

## Research in Brief:

# Features of Professional Development associated with positive educator and student outcomes

Professional development activities are vital to enhance skills and prepare educators for the demands of their profession. Some recent studies have suggested that these training opportunities are inadequately designed, and may not produce the desired outcomes.

The purpose of this metasynthesis was to discover and define which features of professional development in-services produce positive educator and student outcomes.

### **What is a Metasynthesis?**

A metasynthesis is an intentional and coherent approach to analyzing data across a variety of studies. Researchers identify a specific research question and then search for, select, appraise, summarize, and combine evidence to address the research question. This process uses rigorous methods to synthesize existing studies to construct greater meaning through an interpretative process.

Unlike a meta-analysis which is used to aggregate findings to establish 'truths', for example, if an intervention has a true effect on a variable, a meta-synthesis can lead to new interpretations of research. This can result in new theories being developed.

In summary, a meta-analysis is a way of testing a hypothesis whereas a meta-synthesis is a way of developing a new theory.

### *Why does this matter?*

- ⇒ Professional development activities are vital to enhance skills and prepare educators.
- ⇒ If professional development activities are not well designed, then they may not have any impact on educator or student outcomes.
- ⇒ The duration of the most effective in-service training ranged between 15 and 80+ hours (including coaching and reflection), depending on the complexity of the knowledge content.
- ⇒ Training consisting of a clear introduction, demonstration/ explanation of key skills, time to reflect on how the skill can be applied and mentoring opportunities have clear positive effects on educator and student learning.
- ⇒ Ongoing training, feedback, and reflection positively reinforced professional development.



The Knowledge Network for Student Well-Being is a project of the **Knowledge Network for Applied Educational Research** ([www.knaer-recrae.ca](http://www.knaer-recrae.ca))

Communities of practice in the KNSWB include: **Ontario Healthy Schools Coalition, PREVNet, School Mental Health ASSIST, and the Social Planning Network of Ontario**

Other Research in Briefs can be found at <http://oere.oise.utoronto.ca/>

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### What Did the Researchers Do?

The research team conducted key word searches in more than 10 databases including ERIC, PsycInfo, MEDLINE where they found more than 25,000 research papers on the topic of professional development for elementary and secondary educators.

They filtered the results down to 15 syntheses using the following inclusion criteria: professional development was the main focus of the paper, there was an explicit attempt to identify characteristics of and conditions under which in-service training was effective, and sufficient information was included in the reports to conduct secondary analyses of the relationships between the key characteristics of in-services and findings in the research syntheses.

Overall the 15 final syntheses included nearly 550 studies and more than 43 000 participants ranging from PreK to grade 12 educators, early childhood practitioners, and other adult learners.

These 15 reviews were then analyzed to locate main and common characteristics of professional development in-services that lead to improved performance for both the educators and the students.

Findings were related to the following in-service features:

- Focus of Training (Objectives and Content Area)
- In-Service Setting (Job Embedded or Non Job Embedded)
- In-Service Characteristics (These included: Introductions, illustrations, opportunities, mentoring and feedback)
- Study Outcomes (educator and student outcomes)

### What did they learn?

Results show that professional development is most effective when it includes a trainer introduction; demonstration, and explanation of the benefits of mastering the content knowledge or practice; active and authentic educator learning experiences; opportunities for educators to reflect on their learning

experiences; feedback during the in-service training; extended follow-up supports (e.g. additional training opportunities of sufficient duration/intensity, ongoing coach/mentor supports) in order to have discernible effects on educator and student outcomes.

#### Key findings:

- The duration of the most effective in-service training ranged between 15 and 80+ hours, depending on the complexity of the knowledge content.
- Training consisting of a clear introduction, demonstration/explanation of key skills, time to reflect on how the skill can be applied, and mentoring opportunities have clear positive effects on educator and student learning.
- Ongoing training, feedback, and reflection positively reinforced professional development.

In order for the skills and new learning taught during professional development activities to make its way into educator's practice, the sessions should:

- demonstrate content knowledge to educators,
- include authentic educator learning opportunities,
- allow time for reflection on knowledge and skill acquisition,
- provide coaching/mentoring/feedback both during and after the in-service,
- extend learning by offering ongoing in-services of sufficient intensity and duration to promote educator mastery of content knowledge

The dose necessary to produce observable and sustained effects differs depending on the complexity of the "new learning". The more complex the knowledge or skill, the more time will be needed to reflect upon, practice and reinforce the skill.

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