Summary/Purpose: The Eisenhower National Clearinghouse for Mathematics and Science Education (ENC) was established in 1992 by the U. S. Department of Education at The Ohio State University. ENC identifies effective curriculum resources, creates professional development materials, and disseminates information and products to improve K-12 mathematics and science teaching and learning. ENC provides information about more than 24,000 curriculum resources through its major product, ENC Online, a comprehensive web site with over 200 million connections to date (www.enc.org). ENC has distributed six million copies of its primary print publication, ENC Focus, which currently has 125,000 subscribers. ENC collaborates with mathematics and science education professional organizations and Federal agencies to raise public awareness and participates in several NSF-sponsored digital library projects.

Accomplishments - Public Engagement: All products produced by ENC are available free, and eight percent (approximately 10,000) of ENC Focus subscribers and registered online users are parents and other community members. In the last five years, ENC produced issues of Focus on the topics of family involvement and partnerships with the community that are available in the Family and Community topic area of ENC Online. In addition ENC works closely with many professional organizations to support their public engagement efforts, most recently with the National Association of Manufacturers.

Accomplishments - Recruiting, preparing, training, and retaining teachers: Seventy percent of ENC’s audience is mathematics and science teachers. ENC provides support to teachers through its several products, particularly ENC Online and ENC Focus. Each Focus topic is selected to support teacher learning, and each publication features articles that provide research context for the topic, stories about teachers’ experience, and selected curriculum resources from the ENC collection. Recent topics include: Increasing Your Mathematics and Science Content Knowledge, Mathematics and Science in the Real World, Becoming Literate in Mathematics and Science, and Teaching in the Standards-Based Classroom. In addition to Focus, ENC has created and distributed approximately 400,000 professional development products, including 150,000 copies of the latest CD-ROM, By Your Own Design, which was co-produced with the National Staff Development Council. The CD-ROM emphasizes ongoing, job-embedded professional development and is framed in the research on effective professional development. All ENC print and CD-ROM products are also available online at www.enc.org.

Accomplishments – Developing an academic research base: ENC supports dissemination of research results in several ways. Focus topics are framed in research and include articles by researchers. Examples include articles by Nancy Love and LiPing Ma in recent issues on Data Driven Decision Making and Improving Mathematics and Science Content Knowledge. In addition professional development products, such as By Your Own Design, are based on research on effective professional development. ENC catalog records include information about how an item meets science or math standards, and 40% of catalog records now have information on research and evaluations, reviews, or awards.

Plans for the next 12 months: ENC is undertaking a major initiative to create new weekly online content, much of it focused on the three goal areas above. The weekly online content will, in turn, be the basis for ENC Focus. Specifically, for public engagement, ENC plans to create new guides for parents on math and science education and an update of the print and online Guidebook of Federal Resources for K-12 Mathematics and Science. For teachers, ENC will continue to create content that supports improving teacher content knowledge and effective professional development strategies, and will produce a CD-ROM of evaluated professional development resources produced through the NSF-sponsored TE-MAT project. ENC also plans to continue to provide access to research on effective curriculum resources and teaching strategies.