

What are the core goals of mathematics professional development? What features help achieve these goals?

The goal of mathematics professional development is to improve instruction in order to improve student learning. The research on professional development suggests that mathematics professional development is effective when it promotes mathematics teachers' growth in four major areas.

1. Builds teachers' mathematical knowledge and their capacity to use it in practice
2. Builds teachers' capacity to notice, analyze, and respond to students' thinking
3. Builds teachers' productive habits of mind, and
4. Builds collegial relationships and structures that support continued learning.

In addition, research suggests that three broad features of professional development support these goals.

1. Substantial time investment
2. Systemic support, and
3. Opportunities for active learning.

Based on *Mathematics Professional Development*.

The views expressed or implied in this publication, unless otherwise noted, should not be interpreted as official positions of the Council.

Copyright © 2010 by The National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502, Tel: (703) 620-9840, Fax: (703) 476-2690, www.nctm.org.