

# Factors facilitating and constraining the delivery of effective teacher training to promote health and well-being in schools: a survey of current practice and systematic review

J Shepherd,<sup>1\*</sup> S Dewhurst,<sup>2</sup> K Pickett,<sup>1</sup> J Byrne,<sup>3</sup>  
V Speller,<sup>4</sup> M Grace,<sup>3</sup> P Almond,<sup>5</sup>  
D Hartwell<sup>1</sup> and P Roderick<sup>2</sup>

<sup>1</sup>Southampton Health Technology Assessments Centre (SHTAC), Faculty of Medicine, University of Southampton, Southampton, UK

<sup>2</sup>Primary Care and Population Sciences, Faculty of Medicine, University of Southampton, Southampton, UK

<sup>3</sup>Southampton Education School, Faculty of Social and Human Sciences, University of Southampton, Southampton, UK

<sup>4</sup>Health Development Consulting Ltd, Waterlooville, UK

<sup>5</sup>Faculty of Health and Social Care, Anglia Ruskin University, Cambridge, UK

\*Corresponding author

Declared competing interests of authors: none

Published August 2013

DOI: 10.3310/phr01020

## Scientific summary

Teacher training to promote health and well-being in schools

Public Health Research 2013; Vol. 1: No. 2

DOI: 10.3310/phr01020

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# Scientific summary

## Background

Schools are an important setting for health promotion and teachers have an integral role to play in promoting children's and young people's health and well-being. There is a need to investigate how teachers are prepared in their initial teacher training (ITT) to be effective health promoters.

## Objectives

To conduct a survey, using questionnaires and interviews, of ITT providers in England to assess how health and well-being is covered on their courses and to identify barriers and facilitators to training, and to conduct a systematic review of the effectiveness of and barriers to and facilitators of teacher training around health and well-being. The two components of the project were designed to complement each other in answering the research questions.

## Methods

### *Survey*

An online questionnaire about provision of health training on ITT courses was conducted with a sample of 220 ITT course managers in England in June and July 2011. We randomly sampled higher education institutions (HEIs) and employment-based initial teacher training (EBITT) providers from each region and sampled all of the school-centred initial teacher training (SCITT) providers in England. Data were analysed using descriptive statistics. We carried out subsequent face-to-face/telephone interviews with a purposively sampled subsample of 19 of the course managers who responded to the questionnaire, to examine issues in more depth. Data were analysed using a content analysis approach.

### *Systematic review*

We conducted a two-stage systematic review of the effectiveness of and barriers to and facilitators of teacher training around health and well-being: (1) we developed a descriptive map of the characteristics of international research studies evaluating pre-service or in-service teacher training around health and well-being; and (2) we conducted a synthesis of a subset of these studies (pre-service training).

### **Search strategies**

Electronic searches of bibliographical databases (including MEDLINE, EMBASE, The Campbell Library and PsycINFO) and relevant websites (including the British Educational Research Association) were conducted. Bibliographical databases were searched from the period of database inception up to May 2011.

### **Study selection**

In round 1, studies were screened on the basis of title and abstract by one reviewer using a priori inclusion criteria, with a subset independently screened by a second reviewer. To be included, studies needed to mention all of the following: health and well-being within schools, the training of teachers in relation to the promotion of health and well-being, and research into the processes and/or outcomes of this. Publications from before 1990 were not included. Second, the full papers identified from the initial screening were retrieved for further screening for eligibility for the descriptive map. To be eligible, studies had to meet the same criteria used in the initial screening, providing that there was an adequate description of the training. All studies were screened for eligibility by one reviewer and checked by another.

### Descriptive map

A reviewer mapped the key characteristics of the included studies using a keyword tool devised for this study, and a subset were checked by a second reviewer. The purpose of this was to create a detailed map of the evidence base and to then use this to prioritise a subset of studies for the full systematic review in consultation with the project advisory group.

### Data extraction and quality assessment

A reviewer extracted data and quality assessed the studies included in the full review, with checking by a second reviewer.

### Data synthesis

A narrative synthesis of outcome evaluations in the full review was carried out. A thematic analysis of the process evaluation data was conducted. Each process evaluation was systematically coded in a NVivo database (version 9; QSR International, Southport, UK) to generate themes summarising the findings. A narrative account was then written, summarising each theme. Studies were not excluded from the synthesis because of quality, but methodological limitations of particular studies are discussed when relevant.

## Results of the survey

### Online questionnaire

An overall response rate of 34% (74/220 course managers) was achieved for the online questionnaire. The majority (89%) of the respondents reported that they felt that it was either very important or important to cover health and well-being within the ITT curriculum. HEI and SCITT course managers most commonly reported that they spent 5–9% of their curriculum time on covering health-related topics (reported by 46% and 38% respectively), whereas EBITT course managers most commonly reported that <5% of their course time was spent on this (reported by 44%).

The most commonly covered topics on courses were *Every Child Matters* (ECM) (100%), child protection (100%), social and emotional aspects of learning/emotional health and well-being (99%), antibullying (97%), working with parents (96%), environmental education (81%) and physical activity (81%). Fewer of the course managers reported that their courses covered healthy eating (63%), sex and relationships education (62%), drugs education (56%), alcohol education (41%) and smoking prevention (34%). The majority of the course managers (82% of HEIs, 69% of SCITT providers and 66% of EBITT providers) said that they worked with external agencies to deliver some aspects of health and well-being, and they most commonly reported working with personnel from local authorities (reported by 75%) and local schools (reported by 62%). Only a minority (21%) said that they worked with health professionals. The majority of the respondents (70%) reported that the health and well-being aspects of their courses were assessed.

### Interviews

The interviews offered more in-depth insights into how health was covered in ITT and the barriers to and facilitators of this. Many of the course managers interviewed expressed a holistic view of education, and they felt that it was important for trainee teachers to develop knowledge, skills and awareness in relation to pupils' health. We found, however, that there was variability in how health was addressed across and within institutions (e.g. trainee teachers on science or physical education courses were likely to receive more training in these issues). On some courses some health topics were incidentally addressed as part of other aspects of the course, whereas in others they were more integrated into the curriculum or discrete sessions were provided (or there was a mix of these approaches). The course managers more frequently mentioned covering topics such as special educational needs, behaviour management and emotional well-being than topics related to living a healthy lifestyle such as healthy eating and alcohol and drugs education. Trainee teachers' experience of teaching personal, social, health and economic (PSHE) education or exposure to health initiatives on school placement was also variable, often depending on individual circumstances and the priorities of the schools in which they were placed. Many of the course managers were not aware of the

training in health that trainee teachers received in school and a perceived challenge was that PSHE education was delivered in different ways in different schools.

Most of the course managers felt that they addressed trainee health and well-being adequately on their courses, and this was usually because they felt that they had effective pastoral support systems. Some also had specific initiatives in place to address trainee health, including school mentor training.

Although there was variability in how health was addressed, we identified some examples of innovative practice, including a whole-day health event run in collaboration with health professionals, an interprofessional working day run by students with a social work background from another course, and alternative placements in health-related settings such as social services and hospital schools.

We found that training in health in ITT was often facilitated by the interests and backgrounds of ITT staff. Staff having health-related professional experience was a facilitator because this meant that they had ready access to expertise and knowledge. This experience also helped to raise their awareness of the importance of addressing health. Working with people with health expertise from external agencies to deliver some content was perceived to have been particularly successful on courses, and having contacts to bring in external expertise was a commonly mentioned facilitator. Policy frameworks such as ECM, and interprofessional and interdepartmental working within and between organisations were perceived to help facilitate the inclusion and integration of health in ITT. The main barriers to delivering health training cited by the course managers were limited curriculum time; health being perceived to be a lower priority than other aspects of training, partly as it was felt that it was no longer a high government priority in education; and lack of funding. The course managers also suggested that trainee teachers themselves could influence the health training that they received through their life experience, interest in it and comfort and confidence in talking about and teaching these topics.

It should be acknowledged that the questionnaire and interview sample might be biased towards course managers who are more supportive of health in teacher training, and therefore health may not necessarily be a consistent feature of all ITT courses.

## Results of the systematic review

We identified 170 publications from the literature search that met the eligibility criteria for the descriptive map. In terms of location, the largest proportion was studies conducted in the USA. The majority focused on teacher training in sexual and reproductive health, drugs and alcohol or mental and emotional health. Most of the studies were of in-service training, with only 31 studies reporting pre-service training. In consultation with the advisory group we decided to focus the synthesis on the pre-service studies as this complemented the survey.

A further round of screening was conducted for the synthesis. To be included, the pre-service studies needed to provide a rationale for studying pre-service teachers and to report the training and results in sufficient detail. In total, 20 studies (reported in a total of 21 publications) met these criteria. Most had been conducted in the UK or Australia. They covered a range of topics including health promotion in general, child protection and mental health. The studies were diverse in methodologies and in how training was delivered. The studies that reported teacher outcomes of training ( $n = 12$ ) most commonly were based on before-and-after single cohort designs. Most did not include a control group and were based on small samples. Methodological quality was uncertain because of lack of detail given in the publications, but overall quality could be considered low because of the evaluation designs used. The reliability and usefulness of the findings from the studies reporting process evaluations ( $n = 16$ ) was judged as medium or high in 10 studies. None of the studies examined the impact of pre-service training on pupil outcomes in school.

The studies demonstrated some increases in trainee teachers' factual knowledge of health issues following training. There was a general increase in their confidence in relation to teaching PSHE education, and in identifying and helping children with mental and emotional health problems or identifying child protection issues. Likewise, there was a general increase in positive beliefs about the role of teachers and schools in promoting child health, including tentative evidence for beliefs about the relationship between good health and effective learning. There was some (limited) evidence on trainees' and qualified teachers' experiences of teaching health in schools, specifically PSHE education lessons. Teachers' self-ratings showed increases in scores for their ability to facilitate effective discussion of health issues. Teaching methods such as interactive and practical tasks for PSHE education were popular.

In terms of processes, in the main, the training was acceptable and well received by trainee teachers, with a few minor exceptions. Trainee teachers' views on the adequacy of the training in preparing them for their role varied, with child protection studies reporting that trainee teachers did not always feel prepared to deal with this issue after training. The evidence suggested that, for training to meet trainee teachers' needs, it may need to include practical experience and skills; be personally relevant and take into account individual needs; and be clearly relevant to teachers' practice in schools. Barriers to health training identified from the studies included a lack of time, balancing breadth and depth, and variation in training provision.

## Conclusions

The online questionnaire and interview survey show that teacher training in health and well-being in ITT is variable across institutions in England. There appear to be deficits in training in relation to key health issues that are especially relevant to secondary school pupils, such as sex and relationships education and alcohol and drugs education. The delivery of training often depends on the commitment and backgrounds of ITT staff, with a lack of time in the ITT curriculum and a perception that health is a lower priority area cited as barriers to its delivery. Accessing specialist health expertise from external agencies or other departments is an important facilitator. The main limitation of this research was the low response rate (34%) to the survey.

The systematic review of pre-service studies shows that, generally, pre-service teacher training improves teachers' knowledge, confidence and values in relation to health, and that it is generally acceptable and well received by students. In line with our survey findings, though, it suggests that there is variability in provision across providers and that time is a barrier to training. The studies suggest that training needs to include practical skills and be personally and educationally relevant to meet trainee teachers' needs. There is a lack of research demonstrating what impact ITT health training has on school pupils' health and educational outcomes.

## Implications for practice

There are a number of implications for practice including that health issues should be addressed throughout the ITT course, encouraging trainees to become accustomed to their health-promoting role; trainees should be given opportunities to promote health on school placements with adequate support; and a non-threatening atmosphere should be established to encourage discussion of sensitive and complex health topics.

## Research recommendations

1. Further evaluation of the effectiveness of health-related training spanning ITT and the early career years is required, using controlled designs where possible, accompanied by process evaluation to assess implementation, acceptability and adequacy, and other factors influencing effectiveness.
2. Evaluation of ITT programmes could also assess aspects of training found to be beneficial, such as interdisciplinary and interprofessional working and increasing personal relevance to trainees.

3. Given the increased emphasis on school-based ITT, research would be useful with mentors and tutors located in placement schools, and trainee teachers themselves, to ascertain how ITT is organised and to assess barriers and facilitators.
4. Further evidence synthesis is needed to assess the effectiveness of health training for in-service teachers, drawing on a sample of the studies identified by our descriptive map. The focus could be on specific health priority topics (e.g. drugs, alcohol, sexual health) and/or assessing training for teachers in lifestyle-related health behaviour skills.
5. Follow-up research should be conducted with ITT providers over the next few years to assess the longer-term impact of government policy changes on the coverage of health and well-being in courses.

## Study registration

This study is registered as PROSPERO number CRD42012001977.

## Funding

The National Institute for Health Research Public Health Research programme.

# Public Health Research

ISSN 2050-4381 (Print)

ISSN 2050-439X (Online)

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## This report

The research reported in this issue of the journal was funded by the PHR programme as project number 09/3005/12. The contractual start date was in March 2011. The final report began editorial review in October 2012 and was accepted for publication in January 2013. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The PHR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

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