

## Resources for Designing Professional Development

1. *Designing Professional Development for Teachers of Science and Mathematics* includes a planning framework and describes a variety of professional development strategies.

Loucks-Horsley, S., Love, N., Stiles, K. E., Mundry, S., & Hewson, P. W. (2009)  
*Designing professional development for teachers of science and mathematics.*  
(3rd ed.). Thousand Oaks, CA: Corwin Press.

2. The TE-MAT database was developed to support professional development providers as they design and implement programs for pre-service and in-service K - 12 mathematics and science teachers. In this database you will find a Conceptual Framework that highlights key elements critical to the design and implementation of effective professional development programs, with numerous links to relevant reviews of materials and practitioner essays. In addition, the database includes a searchable collection of review of professional development materials. These reviews are the heart of the database, intended to help K–12 mathematics and science professional development providers more readily select materials appropriate for their program goals. Reviews may be browsed by purpose, subject/grade level, topic area, features, or author and title.

<http://www.te-mat.org/>

3. Based on findings from research and insights from practice, knowledge reviews provide guidance to practitioners in the areas of deepening teacher content knowledge, teacher leadership preparation and practice, and the involvement of STEM disciplinary faculty in the work of deepening teacher/teacher leader content knowledge. These knowledge reviews also articulate the contribution of the MSP program to the knowledge base and identify promising practices/strategies for further investigation. Each knowledge review offers opportunities to react to the practice-based insights described, provide additional insights in the particular topic area, and share examples of practice

<http://www.mspkmd.net/blasts/index.php>

4. With support from the National Science Foundation, Horizon Research, Inc. and the Education Development Center developed a “Handbook” on strategic leadership in the Math and Science Partnerships. The Handbook is based on research on large-scale reform, as well as the “wisdom of practice” of practitioners involved in prior teacher enhancement and systemic reform efforts.

[http://www.horizon-research.com/reports/2004/mspta\\_handbook.pdf](http://www.horizon-research.com/reports/2004/mspta_handbook.pdf)

5. The MSP Knowledge Management and Dissemination project created a searchable database that provides researchers and practitioners with information about measures of teacher content knowledge used in empirical research, including research conducted by MSP projects.

<http://www.mspkmd.net/instruments/index.php>