Assessment Initiative:

Final Report

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Federal Reserve Assessment Initiative: Year Two Final Report Executive Summary

During the summer of 2008, the Federal Reserve Banks of Atlanta and St. Louis contracted with the consultants, Drs. William D. Bosshardt and Paul W. Grimes, to conduct a two-year comprehensive assessment of the Banks' educational outreach programs. The primary focus of work in the first year was the development of standards and evaluation instruments for both Federal Reserve education and personal financial literacy programs. In July 2009, the consultants presented the Banks with an interim report and preliminary results from pilot studies used to test the evaluation instruments. Throughout the second year, the consultants focused on evaluating ten specific programs produced and delivered by the Banks using the standards and instruments developed in the first year. The final project report consists of ten separate program evaluations and an overview comparison report.

Overall, the evidence collected and analyzed during the second year confirm the general conclusions suggested by the first year pilot studies – the Federal Reserve educational outreach programs are successful in: (1) improving teacher knowledge as evidenced by significant gains in test scores; (2) reaching students, as evidenced by teacher reports that they use their new knowledge and classroom materials; and (3) developing a community of teachers engaged with the Fed as evidenced by program evaluation scores and the programs' popularity and acceptance by teachers.

Each of the separate program evaluation reports provide a description of how that evaluation was conducted, an analysis of the data, and a summary of the major findings. Based on the empirical evidence, the consultants offer specific recommendations for each program at the end of the reports. A complete tabulation of all data collected for each separate program is provided in the Appendix of each report. Highlights for each program include the following:

<u>Teacher Workshops</u>: Testing indicated that teacher knowledge about the Federal Reserve and personal finance does increase in response to workshop participation. The effect appears to be relatively stronger for Federal Reserve education workshops than for personal finance workshops. Workshops are generally well-received as evidenced by strong evaluation scores, the number of teachers who attend multiple Fed workshops, and the number who plan to participate in other Fed programs after attending a workshop. Teachers appear to use classroom materials with several thousand students being reached in the weeks immediately following the average workshop. Recommendations include maintaining a Federal Reserve education and personal finance focus and segmenting the market for workshops by depth and sophistication of content.

<u>Conference Presentations</u>: Presentations by Fed personnel at professional teacher conferences appear to be a major avenue by which teachers are introduced to the Fed outreach programs and classroom materials. However, the evidence collected from follow-up surveys did not confirm that materials distributed at conference presentations were being used as frequently as materials

distributed through teacher workshops. Recommendations include balancing the quantity of materials distributed with the limited time constraints of conference sessions.

Exhibit Booths: The evidence indicates that educational materials distributed at Fed exhibit booths are being used by teachers in classrooms during the weeks immediately following a conference. In addition, the Fed materials are highly valued by teachers as being effective and enriching their lessons. Thus, exhibit booths appear to serve as both a public relations tool and as a method of getting curriculum materials into classrooms, though not as effective as workshops. Recommendations include a stronger promotional emphasis being placed on upcoming Fed programs.

Evening with the Fed: Evening with the Fed appears to serve as a "capstone" program for the Federal Reserve Bank of Atlanta. Although the program is primarily designed as an enrichment experience for teachers, evidence indicates that while it attracts an economically literate audience, teachers take new knowledge back to the classroom thereby enriching students as well. Teachers who are introduced to the Fed's outreach programs through Evening with the Fed are highly likely to participate in other programs. Recommendations include the continued use of an abbreviated "talking points" handout for teachers attending the event.

Summer School at the Fed: The Summer School at the Fed, produced by the Federal Reserve Bank of St. Louis, provides K-12 teachers with the opportunity to earn either continuing education units or graduate level course credit from local university partners. Summer School teachers are more likely to have participated in previous Fed programs and to have used Fed classroom materials relative to teachers in most of the other programs. The program receives strong positive reviews and the evidence indicates that teacher learning leads to classroom engagement of students in the topics covered. Recommendations include improving the capacity utilization of the program and enhancing the diversity of teachers enrolling in the program.

<u>The Professors Conference</u>: The annual Professors Conference produced by the Federal Reserve Bank of St. Louis is designed for college-level professors, not K-12 educators. The conference is positively evaluated by participants who value the opportunity to interact with Federal Reserve research economists and learn about current Fed activities. In general, the Professors Conference attracts senior level economics professors from regional state universities and private liberal arts colleges. Recommendations include suggestions for format changes to attract younger scholars and more professors from both research universities and community colleges.

Newsletters: Both the *Inside the Vault* and *Extra Credit* newsletters were evaluated using a webbased survey of subscribers. The survey results provide a detailed picture of the demographic characteristics of the readers and indicate how the newsletters are used. The characteristics of the newsletter subscribers parallel those of workshop participants and other Fed programs – predominately female, white, high school teachers holding a Masters degree. Both newsletters have a high percentage of subscribers who read each issue "cover-to-cover" or read an article if the topic appeals to them. A majority of survey respondents report integrating material from the newsletters into their classrooms. The hardcopy *Inside the Vault* generally received relatively more positive evaluation scores than the web-only *Extra Credit*.

<u>Bank Tours</u>: The tours attract relatively more business teachers than do the other Fed outreach programs examined. These teachers also tend to participate in fewer professional development programs; however, they are highly likely to repeat the tour experience with their students from one year to the next. In general, the tours receive positive evaluations with the cash handling areas being the highest rated. Recommendations include refreshing the Boardroom experience to require more active decision making for those participating.

<u>GDP and Pizza</u>: This curriculum produced by the Federal Reserve Bank of St. Louis is an online lesson dealing specifically with the economic concepts and relationships used to measure GDP. The lesson results in statistically significant student learning as shown by observable and statistically significant differences between pre-test and post-test scores. GDP and Pizza provides an example for successfully using distance delivery methods to reach Fed constituents. Recommendations include adapting the GDP and Pizza format for other topics and enhancing the video and graphics presentations to more effectively use the web medium.

<u>Katrina's Classroom</u>: This curriculum produced by the Federal Reserve Bank of Atlanta provides personal finance lessons based on the experiences of several students and their families whose lives were disrupted by Hurricane Katrina. In general, the overall curriculum is highly rated by teachers who indicate that the lessons meet the established objectives. However, the extension materials appear to be used at a lower rate than the original lessons. Recommendations include the production of "where are they now" profiles of the students featured in the lessons and new material to highlight the lasting impacts of the disaster on the economies of the Gulf Coast communities.

Annual Educators Conference: This outreach program of the St. Louis Federal Reserve Bank is differentiated from regular teacher workshops in that is features a major presentation by one of the Bank's research economists. The assessment data indicate that the conference attracts an audience of teachers who possess more formal training and teaching experience in economics when compared to those attending workshops. Post-program evaluation scores were found to be slightly lower than those for Eighth District workshops and the response rate for the follow-up survey was substantially lower than those for the aggregate sample of workshops included in this evaluation. Recommendations include taking advantage of the differences exhibited by the conference attendees by offering future productions with content of more rigor, sophistication, and depth.

Overall, the empirical results and evidence indicate that the Federal Reserve Banks of Atlanta and St. Louis produce and deliver an effective portfolio of educational outreach programs that benefit the citizens of the Sixth and Eighth Districts.

The consultants delivered the following items over the course of the two year project:

Educational Standards for Teaching about the Federal Reserve System

Federal Reserve Educational Test (FRET)

Personal Finance Standards for Use by the Federal Reserve Banks of Atlanta and St. Louis

Personal Finance Test

Get Checking Evaluation

Recommendations for Partners

Teacher Workshop Instruments

Pre-program Survey Post-program Evaluation Form Follow-up Survey

Program Evaluations

Teacher Workshops
Evening with the Fed
Conference Presentations
Exhibit Booths
Bank Tours
Annual Educators Conference
Summer School at the Fed
GDP and Pizza
Katrina's Classroom
Newsletters (Inside the Vault and Extra Credit)