

## Further information

The findings are on the DFES website: [www.dfes.gov.uk/research/programme-of-research/projectinformation](http://www.dfes.gov.uk/research/programme-of-research/projectinformation). They are also available in a book, to be published by Open University Press in 2007 and called *Teachers Matter* (Day, C. et al). In addition, the following papers in journals are available:

Day, C.W., Kington, A. Stobart, G., and Sammons, P. (2006); *The personal and professional selves of teachers: stable and unstable identities*, British Educational Research Journal, vol. 32, No. 4, pp. 601-616, August 2006

Day, C.W, Stobart, G., Sammons, P and Kington, A.; (2006), *Variations in the work and lives of teachers: relative and relational effectiveness*, Teachers and Teaching: Theory and Practice, Vol. 12, No. 2, pp. 169-192, April 2006

Day, C.W., Stobart, G., Sammons, P., Kington, A. and Gu, Q.; (2006) *Variations in Teachers' Work, Lives and Effectiveness (the VITAE Project)*, ICSEI Network Newsletter, Vol 3, No. 2, July 2006

Day, C., Sammons, P., Kington, A., Stobart, G., and Gu, Q.; *Methodological Synergy in a National Project: The VITAE story*, Evaluation and Research in Education (in press)

Gu, Q., and Day, C.: *Teachers Resilience: A Necessary Condition for Effectiveness*, Teaching & Teacher Education (in press)

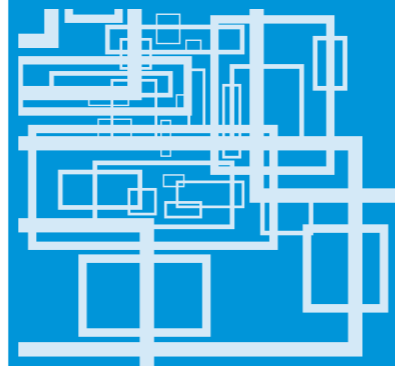
## The warrant

VITAE is the most comprehensive and extensive study of teachers' work and lives, and is the first to explore associations between these factors and teacher effectiveness. It was carried out in real time over a four year period. It used an integrated, mixed method research design involving approaches traditionally associated with both 'positivist' / 'quantitative' and 'interpretive' / 'qualitative' paradigms. This was necessary in order to gather the range of information needed to address all the complex and potentially interrelated issues and concerns, and to provide a detailed, holistic and methodologically robust, rigorous account of teachers' work, lives and effectiveness. Teacher case studies were the prime focus of the study, and were constructed using three main sources of evidence: interviews, teacher and pupil questionnaires and pupil assessment data.

The results of the independent analyses were combined at the interpretation stage of the research using NVivo, although each dataset remained analytically separate. NVivo provided a tool for the storage and synthesis of data collected. A range of key attributes, based on prior analysis and classification of data (interviews, surveys, pupil progress measures etc) were linked to the interview data at an individual teacher level.

Further analyses were carried out which combined the separate datasets into one overall database, prior to various analytical techniques being applied. This more complex combination of approaches provided analytical synthesis and integration of findings through greater mapping, analysis, interpretation and holistic understanding of the research area than would have been gained from a single paradigm or approach.

## Teaching and Learning Research Programme



TLRP involves over 30 research teams with contributions from England, Northern Ireland, Scotland and Wales. Work began in 2000 and will continue to 2008/9.

**Learning:** TLRP's overarching aim is to improve outcomes for learners of all ages in teaching and learning contexts across the UK.

**Outcomes:** TLRP studies a broad range of learning outcomes, including the acquisition of skill, understanding, knowledge and qualifications and the development of attitudes, values and identities relevant to a learning society.

**Lifecourse:** TLRP supports projects and related activities at many ages and stages in education, training and life-long learning.

**Enrichment:** TLRP commits to user engagement at all stages of research. It promotes research across disciplines, methodologies and sectors, and supports national and international co-operation.

**Expertise:** TLRP works to enhance capacity for all forms of research on teaching and learning, and for research informed policy and practice.

**Improvement:** TLRP develops the knowledge base on teaching and learning and policy and practice in the UK.

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# Teaching and Learning RESEARCH BRIEFING

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## Factors that make teachers more effective across their careers

This study has established the dynamic nature of teachers' professional life phases and identities, and has shown how these factors, and the personal, work and policy contexts which teachers experience, influence their effectiveness. If they are to maximise teachers' commitment, well-being, resilience and effectiveness, teachers and their leaders must address the positive and negative effects of these contexts. This research provides a new perspective on teachers' quality, retention and effectiveness over the whole of their careers. VITAE was funded by the DfES and was a TLRP associate project.

Pupils of teachers who are committed and resilient are likely to attain more than pupils whose teachers are not.

➔ Policy makers, national associations and head teachers concerned with raising standards in schools need to consider the connections between teachers' commitment, resilience and effectiveness.

Teachers' sense of positive professional identity is associated with well-being and job satisfaction and is a key factor in their effectiveness.

➔ Strategies for sustaining commitment in initial and continuing professional development programmes should distinguish between the needs of teachers in different phases of their professional lives.

The commitment and resilience of teachers in schools serving more disadvantaged communities are more persistently challenged than others'.

➔ Schools, especially those which serve disadvantaged communities, need to ensure that their CPD provision is relevant to the commitment, resilience and health needs of teachers.

The majority of teachers maintain their effectiveness but teachers do not necessarily become more effective over time. Teachers in later years are at greater risk of becoming less effective though these are still a minority.

➔ National organisations and schools need strategies for professional learning and development to support teachers in the later stages of their careers.

Sustaining and enhancing teachers' commitment and resilience is a key quality and retention issue.

➔ Efforts to support and enhance teacher quality should focus upon building, sustaining and retaining their commitment and resilience.

### Project website:

[www.nottingham.ac.uk/education/centres/crtsd/vitae](http://www.nottingham.ac.uk/education/centres/crtsd/vitae)

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# The research

The key questions addressed were:

Does teacher effectiveness vary from one year to another, and in terms of different pupil outcomes? Do teachers necessarily become more effective over time? If so, how and why?

What are the roles of teacher biography and identity?

How do school and department leaders influence teachers' practice and their effectiveness? What influence does CPD have on teacher effectiveness?

Are particular teachers equally effective for different pupil groups, or does their effectiveness vary with factors such as gender or socio-economic status? If so, how and why?

Do the factors which influence effectiveness vary for teachers working in different school cultures and contexts, or for different kinds of outcomes? If so, how and why?

Do the factors which influence teachers' effectiveness vary between sectors (primary and secondary) and different age groups (Key Stage 1, 2 and 3)? If so, how and why?

## The teachers and the schools

The sample for this research was drawn from seven LAs which were nationally and geographically representative and included both large shire counties and ethnically diverse and deprived inner cities. An initial teacher survey in these LAs assisted in the selection of samples of 100 schools and 300 case study teachers for the study. Half of the sample were primary teachers (Years 2 and 6) from 75 primary schools. The secondary teachers taught English or mathematics to Year 9 pupils in 25 schools. These teachers were representative of the national profile in terms of age, experience and gender. The schools were selected to be representative in terms of level of social disadvantage, measured by attainment levels and by percentage of pupils eligible for free school meals, a standard measure of pupil deprivation. The choice of teachers in Years 2, 6 and 9 meant that key stage national curriculum test results could be used as pupil outcome measures. A limitation of the research design was that it did not gather any observational data from the classroom.

## Ethical Issues

Our research design was influenced by a number of ethical considerations. A Code of Conduct was developed for the study which adhered to ethical guidelines developed by professional bodies such

as the British Educational Research Association (BERA, 2004) and the American Educational Research Association (Strike *et al*, 2002). Two of the most important considerations in conducting the research were to protect the welfare of the research participants and to ensure their informed consent. All head teachers and participating teachers were visited by a member of the research team and informed of the aims of the study, including the level of commitment that would be involved. They were then asked whether they wished to participate. It was also explicit that individual teachers or schools had the right to withdraw from the sample at any point during the research, without the need to give a reason.

The issue of consent was also addressed with regard to the selective interviewing of pupils. Access and consent were carefully negotiated between the researcher, members of staff, and parents of the pupils where necessary. The pupils were asked for their consent and therefore participated on a voluntary basis. As with the teachers, the researcher obtained consent to record each focus group interview digitally before it began. The confidentiality of information given was stressed, and participants were informed that opportunities would be available to ask the researcher any questions about the study in a non-threatening environment. In addition, the pupils were made aware that if they wanted to withdraw from the study at any time, they could do so without needing to give a reason.

All participants were assured of confidentiality and anonymity to ensure that neither individuals nor institutions could be identified. This helped build solid relationships and rapport, encouraged open, honest discussion, and allowed for the reporting of contentious issues. Head

teachers and local authority officials were also informed that they would not have any access to interview data or data interpretation on individual teachers, and that pupils' test and survey results would only be given (upon request) to class teachers, aggregated to the class level to protect the confidentiality of pupil attitude data. Assurances were given that all information would be treated in the strictest confidence, and that schools, teachers and pupils would remain anonymous in the presentation of research findings. In accordance with these principles, identification codes and pseudonyms were used for all research participants at the outset of the study in order to protect their identities and ensure non-traceability.

Participants were kept informed of the progress of the study through twice-yearly newsletters and annual dissemination conferences held in each of the local authority areas, and it was agreed that each teacher and head teacher would receive the Executive Summary of the final project report.

## Data collection

Two dimensions of effectiveness were identified: perceived effectiveness (relational) and effectiveness as defined by value-added measures of pupil progress and attainment (relative). The associations between teachers' perceptions of progress and past and present effectiveness and their effectiveness in terms of value-added pupil attainment were explored. Perceived and relative effectiveness were found to be associated. The main data concerning perceived effectiveness were collected through twice yearly semi-structured, face-to-face interviews with teachers. These were supplemented at various stages of the research by document

analysis and interviews with school leaders and groups of pupils.

Measures of teachers' relative effectiveness expressed through improvements in pupils' progress and attainment were collected through matching baseline test results at the beginning of the year with pupils' national curriculum results at the end. This enabled differences in the relative value added to be analysed, using multilevel statistical techniques that included adjustment for individual background factors such as gender and eligibility for free school meals, as well as prior attainment. Pupil attitude surveys were also conducted each year to gather pupils' views of their schools and teachers.

Using these qualitative and quantitative data, detailed holistic profiles of teachers' work and lives over time were constructed to see whether patterns emerged over a three-year period in terms of perceived and relative effectiveness and, if so, why (see Day *et al*, 2006).

Reference:  
Day, C., Stobart, G., Sammons, P., Kington, A., Gu, Q., Smees, R. and Mujtaba, T. (2006). Variations in Teachers' Work, Lives and Effectiveness, London, DfES Research Report 743.

## Data analysis

The first-stage analysis of the data took place shortly after the interview was conducted, by the researcher who had undertaken the interview. This resulted in a preliminary understanding of the responses given and the development of analytical codes. The second-stage analysis included the use of NVivo (computer-assisted data analysis software) and the construction of analytical matrices (Miles and Huberman, 1994) which provided powerful tools for the storage and synthesis of data collected and a range of key attributes which were linked to the interview data at an individual teacher level.

This second stage qualitative and quantitative analysis focused on professional life phase, identity, commitment and resilience. Each of these was explored in relation to teachers' effectiveness, both perceived and relative, measured in terms of value-added pupil progress and attainment. Individual profiles (cameos) were constructed for teachers and updated after each round of data collection.

These profiles included information on topics such as teachers' professional life phases and identities, pupils' views, and pupils' value-added data. They were shown to teachers during the final round of interviews as a means of validating the researchers' interpretation of the results. The qualitative and quantitative analyses were synthesised and thus contributed to the development of associations between different features of teachers' lives, work, identities and their effects on pupils.

# Major implications

Effectiveness is a complex idea that needs to be understood in relation to teachers' perceptions and how these vary over time in different institutional and personal contexts, and in comparison with other teachers in similar contexts in terms of value-added pupil attainment.

There are significant variations in teachers' perceived and relative effectiveness across year groups and sectors. Teachers' capacities to be effective are influenced by variations in their work, lives and identities and by their capacities to manage these.

Teachers' effectiveness is not simply a consequence of their age or experience. It is influenced by

- their professional life phases
- their sense of professional identity. This is neither intrinsically stable nor unstable. It can be affected positively or negatively by different degrees of tension between their own educational ideals and aspirations, their personal life experiences, the leadership and cultures of their schools, pupils' behaviour and relationships and the impact of external policies on their work

- their commitment and resilience. These qualities are dependent on teachers' cognitive and emotional capacities to manage interactions between personal, work and professional factors, which affect their professional lives and identities positively or negatively.

Teachers' effectiveness is mediated by:

- continuing professional development, which has a consistently positive influence on teachers across all professional life phases. For many teachers the effects of CPD are not as great as those of the conditions in which they work, their school leadership and colleagues, personal events and experiences, and the negative effects of policies

- the extent to which teachers sustain their sense of positive professional identity

- the quality of leadership, both at school and department level, relationships with colleagues, and personal support. These are all key influencing factors on teachers' motivation, efficacy, commitment and quality retention. Long-term effectiveness may be at risk for teachers in the later years of their professional lives and for those who

- work in secondary schools. Teachers in primary schools are more likely to sustain their commitment over a career than secondary teachers.

- work in schools in more challenging socio-economic contexts. These teachers are more likely to experience greater challenges to their health, well-being, and thus resilience, than those who work in more advantaged schools.

There is a statistically significant association between the levels of pupils' progress and attainment at KS1, 2 and 3 (English and maths) and the extent to which teachers sustain their commitment.



Figure 1: Commitment, resilience and effectiveness