

# Literature review on teacher quality in disadvantaged schools

## Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

### Table of Contents

Table of Contents.....	1
Background and review rationale.....	1
Objectives .....	2
Methodology.....	2
Inclusion and exclusion criteria for the review.....	3
Search strategy for identification of studies.....	4
Data extraction and management.....	5
Appraisal of included studies.....	5
Data synthesis.....	6
Reporting .....	6
Personnel .....	7
Conflicts of interest.....	7
Timeline.....	7
References .....	8
Appendix A: Data extraction tool.....	10

### Background and review rationale

The Education Endowment Foundation has commissioned this as a conceptual review on the topic of teacher quality, with a focus on the recruitment and retention of skilled teaching personnel into disadvantaged schools, to inform the focus of an upcoming funding round on this theme.

Research suggests that teacher quality is a key influence on pupil attainment (Coe et al., 2020), second only to pupil background (OECD, 2015) and that *sustained* access to high quality teachers is a significant challenge in England: 30% of teachers leave the profession within the first five years and 40% leave within 10 years (Long & Danechi, 2022). Recruiting and retaining high quality teachers in disadvantaged schools is a particularly urgent need (see also Tereshchenko et al., 2020 and House of Commons, 2017).

There are existing reviews of quantitative studies of teacher quality (Bradford et al., 2021) and on ‘what works in attracting and retaining teachers in challenging schools and areas’ (See et al., 2020). However, the present review intends to scope opportunities for new research in this area, to find

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

and recommend promising leads for future studies. These might include interventions where there is already some evidence from randomised controlled trials or quasi-experimental studies as well as potential interventions that have not yet been investigated experimentally.

The review takes a Rapid Evidence Assessment approach, given the short timescale and the focus on synthesising research with the purpose of making recommendations for promising future areas for research, which means a full systematic review is not required.

### Objectives

The aim of the review is to summarise two areas of research and make recommendations for future research: measures of or proxies for teacher quality; and strategies for recruitment, retention and distribution of teachers to disadvantaged schools. The review will cover quantitative, qualitative and theoretical research.

#### Research questions:

Questions 1-3 address measures of teacher quality, while questions 4-6 address recruitment, retention and distribution of teachers to disadvantaged schools.

1. What measures or proxies for teacher quality (“measures”) are used in the research literature?
2. What are the key advantages and limitations of the measures identified? Are there any gaps in the measures used to identify teacher quality that could be filled?
3. Which measures are most likely to be appropriate for use in research assessing the impact of interventions on teacher recruitment and retention in disadvantaged schools?
4. What are the main approaches and school-based policies that could be used to improve recruitment, retention and distribution of high quality teachers in disadvantaged schools? How can these be categorised?
5. What are the key messages from research on these approaches or policies? How promising might these approaches be and what gaps are there in our understanding of their likely effectiveness?
6. What methodological challenges are there for evaluation of interventions into teacher recruitment and retention? What research designs and methodologies might enable more robust studies in future?

### Methodology

We will conduct a rapid evidence assessment of quantitative, qualitative and theoretical research. We will draw on methodological guidance from the Cochrane Collaboration Rapid Reviews Methods Group (Garrity et al., 2020), as well as the Civil Service REA methodological guidance (Government

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

Social Research Service, 2009) and the Cochrane Collaboration’s guidance on overviews of reviews (Pollock et al. 2020).

We will take a pragmatic approach to the review, given the short timescale. As previous policy is significant in shaping our review, we will carry out an exploratory scoping phase for each set of research questions, making use of grey literature and review articles. For the main searches, we will restrict searches to EBSCO (BEI and ERIC), ProQuest (Education Database and Social Science Database), Scopus and Google Scholar.

#### *Inclusion and exclusion criteria for the review*

The inclusion and exclusion criteria and search terms for both searches will be determined following initial scoping phases involving searches of grey literature and review articles, supported by a search of international academic literature.

	<b>Include</b>	<b>Exclude</b>
<b>Sample</b>	Children and young people aged 4-18 in school contexts. Studies from any country will be included	Higher Education, Further Education and Early Years Settings.
<b>Phenomena of Interest</b>	We define teacher quality as the characteristics of an individual teacher including characteristics resourced by the system in which they work, that are linked to pupil outcomes. Examples might include subject-specialist qualification, or participation in professional development.	Studies regarding quality teaching practices or classroom pedagogy.
<b>Design</b>	Any design to be included.	
<b>Evaluation/Outcome</b>	Studies with quantitative and qualitative outcomes; theoretical articles without outcome measures.	
<b>Research type</b>	Quantitative, qualitative, mixed methods and review and theoretical studies.	
<b>Other criteria</b>	Literature for OECD countries in the last 10 years and for the UK, US, Canada and Australia in the last 20 years.  Published in English.	Literature published outside of the UK/Australia/Canada/USA before 2012. Any literature published before 2002.

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

	Published in peer-reviewed journals or grey literature.	Published in languages other than English. Unpublished studies.
--	---------------------------------------------------------	--------------------------------------------------------------------

#### Search strategy for identification of studies

Searches will be conducted using search systems and bibliographic databases, including EBSCO (BEI and ERIC), ProQuest (Education Database and Social Science Database), Scopus and Google Scholar.

#### Search terms

Our search terms for searches 1 and 2 have been developed from an exploratory scoping phase, searching grey literature, with the intention of making the searches feasible in the timescale by limiting the items for screening to a manageable number.

	Exploratory	Search 1 (RQ1-3)	Search 2 (RQ4-6)
<b>Sources</b>	Google Google Scholar Home page - OECD Department for Education - GOV.UK ( <a href="http://www.gov.uk">www.gov.uk</a> )	EBSCO (ERIC and BEI)	EBSCO (ERIC and BEI) Scopus ProQuest (Education Database and Social Science Database)
<b>Search terms</b>	“teacher quality is defined by” OR “teacher quality in high performing systems” OR “measuring teacher quality” OR “teacher quality measures”	“teacher quality” OR “excellent teacher*” OR “good teacher*”	(“recruit*” OR “retention” OR “turnover” OR “attrition” OR “distrib*”) AND “teacher*”
<b>Search filters</b>	NOT “higher education” Terms searched for in abstracts only	NOT “higher education” Terms searched for in abstracts only	NOT “higher education” NOT “early years” NOT “pre-school” NOT “preschool” Terms searched for in abstracts only
<b>Reference management software</b>	References will be managed in a bespoke Excel spreadsheet.	References will be managed in a bespoke Excel spreadsheet.	References will be managed in a bespoke Excel spreadsheet.

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

<b>Selection of studies</b>		Assessment of author’s intention to address characteristics of individual teachers from reading abstract	Study reports on or discusses approach to recruitment or retention of teacher or distribution of teachers among schools.
-----------------------------	--	----------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------

#### **Selection of studies**

We define teacher quality as the characteristics of an individual teacher including characteristics resourced by the system in which they work that are linked to pupil outcomes. Our exploratory work has demonstrated that “teacher quality” and “quality teaching” are occasionally used interchangeably in the literature and not always clearly defined. Therefore, it is not easy to distinguish the literature we are interested in by search terms. We have taken the approach of excluding studies that only use “quality teaching”, “quality of teaching” and “teacher effectiveness” because this literature is more likely to be focussed on teaching practices rather than teacher characteristics. We have mitigated for the risk of losing papers of interest by including search terms “excellent teacher” and “good teacher”. Our exploratory search showed this would enable us to capture a significant proportion of the literature we are interested in because these terms are frequently found alongside the “effective teacher” in studies relevant to teacher quality. We recognise that the teacher effectiveness literature is large and we will have some loss of relevant papers. Our exploratory search suggests that where teacher effectiveness literature is relevant to teacher quality, it uses standard measures such as teacher qualifications and years of service that will already be captured in our search for teacher quality.

Reviewers will assess whether the intention of the study author(s) is to address teacher quality by reading the abstract, and deciding whether, regardless of the terminology, the author(s) intends to address the characteristics of individual teachers. At the title and abstract stage, 20% of results will be dual-screened.

The results of this process will be documented in a PRISMA flow diagram.

#### **Data extraction and management**

The data extraction will be performed using Microsoft Excel using the categories outlined in Appendix A. The results will be presented in the final review in tables of characteristics, for example showing frequencies of measures identified.

#### **Appraisal of included studies**

We will use a Weight of Evidence rating approach (Cordingley, 2007, cited in Basma and Savage, 2018, p7) to critically appraise studies. This is an appropriate approach given the timescale of the

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

review and the need to appraise a range of methodological approaches, including theoretical, qualitative, quantitative and experimental designs.

	Description
WOE A	Did the reported findings in the study answer the study question and was it internally consistent?
WOE B	Is the research design appropriate for the review questions?
WOE C	Was the focus of the study relevant to the review question?
WOE D	Overall WOE D rating of each study as ‘High’, ‘Medium’, or ‘Low’ Studies that score LOW on WOE A will be deemed LOW on all WOE criteria. Studies that score High or Medium WOE A will be evaluated on all criteria and given an overall code in WOE D.

We will use the critical appraisal of studies to support answers to the research questions, particularly in relation to strengths and limitations of measures, interventions and methods, and identification of gaps in the research literature.

#### **Data synthesis**

We do not intend to conduct a quantitative synthesis as part of this review as it is not appropriate for the research questions being addressed.

In general, we will take a narrative synthesis approach to answer the research questions. We will use some descriptive statistics to answer RQ1. We will categorise the measures identified in the literature and calculate the frequencies with which they were encountered and analyse the differences by year and country in the measures used.

To answer RQ2 and RQ3, we will group and summarise the advantages and disadvantages extracted from the literature and identified through the critical appraisal.

To answer RQ4 and RQ5, we will categorise and describe the most frequent approaches of the literature and summarise the key messages of each.

To answer RQ6, we will summarise and categorise strengths and limitations of the methodologies used in investigating interventions into teacher recruitment, retention and distribution.

#### **Reporting**

The report will use the EEF review reporting template for rapid evidence reviews. It will include background to the review, research questions, methodology, results from grey literature searches

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

and academic literature searches, and a narrative synthesis to answer the six research questions. GRADE analysis is not suitable for the review objectives and research questions under consideration.

### Personnel

- Dr Becky Taylor** - leading the review.
- Dr Mark Hardman** - evaluation of the literature.
- Dr Sal Riordan** - leading on the review methodology.
- Claire Pillinger** - coding and data extraction.
- Professor Gemma Moss** - review design and reporting.

### Conflicts of interest

The authors are not aware of any conflicts of interest.

### Timeline

Deadline	Activity
w/b 7 Nov	Project set up meetings with EEF
25 Nov	Exploratory work to determine search terms, inclusion exclusion criteria, critical appraisal tool, etc. Exploratory phase and Search 1, screening and initial data extraction Submission of draft study plan
2 Dec	Identification of potential members of expert panel and sending of invitations Test run of search 2 Modify an appropriate critical appraisal tool Search 1 further data extraction for RQ2&3
9 Dec	Search 2, screening and initial data extraction Search 1 data synthesis RQ1-3
16 Dec	Search 2 data synthesis RQ4
23 Dec	Search 2 critical appraisal work and data synthesis for RQ5.
7 Jan	Design of expert panel and focus group Expert panel Search 2 data synthesis RQ6
13 Jan	Report writing Submit draft report
27 Jan	Stakeholder focus group
March 2023	Final report (date tbc)

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

---

#### References

- Basma, B., & Savage, R. (2018). Teacher Professional Development and Student Literacy Growth: A Systematic Review and Meta-analysis. *Educational Psychology Review*, 30(2), 457–481.  
<https://doi.org/10.1007/s10648-017-9416-4>
- Bradford, K., Pendergast, D., & Grootenboer, P. (2021). What Is Meant By ‘Teacher Quality’ In Research And Policy: A Systematic, Quantitative Literature Review. *Education Thinking*, 1(1), 57–76.
- Coe, R., Rauch, C. J., Kime, S., & Singleton, D. (2020). *Great Teaching Toolkit Evidence Review*. Evidence Based Education. [https://assets.website-files.com/5ee28729f7b4a5fa99bef2b3/5ee9f507021911ae35ac6c4d\\_EBE\\_GTT\\_EVIDENCE%20REVIEW\\_DIGITAL.pdf?utm\\_referrer=https%3A%2F%2Fwww.greatteaching.com%2F](https://assets.website-files.com/5ee28729f7b4a5fa99bef2b3/5ee9f507021911ae35ac6c4d_EBE_GTT_EVIDENCE%20REVIEW_DIGITAL.pdf?utm_referrer=https%3A%2F%2Fwww.greatteaching.com%2F)
- Garrity C, Gartlehner G, Nussbaumer-Streit B, King VJ, Hamel C, Kamel C, Affengruber L, Stevens A. Cochrane Rapid Reviews Methods Group offers evidence-informed guidance to conduct rapid reviews. *J Clin Epidemiol*. 2021 Feb;130:13-22. doi: 10.1016/j.jclinepi.2020.10.007. Epub 2020 Oct 15. PMID: 33068715; PMCID: PMC7557165.
- Government Social Research Service (2009). Rapid Evidence Assessment Toolkit.  
<https://webarchive.nationalarchives.gov.uk/ukgwa/20140402164155/http://www.civilservice.gov.uk/networks/gsr/resources-and-guidance/rapid-evidence-assessment>
- Hong, Q.N. et al. (2018) ‘The Mixed Methods Appraisal Tool (MMAT) Version 2018 for Information Professionals and Researchers’. *Education for Information*, vol. 34, no. 4 285 – 291.
- House of Commons. (2017). *Recruitment and retention of teachers fifth report of session 2016-2017. HCC 199*.
- Long, R., & Danechi, S. (2022). Teacher recruitment and retention in England. House of Commons Library.
- Noyes J, Booth A, Cargo M, Flemming K, Harden A, Harris J, Garside R, Hannes K, Pantoja T, Thomas J. Chapter 21: Qualitative evidence. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). *Cochrane Handbook for Systematic Reviews of Interventions* version 6.3 (updated February 2022). Cochrane, 2022. Available from [www.training.cochrane.org/handbook](http://www.training.cochrane.org/handbook).
- OECD (2018), *Effective Teacher Policies: Insights from PISA*, PISA, OECD Publishing.  
<http://dx.doi.org/10.1787/9789264301603-en>
- Pollock M, Fernandes RM, Becker LA, Pieper D, Hartling L. Chapter V: Overviews of Reviews. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). *Cochrane Handbook for Systematic Reviews of Interventions* version 6.3 (updated February 2022). Cochrane, 2022. Available from [www.training.cochrane.org/handbook](http://www.training.cochrane.org/handbook).
- See, B.H., Morris, R., Gorard, S. & El Soufi, N. (2020) What works in attracting and retaining teachers in challenging schools and areas?, *Oxford Review of Education*, 46:6, 678-697, DOI: [10.1080/03054985.2020.1775566](https://doi.org/10.1080/03054985.2020.1775566)



## **Literature review on teacher quality in disadvantaged schools**

### **Protocol for a rapid evidence assessment**

**Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society**

---

Tereshchenko, A; Mills, M; Bradbury, A; (2020) Making progress? Employment and retention of BAME teachers in England. UCL Institute of Education: London, UK.

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL’s Faculty of Education and Society

#### Appendix A: Data extraction tool

Data extraction category	Search	Data format
a. Item title, author and journal	1 & 2	Open text
b. DOI	1&2	Open text
c. Year of publication	1&2	YYYY
d. Country/countries of study	1&2	Country name
e. Measures of teacher quality used, discussed or reported upon in paper	1	Y/N
f. Selection check: do the author(s) intend to address teacher quality (as per our definition)? DO NOT CONTINUE IF N or UNCLEAR	1	Y/N/Unclear
g. What is the purpose or use of the teacher quality measure?	1	Quantitative/ Qualitative/ Theoretical
h. Teacher quality measures used or discussed	1	Open text (to be categorised)
i. Purpose or use of teacher quality measure(s)	1	Open text (to be categorised)
j. Likely to contain advantages or disadvantages of teacher quality measures?	1	Y/N
k. Research pertains to socio-economic disadvantages?	1&2	Y/N
l. Research pertains to recruitment, retention, distribution?	1	Y/N
m. Research pertains to teacher quality?	2	Y/N
n. Notes	1&2	Open text
o. Advantages of teacher measure	1	Open text
p. Disadvantages of teacher measure	1	Open text
q. Selection check: is this research about an approach to improved access to teachers for students from disadvantaged homes? (Do not continue if N or UNCLEAR)	2	Y/N/Unclear
r. Approach to improving access to teacher quality for students facing disadvantages	2	Recruitment/ Retention/

## Literature review on teacher quality in disadvantaged schools

### Protocol for a rapid evidence assessment

Principal investigator(s): Dr Becky Taylor, IOE – UCL's Faculty of Education and Society

---

		Distribution/ Other
s. Details of approach	2	Open text [to be categorised]
t. Promise of approach	2	Open text
u. Key messages	2	Open text [to be categorised]
v. Methodological messages	2	Open text