

FCR-STEM

Florida Center for Research in Science, Technology, Engineering and Mathematics

Florida State University

FCR-STEM is seeking applications from middle and high schools for the following professional development focusing on math and science:

What: Content Enhancement Routines Initiative.

Provided by: The Florida Center for Research in Science, Technology, Engineering and Mathematics (FCR-STEM – www.fcstem.org).

Eligibility: Middle and high schools in Florida where instructional leaders and all math and/or science teachers commit to participate in the professional development and implementation during the 2007-08 school year. Other configurations within schools, such as academies within schools, also are eligible to apply.

Application deadline: June 30, 2007. Application (attached) must be made by the school principal.

Cost: None to the school or district. Professional development, materials, coaching and support will be funded by the FCR-STEM grant from the Florida Department of Education.

Description: Content Enhancement Routines provide teaching tools that can easily be integrated into the comprehensive teaching model for math and science adopted by a school or district. The routines are explicit instructional procedures that revolve around visual devices (graphic organizers) that enable teachers to focus on targeted information, present information explicitly, prompt students to elaborate on the targeted topic, and make ideas and relationships concrete. Visual devices are used to help students organize, understand, remember, and apply information presented in class. The routines facilitate the use of research-based instructional strategies that address student needs related to reading in the content area and vocabulary development.

The Content Enhancement Routines were developed by the Center for Research on Learning at the University of Kansas (<http://www.ku-crl.org/sim/content.shtml>). Routines are available for planning and leading student learning; exploring text, topics, and details; teaching concepts; and increasing performance on assignments and assessments. Each routine has been studied primarily in middle and high school content-area classes with academic diversity including a range of literacy proficiency. Teachers learned the routines easily and both teachers and researchers observed student-learning gains, averaging at least 10 to 20 percentage points on classroom tests. Preliminary results of the Seminole County High School Reading Project (an RFT) and a study in Palm Beach County confirmed that large-scale implementation of these routines produce substantial gains in student achievement.

Schedule: Professional development for the first routine will be delivered in fall 2007 in a three-hour face-to-face workshop at the school, followed by coaching and support. Two more routines will be offered as online courses later in the 2007-2008 school year. The professional development and materials will be provided at no cost.

Eligibility: This initiative is designed to foster department-wide implementation in middle and high schools. Applications will be accepted from schools in which the entire math and/or science department will participate and commit to the year-long implementation. Other configurations, such as academies within schools, may also apply. The enclosed application must be received by the FCR-STEM no later than June 30, 2007.

Questions: Should you have questions, please do not hesitate to contact Marty Beech at mbeech@lsi.fsu.edu or at 850-921-0687.