212&_coverDate=01%2F31%2F2010&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view=c&_searchStrId=1573850520&_rerunOrigin=google&_acct=C000061430&_version=1&_userid=3806212&md5=da35b048d4ba7d1d9b166176d3b8ac7&searchtype=a

## Journal of Educational Computing Research Article
The WebAIM (Keeping Web Accessibility In Mind) Project was started in 1999 as a first-round FIPSE Learning Anytime Anywhere Partnerships (LAAP) grant to Utah State University. Funded for four years with George Mason University, Blackboard Inc., and the Teaching Learning and Technology affiliate of the American Association of Higher Education as significant partners, WebAIM produced some of the first practitioner-based training materials to help Web developers create designs and content that were universally accessible, including to those with disabilities. Moreover, this project funded the development of the first system-change model for postsecondary education to use so that educators could transform their digital space into one that would be inclusive of all individuals. As project director Cyndi Rowland recalls, “By the end of the project we had had incredible success but had also uncovered a problem so deep, it continues to this day.”

The initial FIPSE-funded effort has been sustained for over a decade now by multiple funding methods, including the commercialization of products, a fee-for-services component (many postsecondary institutions and high-profile industry groups come to WebAIM for training and services), additional competitive grants including a both a 2007 and 2010 Comprehensive Program grant to Utah State University, and a 2005 Congressionally-directed grant that established the National Center on Disability and Access to Education.

The work is highly regarded and continues to have broad impact nationally and internationally. The WebAIM staff were invited to sit on the United States Access Board’s refresh of Section 508. A recent search of “web accessibility” on Google returned WebAIM as number four in over 12.9 million results. According to Rowland, “In the past year alone, the WebAIM website has had over 1.5 million page views of content. One of our popular free tools – WAVE – is used to generate over 60 thousand reports of accessibility a month (a conservative estimate since we can only count our website visitors, not the downloaded versions that are added to the Firefox toolbar).”

What WAVE does is to aid people in the Web accessibility evaluation process. Rather than providing a complex technical report, WAVE shows the original Web page with embedded icons and indicators that reveal the accessibility of that page. If you are creating an online teaching tool for your students, you can use WAVE to see if your materials will be accessible to people with disabilities. The Web site offers other useful documents, such as a brief overview of cognitive Web accessibility containing a checklist of items to implement to ensure that your Web content is accessible to users with cognitive or learning disabilities as
The four international programs which were started by FIPSE as Special Focus competitions have now moved over to the International and Foreign Language Education (IFLE) Division. All open grants awarded under these programs have been re-assigned to IFLE program officers as follows:

- European Union-United States Atlantis Program – Frank Frankfort, Tanyelle Richardson, or Christine Corey
- North American Mobility in Higher Education Program – Amy Wilson or Jessica Barrett Simpson
- US-Brazil Higher Education Consortia Program – Michelle Guilfoil or Carly Borgmeier
- U.S.-Russia Program – Peter Baker

Current grantees will continue to file their reports in the FIPSE database where they will be reviewed by IFLE program officers. FIPSE will no longer offer evaluation support to these grantees. The public can still access information about those grants by viewing the public side of the FIPSE database.

Future grant competitions for these programs will be announced by IFLE and will not appear in FIPSE program announcements or the FIPSE Update. Colleagues who are interested in applying specifically to one of those four programs should contact IFLE staff or visit the IFLE Web site for more information about upcoming grant competitions.

Individual projects with an international theme will still be eligible to apply to the FIPSE Comprehensive Program under the Comprehensive Program's guidelines. Keep in mind that innovation is a selection criterion in rating Comprehensive Program proposals. All award monies would have to benefit the U.S. institution, students, and faculty.

Carolyn D. Forman passed away on July 27, 2010 in St. Paul, Minnesota at age 50. “Cari” was a FIPSE Program Officer from 1992 until 1998. Her analytic skills and in-depth staff reviews of proposals are still remembered by staff, as is her wonderful spirit. Cari graduated cum laude from Williams College and was elected to the Phi Beta Kappa. She did special studies in China and Italy. She earned her Doctorate of Laws from Stanford University and her

**WEB SITES, cont’d**

- WebAIM
  http://webaim.org/

- WAVE
  http://wave.webaim.org/

- Cognitive Web Accessibility
  http://webaim.org/articles/evaluatingcognitive/

- Guidelines for Education Professionals
  http://webaim.org/solutions/education/

- National Center on Disability and Access to Education:
  http://www.ncdae.org/

- U.S. Access Board
  http://www.access-board.gov/508.htm
How can the public learn about FIPSE’s funded projects?

The FIPSE Database containing abstracts, project-designed Web sites, funding levels, start and end dates, project director and partner institution contact information, and institutional special designations is available to the public at the following address: http://fipsedatabase.ed.gov/. On the home page you can conduct a search for a particular grant by number or conduct a keyword search of titles, abstracts, or contact information. By clicking on the “More Search Options” link you will find expanded keyword searching functions enabling you to search a group of words or phrases and exclude words from a search. There are drop-down menus enabling you to do a search with several parameters, including: FIPSE program name, subject, institution, state, zip code, congressional district, original funding year, organization type, institution type, special designations, and active status at a certain date in time.

Can the public find grant applications, annual and final reports, or evaluation reports in the database?

At this time grant applications, annual and final reports, and evaluation reports are not made available to the public via this database. Over the next few years FIPSE does plan to add some evaluation data to the public side of this database. To learn more, please go to FIPSE’s Evaluation Resource page and read about FIPSE’s Project Effectiveness Evidence for the Public (PEEP).

What options do I have if I can’t locate grants on a given topic?

Searchable subject terms are added to the FIPSE database on an as-needed basis when requested. Generally several weeks lead time is needed to add in permanent searchable subject terms because each new term requires reviewing and re-classifying hundreds of grant abstracts. Requests to add in new search terms should be sent to susan.lehmann@ed.gov, but please keep in mind that these requests will be processed time-permitting.

Masters in Taxation from New York University’s School of Law. Before joining FIPSE, Cari had a successful law practice at the Rosenman Colin firm in New York City. Over the years she was also involved in the Capital Children’s Museum and the Options Public Charter School in Washington, D.C. When she returned to St. Paul, she worked with the Center for Social Change at the Humphrey Institute. Tributes in honor of Cari may be left at the following Web site: http://www.legacy.com/guestbook/twincities/guestbook.aspx?n=carolyn-forman&pid=144347482&cid=gbsrchres. The family asked that interested friends donate to the Cammack Marshall Fund for Children, P.O. Box 14325, St. Paul, MN, 55114.
FIPSE PROJECT WEB SITES THAT CAUGHT OUR EYE

http://www.chabotbookstore.com/SiteText.aspx?id=2542
Chabot-Las Positas Community College District’s Web site for Special Focus Competition: College Course Materials Rental Initiative grant P116Y090045 “Chabot College Textbook Rental Program” stands out among the FIPSE-funded textbook rental sites because it provides obvious links to both a project impact survey and their evaluation report, a textbook rental price comparison, total dollars saved broken out by course, and separate sheets on “What faculty need to know” and “What students need to know” about textbook rental.

http://www.openaccesstextbooks.org/
Tallahassee Community College’s Web site for Special Focus Competition: College Course Materials Rental Initiative grant P116Y090040 “Fulfilling the Promise of Open Textbooks – Developing a Model for Success” has a wealth of information about the adoption and authoring of open textbooks. The site recently sponsored a Webinar entitled “Can we write textbooks the way we write scholarship,” posted an article on whether podcasts help students learn, and posted a report on handheld E-book readers and scholarship. The site also has a link to the Top 50 Open Access Educational Projects.

http://telelearning.dccd.edu/Courseware/Pages/Freeware.aspx
The LeCroy Center for Educational Telecommunications of Dallas County Community College District is exploring the concept of open courseware via its Special Focus Competition: College Course Materials Rental Initiative grant P116Y090020 “The Texas Freeware Project”. Through its Dallas TeleLearning operation, the LeCroy Center invites selected higher education institutions to participate in the Freeware project. Visit the site to find out how to participate and to see what courses are currently being offered.

FIPSE’s Mission

The Fund for the Improvement of Postsecondary Education (FIPSE) is a unit of the Higher Education Programs located within the Office of Postsecondary Education, U.S. Department of Education. FIPSE’s mandate is to “improve postsecondary educational opportunities” across a broad range of concerns. Although a small program, FIPSE has established a record of promoting meaningful and lasting solutions to various, often newly emerging, problems and of promoting the highest quality education for all learners. Through its primary vehicle, the Comprehensive Program grant competition, FIPSE seeks to support the implementation of innovative educational reform ideas, to evaluate how well they work, and to share the lessons learned with the larger education community.

FIPSE defines postsecondary education broadly. Its applicants include a wide variety of nonprofit agencies and institutions offering education after high school, such as colleges and universities (public and private, two or four year, undergraduate and graduate), technical and business schools, testing agencies, professional associations, employers and unions, state and local education agencies, student organizations, cultural institutions, and community groups. FIPSE supports new as well as established organizations, but it cannot award grants to for-profits or unaffiliated individuals.