Little evidence of the effectiveness of continuing professional development (CPD)

Continuing professional development (CPD) aims to improve outcomes for the children and young people with whom educational and welfare professionals work. There is no clear evidence that CPD in education improves student academic outcomes.

What is this review about?
CPD is delivered in a variety of settings by different kinds of ‘trainers’ or educators for differing lengths of time and differing intensity. There are many methods of delivery such as coaching sessions, feedback based on observations or videotapes of classroom practice, and feedback and reflection workshops.

This review looked at the effects of CPD approaches for education and welfare practitioners (pre-school teachers, pedagogues, school teachers, social workers, psychologists, police officers) on educational, social, crime and justice outcomes for children and young people; and – as secondary outcomes – any effects on the professional practice of practitioners in these fields. For the purposes of this review, the CPD must involve the development of core professional skills.

What studies are included?
This review includes studies that evaluate the effects of CPD on children’s or young people’s and professionals’ outcomes. Fifty-one studies were identified, all related to education. No eligible studies were identified for social welfare or crime and justice.

The 51 education studies were grouped into three sub-topic areas: 12 studies (reporting 10 trials) considered CPD in social and emotional development interventions (in daycare, kindergarten, pre-school and school settings); 38 studies (reporting 33 trials) dealt with CPD in language and literacy development interventions; one study looked at CPD in stress reduction. Most (48) studies used experimental designs with random assignment.

Only 26 of the 51 studies were included in the meta-analyses. The reduction was caused by studies reporting on the same trial (five studies), insufficient reporting of outcomes to calculate an effect size (four studies) and studies being rated to have too little evidence for conclusions to be drawn, with the exception of language and literacy development interventions. For this type of CPD, there seems to be no effect on student academic outcomes.
high risk of bias. In total 16 studies were assessed not to be of sufficient methodological quality to be included in the meta-analyses.

The studies spanned the period 1999 to 2018. Thirty-three trials were undertaken in the USA, two in the UK, and one in each of the following countries: Denmark, Ireland, the Netherlands, New Zealand, Portugal, Australia, Chile and Germany.

What are the main findings of this review?

Social and emotional development interventions (nine studies)
A very small body of evidence for social and emotional development interventions (in daycare, kindergarten, pre-school and school settings) finds no effect of CPD on student academic outcomes (four studies). Results from only two individual studies could be combined in a single meta-analysis of other student outcomes (i.e. non-academic) and teacher outcomes, precluding any conclusions concerning effectiveness or ineffectiveness of this type of CPD on these outcomes.

Language and literacy development interventions (17 studies)
A moderate body of evidence for language and literacy development interventions finds no effect for CPD on student academic outcomes (13 studies). The results from only three individual studies could be combined in a single meta-analysis of teacher outcomes, thus precluding any conclusions concerning effectiveness or ineffectiveness of this type of CPD on teacher outcomes.

Stress reduction (one study)
It is not possible to draw conclusions from the one study placed in the sub-topic of stress reduction.

What do the findings of the review mean?
There is insufficient evidence for conclusions to be drawn, with the exception of language and literacy development interventions. For this type of CPD, there seems to be no effect on student academic outcomes.

The dominance of the USA as the main country in which the types of CPD interventions covered by this review have been evaluated clearly limits the generalizability of the findings. Moreover, the limited number of studies means that it was not possible to conduct an analysis of specific CPD-approaches across cultures, professions/service-deliverer types, organizations and service-receiver types.

Agencies should consider conducting a large randomized controlled trial (or a series of large RCTs) evaluating the effectiveness of a CPD intervention in countries outside the USA.