



Department
for Education

TLIF Evaluation: The Ambition Institute's Transforming Teaching Project

Final Report

September 2022

**Eleanor Byrne, Sarah Reaney-Wood and
Mike Coldwell: SIOE**

**Julie Nelson, Dawson McLean, Ruth
Staunton and Jack Worth: NFER**



Government
Social Research

Contents

| | |
|--|----|
| List of tables | 4 |
| Key findings summary | 8 |
| Glossary of terms | 10 |
| 1 About the Transforming Teaching project and the evaluation | 12 |
| 1.1 Background and aims | 12 |
| 1.2 Project Model | 13 |
| 1.3 Theory of Change | 14 |
| 1.4 Contextual factors | 16 |
| 1.5 Evaluation methodology | 17 |
| 1.5.1 Overall evaluation methodology | 17 |
| 1.5.2 Evaluation methodology for this report | 17 |
| 1.6 Focus of this report | 23 |
| 2 Recruitment and Retention | 24 |
| 2.1 Progress towards recruitment targets | 24 |
| 2.2 Recruitment methods | 25 |
| 2.3 What enables and hinders effective recruitment and retention? | 25 |
| 3 Delivery and implementation of learning | 27 |
| 3.1 Progress in delivery | 27 |
| 3.1.1 Project challenges and adaptations | 29 |
| 3.2 Progress in the implementation of learning | 36 |
| 3.3 Challenges and enablers in effective delivery and implementation of learning | 38 |
| 3.3.1 Factors related to the provider/provision | 38 |
| 3.3.2 Factors related to the school climate/context | 40 |
| 4 Outcomes and impacts of the provision | 46 |
| 4.1 Context for interpretation of outcomes | 46 |
| 4.2 Context for interpretation of impacts | 46 |
| 4.3 Observed outcomes | 46 |
| 4.4 TLIF and bespoke project outcomes and impacts | 47 |

| | | |
|------------|--|-----|
| 4.4.1 | Participants' views on bespoke outcomes and impacts related to the aims of TT | 50 |
| 4.4.2 | Findings related to fund-level outcomes | 55 |
| 4.4.3 | Findings related to fund-level impacts | 64 |
| 4.4.4 | Findings related to fund-level wider outcomes | 85 |
| 4.5 | Interpretation of outcomes and impacts | 87 |
| 5 | Sustainability | 88 |
| 6 | Evaluation of the TT project Theory of Change | 90 |
| 7 | Learning about effective CPD for schools in challenging circumstances | 92 |
| 7.1 | Recruiting and engaging schools | 92 |
| 7.2 | Characteristics of effective CPD | 92 |
| 7.3 | Summary | 93 |
| 8 | References | 94 |
| Appendix A | Transforming Teaching Project Theory of Change | 95 |
| Appendix B | Qualitative sampling | 96 |
| Appendix C | SWC matching and comparison group construction | 98 |
| Appendix D | Outcomes of SWC impact analysis | 109 |
| Appendix E | Survey sample characteristics | 111 |
| Appendix F | Fund-level (core questions) Factor Analysis | 114 |
| Appendix G | Survey questions about engagement in the TT project – asked at endpoint only | 121 |
| Appendix H | Analysis of Management Information for the Teaching and Leadership Innovation Fund: Ambition Institute | 127 |
| Appendix I | Practical summary of the evidence about effective CPD (Coe, 2020) | 131 |

List of tables

| | |
|--|----|
| Table 1: Intended outcomes and impacts of the TT project for Senior Leaders | 47 |
| Table 2: Intended outcomes and impacts of the TT project for Teacher Educators | 48 |
| Table 3: Intended outcomes and impacts of the TT project for Teachers | 48 |
| Table 4: Intended outcomes and impacts of the TT project for Schools | 48 |
| Table 5: Regional and National Impact of the TT Project | 49 |
| Table 6: Project-level outcomes – summary of outcomes for TE: Classroom practice | 51 |
| Table 7: Project-level outcomes – summary of outcomes for TE: Pupil confidence | 52 |
| Table 8: Project-level outcomes – summary of outcomes for TE: Knowledge | 52 |
| Table 9: Project-level outcomes – summary of outcomes for HLT: Classroom practice | 53 |
| Table 10: Project-level outcomes – summary of outcomes for HLT: Pupil confidence | 54 |
| Table 11: Findings from factor analysis for all participants | 56 |
| Table 12: Findings from factor analysis for classroom teachers | 57 |
| Table 13: Findings from factor analysis – Middle Leaders | 59 |
| Table 14: Findings from factor analysis – Senior Leaders | 63 |
| Table 15: Difference in the estimated rate of retention in state-funded teaching in England between treatment and comparison teachers | 66 |
| Table 16: Difference in the estimated rate of retention in the same school between treatment and comparison teachers | 67 |
| Table 17: Difference in the estimated rate of retention in the same local authority district (LAD) between treatment and comparison teachers | 68 |
| Table 18: Difference in the estimated rate of retention in challenging schools between treatment and comparison teachers | 68 |
| Table 19: Difference in the estimated rate of progression in state-funded teaching in England between treatment and comparison teachers | 70 |
| Table 20: Difference in the estimated rate of progression in the same school between treatment and comparison teachers | 70 |

| | |
|--|-----|
| Table 21: Difference in the estimated rate of progression in the same local authority district (LAD) between treatment and comparison teachers | 71 |
| Table 22: Difference in the estimated rate of progression in challenging schools between treatment and comparison teachers | 72 |
| Table 23: Difference in retention in state-funded teaching in England | 75 |
| Table 24: Difference in rate of retention in the school | 76 |
| Table 25: Difference in rate of retention in the same LAD | 77 |
| Table 26: Difference in rate of retention in challenging schools | 78 |
| Table 27: Difference in progression in state-funded teaching in England | 79 |
| Table 28: Difference in rate of progression in the school | 80 |
| Table 29: Difference in rate of progression in the same LAD | 81 |
| Table 30: Difference in rate of progression in challenging schools | 82 |
| Table 31: School-based case study participants | 96 |
| Table 32: Matching teachers to the SWC | 99 |
| Table 33: Characteristics of treatment and comparison teachers before and after matching in the full sample | 104 |
| Table 34: Characteristics of potential comparator schools, schools in the intervention group and matched comparison schools | 107 |
| Table 35: Odds ratios from the retention and progression teacher-level outcome analysis | 109 |
| Table 36: Odds ratios from the retention and progression school outcome analysis | 109 |
| Table 37: Survey sample characteristics - Role | 111 |
| Table 38: Survey sample characteristics - Project categorisation | 111 |
| Table 39: Survey sample characteristics - Years in teaching | 112 |
| Table 40: Survey sample characteristics - Participation in the project | 112 |
| Table 41: Survey sample characteristics - Phase of teaching | 112 |

| | |
|---|-----|
| Table 42: Survey sample characteristics - Ofsted rating | 113 |
| Table 43: Factor 1: Effectiveness of school leadership (all) | 115 |
| Table 44: Factor 2: Effectiveness of professional development (all) | 116 |
| Table 45: Factor 3: Effectiveness of school culture (all) | 116 |
| Table 46: Factor 4: Motivation for professional development (all) | 117 |
| Table 47: Factor 5: Personal knowledge for effective teaching (CT) | 117 |
| Table 48: Factor 6: School teaching quality (CT) | 117 |
| Table 49: Factor 7: Motivation for teaching-focused professional development (CT) | 117 |
| Table 50: Factor 8: Opportunities for career progression (CT) | 118 |
| Table 51: Factor 9: Personal knowledge for effective teaching (ML) | 118 |
| Table 52: Factor 10: School teaching quality (ML) | 118 |
| Table 53: Factor 11: Motivation for teaching-focused professional development (ML) | 119 |
| Table 54: Factor 12: Opportunities for career progression (ML) | 119 |
| Table 55: Factor 13: School teaching quality (SL) | 119 |
| Table 56: Factor 14: Opportunities for career progression (SL) | 120 |
| Table 57: Participant involvement in face-to-face training | 121 |
| Table 58: Extent of involvement in face-to-face training | 121 |
| Table 59: Extent to which face-to-face training provision met needs | 122 |
| Table 60: Involvement in face-to-face training by Teacher Educators who are school staff (HLT only) | 122 |
| Table 61: Extent of involvement in face-to-face training by Teacher Educators who are school staff (HLT only) | 122 |
| Table 62: Extent to which provision of face-to face training by Teacher Educators met needs (HLT only) | 122 |
| Table 63: Involvement in coaching by the Ambition Institute | 123 |
| Table 64: Extent of involvement in coaching by the Ambition Institute | 123 |

| | |
|---|-----|
| Table 65: Extent to which Ambition Institute coaching provision met needs | 123 |
| Table 66: Involvement in structured in-school support for diagnosis/implementation (TE/SL only) | 124 |
| Table 67: Extent of involvement in structured in-school support for diagnosis/implementation (TE/SL only) | 124 |
| Table 68: Extent to which provision of structured in-school support for diagnosis/implementation met needs (TE/SL only) | 125 |
| Table 69: Involvement in Senior leadership conferences (SL only) | 125 |
| Table 70: Extent of involvement in Senior leadership conferences (SL only) | 125 |
| Table 71: Extent to which provision of Senior leadership conferences met needs (SL only) | 125 |
| Table 72: Involvement with email/telephone support from the Ambition Institute | 126 |
| Table 73: Extent of involvement with email/telephone support from the Ambition Institute met needs | 126 |
| Table 74: Extent to which provision of email/telephone support from the Ambition Institute met needs | 126 |

Key findings summary

- The Transforming Teaching (TT) project funded through the Teaching and Leadership Innovation Fund aimed to improve teaching through a model of CPD which offered different training packages to three identified staff groups in participating schools:
 - Senior Leaders (SLs) who were supported to create the conditions for change within their schools
 - high-performing teachers who completed training to enhance their classroom practice and to become Teacher Educators (TEs) who would support/lead CPD within the school
 - early career and other teachers identified by the school as having scope to develop their practice (High Leverage Teachers – HLTs) who were supported to improve their practice and encourage CPD engagement.
- The Ambition Institute's contractual targets were to deliver training to 1365 participants in 61 schools across three cohorts over three years. The DfE's Management Information (MI) showed that 1359 participants were recruited from 55 schools.
- As agreed with DfE, the survey and qualitative data gathered as part of this evaluation was only collected from cohorts 1 and 2 as delivery for cohort 3 continued beyond the end of the TLIF programme. The MI data on recruitment for the SWC analysis provided by DfE includes cohorts 1 and 2.
- Case-study findings indicated that participants valued the project's interactive training, flexible delivery, the appropriateness of the CPD content, and the expertise of the CPD delivery team. In contrast, the scheduling of CPD delivery, communications with some groups of participants (particularly HLTs), the repetition of content, and the use of role-play as a CPD technique were cited as negative aspects of the project by some. Perceived challenges to effective in-school implementation related to staff turnover and resource development issues.

Key findings summary

- Baseline and endpoint surveys asked cohort 1 and cohort 2 participants questions related to project-specific aims, TLIF fund-level aims, and also (at endpoint only) their experience of being involved in the TT project. Key survey findings were that, while TT participants were positive about the TT project and had engaged well, no significant changes in project-specific aims (knowledge and practices) were detected. However, the surveys did find significant positive changes in a number of the fund-level outcomes - effective school leadership (all respondents) and personal knowledge of effective teaching, perception of school teaching quality, motivation for teaching-focused professional development, and opportunities for career progression (classroom teachers). The qualitative data only reinforced these positive findings to a certain extent. While most TE respondents felt that their participation in the project had a positive impact on their own leadership skills and confidence, other participants provided less evidence of this.
- Analysis of the SWC data provides some evidence to suggest that the project may have had a positive impact on retention of teachers within the state-funded sector and within challenging schools at a teacher level. In contrast, the TT project had no statistically significant impact on retention at a school level, based on the comparison of treatment and non-treatment schools. However, it is not possible to fully disentangle the effect of the project from other non-observed systematic differences between TT participants and non-participants.
- The evidence for any impact on teacher progression is limited, with findings suggesting TT teachers were less likely to progress than comparison teachers within the same school, the LAD and within challenging schools at a school level (two years after baseline). No statistically significant differences were identified between treatment and non-treatment participants at a teacher level. Limited impacts were reported in the qualitative data related to pupils' attainment. Due to impacts from Covid-19, the planned pupil attainment analysis was not undertaken. The main outcomes reported by the case-study schools were improvements in the classroom practices of TEs and HLTs and increased SL confidence, particularly in relation to CPD delivery and management. Participants also reported positive impacts on the confidence of TEs to deliver CPD and the confidence of HLTs to manage their classrooms effectively. In addition, some participants described the project as having supported their career progression.

Glossary of terms

Cold Calling - the act of calling on students to answer questions at random, and not based on who volunteers to participate, as defined by Doug Lemov as part of his 'Teach Like a Champion' approach. See:

<https://teachlikeachampion.com/blog/cold-call-inclusive/> (14 Oct, 2020)

Deliberate Practice - Deliberate practice involves putting sustained effort into improving performance in a specific area. For example, improving performance at playing golf, chess or the violin.

High Leverage Teachers (HLT) - Early career and other teachers identified by the school as having scope to develop their practice through the Transforming Teaching (TT) project.

Hinge Questioning – A check for understanding at a 'hinge-point' in a lesson, so-called, because of two inter-linked meanings:

It is the point where you move from one key idea/activity to another

Understanding the content before the hinge is a prerequisite for the next chunk of learning

I/We/You - At the beginning of a lesson or when new material is being introduced, the teacher has a prominent role in the delivery of the content. This is the 'I' phase. In the 'we' phase of learning, the teacher continues to model, question, prompt and cue students; but as students move into the 'you' phases, they rely more on themselves and less on the teacher to complete the learning task.

Indirect Beneficiaries (IDB) – Teaching staff within participating Transforming Teaching schools who were not identified to participate directly in the training, but who the project sought to reach through the dissemination of the project CPD.

Priority areas - Category 5 or 6 Achieving Excellence Areas (AEAs) Local Authority districts, including the 12 Government Opportunity Areas - areas identified as having the weakest performance and least capacity to improve.

Priority schools - Schools with an Ofsted judgement of 3 or 4 (Inadequate or Requires Improvement (RI)).

Scripting - Scripted teaching or scripted instruction refers to commercial reading programs that have highly structured lessons, often with specific time allotments for teaching specific skills, and often word-for-word scripts of what the teacher is to say.

Glossary of terms

Senior Leaders (SL) – Members of the SLT who were supported by the Transforming Teaching project to enable them to create the conditions for change within their school.

Senior Leadership Team (SLT) – School management.

Teaching and Leadership Innovation Fund (TLIF) - DfE programme (2017-2020) aimed at improving pupil outcomes and supporting pupil social mobility by improving teaching and leadership in priority areas and schools through outcome-focused, evidence-based and innovative professional development provision. TLIF projects were commissioned over two rounds of funding. Transforming Teaching (TT) was commissioned as part of round 1.

Teacher Educators (TE) - High-performing teachers who completed TT training to enhance their current classroom practice and who were expected to progress (as part of the project) to support/lead CPD within the school.

Transforming Teaching (TT) - The Transforming Teaching (TT) project was a school improvement initiative that aimed to address issues affecting the progression of pupils who come from disadvantaged backgrounds by working to support excellent teaching in these identified areas.

1 About the Transforming Teaching project and the evaluation

1.1 Background and aims

The Transforming Teaching (TT) project began in 2017 as part of the TLIF programme, run by what was then the Institute for Teaching (IfT)¹. In 2018 the IfT merged with Ambition School Leadership (ASL)² to become Ambition Institute³, who took this project forward.

TT aimed to address issues affecting the progression of pupils who come from disadvantaged backgrounds by working to support excellent teaching in these identified areas. This goal of teaching excellence for all was to be achieved by providing sustained, intensive CPD interventions focused on improving teaching practices, teacher retention and teacher career progression.

The initiative was particularly aimed at schools experiencing challenges. Thus, recruitment mainly targeted primary and secondary schools with Ofsted ratings of 3 (Requires Improvement) or 4 (Inadequate), and which were located within Achieving Excellence Areas (AEAs) in categories 5 or 6.

The project delivered training and support directly to three staff groups in each participating school:

- **Senior Leaders (SLs)** who were supported to enable them to create the conditions for change within their school
- high-performing teachers who completed training to enhance their current classroom practice and to become designated **Teacher Educators (TEs)** who were expected to progress (as part of the project) to support/lead CPD within the school
- early career and other teachers identified by the school as having scope to develop their practice (**High Leverage Teachers (HLTs)**), (see section 3 for more detail on HLT selection).

TT was a whole-school project. While each school's designated SLs, TEs and HLTs were the immediate, direct beneficiaries of the CPD, other teaching staff were expected to benefit from the project as indirect beneficiaries (IDBs) through TE/SL-led in school training, TE-led coaching and/or a shift in the school's CPD culture.

¹ The Institute for Teaching was launched in 2017 as a Graduate School designed to improve teaching

² Ambition School Leadership was a charity launched in 2016 to focus on developing school leadership.

³ The Ambition Institute offers training programmes for teachers, school leaders and system leaders, serving children from disadvantaged backgrounds.

1.2 Project Model

The project had two phases:

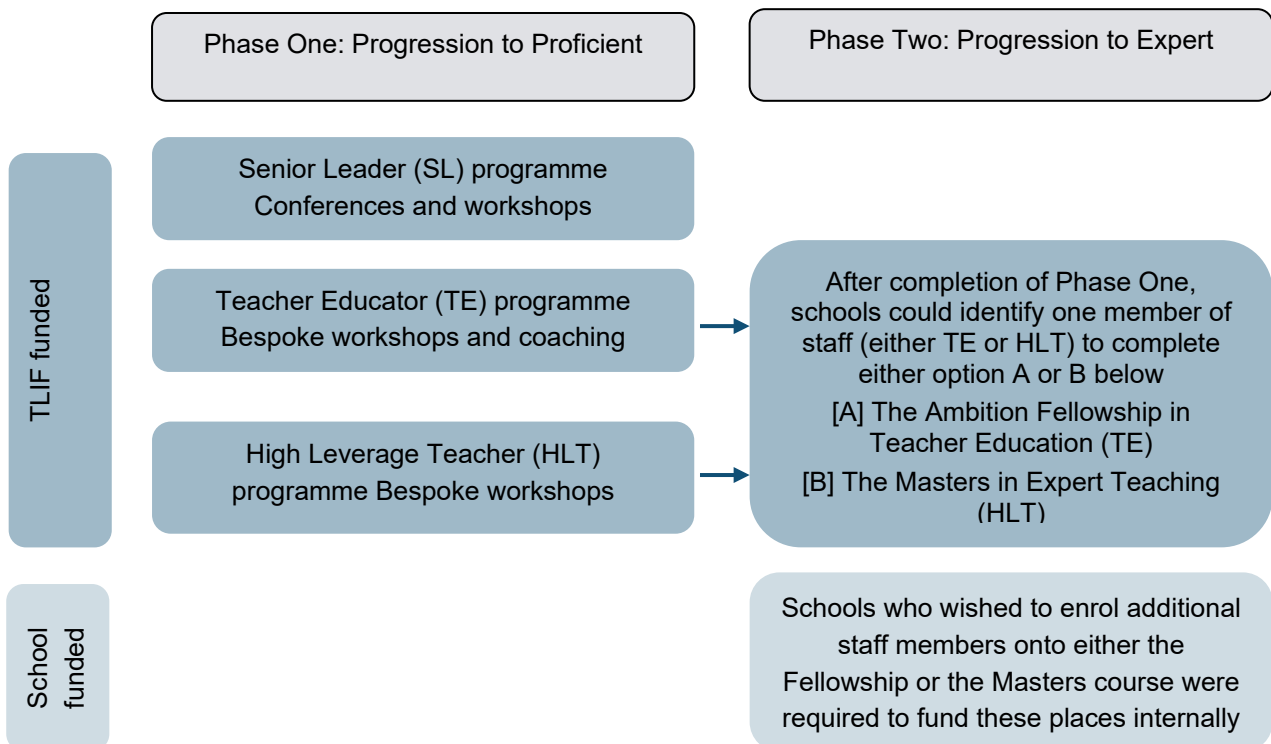
- Progression to Proficient
- Progression to Expert (this phase is optional – see figure 1 below).

Progression to Proficient was completed first and was followed by Progression to Expert. The Progression to Expert phase comprised two optional, additional courses:

- the Ambition Fellowship in Teacher Education – designed for TEs who wished to further their expertise in leading school development and CPD
- the Masters in Expert Teaching – designed for HLTs who wished to continue to enrich and broaden their professional practice.

With regard to the **Progression to Expert** phase, the TLIF programme funded **one** staff member **per school** to complete either the Ambition Fellowship in Teacher Education (TE) or the Masters in Expert Teaching (HLT), however, schools could put forward more participants at their own cost. The Ambition Institute did not dictate the number of participants a school could put forward for the **Progression to Proficient** phase. The diagram below (figure 1) illustrates the two phases of the project model and clarifies the aspects of the project that were funded by the TLIF programme and those optional additional opportunities which could be funded internally by participating schools.

Figure 1: TT project model



Schools could participate in the project for one to three years depending on the level of support required to transform their teaching. In addition to the face-to-face support and training offered, schools could access online resources (if deemed appropriate as part of individual development plans). Face-to-face, in-school training was provided by teams of CPD experts working on the project in two project regions: (i) West Midlands and (ii) North West/Yorkshire and the Humber. The training teams were made up of TT Fellows, tutors and training managers all of whom were former teachers or headteachers with experience of delivering and coordinating CPD.

The project as a whole involved three cohorts of participants. The recruitment target for cohort 1 was nine schools, cohort 2 was 21 schools and cohort 3 was 31 schools. This evaluation report draws on data relating to cohort 1 and cohort 2 schools.

At the time of qualitative data gathering, only one interviewee had progressed onto Phase Two of the project and was undertaking an Ambition Fellowship. As such, this evaluation report focusses solely on Phase One SL, TE and HLT programmes.

1.3 Theory of Change

The project Theory of Change (ToC) is set out in Appendix A which was created by the evaluation team and reviewed by DfE. It was based on the Theory of Change (ToC) submitted by the Transforming Teaching project team as part of its bid; the evaluation team's understanding of the project's underlying rationale, activities, outputs and anticipated outcomes; and subsequent conversations with the project team.

The **Phase One** project inputs were bespoke to each school in order to meet its specific needs. Accordingly, TT provided for the development of individual CPD plans informed by the school's current priority areas. The project did, however, specify a template of core components, which included training sessions and one-to-one support for each of the three participating staff groups. The CPD components for each of the three staff groups participating in **Phase One** are summarised below.

Senior Leaders

- Face-to-face training sessions delivered by TT Fellows in each of the participating schools. Sessions were focused on creating optimal conditions for CPD and designing a programme to achieve rapid improvements in learning in each school.
- Bespoke support to facilitate change implementation, review and reflection. One TT Fellow was assigned to each school to work face-to-face with SLs, TEs and HLTs. The training followed a core programme, which explored coaching and how to improve classroom practice.
- Twice-yearly conferences for SLs.

Teacher Educators

- Face-to-face training delivered by TT Fellows and tutors on how to use evidence-informed tools and knowledge to support high-quality teacher education.
- One-to-one coaching to support the development of TE practice as both expert teachers and coaches (delivered by the school's assigned TT Fellow).
- The opportunity to co-plan and co-deliver high-quality, evidence-informed training.
- TEs did not deliver the HLT programme (see below), but they were expected to lead/support CPD in the school.
- Potential progression to the Ambition Fellowship in Teacher Education (one staff member per school funded by the TLIF programme; additional staff members could enrol, but were funded by their school).

High Leverage Teachers

- Fortnightly, face-to-face professional development sessions delivered by TT Fellows and tutors.
- Potential progression to the TT Masters in Expert Teaching programme (one staff member per school funded by the TLIF programme; additional staff members could enrol, but were funded by their school).

The underpinning rationale for the ToC rested on an assumption that participants were committed and empowered to enact change and implement course strategies systematically and thoroughly. The TT ToC asserted:

[that] high performing teachers have a disproportionately greater impact on the progress of pupils from low-income backgrounds (William, 2016), but these teachers are least likely to be teaching in priority schools where they can make the biggest difference (Allen *et al.*, 2016). Addressing this problem through influencing teacher supply has limited effects (Allen *et al.*, 2016; Fryer, 2016; William, 2016). Instead, we must provide sustained, intensive intervention with existing teachers, using proven methods of professional development. - *TT ToC*

On that basis, it was theorised that the inputs set out above would lead to a range of intermediate outcomes at school, staff and pupil level which, in turn, would lead to longer-term impacts.

Intended outcomes included:

- increased SL confidence in their ability to lead on CPD across the school

- improved leadership practice
- improved teacher satisfaction
- improved classroom practice
- improved pupil attendance, behaviour and wellbeing
- a positive shift in school culture around CPD and staff development.

The intended impacts included:

- improved retention and progression of leaders and teachers
- improved pupil attainment.

1.4 Contextual factors

The TT project is one of ten DfE-funded TLIF projects. The DfE wished to test how effectively a variety of different CPD approaches could meet project-specific and fund-level outcomes; therefore each of the ten projects were commissioned to be intentionally different in design, scale, scope and delivery method. At fund level, the evaluation sought to compare and contrast the relative effectiveness of these projects in meeting their stated aims and objectives – taking into account a range of factors related to their differences. These included:

- **impact focus and target group** (whether impact was intended to be at whole-school, individual-teacher-level or both; and whether the project targeted leaders, teachers or both) – the TT project had a whole-school focus and targeted leaders and teachers
- **phase supported** (whether primary, secondary, or both phases) – the TT project supported both primary and secondary schools
- **per-participant cost** (calculated by comparing the overall cost specified in the project's bid against the number of participants that the project was contracted to recruit⁴). Relative to the other TLIF projects, the TT project was high cost
- **intensity of the delivery model** (categorised by creating a combined score incorporating: duration of provision offered (in months), hours of provision offered

⁴ High-cost projects had a relatively high per participant budget, medium-cost projects had a relatively medium per participant budget and low-cost projects had a relatively low per participant budget.

(per participant); and proportion of school staff that the project aimed to engage⁵). Relative to the other TLIF projects, the TT project had a moderate delivery model

- **range of delivery modes** (categorised into two groups: a wide range (five to six modes), and a moderate range (three modes⁶). The TT project had a moderate range of delivery modes relative to other TLIF projects.

In the fund-level report, we take the TT project's contextual factors into account as we compare its progress in achieving outcomes with the progress made by the other TLIF projects.

1.5 Evaluation methodology

1.5.1 Overall evaluation methodology

The aim of the evaluation was to undertake a process and impact evaluation to explore indicators of effectiveness and to measure impacts (teacher retention and progression) and outcomes (including teaching and/or leadership quality – see Chapter 4, Tables 2-5 for full details). The objective was to draw out learning and best practice, test out the project's theory of change, and identify implications for the fund-level assessment, as well as educational policy and practice more broadly. Our original evaluation design also included an impact evaluation to assess the impacts of the project on pupil attainment. However, due to the partial school closures as a result of the Covid-19 pandemic, and the cancellation of Key Stage 2 assessments and GCSE examinations for the 2020 cohort, DfE decided to remove this aspect of the evaluation. There was, therefore, no longer a pupil impact analysis aspect to the evaluation.

1.5.2 Evaluation methodology for this report

This final evaluation report draws on secondary data from the School Workforce Census (SWC⁷), survey, and qualitative data. It provides a measure of the project's success in achieving the TLIF programme's impacts (SWC and qualitative data), outcomes (survey and qualitative data) and project-specific outcomes (survey and qualitative data). SWC and survey findings are supported by rich qualitative data, which aids understanding of the recruitment, delivery and implementation factors that influenced achievement of these

⁵ We did not have dosage data – so this assessment was based on intention rather than actual involvement, but it provided an indication of the nature of delivery. Our three resulting categories were: 'intensive'; 'moderate' and 'light touch'.

⁶ No projects had four modes of delivery and no projects had fewer than three.

⁷ This work was produced using statistical data from ONS. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

outcomes. The report explores the links between inputs, outcomes and impacts, analysing the appropriateness of the project's ToC in achieving the desired results. The evaluation data sources underpinning this report are outlined below:

- 1) a comparison of secondary data from the SWC for TT participants, and for a matched group of non-TT participants⁸. TT participants were identified via project MI data, which was collected by DfE and shared with NFER.
- 2) baseline (October 2018) and endpoint (March 2020) surveys of 716 participating SLs, TEs and HLTs from cohort 1 and 2. The baseline survey achieved responses from 462 participants (a response rate of 65 per cent) and the endpoint survey achieved responses from 180 participants (a response rate of 25 per cent). 145 participants responded to both baseline and endpoint surveys. Eight of these were found to have excessive missing endpoint data and were, therefore, removed from analysis, leaving a maximum baseline-endpoint sample of 137. This maximum sample varied across measures depending on the item response.
- 3) three telephone interviews with the TT Project Manager (March 2018, March 2019 and February 2020)
- 4) case-study visits to three cohort 1 schools, comprising interviews and focus groups (2019)
- 5) case-study visits to two cohort 2 schools, comprising interviews and focus groups (2020)
- 6) case-study interviews with one cohort 2 school undertaken online via Zoom (2020).

As agreed with DfE, the survey and qualitative data was only collected from cohorts 1 and 2 as delivery for cohort 3 continued beyond the end of the TLIF programme. The MI data on recruitment for the SWC analysis provided by DfE includes cohorts 1, 2 and 3. Further details on the approach to qualitative sampling, together with the characteristics of selected case studies, schools and interviewees, can be found in Appendix B.

Case studies

Schools were sampled purposively to capture variation in the demographic and contextual factors across the cases. The sample was prepared using a grid of the key variables for the schools including location, academy chain (if applicable), Ofsted rating and school phase. The achieved sample has potential implications for the interpretation

⁸ Non-TT participants were defined as any teacher who was not enrolled on the TT project, or any other TLIF intervention.

of findings. For example, each cohort of schools and balance of participants may have experiences and outcomes which differ from those presented here. Details of school sampling are provided in Appendix B. Participants were selected by the senior leadership at each school based on availability at time of interview.

Case-study visits comprised a combination of interviews and focus groups (as appropriate to the case) with SLs, HLTs, TEs and IDBs. IDBs were teachers in participating schools who did not participate directly in CPD led by the Ambition Institute, but who the school intended to support through its participation in the project. The project anticipated that IDBs would benefit through TE-led and/or SL-led in-house CPD⁹, one-to-one coaching from TEs, and/or an overall positive shift in school culture and attitudes towards CPD. The three case studies completed in 2018/9 took place in cohort 1 schools. The three case studies in 2019/20 focussed on cohort 2 participants.

Five case studies were undertaken during researcher in-school visits. The sixth case study was scheduled to be conducted in-school the week beginning March 16th, 2020, which, unfortunately, coincided with the closure of schools to external visitors as part of the COVID-19 lockdown. The school in question was no longer allowing visitors and, as such, one-to-one interviews were conducted instead with one SL, one HLT and one TE from this school via the online meeting platform, Zoom.

HLT and TE interview and focus group participants were selected by the school according to which teachers were available at the time of the focus groups, while SL interview participants were self-selected. All interviews and focus groups lasted between 45 and 80 minutes and each was recorded and transcribed. Interview transcripts were analysed using the qualitative data analysis software package NVivo and coded using an analysis framework based on the theory of change headings (see Appendix A). Details of participants and methods of data collection for each case are presented in Appendix B.

Surveys

Factor analysis was used to explore the findings from the surveys. Survey analysis compared participants' survey responses at baseline and endpoint to explore the extent to which their views changed over the timeframe that they were involved with the TT project. The most robust way to analyse any change over time is to analyse only the responses of those participants who answered at both baseline and endpoint as this provides greater control of individual differences between participants. Therefore, the majority of the survey analysis was based on a matched sample of respondents who

⁹ The TEs do not deliver the HLT training in conjunction with the TT Fellows and tutors, however, once they have completed their own training programme it becomes their responsibility to cascade training down to their colleagues. The TT fellows and tutors support the TEs to undertake this programme of CPD through one-to-one sessions with the TEs themselves.

answered the majority of questions at both baseline and endpoint (N=137)¹⁰ An analysis of the characteristics of all respondents who answered the survey (N baseline=399 N Endpoint=137; note that for both surveys, due to non-responses to some questions, N may differ) and how they compared to the matched analysis and the TT sample as a whole can be found in Appendix E. Despite varying sample sizes across the baseline and endpoint surveys and matched analysis, the teacher- and school-level characteristics of participants in each sample were broadly similar. A description of the quantitative analyses undertaken on the survey data can be found in Appendix F and G.

SWC matching and analysis

Appendix C describes the methods used for matching MI data to SWC data, and for constructing a comparison group. Appendix D describes the results of the impact analysis. In summary, the steps were as described below.

- 1) The MI data was matched to the SWC using Teacher Reference Numbers (TRNs), names and dates of birth. This matched 93 per cent of cohort 1 and 2 participants as recorded in the MI data with at least one record in the SWC. Cohort 3 participants were excluded from the SWC analysis as it continued beyond the length of the TLIF programme, and as such, was not observed in the MI data. Where the recruitment date of a teacher was recorded in the MI data, cohort was assumed based on the year of recruitment. Where the recruitment date of a teacher was not recorded in the MI data, it was assumed these teachers were in cohort 3 and were therefore excluded from the analysis as they are out of scope.
- 2) TT participants were matched with non-participants using propensity score matching. Matching for the full sample used teacher and school characteristics (age, gender, years of experience, Ofsted rating, etc. – see Appendix C for the full list) observed in the baseline year, where baseline year for TT participants was defined as the year the teacher/leader was recruited to the project.
- 3) The retention rates in state-sector teaching among those in the treatment and matched comparison groups were compared using a logistic regression model, one, two and three years¹¹ after baseline and controlling for the variables used for matching. The same process was followed to estimate the impact on retention within the same school/local authority district (LAD)/challenging schools.
- 4) Differences between the TT participant and non-participant groups in progression rates (to middle/senior leadership) within the profession and within the same

¹⁰ note that due to non-responses to some questions, N may differ.

¹¹ While in principle three years of outcomes were observed, sample sizes for participants three years after baseline were too small to be statistically reliable and were omitted.

school/LAD/challenging schools were estimated using a similar model as in step 3. It was not possible to analyse the SWC data by participant type (SL, HLT and/or TE) as these groups were not identifiable in the MI data.

- 5) Similar analysis was then performed at the school level. Project participating schools were matched with non-participating schools using propensity score matching. Matching for the full sample occurred on the basis of school characteristics (school phase, Ofsted rating, etc. – see Appendix C for the full list) observed in the baseline year, where baseline year was defined as the academic year that recruitment to the project started.
- 6) The retention rates in state-sector teaching among teaching staff in the treatment and matched comparison schools were compared using a logistic regression model, one, two and three years after baseline and controlling for the variables used for matching. The same process was followed to estimate the impact on retention in the same school, retention in the same LAD, retention in a challenging school, progression within the profession, progression in the same school, progression in the same LAD and progression in a challenging school.

Evaluation process and challenges

All participating schools were encouraged by the project management team at the Ambition Institute to participate in the evaluation. As a result, recruitment to the case studies was straightforward and the resulting data were typically rich and insightful. However, the case studies were designed to include focus groups/interviews with representatives from all of the four key groups (SLs, TEs, HLTs and IDBs) and in two of the cohort 1 cases the full set was not possible. In case study 1, all teaching staff participated in the project as SLs, TEs or HLTs, so there were no IDBs to interview. The school had decided to enrol all teaching staff onto the project as they were a relatively new school with a small workforce. This was an atypical scenario evident in only one of the case-study schools visited and was unlikely to be repeated in other schools. The absence of IDB data for case study 1 brought some limitations to the comparisons that could be made across the cases.

Case study 3 presented a different challenge as the SL in charge of the project had left and had not been replaced. There were no members of the senior leadership team who felt comfortable or equipped to discuss the project, so there is no SL interview data for this case. Thus, the emerging picture of the whole-school experience, although rich, is incomplete.

Case studies 2 and 5 included focus groups/interviews with representatives from all of the four key groups (SLs, TEs, HLTs and IDBs). Case study 4, however, was only able to provide representatives from three of the four groups (SLs, TEs and HLTs) due to

timetabling problems. Once again, the absence of IDB data for this case study limited the comparisons that could be made across all cases.

The original TT evaluation plan included a sixth school case study that would draw upon all four key groups (SLs, TEs, HLTs and IDBs). This final case study was scheduled for March 18th, 2020; however, as noted above, the COVID-19 pandemic closed the school to visitors and the case study needed to be rearranged with one representative from each of the three participating groups (SLs, TEs and HLTs). These one-to-one interviews (as opposed to focus groups) were conducted via the online meeting platform 'Zoom'. As such, the data from this case study does not have the depth and detail of the data gathered during case-study visits.

The cohort 1 baseline survey attracted fewer than expected returns (41% response rate; 56 completions). A higher response rate was achieved for cohort 2 (72%; 443 completions). The increased response rate was achieved, at least in part, by TT staff encouraging participants to complete the survey when they were visiting schools or conducting training. This approach had not been adopted for cohort 1. Unfortunately, however, the project endpoint survey attracted fewer than expected returns (26%; 178 completions) despite being circulated to all cohort 1 and 2 participants on February 5th, 2020 and not closing until May 1st. During this thirteen-week period participants received five emails and one phone reminder. The survey was also promoted by the Ambition team through email communication. The COVID-19 pandemic and the subsequent early closure of the survey may have impacted on returns and the evaluation's opportunity to boost response rates.

Analysis of the SWC data relied on consistent MI information to observe teachers recruited to the project. However, cohort was not observed in the MI data and data gaps in observing recruitment dates were a challenge in identifying the likely cohort a teacher was recruited into. Where the recruitment date of a teacher was recorded in the MI data, cohort was assumed based on the year of recruitment.¹² Where the recruitment date of a teacher was not recorded in the MI data, it was assumed these teachers were in cohort 3 and were therefore excluded from the analysis as they are out of scope.¹³

In addition, from the SWC data it is impossible to disentangle the effect of the TT project from other non-observed systematic differences (personal teacher-level characteristics

¹² Teachers recruited in the 2017 SWC year (November 3, 2016 - November 1, 2017) were assumed to be in cohort 1. Teachers recruited in the 2018 SWC year (November 2, 2017 – October 31, 2018) were assumed to be in cohort 2.

¹³ This assumption seems reasonable as all of the non-missing recruitment dates observed in the MI data are in either the 2017 and 2018 SWC years, hence corresponding to cohort 1 and 2 teachers. The total number of teachers assigned to cohorts this way was 769, which is similar to the 762 cohort 1 and 2 teachers reported in Ambition's cohort breakdowns.

such as, motivation or other psychological characteristics) between participants and non-participants. So, whilst the SWC has been able to provide some information about how the TT project has had an impact on retention and progression of participants, it is important to understand that a number of factors could not be controlled for.

1.6 Focus of this report

This report focuses specifically on:

- **Section 2 – Recruitment and retention** (whether the project met its targets for school and participant recruitment, and the factors that supported this)
- **Section 3 – Delivery and implementation** (whether this progressed according to plan, what worked well and not so well, and what lessons can be learned for future CPD offers)
- **Section 4 – Outcomes and impacts of the provision** (the extent to which the project met, or had the potential to meet, the TLIF programme’s outcomes and impacts, and its own bespoke project outcomes)
- **Section 5 – Sustainability** (discussion of the potential for sustainability of new ways of working, new learning and outcomes in schools, which have come about through involvement with the project)
- **Section 6 – Evaluation of the TT project Theory of Change.**
- **Section 7 – Summary and indicative implications for policy and CPD development.**

2 Recruitment and Retention

2.1 Progress towards recruitment targets

Annual management information (MI) data on the project supplied by the DfE for the academic year 2019-2020 (submitted February 2020) is presented in Appendix H. The Ambition Institute's contractual outputs were to deliver training to 1365 participants in 61 schools, across the three years of the project. The MI data show that the Ambition Institute had recruited 1445 participants from across 55 schools, as of February 2020. Eighty-six of these dropped out, leaving a final total recorded in the management information of 1359 (a nominal shortfall of six). Targets for the number of schools in cohort 1 (nine) and cohort 2 (21) were met, however, the cohort 3 target (31) was not achieved with a total of 25 schools recorded in the annual MI. Recruitment of priority schools (AEA level 5/6 and Ofsted category 3/4) was as follows:

- 84% of all participating schools were located within priority areas (AEA areas 5/6). The target was 70%.
- 80% of the participating schools were priority schools within priority areas. The target was 70%.
- Of the nine schools in non-priority areas, seven were priority schools (78%). The target was 100%.

Analysis of the following additional annual MI data concerning school and participant characteristics can be found in Appendix H:

- Distribution of participating schools across Regional School Commissioner (RSC) region
- School type
- School phase
- Attainment at Key Stage 2
- Proportion of participants that worked at schools with over 30 per cent of pupils eligible for free school meals (FSM)
- Participant characteristics including role and school phase.

It is worth noting that the Ambition Institute's own data puts the number of schools recruited at 61 and the number of participants recruited at 1365, but these were not all present in the DfE participant data set.

2.2 Recruitment methods

The Ambition Institute's School Partnerships Team recruited schools to the project. For cohort 1, all nine schools were recruited through existing school links and relationships. For cohort 2, there was a mix of methods: existing links, the identification and targeting of appropriate schools by the project team, and proactive work by Regional School Commissioners (RSCs) who contacted schools directly to encourage involvement. In addition, some schools in close proximity to cohort 1 schools heard about the project through word of mouth. For cohort 3, recruitment methods mirrored cohort 2 with the additional advantage of the merged networks of Ambition School Leadership and IfT.

Having over-recruited schools for cohort 3 (based on Ambition numbers) the project team held a wait list for participants and gained permission from the DfE to sell traded versions of the TT project within the TLIF areas allowing those schools on the waitlist to pay Ambition directly to run TT with their staff.

2.3 What enables and hinders effective recruitment and retention?

No significant barriers were encountered in recruiting schools. Recruitment was facilitated by **existing relationships** and **networks of schools**, the project team's recruitment efforts, and by the demand from schools for support to meet their needs. The merger of IfT and Ambition School Leadership was cited by the Project Manager (2018/19 interview) as a factor enabling recruitment, as it opened up access to a 'huge network of schools'. However, the Project Manager also suggested that recruitment would have been successful even without the merger, as targets for cohorts 1 and 2 were modest (itself an enabling factor) and the project was already on track to meet cohort 2 targets by the time the organisations merged.

The Project Manager considered **three elements** to have contributed to effective recruitment.

- The project formed a whole-school offer
- The project was bespoke to each school
- The project was delivered within the schools.

Case-study schools reported that they were keen to become involved in the TT project to meet their own whole-school development needs, for example:

We were looking for a way to improve teaching and learning en masse really, still giving teachers a sense of autonomy, but without losing consistency. So, we felt that involving ourselves with the

Transforming Teaching programme would get all staff singing from the same hymn sheet and give us greater consistency in the classroom. - *Case study 2, SL*

The appeal of the TT project for most schools was predominantly strategic, with **the aims of the project aligning well with the priorities of the school**. TT was viewed as a professional development programme that could work alongside existing school priorities due to its adaptive nature:

Looking at the kind of things it was talking about on the programme, we thought well we want to do something like this anyway and if we can get outside support then we'd be stupid not to take advantage of it. - *Case study 4, SL*

For one of the sampled case-study schools the motivation to participate was principally **financial**:

We were in a financial state to be fair. We were under notice to improve financially... so we went out and found Ambition and the Transforming Teaching programme, made the application and obviously we were successful. - *Case study 5, SL*

The reputation of the Ambition institute also went some way to further school recruitment.

No project fees were incurred by cohort 1 and 2 schools, but schools in cohort 3 were charged £4000 (primary) and £6000 (secondary), which the Project Manager and DfE anticipated would impact on school interest to some extent. The new fees were necessary to cover the cost of cohort 3 training from April to July 2020, as the TT project's TLIF funding came to an end in March 2020. Despite the cost to schools, the Ambition Institute reported high levels of interest when they were recruiting in both their target regions (North West/Yorkshire & Humber, and West Midlands).

3 Delivery and implementation of learning

3.1 Progress in delivery

At the end of the 2019/20 academic year, all active schools were participating in the 'Progression to Proficient' phase of the TT project. DfE completed three observation reports (November 2019, January 2020 and March 2020) about provider delivery after attending three separate TT training events. The November 2019 report focused on a TE workshop and through subjective observations, '*the training event as a whole, the quality of training and the quality of training materials*' was judged as 'good' and highlighted the use of effective training materials and responsive/personable trainers. The January 2020 report was based on a TT Leaders' Conference. Overall, the event was judged 'good' with the '*quality of the trainer*' and '*the quality of the training materials*' also deemed to be of a 'good' standard.¹⁴ This report made special mention of how the trainers encouraged trainee participation during discussions. The final observation report (March 2020) focused on a TE coaching session and judged the '*training event as a whole, the quality of training and the quality of training materials*' as 'good' and highlighted the importance of having a single action step for the teachers to take away and work on. All three reports confirmed that the observed provision was anticipated to '*achieve TLIF outcomes*'.

The expertise of the facilitators

The CPD delivery model centred on workshop-style training events (SLs, TEs and HLTs) and one-to-one coaching (TEs) led by specialised facilitators. All fellows, tutors and training managers were qualified teachers. Tutors had specific experience of senior leadership, while fellows had previously worked either as a headteacher or across a number of schools to improve teaching and learning.

The quality of the training delivery team was identified as a key strength of the project, with most participants praising the delivery techniques and/or content knowledge of the TT Fellows, for example:

I think for me, the experience is based on the people who are delivering it. And the speakers that we had were remarkable – really, really good. - *Case study 1, TE*

Overall, the most positive feedback on the proficiency of the facilitators came from SLs. In the case of the TEs and HLTs opinions were more mixed, with some suggesting that the facilitators had limited expertise – '*it didn't feel like we were getting taught by an*

¹⁴ DfE rating scale: Scale is Excellent, Good, Satisfactory, Poor, Very Poor.

expert sometime' (Case study 5, HLT) – or the facilitators were not well prepared, for example:

We had a session where we... were saying things like 'tiered vocabulary' and she said to us – bear in mind she works for them – is that your terminology you use? Is that what you call it? And I just said, no it's what you call it! She was shocking, really shocking.
- Case study 4, TE

The content of the training

The content of the training was deemed by most of the interviewed participants to be well thought through and appropriate, and most interviewees perceived that the TT project content was flexible across subjects. However, some felt that the strategies and techniques in the training were less appropriate for their subject, for example:

Sometimes I would sit in a training session as a history teacher and think 'oh this really just isn't relevant for me, because my subject is so content-heavy'. I'm not demonstrating and modelling all the time, because we've just got to get through the content first. - Case study 1, HLT

For others however, one of the strengths of the project was the opportunity it provided to reflect on the way other subject teachers planned to implement the learning:

A good thing was to see how things are done differently in different subjects. I know for instance how I would do I/We/You in physics, but to see how it's done in history is very different. - Case study 5, HLT

There were some issues raised in two case-study schools about a lack of correspondence between delivery and project resources, as noted here:

I had one bugbear about the delivery. It was that the handouts we had sometimes didn't quite match up to the presentations. - Case study 4, HLT

The CPD was praised for being interactive, enabling staff to practise techniques as they progressed through training:

What was really good was the sessions were actually mirrored as you would deliver a lesson in class, so you had the [I do, the we do, and the you do] so I thought that was quite useful to embed into your own practice as well. - Case study 1, HLT

Teachers liked the training's focus on practical, 'off the shelf' strategies and techniques, which participants could quickly implement, for example:

The 'narrating the positive', or the 'climate for learning' stuff. You do [the training] on a Thursday, you've got a hand-out that you've walked away with reminding you of what it is. You've got potentially a script written out for certain [things], and then the next lesson on a Friday you can start putting that into practice straight away. - *Case study 1, HLT*

The TE and HLT strands purposely focussed on small incremental changes teachers could make to improve their practice. This 'granular' approach to learning was, on the whole, very well received. The HLT programme covered areas such as hinge questioning, cold calling, classroom climate, co-planning, and instructional coaching. By the start of cohort 3, schools were able to cherry-pick the sessions they felt best met their school needs.

A number of the teachers interviewed (TEs and HLTs) suggested that the project's content did not necessarily offer anything particularly new, but required participants to revisit previous pedagogical theories or techniques to refine their practices. This re-examination of learning was felt to be a positive opportunity for some, while others found it frustrating.

3.1.1 Project challenges and adaptations

Adaptations to the original TT model were made as the project was implemented. These included introducing new core team delivery roles, changes to the sequence of delivery of individual strands and changes to the content of the TE CPD.

New core team delivery roles

Due to the larger size of cohort 2 (21 schools) and cohort 3 (31 schools) compared to cohort 1 (nine schools), the TT project team put in place new roles to support delivery. Regional teams were built and optimally configured to deliver training and support relationships with schools. (Prior to this, one central team travelled to the different schools in all geographical areas.) The new model saw the creation of the North West, Yorkshire and the Humber team with one TT Fellow, two tutors and two training managers, and the West Midlands team with one TT Fellow, one tutor and one training manager. All tutors and training managers were qualified teachers, but tutors were more senior with previous experience of senior leadership. TT Fellows had previously worked either as a headteacher or across a number of schools to improve teaching and learning. The regional TT Fellow was tasked with delivering the leadership strand across schools as well as delivering CPD to TEs.

Changes to the sequence of delivery

The project comprised three strands of CPD delivery: to SLs, TEs and HLTs. The intention within the model was that SLs received their training prior to the start of training for TEs and HLTs. Due to a recruitment delay at the beginning of the project, delivery commenced later than planned in the academic year 2017/18. Training for TEs and HLTs was underway by January 2018, but the leadership CPD strand did not begin during the first year of the project as expected. Instead, SLs in cohort 1 and cohort 2 received training simultaneously, commencing in June 2018 with a special SL TT conference. The decision was made by Ambition to not postpone TE and HLT training to ensure that they were able to complete the project in the time provided.

Changes to the TE programme

TT usually identified highly competent teachers to become TEs. TE participants were recruited to the project through different means. The majority were put forward by each school's senior leadership team, however for some this was a formal application process. The method of recruitment used did not seem to have any significant impact on engagement as most TEs felt valued for being volunteered or asked to apply. The TE commitment was to attend training sessions and receive one-to-one coaching, in order to train a 'teaching and learning team' within each school that would be tasked with disseminating CPD across the whole school. **Feedback from TEs in all six case studies was largely positive** with one participant describing the project as '*some of the best CPD I've ever done*' (Case study 2, TE).

The training content for the TEs in cohort 1 was focused on two key areas, coaching and co-planning.

- **Coaching:** TEs received one-to-one coaching from their assigned TT Fellow. The coaching focused on improving teaching practices, positive behaviour management and supporting the TE to coach others effectively. The TEs were expected to complete a coaching programme with a view to starting to coach their peers within the lifespan of the project and with the ongoing support of their TT Fellow.
- **Co-planning:** The model for co-planning training mirrored the coaching model above with TEs expected to receive co-planning training before implementing new co-planning processes within a school.

Once trained in these two areas the TEs were expected to disseminate the training within their own schools. It quickly became apparent that the dual focus created an overall content load that was too burdensome for the novice TEs and progress was slow:

It was a hard slog for them to reproduce the coaching model with fidelity while they were trying to do the same thing with co-planning and switching between the two. We weren't seeing the progression at the rate that we would typically expect. - *Ambition Institute Project Manager*

The project team's expectations about rates of progression were based on their previous work with schools prior to the TT project. Changes were made to the TE strand content in response to the cohort 1 findings: for the next cohort, instead of delivering CPD on coaching and co-planning, the focus in the first year moved to being solely on coaching, as explained below:

We're just focusing on them becoming really effective coaches instead. Taking the learning from co-planning and embedding that through coaching instead. So instead of them having to learn two procedures, a coaching model and a co-planning model, and then trying to get them to embed both of those simultaneously with teachers within their schools, we're just focusing on the procedural knowledge of the coaching model, and then taking some of that domain-specific knowledge around planning and effective planning principles, and saying actually in coaching you can co-plan with [someone] as part of using the coaching format. That has had a huge impact. - *Ambition Institute Project Manager*

In the TE CPD programme, the first term was dedicated to coaching the TEs themselves and the second term was focused on supporting the TEs to begin delivering coaching to colleagues. For some TEs this model worked well, but others needed more time being coached before they felt confident to work with other teachers. The TT fellows and school SLs were jointly responsible for determining the point at which TEs were ready to begin delivering coaching. The aim of the project was that this would take place in term 2 after a full term of training, however, decisions were made on a TE-by-TE basis.

Changes to the HLT programme

Most case-study schools chose to select some of their recently qualified teachers (those with less than five years in teaching) to participate in the HLT strand as a way of continuing their professional development beyond that which they had formally received as trainees. This was encouraged by the TT project as an opportunity to further upskill less experienced staff members. For some this was a welcome opportunity to revisit their training.

There was initial resistance to the project from some HLTs. This appeared to be due, to some extent, to the way in which they had been introduced to the project. However, most HLT interviewees were positive about the TT CPD delivery and impact.

The purpose of the HLT training was to expose a group of carefully selected teachers to evidence-informed practice. HLTs were identified and put forward by each school's senior management team. They were often early career teachers (interviewed HLTs had been teaching for three years on average) although some more experienced teachers were also selected for these roles. Feedback from HLT interviews was variable across the case-study schools and was partly dependent on how schools 'sold' the training to them.

When the project had been introduced and explained in depth to all participants, and the purpose of the training was understood, it was reported by the Project Manager to have led to strong buy-in. However, some HLTs were unclear why they had been chosen for the training, which led to some confusion, for example in Case Study 2:

I think in science we thought this was because they thought we were lacking in skills and we were put on it, because we didn't know why. A lot of us were put on it from science, so we thought this was a reflection of some of the struggles in science. But we didn't know.
- *Case study 2, HLT*

This point dovetailed with the view of the Ambition Institute Project Manager who noted there were problems when schools had not taken appropriate care to convey the reasons for involvement to staff selected for the HLT strand:

Where we're really struggling is where schools are putting their teachers who are very experienced but, from their viewpoint, not delivering effective lessons on the high leverage teacher programme, but haven't told them that. And so you have people with 15-20 years' experience coming into a lesson and we're talking about how to establish routines in your classroom. That's where we're having a bit more of a barrier. - *Ambition Institute Project Manager*

This quotation highlights an interesting issue. The HLT strand was designed for teachers identified by the school as requiring additional training and support to improve their practice – this was intended to include early career teachers along with more experienced teachers who were judged to need CPD input to refresh or develop their current classroom methods. Although the Ambition team became aware of the problems regarding the lack of communication around the selection (and ongoing engagement) of HLTs, they continued in cohort 2 to rely on the SLs in school to obtain HLT buy-in:

It's not our place to tell them why they've been selected on the programme. And that's what we found really hard – we push at the leadership team, some of the senior leadership team are [scared] to tell them. - *Ambition Institute Project Manager*

However, for cohort 3, the Ambition team developed a new process of 'on-boarding' for the HLTs, designed to promote their engagement and eliminate resistance. This included a new launch procedure for the project with additional meetings with the senior leadership teams. To build relationships with the HLT cohorts, the SLTs launched the project and were given clear guidelines from Ambition to ensure course expectations were clear at the beginning of the project. In addition, the TT team underwent internal training on managing challenges and difficult personalities.

Onboarding issues related to a lack of communication were also experienced by some TEs who felt unaware of the project's aims and outcomes at the outset. For some case-study schools the communication problem was exacerbated by an ongoing lack of overall clarity from either the Ambition Institute or their SLT:

There was no end goal. We didn't know when it was going to end, and we didn't know what we were going to get out of it, basically.
- *Case study 3, TE*

Notwithstanding the concerns about onboarding and communication, HLTs' feedback about the effectiveness of the project was largely positive:

I think for me, I prefer going to the Transforming Teaching sessions rather than CPD provided by the school, because I feel like it's more relevant to me. - *Case study 2, HLT*

The initial HLT onboarding processes were revised by the Ambition Institute based on cohort 1 feedback. To ensure the HLTs felt that the project content was relevant to their specific needs the TT staff moved to spending a full day observing lessons and getting to know the staff as explained by the PM:

...the onboarding visit is now a full day in the school – the fellows now spend a full day and they observe a full range of lessons... we're really clear that we want to see the teachers that they think need the most support to develop, the teachers who they would consider their normal, average teachers, and then we wanted to see their best teachers in their school. And then we talk to middle leaders and talk to teachers about what they think the barriers are... in their classrooms. - *The Ambition Institute PM*

In addition to this, the project changed from offering 36 different sessions to a modularised HLT curriculum grouped into five to seven sessions. It was felt that this offered HLTs a better opportunity to embed their learning by providing a longer-term focus. Feedback to the Ambition institute indicated that HLTs were satisfied with this approach.

Despite this curriculum change all school SLs continued to choose the HLT module content from the options Ambition offered. This created a misalignment in one of the case studies between what the SLT wanted and what the HLTs felt they actually needed, with one HLT commenting:

I think if we'd have been involved in the choice in the sessions... because we saw the list, didn't we and we were like, actually that would have been interesting, but we didn't get the opportunity. - *Case study 5, HLT*

This disparity was a broader issue, as recognised by the Ambition institute Project Manager:

Senior leaders' perceptions of what's happening day-in day-out in classrooms is quite skewed. And it's because what happens when they walk into a classroom is different to what's happening in the rest of the lessons every single week. - *The Ambition Institute PM*

Participant engagement and satisfaction

All participants were asked to complete a number of questions about the extent of their involvement in the TT project¹⁵; how these components met their needs¹⁶, and how they rated their experience of being involved in the TT project overall¹⁷. Involvement in each aspect of the TT project differed between staff groups (i.e. SLs, TEs and HLTs).

The majority of respondents across all staff groups reported moderate to full levels of involvement in the face-to-face training offered for the TT project. The majority of respondents across all staff groups also rated this provision as moderately to fully meeting their needs. The majority of HLTs (only asked of HLTs) reported moderate to full involvement with face-to-face training offered by TEs as part of the TT project and rated it as moderately to fully meeting their needs.

¹⁵ Participant extent of involvement, response scale 1=Not at all to 8=Fully

¹⁶ To what extent project components met participant need, response scale 1=Not at all to 8=Fully

¹⁷ Participant rating of experience of TT project overall, response scale 1=Very poor to 8=Very good

Involvement in the coaching offered as part of the TT project was mixed. The majority of TE and SLT respondents reported moderate to full involvement in the coaching offered, but HLTs reported less involvement. Views of the extent to which this provision met respondents' needs was mixed. The majority of TEs and SLTs (only asked of TE and SLT) reported moderate to full involvement in the structured in school support for diagnosis/implementation offered, with the majority rating the provision as moderately to fully meeting their needs.

Over half (52%) of SLs responding reported moderate to full involvement in the senior leadership conferences provided as part of the TT project, but the extent to which this provision met their needs was mixed.

All groups reported the least involvement with email/telephone support from the Ambition Institute. However, the majority of all groups reported this provision moderately or fully met their needs. When considering how participants felt about their experience of TT, the majority of participants who completed the endpoint survey were moderately or very positive about their experience (between 5 and 8 on a scale from 1=Very Poor to 8=Very good) (n=137, 88%) (see Appendix H).

The qualitative data gathered from the case studies presented a more mixed picture, with some interviewees rating their experience very highly while others voiced more dissatisfaction. The main areas of dissatisfaction included course content that repeated previous training, a lack of senior leadership commitment, the use of role-playing and hampered whole-school rollout.

Case Study 5: The HLT programme content

The HLTs in case study 5 were somewhat disappointed with the content of their programme, which had been selected by the school SLs. Having been offered a range of pre-designed Ambition Institute/TT themes to explore with the HLT cohort, it was the SLT at the school who chose each session. It was felt by some of the HLTs, that this produced a mismatch between the SLTs' wants and the HLTs' needs:

If we could have been involved in [selecting] we could have maybe picked areas that were weaknesses of ours instead of being told these are the sessions you're going to do. - *Case study 5, HLT*

This issue was exacerbated by the fact that all of the HLTs at school 5 were NQTs and as such had recently completed their initial teacher qualifications. All of the interviewees at this school felt that the content covered by the TT project overlapped significantly with that recently covered as part of their teacher training.

...we're recently qualified, we just learnt all of this. Because that's exactly what they're teaching in the training, so actually who would have benefitted more are people who've been teaching longer, to refresh them or tell them the new techniques. - *Case study 5, HLT*

For these interviewed HLTs it felt too soon to be returning to the topics covered.

3.2 Progress in the implementation of learning

The TT project provided structured school-level support for implementation as an integral feature of its provision. It did this by offering bespoke school support, an open stream of communication between the fellows/tutors and the school between CPD sessions, and co-delivery of initial whole-school CPD sessions.

School implementation models

The six case-study schools had different experiences in terms of the implementation of learning. For case study 1 the training had been delivered to every member of the teaching staff and participant buy-in was high. In case study 3, there was negligible school-level commitment owing to senior staff changes, and the implementation of learning was apparent only in relation to the direct beneficiaries of the project (the TEs and the HLTs).

In case studies 2 and 5, the Ambition Institute had worked with the SLs, the TEs and the HLTs over the course of a year and the schools were able to provide In-direct beneficiaries (IDBs) for interview. As such, these two case studies offer the most comprehensive illustration of the TT project as an implementation journey.

In case study 2, the TEs were delivering coaching to their peers and the school culture was described as having shifted positively in relation to attitudes towards CPD. Through discussions with the IDBs from case study 2, it was evident that there was widespread staff endorsement of the project's principles and approaches, and staff practices were reportedly changing to include the techniques introduced by the project. For case study 5 there had been a less successful process of whole-school implementation with many of the IDBs unaware of the project or seeing little value in it. The TEs in this school were delivering coaching with colleagues; however, they did not feel that the project had been

valued and the school's professional development priorities had shifted significantly away from those identified through TT.

In case-study schools 1 and 6 some of the TEs had begun to trial coaching of other members of staff within their departments using the skills and techniques introduced to them by the TT project. This has been a positive experience thus far:

I went into the coaching a lot more confident and actually did the coaching process with the member of staff. And literally within the next day could see that member of staff just taking that action step. And I was in my classroom and I could actually hear him acting upon the action step within a matter of 24 hours. That's the quickest progress I've ever seen in that member of staff. - *Case study 1, TE*

Case study 4 had seen whole-school professional development workshops based on the TT content, and in the first instance co-delivered by the TEs and the TT fellows. The TEs were then required to deliver the content alone, however, they encountered serious issues regarding the project resources and the time it was taking to re-write materials that the Ambition Institute were unwilling to share (see Section 3.3.1).

The TT training programme included CPD for TEs and HLTs, which explored teaching approaches, learning style and positive behaviour management to improve classroom practices. The training content was specific to the TT project and based on the previous work undertaken by the Ambition Institute. Positive behaviour management strategies had been implemented across the six schools, with a focus on creating a more positive learning environment where teachers praised and encouraged good behaviour rather than continuously criticising bad behaviour or apathy. HLTs talked about embracing the notion of 'assuming the best' from pupils in terms of how they as teachers addressed the class and gave instructions, for example:

It allows staff to now reflect more on their practice, where a lesson has not gone so well – staff reflect more and staff are just nicer to the kids and they value them more. And they also understand why things, why kids have not learned things, and what they need to do... and they're more reflective on closing the gaps that the kids have got now. And that's through that time they're getting now to reflect, that they didn't get before. - *Case study 2, SL*

3.3 Challenges and enablers in effective delivery and implementation of learning

Research participants reported experiencing a range of challenges and enablers to the effective delivery and implementation of learning. These are grouped under the headings below.

3.3.1 Factors related to the provider/provision

The in-school dissemination model

For some of the participating schools the in-school dissemination model employed involved the TEs disseminating TT learning across the whole school in dedicated CPD sessions. In the first instance this was co-delivered with their fellow from the Ambition Institute, however, after these initial few sessions it was expected that the TEs would undertake this role independently. A number of TEs from differing case-study schools had used a great deal of their staff development time both as part of the project *and* outside of the project, adapting the training they had received in order to deliver it to colleagues. For some, this process acted as an enabler to implementation and involved taking the specific techniques used in the project to fit the needs of the teachers in their school.

For others however, finding time to implement the training was raised as a barrier. In case study 4, the TEs responsible reported being denied access (by Ambition) to the Ambition Institute resources (PowerPoints, videos, written materials etc.). This created an ongoing strain on staff members' time as they had had to create presentations and videos from scratch alongside conducting the research themselves to ensure that their content was accurate, which could take *'two or three full days to plan them, because we're having to re-film everything'*; and this involved significant conceptual work too: *'we've not been given that theory, we're having to go away and find that theory and read it and understand it. That takes a lot of time.'* (Case study 4, TE). One of the two SLs interviewed in case study 4 was aware of this issue. They too had contacted Ambition to request access to materials, but they were informed that the issue was one of Intellectual Property and, as such, the TEs would not be able to use TT PowerPoints and resources.

It should be noted that this issue was explored in other case studies. In those schools, although access to materials had not been requested, interviewees felt confident that if they were to request similar access this would not pose a problem.

Scheduling of training

The scheduling of the training created both barriers and enablers. For case-study schools 1, 3 and 4 the timing was challenging, because the sessions took place after school

when *'everybody is really tired [and] people have been teaching all day'* (Case study 1, SL). In these cases, the length of the session was felt to be too long.

In contrast, for case studies 5 and 6, time had been allocated during the school day for the sessions, and this was experienced more positively.

The timing of the CPD sessions was chosen by the school SLT and was, therefore, more of a school-based barrier than one brought about by the project itself.

In relation to scheduling in terms of the school year, participants in the case study 2 school would have preferred the CPD project to start at the beginning of the academic year to run alongside their teaching.

Project approaches

Many of the TEs, HLTs and SLs interviewed talked about **the 'granular' approach** of the project. The TT project focussed in fine detail on specific techniques or approaches that may improve practice. These included cold calling, hinge questioning and the science of learning. This granular focus allowed participants to explore their own practice in depth. Some participants perceived this as a process of making small changes that may 'refine' rather than 'transform' practice.

The granular approach led some HLTs to express concern over the repetitive nature of the project's content e.g. *'We did I/We/You for what felt like weeks.'* (Case study 5, HLT). In contrast, for other schools this was perceived as reinforcement rather than repetition:

There's things that we keep coming back to.... And the fact that it's not just a 'one and done' on technique, it's always reinforcing and strengthening these things and revisiting them and building on the foundations I think – which has made it quite a strong programme.
- *Case study 4, HLT*

One facet of the project's workshops was the use of **deliberate practice/role play**. A number of the interview participants deemed the role-playing aspect of the training to be 'uncomfortable', 'nerve-wracking' or 'embarrassing' for example:

I felt uncomfortable throughout the whole programme. I mean, it's useful, I can see its merit, but I still don't feel comfortable with it.
- *Case study 5, TE*

However, this reluctance to participate in role-play was not felt by all.

What I enjoyed was the idea of practice at the end as well, because normally CPD was... oh 'this is how you do it' and then you practise it

in the lesson. But given the opportunity to practise amongst your work colleagues, I guess it shows the teaching that you've been given, but also how to put it into practice, and then you're prepared for when you get into lessons. - *Case study 1, HLT*

The different perceptions regarding the project elements appear to be mainly as a result of the differing ways in which participants viewed them, rather than due to the effectiveness of the different elements themselves. This underlines the need for clearly communicated project aims and goals for all participants at the outset. The TT project aimed to offer schools a bespoke CPD programme that Ambition Institute modules. While the module content was predetermined each one was part of a suite of different modules, which can be cherry-picked by schools to meet their individual needs. In addition, there was a degree of flexibility in the way in which the content was delivered - for example, in terms of workshop timings. One of the advantages of TT was that the Ambition Institute could be adaptive in their delivery approaches as was seen in case study 6:

I don't think our HLTs were getting much from the sessions at first; they were ok, but not great so we worked with [Ambition] to make some changes and everyone seemed much happier. - *Case study 6, SL*

3.3.2 Factors related to the school climate/context

Staff instability/Teacher retention

The Ambition Institute Project Manager reported that TEs often moved into more senior roles during the course of the project, but she observed that it was hard to determine the overall impact of these personnel changes on the impact of the project. In addition, involvement in the project itself may have led to TEs leaving the school via promotion as a result of their development during the project:

But there were some situations where even teacher educators were being promoted into other roles in the trust, because they're obviously really great teachers now. So, I don't know if we've managed in those couple of instances to retain teachers in role in those schools that they were in. - *Ambition Institute Project Manager*

This retention issue was an ongoing concern throughout the project and is also applicable to SLs:

The challenge with SLT is just the retention of that team. Quite often head teachers were leaving and changing... so quite often we just start over and over again. - *Ambition Institute Project Manager*

This issue presented a major challenge for the project and was reflected in case studies 3 and 5 where SLT members changed or left the school, meaning the work on the project was essentially lost to that school.

For the Ambition Institute Project Manager, the retention of teachers and SLs within a TT school did not hinder the overall aims of the project as she believed that most of these teachers remained within priority schools and can, therefore, further disseminate the project content:

I don't think it's a problem, because I'm looking at impact to the sector. They will take that knowledge and that learning of what great teaching is and how to develop it in others into any role they do from that point, whether that's a leadership role or a teacher educator role in another school, or head of department... or working in an organisation that works in education. - *Ambition Institute Project Manager*

For those teachers, however, who had been through a lengthy professional development programme only to see it drop off as a school priority due to a change in the SLT, there was a feeling of frustration and disappointment.

The TT project model rests upon the principles that the TEs will receive coaching and will, in time, be equipped to deliver this coaching model to colleagues, thereby ensuring a level of sustainability within each school once the TT project has concluded. In case study 3 this did not occur. When the SL left, the TEs did not carry on with their training and, therefore, never advanced to the coaching delivery stage of the model.

Shared Language/Teacher Retention

The HLTs in case study 1 discussed that a 'shared language' among teaching staff, and the way in which TT had embedded a shared routine across all classrooms in school, had acted as an enabler to implementation. Teachers noted that it was evident when a class had been taught by a supply cover teacher who had not learnt this shared approach. For example:

I think, because the routines are embedded across the school in the majority of the classrooms, it does have an impact. And I think you can tell when the kids have had cover. - *Case study 1, HLT*

While this goes some way to demonstrating the strengths of the TT project and the impact it can have on teaching practice across a whole school, it also highlights the implications of staffing instability. If a member of staff is absent for even one lesson this can have a detrimental impact on the lesson and the way the students engage. As such,

the success of the TT-driven changes in school hinges on the retention of the trained staff. New (untrained) staff members joining the team, or current (trained) staff members leaving the school can potentially have an impact on the sustainability of the work. Staff turnover is inevitable, especially in schools in challenging circumstances, such as the TLIF schools, therefore, schools need to commit to the importance of sustaining the new learning and practices, making sure that new members of staff are trained up and supported when they join the school.

Alignment with school priorities

A further issue was a shift in school priorities. In several cases, a change in SLT, inspection feedback or a new Trust focus had an impact on the way the TT learning was valued and implemented. School 5, for example, had already begun to move onto a new professional development focus around the work of Rosenshine.¹⁸ This school had become involved in the TT project as it was financially advantageous, however, now that the school's financial problems had been resolved they felt the TT project was not a good fit:

It was very much of the time.... If I had to look for CPD now, I wouldn't offer that. - *Case study 5, SL*

In this example, the change in priorities related to a number of the SLT members having changed. This downgrading in the status of the project led to some frustration for some of those teachers involved:

It's a little bit annoying that we've put a year into something that's kind of been forgotten by the current SLT. - *Case study 5, HLT*

This related to a wider concern shared by teachers in other case-study schools about the longevity of the learning:

My worry is that we put all this effort in and we've learnt all these things and... five years down the line, three years down the line, is this now not going to be a thing? - *Case study 4, HLT*

Across the six evaluation case studies, implementation was experienced as a complex process requiring SLT commitment and a continuity in school CPD focus. To safeguard

¹⁸ For further reading please see: <https://www.teachertoolkit.co.uk/2021/07/15/the-evolution-of-rosenshine-principles-1982-2012/> (18 January 2022)

against problems caused by a single SL moving on and priorities altering, the Ambition Institute suggested a need for all members of the SLT to participate in the project:

I think that with the SLT strand, it's always been two to three members [for example] the head teacher, the head of teaching and learning. I would say that the entire SLT team needs to be on that strand. And if the school is part of a trust, having a representative from the trust there as well, so that we can ensure that what we're doing is aligned with trust priorities. - *Ambition Institute Project Manager*

SLT commitment to the TE programme

A related barrier to implementation was the SLTs' response to the TE programme. The Project Manager interviews indicated a potential issue with some SLs feeling uneasy with the TEs making leadership suggestions:

There are a couple of schools, especially in cohort 1 and cohort 2, where the senior leaders really didn't want a group of teacher educators putting forth suggestions on what they should do as a leadership team. - *Ambition institute Project Manager*

In cases where the SLT did not feel threatened the implementation process was reported to have been much easier, and this was not an issue that arose in any of the SL interviews conducted:

Where the leadership haven't been threatened by this knowledge that these teacher educators are building and have utilised them and recognised them as being a really valuable resource, I think that the programme absolutely achieves its outcomes. - *Ambition Institute Project Manager*

TT coaching

All SL and TE participants interviewed spoke positively about the TT coaching. Some staff in the case study 1 school felt that the training was helpful in dispelling the 'myth' that coaching has negative connotations and implies a deficit in ability or skill. The senior and middle leaders interviewed in this school explained how their presence at the training, and the fact that they themselves had a coach, promoted the potential for learning and CPD via coaching:

The main facilitator of the training was my coach. And I said that to staff. I was very open about it. I said, listen, I'm a member of senior

leadership in charge of teaching and learning, and I have a coach. How great is that? And it wasn't a case of - oh it must be because you are under-performing or there's a deficit in some area. I think it really created the culture that we're all in it together and we're all learning. - *Case study 1, SL*

For the TEs in case study 5, there were some issues fitting their coaching into the school timetable. This was related to the quick feedback model endorsed by the project that required teacher observation feedback to be given very soon after the observation itself had been conducted:

The only time I'm free when he's teaching is a Wednesday week 1, period 3, so I'm observing him then, but we won't meet again for another week. - *Case study 5, TE*

Dissemination and roll-out

The project model encouraged whole-school participation through professional development dissemination events. There was evidence that care needed to be taken about how this occurred. In case study 5, the whole school was asked to attend TE/Ambition Institute co-delivered TT sessions. This was viewed as a positive opportunity for professional development by the TEs who welcomed the opportunity to share their learning. However, the content of these whole-school sessions mirrored that which had previously been delivered to the participating HLTs (and in some cases previously during their ITT), creating a sense of exasperation at having to repeat the learning.

In contrast, case study 4 also repeated the project content in whole-school sessions, however, at this school HLTs were invited to these sessions as active participants and encouraged to support discussion as 'experts'. This approach was met with more support.

HLT selection

One final potential barrier to implementation was the issue of stigma and possible negative connotations around being selected as an HLT for the project, with some feeling they had been selected due to deficiencies in their teaching:

At one point I felt like I was on that programme, because I was a bad teacher, because I wasn't doing the right things. - *Case study 5, HLT*

This links back to the previously discussed concern surrounding the on-boarding of HLTs and communication. Overcoming potential stigma led some schools to recruit to the project across a broader range of staff members, as explained in case study 4:

We knew instinctively we weren't going to go for the let's just put teachers who are 'Requires Improvement' on this programme. One, I don't believe in it. I think that if you do that no matter how much you try to massage or to gloss that in some way to say... people just look around and they're going, hang on a minute, you're also someone that the QA said we need to make some improvement. So, that was very negative. - *Case study 4, SL*

The HLTs in case study 4 all shared a positive assessment of the programme with a clear intention to continue putting into practice their learnings from the project.

4 Outcomes and impacts of the provision

This section considers the extent to which TT achieved its intended project outcomes (see Appendix A and Tables 2-5) as well as the contribution it made to the TLIF programme's intended impacts and outcomes. It draws on survey data to report changes from baseline to endpoint on a number of outcome measures and secondary analysis of SWC data to report changes in teacher retention and progression. These findings are supported by qualitative data, which adds insight into different stakeholders' perceptions of the outcomes of the project and provides context for the interpretation of outcomes.

The analysis of impacts utilises a comparison group design. This enables us to estimate counterfactual retention outcomes for teachers and infer whether or not changes in teacher retention and progression might have come about in the absence of TT. However, as the survey design does not include a comparison group, we can only show an association between the project and observed outcomes. We do not have evidence to support a causal link. It is possible that any reported outcomes might still have come about in the absence of the project.

4.1 Context for interpretation of outcomes

Although we have attempted to collect comparable fund-level outcome data for all TLIF projects, in practice the projects' intentions, with regard to achieving these outcomes, differed. The TT project attempted to achieve most of the fund-level outcomes, but not increased engagement in CPD or reduced exclusions/improved attendance. This should be borne in mind when interpreting the outcomes reported in Section 4.4 below.

4.2 Context for interpretation of impacts

The TT project attempted to achieve fund-level and project-level impacts to improve teacher retention and progression and improve pupil attainment. It is worth highlighting that pupil impacts are explored via teacher perceptions conveyed in survey responses, rather than attainment data, which was unavailable for the respective cohorts due to the Covid-19 pandemic.

4.3 Observed outcomes

In this section we use a statistical technique called factor analysis that summarises information from a number of items asked in both the baseline and endpoint surveys into a smaller set of reliable outcome measures. By exploring whether there were statistically

significant changes in the mean scores of these factors between baseline and endpoint¹⁹, we explored whether the TT project had an impact on participants. This allowed for a more robust and straightforward analysis than comparing single items from the surveys. The factor analysis was based on a matched analysis of the same respondents who answered at both baseline and endpoint. A number of TT bespoke questions were also analysed and reported individually. Factor analysis was not conducted on these questions as they were small in number and covered a range of topics/issues. Therefore, it was more meaningful to report the findings from the TT bespoke questions on a question-by-question basis. Further information about how the factors were constructed can be found in Appendix F.

The survey findings are supplemented with the findings from qualitative interviews with TEs, HLTs, SLs, IDBs, Coaches, and the Ambition Institute Project Manager. These explored respondents' perceptions of the outcomes of involvement in the project on different stakeholder groups (participants, other school staff, pupils) and on the wider school. We have extrapolated from both the qualitative and quantitative data to illustrate where there are indications of fund-level outcomes having been achieved, or not.

4.4 TLIF and bespoke project outcomes and impacts

The table below details the outcomes (most of which we expected to see earlier than impacts i.e. within a year of project involvement) and impacts (which take longer to realise) that the TT project intended to achieve.

Table 1: Intended outcomes and impacts of the TT project for Senior Leaders

| Outcomes and impacts | Outcome or Impact |
|---|-------------------|
| <ul style="list-style-type: none"> • Improved knowledge of, and skills in, leadership and management | Outcome |
| <ul style="list-style-type: none"> • Improved Confidence in own leadership | Outcome |
| <ul style="list-style-type: none"> • Improved Changes in leadership practice | Outcome |
| <ul style="list-style-type: none"> • Improved bespoke project practices related to pedagogy, lesson planning and managing classroom behaviour* | Outcome |

¹⁹ Results were considered statistically significant if the probability of a result occurring by chance was less than five per cent ($p < 0.05$).

Table 2: Intended outcomes and impacts of the TT project for Teacher Educators

| Outcomes and impacts | Outcome or Impact |
|---|--------------------------|
| <ul style="list-style-type: none"> Improved knowledge and skills to teach to the highest standards | Outcome |
| <ul style="list-style-type: none"> Exemplary practice | Outcome |
| <ul style="list-style-type: none"> Improved bespoke project practices related to pedagogy, lesson planning and managing classroom behaviour* | Outcome |
| <ul style="list-style-type: none"> Improved knowledge and skills in teacher education | Outcome |
| <ul style="list-style-type: none"> Positive impact on improving other teachers' practice | Outcome |

Table 3: Intended outcomes and impacts of the TT project for Teachers

| Outcomes and impacts | Outcome or Impact |
|---|--------------------------|
| <ul style="list-style-type: none"> Improved teaching knowledge and skills (generic, subject-specific and classroom management) | Outcome |
| <ul style="list-style-type: none"> Increased sense of self-efficacy | Outcome |
| <ul style="list-style-type: none"> Improved practices | Outcome |
| <ul style="list-style-type: none"> Improved bespoke project practices related to pedagogy, lesson planning and managing classroom behaviour* | Outcome |

Table 4: Intended outcomes and impacts of the TT project for Schools

| Outcomes and impacts | Outcome or Impact |
|---|--------------------------|
| <ul style="list-style-type: none"> Improved quality of leadership (senior and teacher leaders) | Outcome |
| <ul style="list-style-type: none"> Culture of continuous improvement, challenge and support | Outcome |
| <ul style="list-style-type: none"> Improved quality of teaching | Outcome |
| <ul style="list-style-type: none"> Well-being/satisfaction/motivation of staff | Outcome |
| Improved leader and teacher retention and progression | |
| <ul style="list-style-type: none"> Improved senior leader and teacher retention | Impact |
| <ul style="list-style-type: none"> Improved senior leader and teacher progression | Impact |

| | |
|--|---------|
| Positive impacts on pupils | |
| <ul style="list-style-type: none"> Improved pupil wellbeing, behaviour and discipline (e.g. via pupil attendance, exclusions data) | Outcome |
| <ul style="list-style-type: none"> Increased pupil attainment | Impact |
| Improved sustainability | |
| <ul style="list-style-type: none"> Improved capacity and demand for CPD/sustainable change (measurement of this impact was not covered by the evaluation) | Impact |

Table 5: Regional and National Impact of the TT Project

| Outcomes and impacts | Outcome or Impact |
|--|--------------------------|
| <ul style="list-style-type: none"> 'What works' shared with the wider system* (measurement of this outcome was not covered by the evaluation) | Outcome |
| <ul style="list-style-type: none"> Tested model available within the CPD market* (measurement of this impact was not covered by the evaluation) | Impact |

* Project-specific outcomes and impacts

The following sections reflect on these outcomes thematically, and draw on factor analysis, which was conducted in two stages.

- First, it was conducted on the core question items that were asked of all respondents in exactly the same way. This resulted in Factors 1 to 4 (see Appendix F) for all respondents.
- Second, it was conducted on core question items that covered consistent themes, but where the wording, or the inclusion, of items varied slightly depending on the role of the respondent (class teachers, middle leaders, or senior leaders).

This resulted in Factors 5 to 8 for class teachers, factors 9 to 12 for middle leaders and factors 13 and 14 for senior leaders (see Appendix F). As the survey asked questions of teachers, middle leaders and senior leaders all of the aforementioned factors are of relevance. In addition, the TT project asked a set of project-specific questions to respondents based on their category on the course; TE, middle leader and HLT. These do not equate perfectly to the classroom teacher, middle leader and senior leader factors, as some TEs may have, in fact, been middle or senior leaders. A detailed description of the factor analysis undertaken can be found in Appendix F, and the summary results are shown in section 4.4.2 and Table 11 below. Factor analysis was not conducted on the project-specific survey questions due to small sample sizes. Therefore, for project-specific questions pertaining to individual participant groups (classroom teacher, middle

leader and senior leader) analysis at individual question level was conducted. Non-parametric paired tests were undertaken to determine whether changes observed over the course of the project were statistically significant (Appendix G).

4.4.1 Participants' views on bespoke outcomes and impacts related to the aims of TT

In addition to the fund-level factors discussed above, the baseline and endpoint surveys included items that directly related to the aims of TT. These items explored TE, SL and HLT's views on a range of issues relating to pedagogy, lesson planning and managing classroom behaviour. Whilst all respondents were asked these questions, we only had matched responses from TEs and HLTs. Therefore, the table below represents responses from TEs and HLTs only. The overall aims of the project were to offer a whole-school programme for improving teaching, retention and career progression and to make excellent teaching available to children of all backgrounds. The table highlights where there was a statistically significant change in the findings between baseline and endpoint. The full data behind this summary can be found in Appendix G.

The results show that, where changes could be assessed between baseline and endpoint, two statistically significant changes were found (see Tables 6-10). The qualitative data gathered from the case studies indicates that in some cases the project had led to substantial changes in teacher practice and had a meaningful impact on confidence, particularly with TEs and HLTs. However, there were also a number of cases where impact was less apparent with regard to changes in practice and, perhaps more acutely, in terms of whole-school change. This was potentially related in part to issues including low levels of whole-school engagement in CPD, staff turnover and the time pressures related to in-school CPD resource development.

Table 6: Project-level outcomes – summary of outcomes for TE: Classroom practice

| Item | Mean Score - Baseline | Mean Score - Endpoint (TE) | Change (TE) | N | Statistically significant change (p = < 0.05) |
|---|-----------------------|----------------------------|-------------|----|---|
| Review and tighten classroom routines to maximise time for learning | 2.4 | 2.4 | 0 | 17 | No |
| Manage situations as they escalate using positive behaviour management approaches | 2.7 | 2.9 | 0.2 | 17 | No |
| Create rigorous, outcome-driven lessons | 2.6 | 2.8 | 0.2 | 17 | No |
| Plan backwards, so that sequences of lessons move pupils towards a clear end goal | 2.8 | 2.9 | 0.1 | 17 | No |
| Use a range of strategies to support clarity and engagement during periods of teacher talk | 2.4 | 2.8 | 0.4 | 17 | No |
| Use marking and assessment to gather information about pupils' strengths and areas of development | 2.9 | 2.8 | -0.1 | 17 | No |
| Feed information about pupils' strengths and areas for development into planning | 2.5 | 2.5 | 0 | 17 | No |
| Use formative assessment within lessons to adapt teaching in response to class needs | 2.9 | 2.7 | -0.2 | 17 | No |
| Be able to craft good questions for pupils | 2.7 | 2.9 | 0.2 | 17 | No |
| Get pupils to follow class rules | 3.2 | 3.2 | 0 | 17 | No |

Table 7: Project-level outcomes – summary of outcomes for TE: Pupil confidence

| Item | Mean Score - Baseline | Mean Score - Endpoint (TE) | Change (TE) | N | Statistically significant change (p = < 0.05) |
|--|-----------------------|----------------------------|-------------|----|---|
| Get pupils to believe they can do well in schoolwork | 2.9 | 3 | 0.1 | 17 | No |

Table 8: Project-level outcomes – summary of outcomes for TE: Knowledge

| Item | Mean Score - Baseline | Mean Score - Endpoint (TE) | Change (TE) | N | Statistically significant change (p = < 0.05) |
|---|-----------------------|----------------------------|-------------|----|---|
| Knowledge and understanding of what effective CPD looks like | 1.9 | 2.8 | 0.9 | 16 | No |
| Knowledge and understanding of how to facilitate teacher professional development | 1.1 | 2.4 | 1.3 | 16 | Yes (Positive) |

Table 9: Project-level outcomes – summary of outcomes for HLT: Classroom practice

| Item | Mean Score - Baseline | Mean Score - Endpoint (TE) | Change (TE) | N | Statistically significant change (p = < 0.05) |
|---|-----------------------|----------------------------|-------------|----|---|
| Review and tighten classroom routines to maximise time for learning | 2.3 | 2.2 | 0.1 | 57 | No |
| Manage situations as they escalate using positive behaviour management approaches | 2.5 | 2.5 | 0 | 57 | No |
| Create rigorous, outcome-driven lessons | 2.2 | 2.2 | 0 | 57 | No |
| Plan backwards so that sequences of lessons move pupils towards a clear end goal | 2.3 | 2.4 | 0.1 | 57 | No |
| Use a range of strategies to support clarity and engagement during periods of teacher talk | 2.3 | 2.4 | 0.1 | 57 | No |
| Use marking and assessment to gather information about pupils' strengths and areas of development | 2.3 | 2.5 | 0.2 | 57 | No |
| Feed information about pupils' strengths and areas for development into planning | 2.4 | 2.5 | 0.1 | 57 | No |
| Use formative assessment within lessons to adapt teaching in response to class needs | 2.6 | 2.5 | -0.1 | 57 | No |
| Be able to craft good questions for pupils | 2.7 | 2.6 | -0.1 | 57 | No |
| Get pupils to follow class rules | 2.8 | 2.8 | 0 | 57 | No |

Table 10: Project-level outcomes – summary of outcomes for HLT: Pupil confidence

| Item | Mean Score - Baseline | Mean Score - Endpoint (TE) | Change (TE) | N | Statistically significant change (p = < 0.05) |
|--|----------------------------------|---------------------------------------|------------------------|----------|---|
| Get pupils to believe they can do well in schoolwork | 3 | 2.4 | -0.6 | 57 | Yes (negative) |

The key findings from this section indicate that while TT participants were positive about the TT project and had engaged well, we were only able to detect one significant positive change in their project-specific knowledge and practices as a result of their involvement in the project (see Tables 6-8). This was specifically related to an increase in TE level of knowledge and understanding of how to facilitate teacher professional development. The survey data indicates that there was a significant drop in the extent to which HLTs felt that they were able to get pupils to believe they could do well in schoolwork. This was not an issue that came to light through the qualitative interviews: no HLTs noted that the programme had negatively impacted on their ability to get pupils to believe they could do well in schoolwork. This indicates further investigation would be required to understand the reason for this finding.

4.4.2 Findings related to fund-level outcomes

In addition to questions/items that directly related to the aims of the TT project discussed above, cross-cutting fund-level factors were also created to explore the extent to which TT contributed to fund-level goals. Respondents were asked to rate a series of items on a scale of one to eight, where one was 'Strongly Disagree' and eight was 'Strongly Agree'. The responses were then converted into a point score, with 'Strongly Disagree' being worth -4.0 points, and 'Strongly Agree' +4.0 points. Items were combined to produce a mean score and compared between baseline and endpoint. To help interpret the mean scores, the maximum and minimum scores possible using this methodology were also calculated and are presented. For a full description of the analyses undertaken, please see Appendix F. A summary of the findings from the factor analysis is detailed in the tables below. These also highlight where there was a statistically significant change in the findings between baseline and endpoint.

Effectiveness of school leadership (Factor 1)

Factor 1 explores changes between the baseline and endpoint survey in participants' perceptions of the effectiveness of school leadership teams (SLTs). This factor includes 13 items (see Appendix F) and is based on responses from all respondent groups (class teachers, middle leaders, or senior leaders).

Table 11: Findings from factor analysis for all participants

| | Range - minimum | Range - maximum | Mean score - baseline | Mean score - endpoint | Mean score - change | N | Sig. (2-tailed) |
|---|-----------------|-----------------|-----------------------|-----------------------|---------------------|-----|-----------------|
| Effective school leadership (all) | -49 | 52 | 15.37 | 21.32 | +5.95 | 136 | Yes (positive) |
| Effectiveness of professional development (all) | -28 | 28 | 9.97 | 10.20 | +0.23 | 136 | No |
| Effectiveness of school culture (all) | -22 | 24 | 8.22 | 6.05 | -2.17 | 136 | No |
| Motivation for professional development (all) | -8 | 8 | 6.31 | 6.15 | -0.16 | 136 | No |

There were significant positive changes in the factors related to respondents' perceptions of **effective school leadership**. The qualitative data only reinforced these positive findings to a certain extent. While most TE respondents felt that their participation in the project had had a positive impact on their own leadership skills and confidence, TEs, HLTs, IDBs and SLs were less likely to think so.

We observed no statistically significant changes in **perceptions of the effectiveness of their school culture** or **perceptions of the effectiveness of, or their motivation for, professional development**.

Teaching quality and motivation for professional development - classroom teachers (Factors 5-8)

Factors 5-8 explore changes between the baseline and endpoint survey in classroom teachers' perceptions of teaching quality and career progression.

Table 12: Findings from factor analysis for classroom teachers

| | Range - minimum | Range - maximum | Mean score - baseline | Mean score - endpoint | Mean score - change | N | Sig. (2-tailed) |
|---|-----------------|-----------------|-----------------------|-----------------------|---------------------|----|-----------------|
| Personal knowledge for effective teaching (CT) | -10 | 24 | 8.38 | 20.72 | +12.34 | 58 | Yes (Positive) |
| School teaching quality (CT) | -4 | 27 | 6.54 | 18.55 | +12.01 | 58 | Yes (Positive) |
| Motivation for teaching focused profession development (CT) | -5 | 16 | 5.41 | 12.81 | +7.40 | 58 | Yes (Positive) |
| Opportunities for career progression (CT) | -8 | 18 | -.64 | 7.76 | +7.12 | 58 | Yes (Positive) |

The factors in table 12 were based on responses from classroom teachers.

There were significant changes in all four factors: classroom teachers' perceptions of **personal knowledge of effective teaching**, **perception of school teaching quality**, **motivation for teaching-focused professional development**, and **opportunities for career progression**. The changes observed were all positive and statistically significant.

What follows is a discussion around each factor based on the available qualitative data.

Personal knowledge for effective teaching

The findings from the case-study interviews with HLTs supported the survey findings relating to classroom teachers' knowledge regarding effective teaching. HLTs and TEs reported improvements in both their confidence and their teaching practice. The improvements in confidence stemmed from their growing repertoire of teaching skills.

It was best that it gave us time to reflect to the group and share ideas as a group. I think that's the best thing we got from it. - *Case study 5, HLT*

I have definitely grown as a teacher, I feel more secure in my practice. - *Case study 6, HLT*

Impacts on teaching practice included greater awareness of new approaches to teaching and learning, and their application in the classroom, including questioning, classroom management and cognitive processing. There was evidence that HLTs valued the research-based underpinnings of these approaches, and that they had become more 'research aware' as a result of their participation in TT:

I liked that the programme was based on current research. That sort of helped us to see the value. - *Case study 6, HLT*

For some HLTs (and TEs), however, the research content was experienced as revisiting content covered in their recent teacher training. In addition, some HLTs felt that the project content built on practices that they already utilised and, therefore, tweaked rather than *transformed* their teaching. Most HLTs agreed that much of the project content could be implemented immediately into lessons.

School teaching quality

Some of the HLTs interviewed discussed whole-school changes based on specific techniques introduced through the TT project which, in turn, had created a sense of shared language and practice.

We're all singing from the same hymn sheet now. - *Case study 6, HLT*

Overall, the case studies indicated that teaching quality had improved in those schools that had implemented the project across all teaching staff through dissemination workshops or by enrolling all teachers onto the project in the first instance.

HLT's perceived a clear link between involvement in the project and improvements in their classroom practices, for example: '*I've gone from potentially telling kids off to praising students and the kids that [were getting it wrong] are then getting it right.*' (Case study 1, HLT). This was corroborated by the SL and TEs in case-study school 1 who reported a noticeable improvement in the HLTs across the school:

I would say in terms of my department, there's a huge improvement. And actually, I can see the team really investing in the training, because they could see that there were little victories every week, because they were able to really hone in on that one action step. And it was feeding into the learning; it was feeding into the coaching.
- *Case study 1, TE*

For other schools the impacts reported were smaller and reported as ‘tweaks’; in case study 3 mention was made of behaviour management, and in case studies 4, 5 and 6 incremental improvements were reported, for example:

I felt like the sessions didn’t say to me – scrap what you’re doing, here’s a new way of teaching. It was just like refining, tweaking things.’ - *Case study 6, HLT*

Opportunities for career progression

Qualitative insights into career progression opportunities are provided in Section 4.4.3

Teaching quality and motivation for professional development - middle leaders

Factors 9-12 explored changes between the baseline and endpoint survey in middle leaders’ perceptions of personal knowledge, school teaching quality and career progression.

Table 13: Findings from factor analysis – Middle Leaders

| | Range - minimum | Range - maximum | Mean score - baseline | Mean score - endpoint | Mean score - change | N | Sig. (2-tailed) |
|--|-----------------|-----------------|-----------------------|-----------------------|---------------------|----|-----------------|
| Personal knowledge for effective teaching (ML) | -9 | 12 | 8.98 | 9.92 | +0.94 | 48 | No |
| School teaching quality (ML) | -17 | 24 | 11.56 | 11.63 | +0.07 | 48 | No |
| Motivation for teacher focused professional development (ML) | -8 | 8 | 4.96 | 5.40 | +0.44 | 48 | No |
| Opportunities for career progression (ML) | -8 | 8 | -1.21 | -.42 | +0.79 | 48 | No |

Table 13 indicated that small positive changes were seen in all four of the above factors among middle leaders. However, unlike with classroom teachers, these changes were not statistically significant.

In contrast, the case-study interviews indicated that the greatest impact had been felt by those in middle leadership as part of the TE strand.

Personal knowledge for effective teaching (Middle Leaders)

Many of the TEs interviewed discussed the different techniques that they had gleaned from the project that they had implemented into their practices. These were often small changes, such as the way they managed questions during their lessons:

I do questioning of pupils who aren't paying attention... I do that too much. It [can be] useful at points, especially with my Year 10 boys, because about eight of them are staring out windows at any time, so I realised hang on, I'm only asking those eight boys, so I'm starting to ask other people. - *Case study 5, TE*

The project's techniques offered the opportunity to refine already existing practices:

I think [it's] the little things like cold calls – I didn't realise I didn't always pause. I suppose it's brought it more into my consciousness – the little things. - *Case study 5, TE*

Overall, the case studies illustrated that, in those schools we visited, participants felt that the project had had a positive impact on TEs' personal knowledge for effective teaching. An increase in perceptions of personal knowledge for effective teaching was also evidenced in the survey. However, the increase was not large enough to be statistically significant.

School teaching quality (Middle Leaders)

The case-study data suggested that the coaching element of the project had been the most effective strand of the TE offer and had the largest impact on teaching quality. This was echoed by the Ambition Institute Project Manager in reporting the feedback that they had received.

We just get really, really great feedback on coaching from [the TEs].
- *Ambition Institute Project Manager*

The positive comments regarding coaching were linked directly to a perceived increase in confidence in delivering coaching to peers and in CPD itself. The coaching strand of the project offered three sequential stages.

- 1) The TEs received coaching from the Ambition Institute Fellows.
- 2) The TEs received training in coaching from the Ambition Institute Fellows.
- 3) The TEs delivered coaching to peers within school.

Most TEs interviewed felt that this model offered the opportunity to expand understanding and embed new, cross-curricular techniques into practice.

To be honest I think the best thing was the coaching, I feel like I know so much more about being a coach now and I've been doing it with colleagues outside my subject. I don't think I would have felt confident to do that a year ago. - *Case study 6, TE*

TEs believed there was a link between involvement in the project and improvements in their classroom practices. TEs from case-study schools 1, 2, 4, 5 and 6 felt that their own planning and classroom practice had changed, for example:

And we had a day when we looked at how we build the curriculum. After that, I had to plan my next scheme of work. And I think it took me about 3½ weeks, because I was constantly questioning things, but it was a great process. I remember coming back to [the head of department] afterwards – this is the longest I've ever spent on planning, but this is the most satisfied I've felt with it. - *Case study 1, TE*

For TEs in case study 2, the training resources and techniques provided were described as a 'toolbox of approaches' that they continued to use. For example, one TE in case study 2 found the training to be re-energising and supportive of their classroom practice:

I've been up 'til like 2 in the morning just planning curriculum, but I'm so excited and I'm so buzzed and I can't wait to roll this out. Just really excited to take in all the learning, because it made me see things in such a different way. I can see the impact within my curriculum – my curriculum looks a lot stronger. I can see the impact within my own teaching in the classroom, because I'm really thinking about the learning and the cognitive load and the architecture within that as well. - *Case study 2, TE*

TEs felt that the project had also improved their confidence in leading and delivering CPD for other members of school staff. The TEs from case study 1 described how the training had taught them to model effective teaching. Despite the team from case study 3 being disbanded, the TEs were still able to use what they had learnt from the TT project in their leadership roles, for example:

Then I'm training up – I had a CPD meeting with two members of staff who are in their fourth year of teaching, so I skilled those up in the deliberate practice and the scripting and then they joined me and supported me. If I've got an opportunity to spread this, then I'll spread

it, yes. It has had that big an impact, but again it's specific in my role rather than whole school. - *Case study 3, TE*

The SL from school 1 commented on the value of TEs getting CPD themselves to help them to develop and become better at delivering CPD:

And part of the teacher educator programme allowed for us to get coaching and receive coaching, and really improve our own practice, really improve our understanding of co-planning, and actually how to coach others. - *Case study 1, SL*

Motivation for teacher-focused professional development (Middle Leaders)

Both the survey and interview data suggested that the project had had a small positive impact on motivation for teacher focussed professional development, although this finding was not significant for middle leaders. Feedback on the project's use of research was largely positive and for some TEs this had, in turn, produced a greater interest in research-informed practice and a degree of independently motivated reading:

The research side of things really validated the sessions for me. I've actually gone away and done some of my own research on the back of it. - *Case study 6, TE*

Opportunities for career progression (Middle Leaders)

Qualitative insights into career progression opportunities are provided in Section 4.4.3.

Teaching quality – senior leaders

Factors 13 and 14 explore changes between the baseline and endpoint survey in senior leaders' perceptions of school teaching quality and career progression.

Table 14: Findings from factor analysis – Senior Leaders

| | Range - minimum | Range - maximum | Mean score - baseline | Mean score - endpoint | Mean score - change | N | Sig. (2-tailed) |
|---|-----------------|-----------------|-----------------------|-----------------------|---------------------|----|-----------------|
| School teaching quality (SL) | -17 | 23 | 9.88 | 14.68 | +4.80 | 25 | Yes (Positive) |
| Opportunities for career progression (SL) | -8 | 8 | 1.96 | 0.68 | -1.28 | 25 | No |

Table 14 indicates that a small positive change was seen in the factor; **school teaching quality** and a small negative change was seen in the factor relating to **opportunities for career progression**. However, for SLs only changes in **school teaching quality** were statistically significant.

School teaching quality

The case studies suggest that all SLs interviewed felt that the TT project had improved teaching quality to a lesser or greater extent, for example:

All members of our staff are part of the learning structure in terms of observations and being observed, this has definitely made teaching and learning more uniform – principles that have been adopted in line the with Transforming Teaching, such as retrieval practice, applying learning and formative assessment are being used by everyone.

- *Case study 6, SL*

The TT project's granular approach to learning was cited by one SL as having helped to embed improved practices:

Meet and greet at the door is one of the things they talked about – one of the things we had talked about previously, but now because they've just had that message drilled, it just becomes normal practice.

- *Case study 5, SL*

For SLs, a significant positive change was seen in the factor: **school teaching quality**. As expected, outcomes for SLs were mainly discussed in terms of improvements in their leadership, particularly in relation to developing staff and improving overall teaching quality for example:

It's improved my coaching technique, made it sharper, more efficient. With coaching and mentoring you don't want to spend too much time mentoring; you want to spend some time coaching. But then you need to have efficiency of the sessions. So being an efficient coach is a difficult thing to strike a balance of. I think that's been a big thing it's had on me personally. It's improved my knowledge of how to improve teaching and learning, and it's improved my empathy and understanding of others, and also saying that in terms of contextual awareness and the impact of it, it's shown me that teaching and learning can be improved on a large scale. - *Case study 2, SL*

The SL interviewed in case-study school 2 discussed how the project had been particularly useful for co-facilitation of training. No SLs were interviewed in school 3 due to changes in the leadership team. The SLs from case study 4 felt that completing the training had resulted in a positive impact on their own practice, this was also the case for case-study 6:

At the same time, I was doing the Fellowship, so I think Ambition have had a massive impact on my skills. - *Case study 6, SL*

The SL from case study 5 had a different view and reported very little impact on his own practice.

I have done this kind of thing many times before, so it didn't really change anything for me personally. - *Case study 5, SL*

Opportunities for career progression

Qualitative insights into career progression opportunities are provided in Section 4.4.3.

4.4.3 Findings related to fund-level impacts

This section explores the extent to which the TT project achieved its impacts in relation to teacher retention and progression (through analysis of teacher outcomes in the SWC). It also explores participants' perceptions of the impact of the project on teacher retention and progression (through analysis of survey and qualitative data).

Retention and progression analysis

The evaluation aimed to explore the impact of the TT project on the fund-level goals to improve teacher retention and progression. As outlined previously, the TT project intended to achieve both teacher-level and whole-school-level impacts. Therefore, this analysis is conducted on TT participants and a matched comparison sample of teachers (teacher-level impacts), and on all teachers from TT schools and a matched comparison sample of schools (whole-school impacts). As such, the findings are reported in two

sections; one reporting the impact the TT project had on teacher-level retention and progression and one section using school-level data to explore the impact TT had on school-level retention and progression.

The analysis uses the set of TT participants compared to a non-TT teachers matched on a range of key characteristics (see Appendix C) to estimate what counterfactual retention and progression rates might have been with and without the TT project. Teacher retention was analysed in terms of:

- retention in the state-funded sector in England
- retention in the school
- retention in the same LAD
- retention in challenging schools.

Teacher progression was analysed in terms of:

- progression in the state-funded sector in England
- progression in the school
- progression in the same LAD
- progression in challenging schools.

Teacher-level retention

The following sections discuss the findings of the SWC secondary analysis at the teacher level. The tables below summarise the estimated impact of the TT project across the four retention measures analysed. We use the descriptor 'teacher-level' to describe analyses of all project participants, irrespective of their level of seniority.

Retention in the state-funded sector in England

Table 15: Difference in the estimated rate of retention in state-funded teaching in England between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|--|--------------------|---------------------|------------|----------------------------|
| Estimated retention rate in state-funded teaching 1 year after baseline (%) | 93.0 | 89.4 | 3.6 | Yes |
| Number of teachers | 714 | 4523 | | |
| Estimated retention rate in state-funded teaching 2 years after baseline (%) | 89.0 | 83.7 | 5.2 | Yes |
| Number of teachers | 714 | 4523 | | |

Note: Estimated retention rates are the average predicted retention rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

Analysis presented in Table 15 shows that the TT project was associated with a statistically significant higher rate of retention within the state-funded teaching profession; with treatment teachers between 3.6 and 5.2 percentage points more likely to be retained in teaching one and two years after the baseline data was collected. This suggests that the TT project had a positive impact on teacher retention in the profession. However, the presence of a significant difference just one year after baseline indicates that there may have been systematic differences between the treatment and comparison samples at baseline that are not accounted for in this analysis. As recruitment to the project was on a rolling basis and the analysis does not observe specific end-dates of the treatment for each participant, it is likely that many participants had either received minimal training or were still enrolled in the training when the census data was collected and the impact on retention estimated at one year after baseline. This makes the project's estimated effect of improving retention by 3.6 percentage points within one year of baseline seem implausible.

Retention in the school

Table 16: Difference in the estimated rate of retention in the same school between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|--|--------------------|---------------------|------------|----------------------------|
| Estimated retention rate in the same school 1 year after baseline (%) | 92.0 | 88.8 | 3.2 | Yes |
| Number of teachers | 593 | 3923 | | |
| Estimated retention rate in the same school 2 years after baseline (%) | 85.3 | 83.1 | 2.2 | No |
| Number of teachers | 593 | 3923 | | |

Note: Estimated retention rates are the average predicted retention rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

Analysis presented in Table 16 shows that the TT project was associated with a statistically significant higher rate of retention within the same school; with treatment teachers 3.2 percentage points more likely to be retained in teaching one year after the baseline data was collected. This suggests that the TT project had a positive impact on teacher retention in the same school, but that this reduced and was not significant at two years. However, as recruitment to the project was on a rolling basis and the analysis does not observe specific end-dates of the treatment for each participant, it is likely that many participants had either received minimal training or were still enrolled in the training when the census data was collected and the impact on retention estimated at one year after baseline.

Retention in the same local authority

Table 17: Difference in the estimated rate of retention in the same local authority district (LAD) between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|---|--------------------|---------------------|------------|----------------------------|
| Estimated retention rate in the same LAD 1 year after baseline (%) | 93.9 | 91.8 | 2.0 | No |
| Number of teachers | 593 | 3923 | | |
| Estimated retention rate in the same LAD 2 years after baseline (%) | 89.0 | 88.0 | 1.0 | No |
| Number of teachers | 593 | 3923 | | |

Note: Estimated retention rates are the average predicted retention rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

Analysis presented in Table 17 shows that there was no statistically significant difference between treatment and comparison treatment teachers' rates of retention in the same LAD either one or two years after baseline.

Retention in challenging schools

Table 18: Difference in the estimated rate of retention in challenging schools²⁰ between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|---|--------------------|---------------------|------------|----------------------------|
| Estimated retention rate in challenging schools 1 year after baseline (%) | 96.1 | 92.7 | 3.3 | Yes |
| Number of teachers | 581 | 3860 | | |

²⁰ For the purposes of this analysis, 'challenging' schools are defined as schools rated by Ofsted as 'requires improvement' or 'inadequate', and which are not the school the teacher was employed in at baseline. A teacher is defined as remaining in a challenging school if they either stayed within the school they were in at baseline, or moved to another school which was rated 'requires improvement' or 'inadequate'.

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|--|---------------------------|----------------------------|-------------------|-----------------------------------|
| Estimated retention rate in challenging schools 2 years after baseline (%) | 92.2 | 88.8 | 3.4 | Yes |
| Number of teachers | 579 | 3831 | | |

Note: Estimated retention rates are the average predicted retention rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

Analysis presented in Table 18 shows that the TT project was associated with a statistically significant higher rate of retention within challenging schools; with treatment teachers between 3.3 and 3.4 percentage points more likely to be retained in teaching one and two years after the baseline data was collected. This suggests that the TT project had a positive impact on teacher retention in challenging schools.

Overall, while these results suggest that the TT project had a positive impact on teacher retention within the state-funded sector and within challenging schools at a participant level, it is possible that the strength of the estimated effects in Tables 15 and 18 are somewhat overstated. There may have been systematic differences between treatment and comparison teachers that existed prior to the project that the analysis has not been able to account for (e.g. personality traits, motivation towards CPD). These systematic differences could lead to overestimation of the effect of the project if they are inadequately controlled for (see Appendix C for further discussion). Ultimately, while the estimates in Tables 15 and 18 can be interpreted to suggest that the TT project indeed increased retention rates for teachers, the true effect of the project is likely to be somewhat smaller than the estimates suggest. In addition, the case-study data suggests that most participants did not feel involvement in the project had influenced their likelihood to stay in the profession.

Teacher-level progression

The tables below summarise TT's impacts across the four progression measures analysed. Progression rates are defined as the proportion of teachers who moved from either a classroom teacher to a middle/senior leader role, or a middle leader role to a senior leader role within one and two years of baseline.

Progression in the state-funded sector in England

Table 19: Difference in the estimated rate of progression in state-funded teaching in England between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|--|--------------------|---------------------|------------|----------------------------|
| Estimated progression rate in state-funded teaching 1 year after baseline (%) | 9.3 | 8.0 | 1.3 | No |
| Number of teachers | 517 | 3480 | | |
| Estimated progression rate in state-funded teaching 2 years after baseline (%) | 12.4 | 11.7 | 0.7 | No |
| Number of teachers | 517 | 3480 | | |

Note: Estimated progression rates are the average predicted progression rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

The analysis shown in Table 19 shows that there were no significant differences in the progression rates of teachers in the state-funded school sector between treatment and comparison teachers, one and two years after baseline.

Progression in the school

Table 20: Difference in the estimated rate of progression in the same school between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|--|--------------------|---------------------|------------|----------------------------|
| Estimated progression rate in the same school 1 year after baseline (%) | 7.8 | 7.3 | 0.5 | No |
| Number of teachers | 471 | 3121 | | |
| Estimated progression rate in the same school 2 years after baseline (%) | 9.6 | 10.3 | -0.7 | No |
| Number of teachers | 438 | 2923 | | |

Note: Estimated progression rates are the average predicted progression rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in

average predicted progression rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

The analysis shown in Table 20 shows that there were no significant differences in the progression rates of teachers in the same school between treatment and comparison teachers, one to two years after baseline.

Progression in the same local authority

Table 21: Difference in the estimated rate of progression in the same local authority district (LAD) between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|---|--------------------|---------------------|------------|----------------------------|
| Estimated progression rate in the same LAD 1 year after baseline (%) | 8.2 | 7.5 | 0.7 | No |
| Number of teachers | 482 | 3218 | | |
| Estimated progression rate in the same LAD 2 years after baseline (%) | 10.5 | 10.9 | -0.3 | No |
| Number of teachers | 460 | 3084 | | |

Note: Estimated progression rates are the average predicted progression rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

The analysis shown in Table 21 shows that there were no significant differences in the progression rates of teachers in the same LAD between treatment and comparison teachers, one and two years after baseline.

Progression in challenging schools

Table 22: Difference in the estimated rate of progression in challenging schools²¹ between treatment and comparison teachers

| | Treatment teachers | Comparison teachers | Difference | Statistically significant? |
|--|--------------------|---------------------|------------|----------------------------|
| Estimated progression rate in challenging schools 1 year after baseline (%) | 8.9 | 7.7 | 1.2 | No |
| Number of teachers | 484 | 3201 | | |
| Estimated progression rate in challenging schools 2 years after baseline (%) | 10.8 | 10.8 | -0.1 | No |
| Number of teachers | 463 | 3055 | | |

Note: Estimated progression rates are the average predicted progression rates from a logistic regression model for treatment and comparison teachers, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of this difference is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison teachers.

The analysis shown in Table 22 shows that there were no significant differences in the progression rates of teachers in challenging school between treatment and comparison teachers, one and two years after baseline.

The case-study findings indicated that the project's HLTs did not feel that participation had impacted on their progression. The HLTs we spoke to did not allude to any direct impacts on career progression. For case-study school 2, one SL valued the Ambition Institute's work with HLTs in terms of upskilling them and advancing their careers, noting:

I think it will make them stand out from the crowd. They'll be much more employable than their peers who have been [inducted into the profession] elsewhere. And I think they'll be much more secure in their knowledge of a wider range of pedagogies to draw upon. - Case study 2, SL

²¹ For the purposes of this analysis, 'challenging' schools are defined as schools rated by Ofsted as 'requires improvement' or 'inadequate', and which are not the school the teacher was employed in at baseline. A teacher is defined as remaining in a challenging school if they either stayed within the school they were in at baseline, or moved to another school which was rated 'requires improvement' or 'inadequate'.

This was echoed by an HLT from case study 2, stating:

I've observed newer teachers who haven't received the [TT programme], even from interviews – because we've been interviewing for a D&T teacher – and the difference between someone who hasn't had [the TT training], to someone who has, is so apparent now. - *Case study 2, HLT*

When asked about their satisfaction and intentions to remain in teaching, HLTs in case-study schools 2, 3, 5 and 6 were unanimous that the training had not impacted on opportunities for career progression. However, some HLTs from case-study schools 1 and 4 talked about generally feeling more positive in the classroom, which may then make them more likely to want to stay in the profession, despite a host of other factors that may push them out, such as workload.

Interview data suggested that participating in the project had made the TEs more appealing within the job market and as such, some of them were moving into more senior roles. This was expressed by the case study 5 SL:

Yes [that TE] is moving on. He's not moving on, because he wants to move on, he wants to move up. There isn't an opportunity here. I will absolutely encourage him because he has gained those experiences. [A different] TE has taken on more responsibility. The Head of English has taken on more responsibility. So, they are kind of... they have moved themselves on in terms of not just their understanding, but their standing within the academy. And I suppose where they see themselves as well. - *Case study 4, SL*

This viewpoint was echoed by one TE from case study 5 who cited the TT project directly as a major contributing factor in her recent promotion.

Interview data suggests that there is a possible link between participation in the TE strand and employability.

One TT Fellow commented that the intention of the TT project was to increase satisfaction and even potential retention for TEs by enabling them to feel developed and to enjoy their roles. This had been the outcome for the TEs at school 1, with one noting that '*I have to say the eight days that we had last academic year were perhaps some of the most satisfying days of my whole career.*' Another linked this to future retention:

I think for me it really sharpened my craft. Did it help me stay in teaching? Definitely yes...Would it help me stay in teaching? Definitely. Having that... passion and really lighting the fire – it definitely did all that. - *Case study 1, TE*

However, the opposite trend was apparent for TEs in case study 3 due to reasons related to internal staffing issues beyond the control of the project, as reported in the TE focus group exchange:

For me, if I'm honest, it's probably had a bit of a detrimental impact, because I feel like I've had all this training and then, because of different policies and different restructuring, I feel like – what was the point? A bit of frustration I suppose. - *Case study 3, TE*

However, it is worth noting that with so many other possible factors impacting on job satisfaction and retention it is very hard to single out the TT project and its direct impact.

The SLs interviewed did not make reference to their own career progression in regard to the project. The project manager, however, felt that the upskilling of SLs as a result of participation in the project could be linked to an increase in career progression *opportunities*.

In summary, the evidence presented above suggests that the TT project had a positive longer-term impact on teacher retention in state-funded schools and challenging schools, a shorter-term positive impact in the same school but no significant impact in schools from the same LAD. In addition, no significant impacts were observed for teacher progression. Due to systematic differences between treatment and comparison teachers that existed prior to the project that the analysis has not been able to account for, the positive impacts on retention may be somewhat overstated.

School-level retention

The following sections explore the findings from the SWC secondary analysis on retention at the school-level (school-level impacts).

Retention in the state-funded sector in England

Table 23: Difference in retention in state-funded teaching in England

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|--|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated retention rate in state-funded teaching 3 years <u>before</u> baseline | 91.6 | 90.7 | 1.0 | - | - |
| Estimated retention rate in state-funded teaching 2 year <u>before</u> baseline | 91.3 | 89.8 | 1.5 | - | - |
| Estimated retention rate in state-funded teaching 1 year <u>before</u> baseline | 90.8 | 90.6 | 0.2 | - | - |
| Estimated retention rate in state-funded teaching 1 year after baseline | 91.2 | 91.3 | -0.1 | -1.0 | No |
| Estimated retention rate in state-funded teaching 2 years after baseline | 92.5 | 92 | 0.6 | -0.3 | No |
| Number of schools | 42 | 357 | - | - | - |

Note: Estimated retention rates are the average predicted retention rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 23 does not demonstrate any statistically significant differences between treatment and comparison schools in relation to teacher retention in state-funded schools.

Retention in the school

Table 24: Difference in rate of retention in the school

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|--|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated retention rate in the same school 3 years <u>before</u> baseline | 90.6 | 91.2 | -0.6 | - | - |
| Estimated retention rate in the same school 2 year <u>before</u> baseline | 90.4 | 91.1 | -0.7 | - | - |
| Estimated retention rate in the same school 1 year <u>before</u> baseline | 90 | 90.9 | -0.9 | - | - |
| Estimated retention rate in the same school 1 year after baseline | 90.1 | 91 | -0.9 | -0.2 | No |
| Estimated retention rate in the same school 2 years after baseline | 92.3 | 93.4 | -1.1 | -0.4 | No |
| Number of schools | 42 | 357 | - | - | - |

Note: Estimated retention rates are the average predicted retention rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 24 does not demonstrate any statistically significant differences in retention rate in the same school between treatment and comparison schools.

Retention in the same LAD

Table 25: Difference in rate of retention in the same LAD

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|---|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated retention rate in the same LAD 3 years <u>before</u> baseline | 93.3 | 94 | -0.7 | - | - |
| Estimated retention rate in the same LAD 2 years <u>before</u> baseline | 92.9 | 93.9 | -1.0 | - | - |
| Estimated retention rate in the same LAD 1 year <u>before</u> baseline | 92.8 | 93.8 | -1.0 | - | - |
| Estimated retention rate in the same LAD 1 year after baseline | 92.4 | 93.7 | -1.3 | -0.4 | No |
| Estimated retention rate in the same LAD 2 years after baseline | 94.9 | 95.3 | -0.4 | 0.5 | No |
| Number of schools | 42 | 357 | - | - | - |

Note: Estimated retention rates are the average predicted retention rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 25 does not demonstrate any statistically significant differences in retention rate in the same LAD between treatment and comparison schools.

Retention in challenging schools

Table 26: Difference in rate of retention in challenging schools²²

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|--|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated retention rate in challenging schools 3 years <u>before</u> baseline | 93.6 | 94.3 | -0.7 | - | - |
| Estimated retention rate in challenging schools 2 year <u>before</u> baseline | 94.0 | 94.5 | -0.6 | - | - |
| Estimated retention rate in challenging schools 1 year <u>before</u> baseline | 93.6 | 94.2 | -0.6 | - | - |
| Estimated retention rate in challenging schools 1 year after baseline | 94.3 | 94.3 | 0 | 0.6 | No |
| Estimated retention rate in challenging schools 2 years after baseline | 94.8 | 95.9 | -1.1 | -0.5 | No |
| Number of schools | 37 | 319 | - | - | - |

Note: Estimated retention rates are the average predicted retention rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted retention rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of retention outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were

²² For the purposes of this analysis, challenging schools are defined as schools rated by Ofsted as 'requires improvement' or 'inadequate'. A teacher is defined as remaining in a challenging school if they either stay within the same school, or they moved to a different school which was rated 'requires improvement' or 'inadequate'.

omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 26 does not demonstrate any statistically significant differences in between treatment and comparison schools in relation to teacher retention in challenging schools.

School-level progression

The following sections explore the findings from the SWC secondary analysis on progression at the school level (school-level impacts).

Progression in the state-funded sector in England

Table 27: Difference in progression in state-funded teaching in England

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|--|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated progression rate in state-funded teaching 3 years <u>before</u> baseline | 5.6 | 6.7 | -1.1 | - | - |
| Estimated progression rate in state-funded teaching 2 years <u>before</u> baseline | 6.6 | 6.5 | 0.1 | - | - |
| Estimated progression rate in state-funded teaching 1 year <u>before</u> baseline | 5.7 | 6.5 | -0.8 | - | - |
| Estimated progression rate in state-funded teaching 1 years after baseline | 5.6 | 5.5 | 0.1 | 0.7 | No |
| Estimated progression rate in state-funded teaching 2 years after baseline | 3.7 | 4.9 | -1.2 | -0.6 | No |
| Number of schools | 41 | 356 | - | - | - |

Note: Estimated progression rates are the average predicted progression rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 27 does not demonstrate any statistically significant differences between treatment and non-treatment schools in relation to teacher progression in state-funded schools.

Progression in the school

Table 28: Difference in rate of progression in the school

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|--|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated progression rate in the same school 3 years <u>before</u> baseline | 4.8 | 6.0 | -1.2 | - | - |
| Estimated progression rate in the same school 2 years <u>before</u> baseline | 5.6 | 5.7 | -0.2 | - | - |
| Estimated progression rate in the same school 1 year <u>before</u> baseline | 4.8 | 5.5 | -0.7 | - | - |
| Estimated progression rate in the same school 1 years after baseline | 4.3 | 4.6 | -0.3 | 0.4 | No |
| Estimated progression rate in the same school 2 years after baseline | 2.6 | 4.0 | -1.4 | -0.7 | Yes |
| Number of schools | 41 | 355 | - | - | - |

Note: Estimated progression rates are the average predicted progression rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so

were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 28 demonstrates a significant difference in progression rates between treatment and non-treatment schools in relation to teacher progression in the same school, two years after baseline. Teachers in treatment schools were 0.7 percentage points less likely to have progressed than comparison teachers.

Progression in the same LAD

Table 29: Difference in rate of progression in the same LAD

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|---|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated progression rate in the same LAD 3 years <u>before</u> baseline | 5.1 | 6.2 | -1.1 | - | - |
| Estimated progression rate in the same LAD 2 years <u>before</u> baseline | 5.9 | 6.0 | -0.1 | - | - |
| Estimated progression rate in the same LAD 1 year <u>before</u> baseline | 5.1 | 5.8 | -0.6 | - | - |
| Estimated progression rate in the same LAD 1 year <u>after</u> baseline | 4.6 | 4.8 | -0.3 | 0.3 | No |
| Estimated progression rate in the same LAD 2 years <u>after</u> baseline | 2.8 | 4.2 | -1.4 | -0.8 | Yes |
| Number of schools | 41 | 356 | - | - | - |

Note: Estimated progression rates are the average predicted progression rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so

were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 29 demonstrates a significant difference in progression rates in the same LAD between treatment and non-treatment schools, two years after baseline. Teachers in treatment schools were 0.8 percentage points less likely to have progressed than comparison teachers.

Progression in challenging schools

Table 30: Difference in rate of progression in challenging schools²³

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|---|-----------------|------------------|------------|----------------------------|----------------------------|
| Estimated progression rate in challenging schools 3 years <u>before</u> baseline | 5.3 | 6.3 | -1 | - | - |
| Estimated rate of progression in challenging schools 2 years <u>before</u> baseline | 6.2 | 6.1 | 0.1 | - | - |
| Estimated rate of progression in challenging schools 1 year <u>before</u> baseline | 5.4 | 6 | -0.6 | - | - |
| Estimated progression rate in challenging schools 1 year after baseline | 5 | 5 | 0.1 | 0.6 | No |
| Estimated progression rate in challenging schools 2 years after baseline | 3.1 | 4.4 | -1.3 | -0.8 | Yes |

²³ For the purposes of this analysis, challenging schools are defined as schools rated by Ofsted as 'requires improvement' or 'inadequate'. A teacher is defined as progressing in a challenging school if they move to a middle/senior leadership position from a classroom teaching position or a senior leadership position from a middle leadership or classroom teaching position *and* stay within the same school or move to a different challenging school.

| | Treatment group | Comparison group | Difference | Difference -in- difference | Statistically significant? |
|-------------------|-----------------|------------------|------------|----------------------------|----------------------------|
| Number of schools | 41 | 355 | - | - | - |

Note: Estimated progression rates are the average predicted progression rates from a logistic mixed-effects regression model for treatment and comparison schools, controlling for observed characteristics. The difference in average predicted progression rates is the marginal effect. Statistical significance of these differences is assessed at the five per cent level. While in principle three years of progression outcomes were observed, sample sizes three years after baseline were too small to be statistically reliable and so were omitted from the analysis. Due to rounding, some estimated marginal effects may not exactly equal the difference between treatment and comparison schools.

The analysis displayed in Table 30 demonstrates a significant difference in progression rates between treatment and non-treatment schools in relation to teacher progression in challenging schools, two years after baseline. Teachers in treatment schools were 0.8 percentage points less likely to have progressed than comparison teachers.

In summary, there is some evidence to suggest that the TT project had a slight negative impact on progression rates within treatment schools, within the LAD and in challenging schools. There is no significant difference in treatment and comparison schools in teacher progression in the state-funded sector.

Interpretation of retention and progression findings

Both the TLIF programme ToC and the TT project ToC identified longer-term aims to improve teacher retention and progression.

The SWC retention analysis suggests that the TT project may have achieved its aim to improve participants' retention in the profession, in challenging schools, and in the shorter-term in the same school, although the estimated magnitude of this effect may be somewhat overstated. In interviews, most HLTs suggested that participation in the TT project had little or no impact on whether they would remain in teaching. The participants interviewed did not discuss retention at length and as such few conclusions could be drawn. There was no evidence of impact on retention at the school level.

The SWC progression analysis provides no evidence that the TT project achieved its aim to improve teachers' progression to middle or senior leadership at the participant or school level. This finding is supported by the survey data pertaining to SLs, with a small negative change recorded in the factor relating to opportunities for career progression. It was only the HLT group that exhibited a statistically significant positive change concerning progression. In addition to this, the interview findings indicated that the project's HLTs and TEs, overall, did not feel that participation had impacted on their progression, however, some SLs did feel that the programme had upskilled their TEs.

Perceived impacts on pupils

As reported earlier, most of the HLTs and TEs we interviewed reported that the project had helped them to improve their teaching practice to a lesser or greater degree, a finding supported by the surveys and the qualitative interviews. Most felt these improvements would eventually lead to improved pupil outcomes, with some reporting that they had already begun to see an impact on their pupils. In some cases, HLTs and TEs found it difficult to separate out the impacts resulting from the project from other initiatives underway in the school, or other school-led changes. As one HLT explained:

Just like, naturally, how better classroom routines are going to enable you to teach better. Hopefully, that's going to be linked to attainment as well. But... I think it would be hard to draw a direct link. - *Case study 2, HLT*

Some SLs were able to point to specific improvements in their pupils' learning that they felt had come about, because of changes they had made to their practice:

The impact on pupils is evident in their outcomes... their outcomes are improved significantly... they're above national average. It was significantly below the national average. It was -0.19, and this year it was +2.4, I think. So, we've had a huge shift, a huge shift in our disadvantaged children's outcomes. And the reason for that is they just get better lessons. They get better lessons that are more focused and sharper, and tailored to make sure that none of them leave with any gaps. They are far better teachers. - *Case study 2, SL*

The project aimed to improve pupil well-being, behaviour and discipline. The outcome cited most often by teachers during interview, regarding their pupils, was improved behaviour. This was supported by greater consistency in expectations for pupil behaviour, which was mentioned by staff in case studies 1 and 2. There was the general opinion that pupils felt happy and safe in class, which was attributed to the shift in the mindset of teachers. There was, however, no further discussion by any interviewee on pupil well-being and the potential impact of the TT project.

However, as reported above, there was limited evidence that TT had brought about wider impacts in schools, beyond improving the teaching practice of participating staff and, in some cases, their immediate co-workers. In addition, a robust impact analysis of pupil attainment could not be undertaken due to the cancellation of national examinations and assessments as a result of Covid-19 resulting in there being no National Pupil Database (NPD) data to analyse.

4.4.4 Findings related to fund-level wider outcomes

It should be noted that not all of the TLIF's wider outcomes/impacts have been identified as intended impacts by all projects. For example, TT was designed to ultimately lead to improvements in teacher retention and progression and improved pupil attainment and social mobility (through improved quality of teaching). It was not, however, designed to lead to improvements in pupil attendance/reduced exclusions, or improved school Ofsted ratings.

This section explores the wider outcomes of the project including the impact on non-participants and the wider school.

Perceived outcomes for non-participants (IDBs)

The survey did not target non-participants, so all findings are drawn from the qualitative data.

Some IDBs reported that the project had impacted on classroom practices, whereas others felt no impact at all.

In the case of case-study school 2, the TT project had been disseminated by the SLs and the TEs to all staff. There was some positive feedback from case study 2 IDBs, for example:

I've found it useful for improving my practice, definitely, as a teacher. My whole role was about CPD and training people, but the coaching I've received has definitely improved my practice more than one-off observations. - *Case study 2, IDB*

In contrast, in case-study school 3, it was reported by interviewees that staff changes meant that the project had not been adequately rolled out to all staff and accordingly the IDBs interviewed had a very limited awareness of it:

I wouldn't like to say who was targeted for it. I would probably want to say maybe its teachers that require improvement, if I were to have a guess, that have been targeted. But literally that's the extent of the knowledge. I don't really know any more about it than that. - *Case study 3, IDB*

This was also the case for the IDBs interviewed in case study 5 who felt the project was badly communicated to them and a 'waste of time'. It is somewhat unsurprising to note that the impact on IDBs appears to be influenced by the extent to which schools made a conscious effort to roll out the learning to the whole school, or at least large numbers of staff.

Perceived impact on schools

The TT project sought to make whole-school improvements by enriching school leadership, the quality of teaching and the motivation and well-being of staff. The project also aimed to promote and foster a culture of continuous improvement within the participating schools. Three of the six case-study schools reported a culture shift within school. The primary outcome for these schools appeared to be an improvement in their school culture in relation to CPD and school improvement. In the case of case-study school 1 this was very much facilitated by all staff having participated in the training:

Would definitely say there was an improved culture. There was more of a shared understanding of language, there was a real buy-in from staff. Staff felt very confident to participate. I feel like, because everybody was there, people could say 'oh you remember when we did this in that session?'. - *Case study 1, SL*

This whole-school participatory approach seen in school 1 clearly supported a relatively unproblematic, collective shift in school culture. For those schools with only selected staff participating directly in the project, this kind of universal cultural change did not happen quite so quickly or easily. As seen earlier in the report, the Ambition Institute felt that enlisting all staff members was problematic, however it is clearly suggested by the findings from case study 1 that there are some benefits to the whole-school approach.

In the case of school 2 the cultural changes were more subtle, focusing more on the attitudes to coaching, mentoring and receiving feedback. There were reportedly initial concerns from some staff who were resistant to this type of training, but these concerns diminished over time. Positive changes were partly affected by middle leaders having more responsibility and accountability for the performance of the staff they managed:

We were increasing accountability and we were increasing quality assurance, but we were doing it in a less judgemental way than we'd previously done it, when we used to go in and grade lessons. We also did that for our learning walks and our visits to lessons. It enables us to create a bit more of an open-door culture. And as a result, some staff have moved on that were set in their ways, but ultimately our middle leadership has adapted to this way of working and they are now driving the culture... And we also now feel we've got a set of middle leaders who are very competent and aligned rather than opposed to those. - *Case study 2, SL*

In the instance of case-study school 3, although staffing losses meant that implementation was more limited, there was still some discussion of the training contributing to a culture of everyone being in a position to benefit from professional development - even the 'strongest teachers'. Case-study school 3 participants also felt

that TT had helped to remove the perception of some types of training as a threat, and instead teachers accepted coaching and feedback more willingly. For case-study schools 4 and 6 there was an acknowledgment of a new 'shared language', which had contributed to an overall positive shift in attitude to practice. For case-study school 5, however, the school CPD focus had been shifted away from the TT project. As such, there was very little overall change to the school's culture as a result of the TT project that could be captured.

Improved staff wellbeing was not highlighted by the case-study data as an outcome of participation, in fact, none of the teachers or leaders interviewed discussed wellbeing as an output. There was, however, some dialogue around staff motivation and the positive impact the TT project had had on individuals. One other outcome reported was an improved Ofsted score for the school in case study 2. It is important to note that such an Ofsted grade change cannot be directly attributed to the TLIF project at this stage – it is only indicative of a potential impact. Improved Ofsted ratings were not, however, an intended project outcome.

4.5 Interpretation of outcomes and impacts

Overall, the project has met with mixed success in achieving its anticipated impacts and outcomes. There is considerable evidence from the surveys and/or qualitative interviews that, where the project had been completed, it improved participating classroom teachers' confidence and subject knowledge, equipped them with a growing repertoire of teaching skills, and improved key elements of their teaching practice. In addition, there is some perceptual evidence to suggest that these improvements may have already been leading to improved pupil outcomes, particularly in terms of behaviour and lesson participation. The project appears to have had an overall positive effect on teachers' attitudes towards CPD and school leadership. However, there was mixed evidence on the extent to which the project was successfully rolled-out within schools, leading to whole-school change. The project was heavily reliant on the participating staff remaining in post to oversee its implementation and when this did not happen the positive benefits of the project across the school could be negligible. This was also the case in regard to SL commitment. The support of the SLT was crucial to the success of the project. Where participants had invested time and effort in the project only to then see it abandoned, participants felt resentment and frustration.

The SWC data suggests that TT project may have led to improvements in retention within state-funded schools and within challenging schools at participant level. However, this was not seen at the school level, with no statistically significant differences recorded in retention rate in the same school between treatment and comparison schools. In turn, no significant impact was found in progression at the teacher level, with a slight negative impact on progression for those participating in the project at school level.

5 Sustainability

As part of evaluation of TT, we were interested in the sustainability of the new ways of working, new learning and outcomes in schools, which came about through participants' involvement with the project. All HLTs and TEs spoken to through the case studies felt that there were aspects of the project they were able to use and embed in their practice. The scale of change varied across cases. Additionally, these changes were focussed more on the individual rather than across the school itself, for example:

I really enjoyed the content and I do think my instructional coaching has improved. I've enjoyed the experience of delivering CPD. But I don't necessarily feel like I've had an impact on teaching and learning, which I guess was my goal for going on it. - *Case study 5, TE*

I think we loved the actual days, the content was really interesting, but it didn't necessarily feel like we were having a massive impact on the day-to-day practice of staff in school. - *Case study 6, TE*

A noticeable distinction in the implementation of the project was the way in which each school followed-up the training. Within some of the case-study schools it was unclear to both the TEs and HLTs how the work they had done would continue once the formal intervention came to an end. For others it had been built into their scheme of work and/or the participating teachers were assessed on whether they were applying the content of the project to their practice. In addition, for those schools who had successfully implemented elements of the project across the whole school there was a degree of shared language, which may support sustainability:

We all speak the same language now, all of us. I/We/You – we all know that. Everyone in the school is involved in the training. So yes, there is a cooperative use of the terminology. - *Case study 4, HLT*

This in turn filtered down to the pupils who, it was suggested, had an understanding of the approaches being used across the curriculum and an expectation of their use in the classroom:

They're expecting those questions to come at them, because if that's what they're doing in maths, that's what they're doing in English, history, business, whatever, then when they come to science, clearly, they're going to be used to that and they're going to be waiting for it. - *Case study 4, HLT*

Indeed, as summarised in the sections above, there is considerable evidence that in some cases, the project successfully equipped participating HLTs with a growing

repertoire of teaching skills, while also improving key elements of their teaching practice. This is also true of the TEs who also gained skills and confidence in peer coaching methods. It appears that for many TEs and HLTs, these new skills and knowledge were both well-understood and well-practised. There is, therefore, every reason to be hopeful that these new approaches have, or will, become embedded within participating teachers' practice. Despite this, the scope for embedding at whole-school level was limited. The clear association between SLT commitment/the retention of TT-trained staff and whole-school implementation presented a serious threat to the TT project as a sustainable model for whole-school change. This needs to be taken into account in any future discussions about scaling-up this, or similar, projects.

Moving forwards, the Ambition Institute were planning to continue offering the TT project as a traded package to schools who can afford to purchase it privately.

6 Evaluation of the TT project Theory of Change

This section summarises and interprets the findings already presented in the previous sections and reviews the extent to which the TT ToC (See Section 1.3 and Appendix A) was realised in practice.

The TT project was largely delivered as planned according to the project activities and target outputs outlined in the ToC (see Appendix A). The Ambition Institute appeared to have the infrastructure in place, as described in the ToC document, to carry out the project as planned. In-school deliverers were trained successfully to complete the project delivery to participating teachers and support whole-school roll-out when viable. Existing networks of schools appeared to have been utilised where possible to recruit teachers to attend training, with some variations in the way that individual teachers were enrolled onto the project. Teachers and Senior Leaders interviewed had been able to attend the training with the timings of the training varying across the project to meet the individual needs of the schools. Content also varied from school to school with bespoke CPD packages designed around a core syllabus. Interview data suggests that the response to training was, however, quite mixed with some participants positive, particularly in reference to the TT coaching model and delivery staff. In contrast, others had more concerns around individual aspects of the CPD, delivery methods, the repetition of content and communications with some groups of participants (particularly HLTs).

Implementation of the programme varied across the case-study schools and as such so did the levels of successful roll-out across whole schools. Barriers to implementation included staff changes (particularly at SL level), on-boarding/recruitment processes within schools and finding the time to schedule roll-out training. Some interviewees also discussed timetabling difficulties in terms of the implementation of their own learning within the classroom.

There is evidence that the project activities were successful in leading to a range of outcomes for participants – namely in terms of the quality of leadership in CPD, improved teaching knowledge and skills, and improved teaching practices. Overall, the qualitative and survey data suggests that the project positively impacted upon SL, TE and HLT knowledge and skills and improved the CPD provision within many of the participating schools. The evidence is more limited in terms of the project's effectiveness in leading to improvements in confidence in leadership, levels of senior leader satisfaction, effective change implementation, pupil attainment and improved teacher/leader retention and progression.

The findings on achievement of the fund-level impacts of teacher retention and progression show only limited evidence to suggest that TT improved retention in the ways outlined in the ToC. The SWC comparison data suggests that the TT project may have had a small positive longer-term impact on teacher retention in state-funded schools and challenging schools and a shorter-term positive impact in the same school.

However, at the school level no significant differences in retention were recorded between treatment and comparison schools. There was no significant difference in progression between TT participants and comparison teachers. At a school level, there were some, limited, indications that teachers in treatment schools were *less* likely to have progressed than comparison teachers. This finding is supported by the survey data pertaining to SLs, where a small negative change was recorded in the factor relating to opportunities for career progression. In addition to this, the interview findings indicated that the programme's HLTs and TEs, overall, did not feel that participation had impacted on their progression.

7 Learning about effective CPD for schools in challenging circumstances

7.1 Recruiting and engaging schools

The popularity of this project demonstrated that there is demand for specialist school support projects, and that, with an effective marketing strategy and existing networks, considerable numbers of schools can be recruited to interventions of this sort. It should also be noted that the growing reputation of the Ambition Institute helped significantly in the recruitment of cohort 3 schools.

7.2 Characteristics of effective CPD

Coe (2020) drew together a list of practical implications for the design of CPD. Although his review focussed on subject-specific CPD, it was based on the broad congruence of evidence found in reviews about the characteristics of effective CPD both within a subject-specific and wider context. These characteristics support changes in teachers' classroom practice, which, in turn, are likely to lead to substantive gains in student learning. These are set out in Appendix I. The first purpose of this section is to highlight key features of the TT project, which appeared to lead to positive outcomes indicative of effective CPD that align with Coe's list. The second is to identify any key features of TT that appeared to lead to positive outcomes indicative of effective CPD, which are not included in Coe's list.

As an evidence-based intervention, it is perhaps not surprising that TT shared many of the components that Coe (2020) identified regarding CPD that is most likely to lead to substantive gains in pupils' learning. The specific features of the TT project that were found to be important in leading to positive outcomes in schools in challenging circumstances were:

- Evidence-based content - Content founded on a secure evidence base.
- Bespoke content - Content was not a prescriptive or 'one size fits all' approach, but instead contextually relevant and differentiated as appropriate.
- Duration and timing – sessions held regularly and (where possible) during the school day.
- Granular approach – a focus on techniques and approaches that teachers could directly apply within their classrooms with a reinforcement of learning throughout.
- Coaching – training and the implementation of coaching.
- Characteristics of the lead deliverer – expertise of facilitator.

Replicating these features of the TT project more widely may support more effective CPD for schools in challenging circumstances. However, these features need to be applied consistently across schools.

In addition, it is worth noting that a key enabler of success for the TT project was making sure that the course aims and objectives were clearly communicated to those selected to participate in the CPD ahead of any delivery. In addition, it seems evident that participants needed to know why they were involved and that their participation on this CPD project was not because they had been singled out as needing development.

7.3 Summary

Overall, the TT project was well received. Most participating teachers were enthusiastic about the project and were invested in its aims. SLs and TEs were particularly positive in four of the six case studies we completed.

Feedback indicated that most participants valued the project's interactive training, the flexibility in delivery, the appropriateness of the CPD content and the knowledgeable CPD team, among other things. In contrast, the scheduling of delivery, communications with HLTs, and the use of role-play in CPD were cited as potential negative aspects of the project. Progress in implementation was steady across four of the six case-study schools and any implementation failure was seen to be the result of staff turnover, a lack of SLT support, the withholding of resources or linked to the time required to implement the learning.

It is important to note that school staff turnover and absence were key barriers to effective implementation of the TT project, presenting a significant risk to its sustainability, and although teacher retention was an aim of the project it was recognised that these school-level challenges were often beyond the control of the Ambition Institute. Evidence from the evaluation case studies suggests that if a member of staff central to the TT project left the school, it was possible for all of the TT learning to be lost beyond those participants who originally received the training. This presented a potential conflict between the progression and the retention of teaching staff that needed to be mitigated by the inclusion of a wider number of teachers and senior leaders across the whole school.

There was SWC evidence of improved teacher retention at a teacher level. However, there was no evidence for improved progression from either qualitative data or secondary analysis of the SWC. Evidence for improved pupil attainment, behaviour and discipline was limited to qualitative findings. Whilst there were some qualitative indications that pupil outcomes might improve, a robust impact analysis of pupil attainment could not be undertaken due to the cancellation of national examinations and assessments as a result of Covid-19 resulting in there being no National Pupil Database (NPD) data to analyse.

8 References

Allen, R., Mian, E. and Sims, S. (2016). *Social Inequalities in Access to Teachers Social Market Foundation Commission on Inequality in Education: Briefing 2* [online]. Available: <https://www.smf.co.uk/wp-content/uploads/2016/04/Social-Market-Foundation-Social-inequalities-in-access-to-teachers-Embargoed-0001-280416.pdf> [20 Jan, 2022].

Coe, R. (2020). 'The case for subject-specific CPD', *Paper presented at the Institute of Physics summit to discuss a long-term approach to subject-specific continuing professional development (CPD)*, The Institute of Physics, London, January 2020. Available at: <https://www.iop.org/about/publications/the-case-for-subject-specific-cpd> (Accessed: 14 June 2022).

Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., Saunders, L. and Coe, R. (2015). *Developing Great Teaching: Lessons from the International Reviews into Effective Professional Development. Project Report* [online]. Available: <http://dro.dur.ac.uk/15834/1/15834.pdf?DDD45+DDD29+DDO128+hsmz78+d700tmt> [20 Jan, 2022].

Deans for Impact (2016). *Practice with Purpose: The Emerging Science of Teacher Expertise* [online]. Available: https://deansforimpact.org/wp-content/uploads/2016/12/Practice-with-Purpose_FOR-PRINT_113016.pdf [20 Jan, 2022].

Department for Education (2016). *Standard for Teachers' Professional Development* [online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/537030/160712_-_PD_standard.pdf [20 Jan, 2022].

Sutton Trust (2011). *Improving the Impact of Teachers on Pupil Achievement in the UK – Interim Findings* [online]. Available: <https://www.suttontrust.com/our-research/improving-impact-teachers-pupil-achievement-uk-interim-findings/> [20 Jan, 2022].

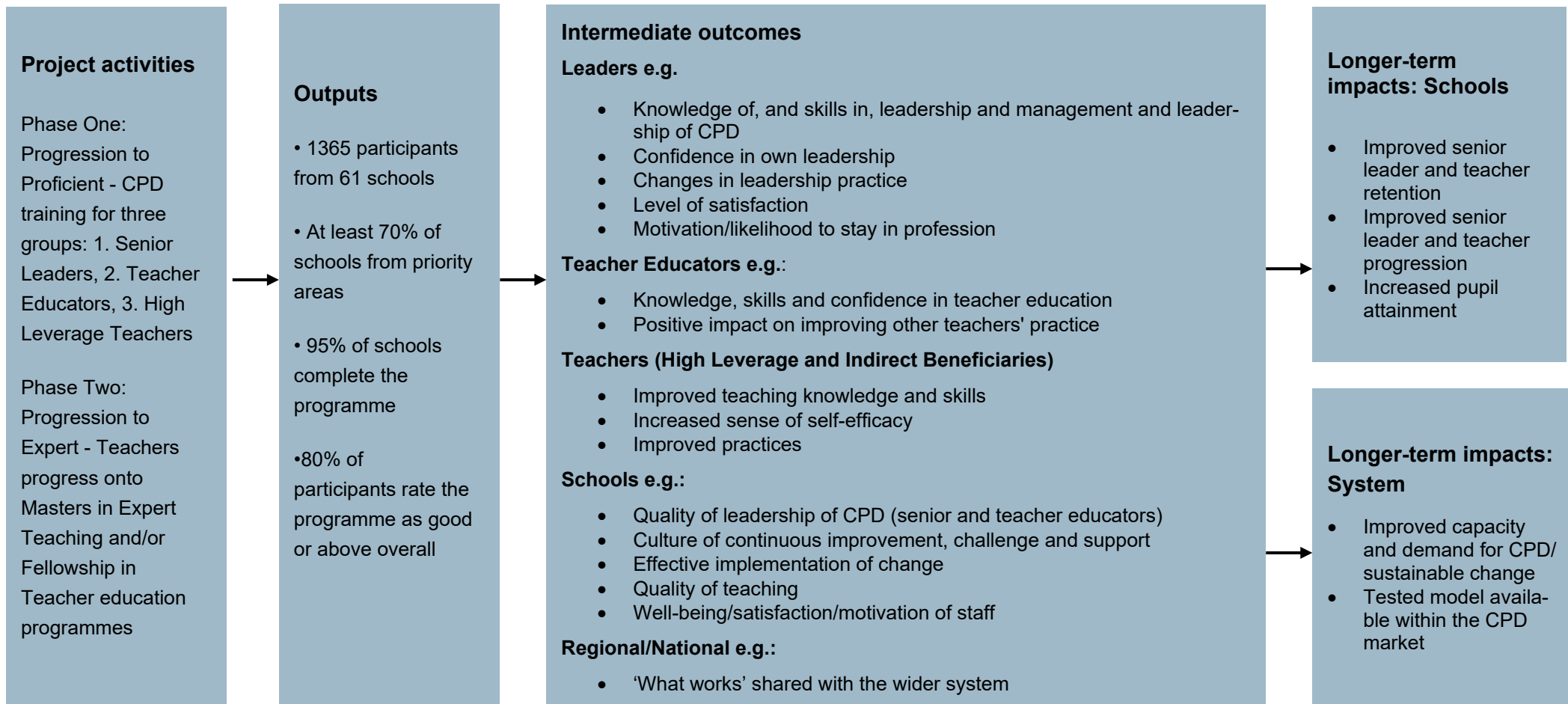
William, D. (2016). *Embedded Formative Assessment: (Strategies for Classroom Assessment That Drives Student Engagement and Learning)* Solution Trees Press.

Worth, J. (2020). *Teacher Labour Market in England: Annual Report 2020* [online]. Available: https://www.nfer.ac.uk/media/4063/tlm_annual_report_2020.pdf [20 Jan, 2022].

Appendix A Transforming Teaching Project Theory of Change

Rationale and Evidence

High performing teachers have a disproportionately greater impact on progress of pupils from low income backgrounds (Wiliam, 2016), but the teachers who are most experienced, most effective and best qualified are least likely to be teaching where they can make the biggest difference (Allen et al., 2016). Transforming Teaching (TT) is a whole-school programme for developing excellent teaching that aims to significantly improve teaching, retention and teacher career progression.



Contextual issues

- Prior knowledge, experience, beliefs and attitudes of participants; School readiness and capacity for change

Appendix B Qualitative sampling

Six case-study schools were purposively selected from a longlist supplied by The Ambition Institute of schools to provide a variation sample. Three case studies were conducted with cohort 1 schools and the remaining three with cohort 2 schools.

Characteristics used to inform the selection process to ensure that the sample was balanced overall, included:

- school type (Community, MAT, Free school, etc)
- school size (numbers of pupils on roll and numbers of staff)
- Ofsted rating (Requires Improvement, Inadequate)
- FSM
- Geographical location

The named SLs from each of the six selected schools were contacted to take part, first by email then follow up phone calls.

Table 31 illustrates the case study participants.

Table 31: School-based case study participants

| Case number | Role | No. participants interviewed | Method (interview (INT) or Focus Group (FG)) | Cohort |
|-------------|------|------------------------------|---|--------|
| 1 | SL | 1 | INT | 1 |
| 1 | TE | 3 | FG | 1 |
| 1 | HLT | 5 | FG | 1 |
| 1 | IDB | 0 | n/a (all staff members participated in the project as either SL, TE or HLT) | 1 |
| 2 | SL | 1 | INT | 1 |
| 2 | TE | 4 | FG | 1 |
| 2 | HLT | 5 | FG | 1 |
| 2 | IDB | 4 | FG | 1 |
| 3 | SL | 0 | n/a (SL had left the school at time of interview) | 1 |
| 3 | TE | 3 | FG | 1 |
| 3 | HLT | 3 | FG | 1 |
| 3 | IDB | 2 | FG | 1 |

| Case number | Role | No. participants interviewed | Method (interview (INT) or Focus Group (FG)) | Cohort |
|-------------|------|------------------------------|---|--------|
| 4 | SL | 2 | FG | 2 |
| 4 | TE | 4 | FG | 2 |
| 4 | HLT | 6 | FG | 2 |
| 4 | IDB | 0 | n/a (no IDBs available due to timetabling issues) | 2 |
| 5 | SL | 1 | INT | 2 |
| 5 | TE | 5 | FG | 2 |
| 5 | HLT | 6 | FG | 2 |
| 5 | IDB | 7 | FG | 2 |
| 6 | SL | 1 | INT (Online) | 2 |
| 6 | TE | 1 | INT (Online) | 2 |
| 6 | HLT | 1 | INT (Online) | 2 |
| 6 | IDB | 0 | n/a (deemed logistically not possible due to COVID pressures) | 2 |

Appendix C SWC matching and comparison group construction

Data sources

The main data source used for the retention and progression analysis was the School Workforce Census (SWC). The SWC has been collected annually on the first Thursday of November since 2010 and it observes teaching staff and their characteristics from all state-sector schools in England. The key teacher characteristics recorded in the SWC and used for the analysis comprised gender, age, qualification date and role, while key school characteristics comprised school phase, type and region.

Each teacher in the SWC is assigned a unique identifier, which enables analysis of the same individual over multiple censuses. This allows observation of key pieces of information about teachers' careers, such as whether they leave state-sector teaching, move school/area, or progress into a more senior role.

The SWC records the school in which each teacher is employed, meaning it is also possible to identify teachers who move to different schools, LADs and regions.²⁴ However, since the SWC does not include teachers in private sector schools or schools outside of England, any teachers who move to one of those schools will appear to have left teaching, even though, in reality, they may not have.

The data quality and response rates to the SWC are very high, so the data has good coverage and few gaps. However, it has some gaps due to schools not submitting returns or individual teachers missing from submitted returns, so to minimise the influence of errors and data gaps, and improve the reliability of the retention outcomes, records were imputed where gaps or errors were evident.²⁵ While this is unlikely to have completely eliminated all instances of SWC data gaps it is unlikely to affect the interpretation of the findings as they are very likely to affect treatment teachers/schools in a similar way to comparison teachers/schools.

²⁴ Teachers may have had contracts in multiple schools, but the file that we used for this evaluation contained one record per teacher per year of the 'main school' that the teacher was working in. The school changes that we observed were therefore changes in the 'main school', as recorded in the SWC.

²⁵ Cases where data gaps were obvious included the observations in which a teacher was not recorded in a school in a year after which the SWC recorded them as having started in a particular role. For example, if the SWC showed a particular teacher was working in a school in the 2017 census year and they were recorded as having started in their current role in the 2016 census year, where they had no SWC record, then the missing record for 2016 was imputed. In these cases, it was assumed they were teaching in the same school as in 2017, and their time-variant characteristics were imputed as appropriate (reducing their observed age, experience, etc. by one year). School-level characteristics and teacher-level characteristics that do not vary by time (i.e. gender, ethnicity), were set to their observed value in 2017. This imputation affected relatively few records and did not apply to any records in which role start date was not observed.

In addition to the teacher-level variables, school-level data was used for the analysis including region, phase, Ofsted rating and Achieving Excellence Area (AEA) category, all data which is published by the DfE.²⁶

The final data source consisted of the management information (MI) data collected by the TLIF providers on the teachers participating in each project, and collated by DfE. The MI data observes teachers' personal details, participation in TLIF projects, along with the provider, the name of the school in which the teacher participated in the training and, for some projects, the training start and end dates.

Each teacher in the MI data was linked to their SWC records using their name, TRN and birth date. Across all TLIF projects, 97 per cent of teachers in the MI data were matched to at least one record in the SWC. Match rates varied somewhat across the different projects, although were generally very good, even after accounting for teachers in the MI data who linked to multiple teachers in the SWC, or did not link to an SWC record in the year in which they were recruited to the project.²⁷

Table 32 shows that the match rate for teachers listed in the MI data as participating in the TT project (in cohort 1 or 2) was 93 per cent to an SWC record in the year in which, according to the MI data, they were recruited to the project.

Table 32: Matching teachers to the SWC

| Stage of matching | Frequency of teachers |
|---|-----------------------|
| Total TT participants identified in the MI data | 1,445 |
| Total TT participants matched to at least one SWC record | 1,421 |
| Total TT participants in Cohorts 1 and 2 only | 769 |
| Total TT Cohort 1 and 2 participants after removing SWC inconsistencies and records with missing baseline information | 719 |
| Match rate for Cohort 1 and 2 participants (%) | 93 |

Methodology

Each of the methodological steps in the analysis were performed separately for evaluating the project effects at the individual teacher and the whole-school level. After linking the MI data to the SWC, the group of comparison schools/teachers was derived

²⁶ The latest data is available here: <https://www.get-information-schools.service.gov.uk/>

²⁷ Cases such as these where the match was clearly wrong were removed from the analysis.

whose retention and progression outcomes were compared to TT-participating schools/teachers.

For each treatment and comparison teacher/school, a baseline year was defined, relative to which subsequent retention and progression outcomes were observed. For TT participant teachers, this was defined as the year in which the teacher was recruited to the project. For any teachers with multiple observed recruitment dates, the first observed date was used as baseline. For schools, the baseline year was defined as the most common recruitment year for participant teachers in that schools. For example, if the majority of teachers in a particular school were recruited to the project in 2017, then 2017 was assigned as the baseline year for that school.

With this full set of potential comparator teachers/schools, a statistical technique called *propensity score matching* was used to ensure that the treatment and comparison groups were highly comparable in observable characteristics. This was done similarly but separately for teachers and schools. For teachers, the probability (propensity score) that a particular teacher with given characteristics was part of the treatment group was estimated. TT participant teachers were then matched with up to ten of their 'nearest neighbours' – comparison teachers with the most-similar likelihood of being in the treatment group, and therefore with the most similar observed characteristics. For schools, the propensity score was estimated with the observed characteristics of the school, rather than individual teachers.

When propensity score matching is able to match on all of the variables that influence selection into the treatment group, then the only remaining difference between the treatment and matched comparison group is the effect participating in the project had. However, variables can only be included in the matching if they are observed in the data. If other unobserved variables influence selection into the treatment group, and also affect retention, then this may partially explain some of the differences in outcomes between the two groups. The potential for this 'selection bias' means caution should be exercised about interpreting the differences between the groups as only representing the causal impact of the project.

The characteristics we used for matching differed between the teacher- and school-level analyses. At the teacher level, both teacher and school characteristics (observed at the baseline year) were used as variables in the matching. The teacher characteristics included age, gender, years since qualification²⁸, full-time/part-time status, post and baseline year. The school characteristics used for matching included Ofsted rating, AEA

²⁸ We used years since qualification as a stand-in for experience as the variable observing year of entry into the profession (which was used to calculate years of experience) had a substantial amount of missing observations.

category, quintile of free school meal (FSM) eligibility, quintile of attainment²⁹, region, phase, and indicator of whether or not the school was participating in any other TLIF projects.

At the school level, the following school characteristics (observed at the baseline year) were used as variables in the matching: school phase, Ofsted rating, AEA category, quintile of free school meal (FSM) eligibility, quintile of attainment³⁰, pre-baseline year retention rates and an indicator of whether the school was participating in any other TLIF projects.

The quality of the match was assessed by examining cross-tabulations of the matching variables across the treatment and comparison groups. Where the variables were balanced – meaning the distribution of characteristics was similar between the treatment and comparison groups – the propensity score matching can be said to have performed well (see Tables 33 and 34 for the matching output).

As all of the outcome variables are dichotomous (i.e. yes or no), the differences in retention and progression outcomes between the two groups were estimated using logistic regression modelling. Retention and progression are considered separately from four different perspectives:

- 4) Within the same school one, two and three years after baseline
- 5) Within the same LAD one, two and three years after baseline
- 6) Within the profession as a whole one, two and three years after baseline
- 7) Within a ‘challenging’ school one, two and three years after baseline.

A teacher was considered to have been ‘retained’ in the same school/LAD if they were teaching in a particular school/LAD in a given year, and were then recorded as teaching in the same school/LAD (based on URN and LAD codes) one, two, or three years later. Similarly, a teacher was considered to have been ‘retained’ in the profession if they were recorded as teaching in a state-sector school in England in a given year, and then were also teaching in a state-sector school in England one, two, or three years later.³¹

²⁹ Attainment was measured as the proportion of pupils in the school that met the minimum requirements in Reading, Maths and Science at Key Stage 2 (for primary schools) or GCSEs (for secondary schools). Schools were assigned to an attainment quintile based on this proportion.

³⁰ Attainment was measured as the proportion of pupils in the school that met the minimum requirements in Reading, Maths and Science at Key Stage 2 (for primary schools) or GCSEs (for secondary schools). Schools were assigned to an attainment quintile based on this proportion.

³¹ To reiterate, since the SWC only observes teachers in state-sector schools in England, any teacher who moves to a private school or to a school outside of England is considered to have left the profession.

'Challenging schools' were generally defined as schools that were rated by Ofsted as 'requires improvement' or 'inadequate'. However, it was also assumed that all TT participant teachers were teaching in a 'challenging school' when they were recruited to the project at baseline, even for the relatively few teachers that were in a 'good' or 'outstanding' school (see observed characteristics in the matched sample - Table 33). This is because the school had been deemed challenging enough to be targeted by the TT project, despite having been rated favourably by Ofsted in its last inspection.

Retention in a challenging school was defined at the teacher level. That is, a TT participant teacher was considered as having been retained in a 'challenging school' if they either stayed in the same school they were in at baseline, or had moved to a different school which was rated 'requires improvement' or 'inadequate' in the year they moved. It should be noted that this same definition also applies to comparison teachers (including those in 'good' or 'outstanding' schools not targeted by the TT project), but the results of the statistical matching (see Table 33) ensure that the observed characteristics of the 'good' and 'outstanding' schools in the comparison group are similar to the observed characteristics of the 'good' and 'outstanding' schools within the treatment group.

As a concrete example, a TT teacher in a 'good' school who stayed in the same school, or a non-TT teacher in a 'requires improvement' school who moved to an 'inadequate' school would both be considered to have been 'retained in a challenging school'. Similarly, any teachers who moved to another school with a 'good' or 'outstanding' rating were considered to have moved to a 'non-challenging' school, regardless of the rating of the school they were in at baseline.

Progression was defined according to three broad role categories – classroom teachers, middle leaders, and senior leaders. Middle leaders were defined as teachers in a "Leading Practitioner", "Excellent Teacher", "Advanced Skills Teacher", or "Advisory Teacher" post, or who received a Teacher Leadership Responsibility (TLR) payment of £100 or more in a given year.³² Senior leaders were defined by those in an "Executive Head Teacher", "Head Teacher", "Deputy Head Teacher" or "Assistant Head Teacher" role in a given year.

A teacher was considered to have 'progressed' if they moved from a classroom teacher role to either a middle or senior leadership role, or a middle leadership role to a senior leadership role one, two or three years after baseline. Progression within a school/LAD/challenging school is defined as those teachers who remain within the same school/LAD/a challenging school and progressed from classroom teacher to middle leadership or middle leadership to senior leadership.

³² This is a definition of middle leader that has been used by DfE in the past. See Footnote 14 in <https://www.gov.uk/government/statistics/teachers-analysis-compendium-2017>

Eight different regression models were estimated, one each for retention and progression within the same school/the same LAD/challenging schools/the profession. This was done using separate regression models for the teacher-level and the school-level analysis.

For the teacher-level analysis, a logistic regression model was used to estimate the likelihood of retention/progression in each of the eight models. As independent variables, all of the variables from the propensity score matching were included – in order to control for any remaining imbalances in the matching variables between the treatment and comparison groups after matching – as well as the treatment indicator and year dummy variables to account for specific time period effects (e.g. the impact of Covid-19 on the 2020 data). Senior leaders were excluded from the sample estimating the effect on progression as, based on the definition above, they are not able to progress any further and therefore progression outcomes are ‘did not progress further’ by definition.

To compare the differences between the two groups, the probability of ‘retention’ or ‘progression’ was estimated if every teacher had been involved in the project, and then again if every teacher had not been involved in the project. The average of these predicted probabilities is the average estimated retention/progression rate for treatment and comparison teachers, respectively. The difference between treatment and comparison teachers is the estimated ‘marginal effect’, which is presented in the tables in section 4, with the accompanying odds ratio estimates in Appendix D. Standard errors for the marginal effect estimates are calculated using the delta method and statistical significance is assessed at the five per cent level.

For the school-level analysis, the models were estimated using teacher-level data in a logistic mixed-effects regression model. As independent variables, all of the variables from the propensity score matching, as well as the treatment indicator, census year and an interaction between these variables were included. School was included as a random effect.

To compare the differences between the two groups, the model estimated the probability that each teacher in the matched sample would have been ‘retained’ or ‘progressed’ if they had been involved in the project, and then again if they had not been involved in the project, in each of the five census years. The average of these predicted probabilities was then taken to find the estimated retention/progression rate, with and without the treatment. The difference between these estimated retention/progression rates is the estimated ‘marginal effect’, which is presented in the tables in section 4. The difference-in-difference testing was then performed to compare the difference between treatment and comparison, between pre-baseline and each post-baseline year. For each post-baseline year, the treatment vs. comparison difference was compared to an average of the pre-baseline differences. The same difference-in-difference estimates are also presented as odds ratios in Appendix D. Statistical significance is assessed at the five per cent level.

Statistical Matching

Table 33 below highlights the sample characteristics for the full treatment and comparison groups for the teacher-level analysis. In the unmatched samples, treatment teachers were more likely to be younger, and less experienced than in the unmatched potential comparison group. Similarly, the schools that treatment teachers were in were more likely to be rated ‘requires improvement’ or ‘inadequate’, have lower attainment, higher proportions of pupils eligible for free school meals, and be an AEA category 5 or 6 school at baseline.

After matching, the proportions of comparison teachers in each of the key matching characteristics were much more closely aligned with treatment teachers. While some small differences between treatment and comparison teachers still existed after matching, including the matching variables as covariates in the logistic regression modelling ensured that the final estimates controlled for any of these outstanding differences.

Focussing on the subset of potential comparison teachers who were the most similar to treatment teachers necessarily involved discarding some potential comparison teachers from the matched sample, when there were no sufficiently similar treatment teachers with which to match. Of the 431,428 potential comparison teachers, only 4,523 were matched to a treatment teacher, highlighting how potential comparison teachers were still fairly dissimilar to teachers recruited to the TT project (at least in observed teacher and school characteristics).

Six treatment teachers were also discarded from the matched sample, as these teachers have no sufficiently similar counterpart in the potential comparison teacher sample.

Table 33: Characteristics of treatment and comparison teachers before and after matching in the full sample

| Characteristic | Treatment teachers (%) | Potential comparison teachers (%) | Matched treatment teachers (%) | Matched comparison teachers (%) |
|------------------------------|------------------------|-----------------------------------|--------------------------------|---------------------------------|
| Male | 31.3 | 24.0 | 31.4 | 31.5 |
| Female | 68.7 | 76.0 | 68.6 | 68.5 |
| Aged under 30 | 31.4 | 23.0 | 31.2 | 34.6 |
| Aged 30-49 | 58.8 | 60.8 | 59.0 | 56.2 |
| Aged 50 or older | 9.7 | 16.2 | 9.8 | 9.1 |
| Within 5 years of qualifying | 32.8 | 23.4 | 32.4 | 37.1 |

| Characteristic | Treatment teachers (%) | Potential comparison teachers (%) | Matched treatment teachers (%) | Matched comparison teachers (%) |
|--|-------------------------------|--|---------------------------------------|--|
| Between 5 and 9 years since qualifying | 21.8 | 20.1 | 22.0 | 20.4 |
| Between 10 and 19 since qualifying | 28.7 | 31.7 | 28.9 | 27.8 |
| 20 years or more since qualifying | 15.3 | 21.9 | 15.4 | 14.0 |
| Unknown years since qualification | 1.4 | 2.8 | 1.4 | 0.8 |
| Classroom teacher | 53.5 | 67.6 | 53.6 | 56.6 |
| Middle/Senior leader | 46.5 | 32.4 | 46.4 | 43.4 |
| Full-time | 88.7 | 78.0 | 88.7 | 90.2 |
| Part-time | 11.3 | 22.0 | 11.3 | 9.8 |
| Ofsted outstanding | < 2.0* | 19.7 | < 2.0* | 0.4 |
| Ofsted good | 12.8 | 59.6 | 12.9 | 14.2 |
| Ofsted requires improvement | 64.5 | 13.4 | 64.3 | 68.5 |
| Ofsted inadequate | 15.6 | 4.6 | 15.7 | 11.3 |
| Ofsted score unknown | < 7.0* | 2.6 | < 7.0* | 5.6 |
| Primary school | 16.6 | 53.3 | 16.7 | 16.7 |
| Secondary school | 83.4 | 46.7 | 83.3 | 83.3 |
| FSM lowest 20% | < 4.0* | 16.2 | < 4.0* | < 2.5* |
| FSM middle-lowest 20% | 12.0 | 17.1 | 12.0 | 8.9 |
| FSM middle 20% | 7.6 | 18.5 | 7.7 | 7.5 |
| FSM middle-highest 20% | 21.1 | 20.8 | 21.3 | 17.6 |
| FSM highest 20% | 55.4 | 26.5 | 55.5 | 63.8 |
| FSM unknown | < 2.0* | 0.9 | < 2.0* | < 0.2* |
| Attainment lowest 20% | 9.6 | 9.4 | 9.7 | 10.8 |

| Characteristic | Treatment teachers (%) | Potential comparison teachers (%) | Matched treatment teachers (%) | Matched comparison teachers (%) |
|-------------------------------|-------------------------------|--|---------------------------------------|--|
| Attainment middle-lowest 20% | 39.4 | 21.9 | 39.6 | 42.9 |
| Attainment middle 20% | 31.3 | 23.1 | 31.2 | 29.1 |
| Attainment middle-highest 20% | 18.2 | 23.0 | 17.9 | 15.6 |
| Attainment highest 20% | < 2.0* | 17.8 | < 2.0* | 0.4 |
| Attainment unknown | < 2.0* | 4.9 | < 2.0* | 1.3 |
| AEA Category 1 | 0.0 | 4.3 | 0.0 | 0.0 |
| AEA Category 2 | 1.9 | 9.7 | 2.0 | 4.4 |
| AEA Category 3 | 0.0 | 15.9 | 0.0 | 0.0 |
| AEA Category 4 | 12.9 | 21.7 | 13.0 | 15.4 |
| AEA Category 5 | 54.7 | 23.0 | 54.3 | 54.2 |
| AEA Category 6 | 30.5 | 25.5 | 30.7 | 26.0 |
| Baseline year 2017 | 22.8 | 50.1 | 23.0 | 22.7 |
| Baseline year 2018 | 77.2 | 49.9 | 77.0 | 77.3 |
| Number of teachers | 719 | 431,428 | 714 | 4,523 |

Note: * indicates proportion has been rounded due to small sample sizes.

In addition to the full matched sample, a second matched sample was derived, with which to estimate the differences in career progression and retention within the same school/same LAD/a challenging school. This sample was only used for the teacher-level analysis and not the school-level analysis. Given that career progression or retention within the same school/same LAD/a challenging school for teachers who left the profession is not observed for teachers who leave the profession, this additional matched sample consisted of a subset of teachers in the full sample who did not leave the profession in the three years after baseline. Characteristics of teachers in the matched sample of non-leavers were very similar to the full matched sample.

Table 34: Characteristics of potential comparator schools, schools in the intervention group and matched comparison schools

| Characteristic | Potential comparator schools (%) | Project schools (%) | Matched comparison schools (%) |
|--------------------------|---|----------------------------|---------------------------------------|
| Nursery | 2 | 0 | 0 |
| Primary | 77 | 20 | 25 |
| Secondary | 15 | 80 | 75 |
| 16 Plus | 0 | 0 | 0 |
| Special | 6 | 0 | 0 |
| East of England | 12 | 0 | 0 |
| East Midlands | 9 | 0 | 5 |
| West Midlands | 11 | 50 | 40 |
| Inner London | 5 | 0 | 0 |
| Outer London | 7 | 0 | 0 |
| North East | 5 | 0 | 0 |
| North West | 14 | 40 | 40 |
| South East | 15 | 0 | 0 |
| South West | 11 | 0 | 0 |
| Yorkshire and the Humber | 10 | 10 | 15 |
| AEA category 1 | 15 | 0 | 0 |
| AEA category 2 | 15 | 0 | 5 |
| AEA category 3 | 17 | 0 | 0 |
| AEA category 4 | 19 | 20 | 25 |
| AEA category 5 | 17 | 40 | 35 |
| AEA category 6 | 16 | 40 | 40 |
| FSM lowest 20% | 19 | 0 | 0 |
| FSM middle-lowest 20% | 18 | 10 | 5 |
| FSM middle 20% | 18 | 10 | 10 |
| FSM middle-highest 20% | 18 | 10 | 20 |
| FSM highest 20% | 18 | 70 | 65 |
| Unknown FSM | 9 | 0 | 0 |
| Attainment lowest 20% | 16 | 10 | 15 |

| Characteristic | Potential comparator schools (%) | Project schools (%) | Matched comparison schools (%) |
|-------------------------------|---|----------------------------|---------------------------------------|
| Attainment middle-lowest 20% | 18 | 50 | 40 |
| Attainment middle 20% | 17 | 30 | 25 |
| Attainment middle-highest 20% | 18 | 10 | 10 |
| Attainment highest 20% | 16 | 0 | 0 |
| Unknown attainment | 15 | 0 | 5 |
| Ofsted Inadequate | 3 | 10 | 10 |
| Ofsted Requires improvement | 10 | 50 | 55 |
| Ofsted Good | 65 | 20 | 20 |
| Ofsted Outstanding | 20 | 0 | 0 |
| Ofsted Unknown | 3 | 10 | 10 |
| Number of schools | 21,602 | 42 | 354 |
| Number of teachers | 499,715 | 4,780 | 20,447 |

Note: Matching was performed at a school level, so these percentages are also at a school level, e.g. 10 per cent of schools not 10 per cent of teachers. Potential comparison school percentages are rounded to the nearest 1 per cent. Selected comparison school percentages are rounded to the nearest 5 per cent. Treatment school percentages are rounded to the nearest 10 per cent. The rounding is to ensure data are not disclosive.

Appendix D Outcomes of SWC impact analysis

Table 35: Odds ratios from the retention and progression teacher-level outcome analysis

| | 1 year after baseline | 2 years after baseline |
|--------------------------------------|-----------------------|------------------------|
| Retention in state-sector teaching | 1.6 (1.2 – 2.2) | 1.6 (1.2 – 2.1) |
| Retention in the same school | 1.5 (1.1 – 2.0) | 1.2 (0.9 – 1.5) |
| Retention in the same LAD | 1.4 (1.0 – 2.0) | 1.1 (0.8 – 1.5) |
| Retention in a challenging school | 1.9 (1.3 – 3.1) | 1.5 (1.1 – 2.1) |
| Progression in state-sector teaching | 1.2 (0.9 – 1.7) | 1.1 (0.8 – 1.4) |
| Progression in the same school | 1.1 (0.7 – 1.6) | 0.9 (0.6 – 1.3) |
| Progression in the same LAD | 1.1 (0.8 – 1.6) | 1.0 (0.7 – 1.3) |
| Progression in a challenging school | 1.2 (0.8 – 1.7) | 1.0 (0.7 – 1.4) |

Note: Figures in brackets represent the 95 per cent confidence interval of the odds ratio estimate.

Table 36: Odds ratios from the retention and progression school outcome analysis

| | 1 year after baseline | 2 years after baseline |
|--------------------------------------|-----------------------|------------------------|
| Retention in state-funded teaching | 0.9 (0.8 – 1.0) | 1.0 (0.8 – 1.2) |
| Retention in the same school | 1.0 (0.8 – 1.2) | 0.9 (0.8 – 1.1) |
| Retention in the same LAD | 0.9 (0.8 – 1.1) | 1.1 (0.9 – 1.3) |
| Retention in challenging schools | 1.1 (0.9 – 1.4) | 0.9 (0.7 – 1.1) |
| Progression in state-funded teaching | 1.1 (0.9 – 1.3) | 0.8 (0.7 – 1.0) |

| | 1 year after baseline | 2 years after baseline |
|------------------------------------|------------------------------|-------------------------------|
| Progression in the same school | 1.1 (0.9 – 1.3) | 0.7 (0.6 – 0.9) |
| Progression in the same LAD | 1.1 (0.8 – 1.3) | 0.7 (0.6 – 0.9) |
| Progression in challenging schools | 1.1 (0.9 – 1.4) | 0.8 (0.6 – 1.0) |

Note: Figures in brackets represent the 95 per cent confidence interval of the odds ratio estimate.

Appendix E Survey sample characteristics

Table 37: Survey sample characteristics - Role

| Role | Base-line N | Base-line % | End-point N | End-point % | Matched analysis N | Matched analysis % | TT Whole Sample N | TT Whole Sample % |
|-------------------|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|-------------------|
| Classroom teacher | 245 | 49.1 | 59 | 43.1 | 59 | 43.1 | 765 | 66.8 |
| Middle leader | 175 | 31.5 | 52 | 38.0 | 52 | 38.0 | 243 | 21.2 |
| Senior leader | 79 | 15.8 | 26 | 19.0 | 26 | 19.0 | 137 | 12.0 |

Table 38: Survey sample characteristics - Project categorisation

| Project categorisation | Base-line N | Base-line % | End-point N | End-point % | Matched analysis N | Matched analysis % | TT Whole Sample N | TT Whole Sample % |
|-------------------------|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|-------------------|
| Teacher educator | 287 | 57.5 | 32 | 23.4 | 32 | 23.4 | - | - |
| Senior leader | 112 | 22.4 | 23 | 16.8 | 23 | 16.8 | - | - |
| Higher leverage teacher | 100 | 20.0 | 82 | 59.9 | 82 | 59.9 | - | - |

Table 39: Survey sample characteristics - Years in teaching

| Years in teaching | Base-line N | Base-line % | End-point N | End-point % | Matched analysis N | Matched analysis % | TT Whole Sample N | TT Whole Sample % |
|------------------------------|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|-------------------|
| 30 years or more | 22 | 4.4 | 2 | 1.5 | 2 | 1.5 | - | - |
| 20-29 years | 67 | 13.4 | 37 | 27.0 | 37 | 27.0 | - | - |
| 10-19 years | 172 | 34.5 | 50 | 36.5 | 50 | 36.5 | - | - |
| 5-9 years | 104 | 20.8 | 22 | 16.1 | 22 | 16.1 | - | - |
| 1-4 years | 93 | 18.6 | 26 | 19.0 | 26 | 19.0 | - | - |
| First year of teaching (NQT) | 41 | 8.2 | - | - | - | - | - | - |

Table 40: Survey sample characteristics - Participation in the project

| Participation in the project | Base-line N | Base-line % | End-point N | End-point % | Matched analysis N | Matched analysis % | TT Whole Sample N | TT Whole Sample % |
|--|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|-------------------|
| Joined from the start and completed** | N/A | N/A | 127 | 92.70 | 127 | 92.70 | - | - |
| Joined after the start but completed** | N/A | N/A | 6 | 4.37 | 6 | 4.37 | - | - |
| Dropped out early; did not complete | N/A | N/A | 4 | 2.91 | 4 | 2.91 | - | - |

Table 41: Survey sample characteristics - Phase of teaching

| Phase of teaching | Base-line N | Base-line % | End-point N | End-point % | Matched analysis N | Matched analysis % | TT Whole Sample N | TT Whole |
|-------------------|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|----------|
|-------------------|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|----------|

| | | | | | | | | Sample % |
|-----------|-----|-------|-----|-------|-----|------|------|----------|
| Primary | 95 | 19.03 | 26 | 17.24 | 24 | 17.9 | 301 | 21 |
| Secondary | 352 | 70.54 | 115 | 79.31 | 109 | 79.3 | 1144 | 79 |
| Other | 52 | 10.42 | 4 | 3.44 | 4 | 2.8 | - | |

Table 42: Survey sample characteristics - Ofsted rating

| Ofsted rating | Base-line N | Base-line % | End-point N | End-point % | Matched analysis N | Matched analysis % | TT Whole Sample N | TT Whole Sample % |
|----------------------|-------------|-------------|-------------|-------------|--------------------|--------------------|-------------------|-------------------|
| Outstanding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Good | 30 | 6 | 14 | 9.7 | 14 | 9.7 | 237 | 16 |
| Requires improvement | 362 | 72.5 | 97 | 66.9 | 91 | 66.9 | 925 | 64 |
| Inadequate | 92 | 18.4 | 32 | 22.1 | 31 | 22.1 | 283 | 20 |
| Missing | 15 | 3 | 2 | 1.4 | 1 | 1.4 | | |

Total N differs across the table as not all respondents answered all questions

**These responses include respondents who completed the project prior to completing the endpoint survey, as well as those who were still participating in the project at the time they completed the endpoint survey.

Transforming Teaching (TT) whole sample statistics included for sections where information is held. Project categorisation, years in teaching and participation in project was collected from the survey.

The 'Other' phase of teaching category is for schools not classed as Primary or Secondary, for example; all through schools or middle schools. From the data received Ofsted rating was missing for a number of schools.

Appendix F Fund-level (core questions) Factor Analysis

Approach to fund-level factor analysis

The TLIF project evaluations included surveys of participants at baseline and endpoint. The surveys included ‘core questions’ – common questions and items included in all the TLIF surveys - with the aim of providing data that could be combined across all projects to analyse fund-level outcomes. Surveys also included, to differing extents, ‘bespoke questions’ – questions that were specific to the project focus and outcomes. This section explains the approach taken to factor analysis of the survey ‘core questions’. Project specific questions were reported at the individual level (Appendix G), as sample sizes were too small to conduct project-level factors analysis.

Factor analysis is a statistical technique that summarises information from a number of survey items into a smaller set of reliable outcome measures. It combines survey items that are correlated and assess the same underlying latent construct by grouping together question items that have similar patterns of responses. This enables more robust and straightforward analysis than reporting single items. We used the factors derived through this analysis as our outcome measures to report the survey findings in this report.

Factor analysis was conducted in two stages. First, it was conducted on the core question items that were asked of *all* respondents in exactly the same way. This resulted in Factors 1 to 4 in Section 1.2 below for all respondents. Second, it was conducted on core question items that covered consistent themes but where the wording, or the inclusion, of items varied slightly depending on the *role of the respondent* (class teachers, middle leaders, or senior leaders). This resulted in Factors 5 to 8 for class teachers, Factors 9 to 12 for middle leaders, and Factors 13 and 14 for senior leaders (see Sections 1.3, 1.4 and 1.5 below). The TT project included questions for class teachers, middle leaders and senior leaders. Therefore, all factors are relevant to this report.

Each survey question was designed to measure a specific construct – for example ‘leadership quality’ – through a series of items related to that construct. In our analysis, the items that loaded onto each individual factor were, in most cases, derived from a single survey question. This indicates that our survey was successful in measuring the constructs that it intended to. Most survey questions were answered on a Likert scale (e.g. an 8-point agree-disagree scale). The response on the scale was converted to a score for each item, then combined to produce a mean score and score range for each of the factors. Any teacher, middle or senior leader that answered a third or less of the items entered into the factor analysis were removed from the analysis for the purpose of constructing the factors on a consistent set of responses.

Factors were selected that met the following criteria:

- strong internal consistency of each factor which indicates reliability (indicated by a high Cronbach's Alpha statistic on a range from 0 to 1)
- loadings above 0.3 which indicate an association between items and the underlying factors. The relationship of each item to a factor is expressed by a factor loading. Factor loadings are similar to correlation coefficients – a higher value on a range from -1 to 1 indicates a stronger correlation with the factor
- Eigenvalues greater than 1 which indicate strong validity of the factors (the additional variance explained by bringing items together into a single factor)
- low levels of correlation between factors, indicating that each factor is measuring something slightly different.

Several factors were only comprised of two items. However, we deemed this to be acceptable as a two-item factor provides a more robust measure of a concept than two separate items.

Some questions and items that were entered into factor analysis did not load onto factors or form reliable factors. These are analysed separately in each report, as applicable to the project.

Factors for all respondents

Table 43: Factor 1: Effectiveness of school leadership (all)

| Effectiveness of school leadership (all): Item statements | Loading |
|---|----------------|
| My school leadership team sets a clear vision | 0.769 |
| My school leadership team is effective | 0.768 |
| My school leadership team creates an ethos within which all staff are motivated and supported to develop their own skills and subject knowledge | 0.734 |
| My school leadership team sets high expectations for all pupils | 0.721 |
| My school leadership team challenges assumptions about low capabilities of disadvantaged pupils | 0.694 |
| My school leadership team uses data to monitor the quality of teaching and learning and to initiate improvements where required | 0.683 |
| My school leadership team identifies professional development as a priority for all teachers | 0.673 |
| My school leadership team: values experimentation and the introduction of new ideas for teaching and learning | 0.660 |
| My school leadership team: trusts staff to adapt teaching practices to meet the needs of pupils | 0.650 |

| Effectiveness of school leadership (all): Item statements | Loading |
|---|----------------|
| My school leadership team sets the conditions for effective behaviour management | 0.649 |
| My school leadership team supports teachers to develop their careers (either via a teaching or leadership route, depending on their interest) | 0.646 |
| My school leadership team identifies professional development as a priority for all support staff | 0.597 |
| My school leadership team facilitates collaborative work with other schools | 0.569 |

Reliability of measure: Alpha = 0.941

Table 44: Factor 2: Effectiveness of professional development (all)

| Effectiveness of professional development (all): Item statements | Loading |
|---|----------------|
| The facilitation of the professional development I have received is effective | 0.806 |
| The content of the professional development I have received is relevant to my needs | 0.796 |
| The professional development I have undertaken has been effective | 0.755 |
| There is support to implement learning from professional development | 0.709 |
| I have access to high-quality professional development | 0.687 |
| I am encouraged to undertake professional development | 0.589 |
| I receive support to undertake follow-up activities when engaging in professional development | 0.584 |

Reliability of measure: Alpha = 0.917

Table 45: Factor 3: Effectiveness of school culture (all)

| Effectiveness of school culture (all): Item statements | Loading |
|---|----------------|
| I enjoy working at my school | 0.679 |
| Most pupils achieve the goals that are set for them in my school | 0.588 |
| My school has a collaborative culture characterised by mutual support | 0.558 |
| All in all, I am satisfied with my job | 0.529 |
| The atmosphere throughout my school encourages pupils to learn | 0.524 |
| My workload is manageable | 0.507 |

Reliability of measure: Alpha = 0.818

Table 46: Factor 4: Motivation for professional development (all)

| Motivation for professional development (all): Item statements | Loading |
|--|---------|
| I am keen to engage in professional development | 0.807 |
| Professional development plays a major role in helping me to improve the quality of my teaching/leadership | 0.772 |

Reliability of measure: Alpha = 0.831

Factors for classroom teachers (CT)**Table 47: Factor 5: Personal knowledge for effective teaching (CT)**

| Personal knowledge for effective teaching (CT): Item statements | Loading |
|--|---------|
| I have the required subject pedagogical knowledge to effectively teach my subject(s)/key stage | 0.920 |
| I have the required generic pedagogical knowledge to effectively teach my subject(s)/key stage | 0.794 |
| I have the required subject knowledge to effectively teach my subject(s)/key stage | 0.733 |

Reliability of measure: Alpha = 0.877

Table 48: Factor 6: School teaching quality (CT)

| School teaching quality (CT): Item statements | Loading |
|--|---------|
| Teachers in this school manage behaviour effectively to ensure a safe learning environment | 0.723 |
| Teachers set high expectations for all pupils' achievement | 0.708 |
| Teaching in my subject(s)/key stage is generally very good | 0.348 |

Reliability of measure: Alpha = 0.665

Table 49: Factor 7: Motivation for teaching-focused professional development (CT)

| Motivation for teaching-focused professional development (CT): Item statements | Loading |
|---|---------|
| I use professional development both to maintain and to extend my knowledge of my subject area(s)/key stage | 0.889 |
| I use professional development both to maintain and to extend my critical understanding of a range of subject- or key stage-specific pedagogical approaches | 0.843 |

Reliability of measure: Alpha = 0.878

Table 50: Factor 8: Opportunities for career progression (CT)

| Opportunities for career progression: Item statements | Loading |
|--|----------------|
| I have the opportunity to progress as a classroom teacher within my school if I want to (e.g., as a specialist subject leader) | 0.897 |
| I have the opportunity to progress into a middle/senior leadership position within my school if I want to | 0.786 |

Reliability of measure: Alpha = 0.84

Factors for middle leaders (ML)

Table 51: Factor 9: Personal knowledge for effective teaching (ML)

| Personal knowledge for effective teaching (ML): Item statements | Loading |
|--|----------------|
| I have the required subject pedagogical knowledge to effectively teach my subject(s)/key stage | 0.892 |
| I have the required generic pedagogical knowledge to effectively teach my subject(s)/key stage | 0.856 |
| I have the required subject knowledge to effectively teach my subject(s)/key stage | 0.730 |

Reliability of measure: Alpha = 0.906

Table 52: Factor 10: School teaching quality (ML)

| School teaching quality (ML): Item statements | Loading |
|--|----------------|
| Teachers in my subject/key stage have the required subject pedagogical knowledge to effectively teach their subject(s)/key stage | 0.934 |
| Teachers in my school have the required generic pedagogical knowledge to effectively teach their subject(s)/key stage | 0.845 |
| Teachers in my subject/key stage have the required subject knowledge to effectively teach their subject(s)/key stage | 0.747 |
| Teachers in my subject/key stage use research findings to make changes to their teaching practice | 0.589 |
| Teachers set high expectations for all pupils' achievement | 0.523 |
| Teachers in this school manage behaviour effectively to ensure a safe learning environment | 0.412 |

Reliability of measure: Alpha = 0.859

Table 53: Factor 11: Motivation for teaching-focused professional development (ML)

| Motivation for teaching-focused professional development (ML): Item statements | Loading |
|---|----------------|
| I use professional development both to maintain and to extend my critical understanding of a range of subject- or key stage-specific pedagogical approaches | 0.898 |
| I use professional development both to maintain and to extend my knowledge of my subject area(s)/key stage | 0.865 |

Reliability of measure: Alpha = 0.9

Table 54: Factor 12: Opportunities for career progression (ML)

| Opportunities for career progression (ML): Item statements | Loading |
|---|----------------|
| I have the opportunity to progress into a system leadership position if I want to (e.g. a specialist leader of education (SLE)) | 0.787 |
| I have the opportunity to progress into a middle/senior leadership position within my school if I want to | 0.742 |

Reliability of measure: Alpha = 0.765

Factors for senior leaders (SL)

Table 55: Factor 13: School teaching quality (SL)

| School teaching quality (SL): Item statements | Loading |
|---|----------------|
| Teachers in my school have the required subject pedagogical knowledge to effectively teach their subject(s)/key stage | 0.914 |
| Teachers in my school have the required generic pedagogical knowledge to effectively teach their subject(s)/key stage | 0.901 |
| Teaching across different subject(s)/key stages is generally very good | 0.867 |
| Teachers in my school set high expectations for all pupils' achievement | 0.828 |
| Teachers in my school have the required subject knowledge to effectively teach their subject(s)/key stage | 0.803 |
| Teachers in my school manage behaviour effectively to ensure a safe learning environment | 0.709 |
| Teachers in my school use research findings to make changes to their teaching practice | 0.678 |

Reliability of measure: Alpha = 0.931

Table 56: Factor 14: Opportunities for career progression (SL)

| Opportunities for career progression (SL): Item statements | Loading |
|---|----------------|
| I have the opportunity to progress into a senior system leadership position if I want to (e.g. (NLE), Multi-Academy Trust Chief Executive, Teaching School Alliance Director) | 0.853 |
| I have the opportunity to progress into a system leadership position if I want to (e.g. a specialist leader of education (SLE)) | 0.815 |

Reliability of measure: Alpha = 0.821

Appendix G Survey questions about engagement in the TT project – asked at endpoint only

Participants answering the endpoint survey were asked to indicate whether they were involved in each of the main elements of the TT project. Those who were, were then asked to rate the extent to which each element met their needs on a scale of 1 to 8 where 1 was ‘Not at all’ and 8 was ‘fully’. The scale has subsequently been collapsed into four categories as follows: 1-2 (‘Not at all’); 3-4 (‘Somewhat’); 5-6 (‘Moderately’); 7-8 (‘Fully’).

The findings are based on all participants who responded to the endpoint survey. However, some caution should be taken in interpreting the findings due to the small underlying numbers. Percentages may not sum to 100 due to rounding. Missing responses have been removed.

Face-to-face training by the Ambition Institute

Table 57: Participant involvement in face-to-face training

| | Teacher Educator - involved | Teacher Educator - not involved | Higher Leverage Teacher – involved | Higher Leverage Teacher – not involved | Senior Leader – involved | Senior Leader – not involved |
|---|-----------------------------|---------------------------------|------------------------------------|--|--------------------------|------------------------------|
| N | 32 | 0 | 78 | 4 | 21 | 2 |
| % | 100 | 0 | 95 | 5 | 91 | 9 |

Table 58: Extent of involvement in face-to-face training

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|-----------------------------|------------------|----------------|------------------|-------------|
| Teacher Educator (N) | 0 | 0 | 5 | 27 |
| Teacher Educator (%) | 0 | 0 | 16 | 84 |
| Higher Leverage Teacher (N) | 1 | 3 | 11 | 63 |
| Higher Leverage Teacher (%) | 1 | 4 | 14 | 80 |
| Senior Leader (N) | 0 | 2 | 7 | 12 |
| Senior Leader (%) | 0 | 10 | 33 | 57 |

Table 59: Extent to which face-to-face training provision met needs

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|-----------------------------|------------------|----------------|------------------|-------------|
| Teacher Educator (N) | 0 | 1 | 7 | 24 |
| Teacher Educator (%) | 0 | 3 | 22 | 75 |
| Higher Leverage Teacher (N) | 6 | 12 | 29 | 31 |
| Higher Leverage Teacher (%) | 8 | 15 | 37 | 40 |
| Senior Leader (N) | 0 | 1 | 9 | 11 |
| Senior Leader (%) | 0 | 5 | 43 | 52 |

Face-to-face training by Teacher Educators who are school staff (only asked of HLTs)

Table 60: Involvement in face-to-face training by Teacher Educators who are school staff (HLT only)

| | Involved | Not involved |
|---|----------|--------------|
| N | 63 | 17 |
| % | 79 | 21 |

Table 61: Extent of involvement in face-to-face training by Teacher Educators who are school staff (HLT only)

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|--------------|------------------|----------------|------------------|-------------|
| N | 3 | 8 | 14 | 38 |
| % | 5 | 13 | 22 | 60 |

Table 62: Extent to which provision of face-to face training by Teacher Educators met needs (HLT only)

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|--------------|------------------|----------------|------------------|-------------|
| N | 4 | 10 | 27 | 22 |
| % | 6 | 16 | 43 | 35 |

Coaching by the Ambition Institute

Table 63: Involvement in coaching by the Ambition Institute

| | Teacher Educator - involved | Teacher Educator - not involved | Higher Leverage Teacher – involved | Higher Leverage Teacher – not involved | Senior Leader – involved | Senior Leader – not involved |
|---|-----------------------------|---------------------------------|------------------------------------|--|--------------------------|------------------------------|
| N | 31 | 1 | 20 | 59 | 15 | 8 |
| % | 97 | 3 | 25 | 75 | 65 | 35 |

Table 64: Extent of involvement in coaching by the Ambition Institute

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|-----------------------------|------------------|----------------|------------------|-------------|
| Teacher Educator (N) | 0 | 1 | 3 | 27 |
| Teacher Educator (%) | 0 | 3 | 10 | 87 |
| Higher Leverage Teacher (N) | 4 | 7 | 2 | 7 |
| Higher Leverage Teacher (%) | 20 | 35 | 10 | |
| Senior Leader (N) | 0 | 1 | 2 | 2 |
| Senior Leader (%) | 0 | 10 | 40 | 40 |

Table 65: Extent to which Ambition Institute coaching provision met needs

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|--------------|------------------|----------------|------------------|-------------|
| N | 0 | 1 | 5 | 25 |
| % | 0 | 3 | 16 | 81 |
| N | 4 | 5 | 4 | 7 |
| % | 20 | 25 | 20 | 35 |
| N | 0 | 1 | 2 | 2 |
| % | 0 | 20 | 40 | 40 |

Structured in-school support for diagnosis/implementation (only asked of TE and SL)

Table 66: Involvement in structured in-school support for diagnosis/implementation (TE/SL only)

| | Teacher Educator - involved | Teacher Educator - not involved | Senior Leader – involved | Senior Leader – not involved |
|---|------------------------------------|--|---------------------------------|-------------------------------------|
| N | 27 | 4 | 17 | 6 |
| % | 87 | 13 | 74 | 26 |

Table 67: Extent of involvement in structured in-school support for diagnosis/implementation (TE/SL only)

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|----------------------|-------------------------|-----------------------|-------------------------|--------------------|
| Teacher Educator (N) | 0 | 4 | 7 | 16 |
| Teacher Educator (%) | 0 | 15 | 26 | 59 |
| Senior Leader (N) | 0 | 2 | 5 | 10 |
| Senior Leader (%) | 0 | 12 | 29 | 59 |

Table 68: Extent to which provision of structured in-school support for diagnosis/implementation met needs (TE/SL only)

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|----------------------|------------------|----------------|------------------|-------------|
| Teacher Educator (N) | 1 | 4 | 7 | 15 |
| Teacher Educator (%) | 4 | 15 | 26 | 55 |
| Senior Leader (N) | 1 | 0 | 7 | 9 |
| Senior Leader (%) | 6 | 0 | 41 | 53 |

Senior leadership conferences delivered by the Ambition Institute (only asked of SL)

Table 69: Involvement in Senior leadership conferences (SL only)

| | Involved | Not involved |
|---|----------|--------------|
| N | 12 | 11 |
| % | 52 | 48 |

Table 70: Extent of involvement in Senior leadership conferences (SL only)

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|--------------|------------------|----------------|------------------|-------------|
| N | 0 | 2 | 2 | 8 |
| % | 0 | 16 | 16 | 66 |

Table 71: Extent to which provision of Senior leadership conferences met needs (SL only)

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|--------------|------------------|----------------|------------------|-------------|
| N | 1 | 3 | 4 | 4 |
| % | 8 | 25 | 33 | 33 |

Email/telephone support from the Ambition Institute

Table 72: Involvement with email/telephone support from the Ambition Institute

| | Teacher Educator - involved | Teacher Educator - not involved | Higher Leverage Teacher – involved | Higher Leverage Teacher – not involved | Senior Leader – involved | Senior Leader – not involved |
|---|-----------------------------|---------------------------------|------------------------------------|--|--------------------------|------------------------------|
| N | 14 | 17 | 5 | 74 | 8 | 15 |
| % | 45 | 55 | 6 | 94 | 35 | 65 |

Table 73: Extent of involvement with email/telephone support from the Ambition Institute met needs

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|-----------------------------|------------------|----------------|------------------|-------------|
| Teacher Educator (N) | 0 | 2 | 4 | 8 |
| Teacher Educator (%) | 0 | 14 | 29 | 57 |
| Higher Leverage Teacher (N) | 0 | 2 | 0 | 3 |
| Higher Leverage Teacher (%) | 0 | 40 | 0 | 60 |
| Senior Leader (N) | 0 | 0 | 4 | 4 |
| Senior Leader (%) | 0 | 0 | 50 | 50 |

Table 74: Extent to which provision of email/telephone support from the Ambition Institute met needs

| Likert scale | 1-2 (not at all) | 3-4 (somewhat) | 5-6 (moderately) | 7-8 (fully) |
|-----------------------------|------------------|----------------|------------------|-------------|
| Teacher Educator (N) | 0 | 0 | 4 | 10 |
| Teacher Educator (%) | 0 | 0 | 29 | 71 |
| Higher Leverage Teacher (N) | 0 | 2 | 1 | 2 |
| Higher Leverage Teacher (%) | 0 | 40 | 20 | 40 |
| Senior Leader (N) | 0 | 0 | 5 | 3 |
| Senior Leader (%) | 0 | 0 | 63 | 37 |

Appendix H Analysis of Management Information for the Teaching and Leadership Innovation Fund: Ambition Institute

Introduction

The Teaching and Leadership Innovation Fund (TLIF) was a DfE fund through which 10 providers offered support to schools in a variety of areas from behaviour management to phonics and STEM teaching. The aim of the fund was to create and develop a sustainable market for high-quality Continuous Professional Development (CPD).

This is a summary of Management Information (MI) data submitted by all ten providers receiving TLIF funding and **does not** assess project impact. The data was submitted in February 2020 and covers the schools and participants recruited, as indicated by the providers. Comparable national figures in this report are based on the 2018 School Workforce Census covering teaching staff in state-funded schools, and Ofsted as at the most recent inspection. The 2018 School Workforce Census was chosen in order to align with the most schools across programme cohorts between 2017 and 2020. The school level analysis refers to all schools that were recruited by providers to participate in the project, including those that withdrew. Schools may have been recruited by more than one provider and participants may have been registered for more than one project.

Targets: Background

Each provider had a number of Key Performance Indicators (KPIs). These were broken down into three different categories:

- **geography**: whether specific areas were targeted by providers (e.g. regional targets, Opportunity Areas, priority areas) and whether particular schools should be targeted by providers (e.g. based on Ofsted rating)
- **schools**: the target number of schools
- **participants**: the target number of participants.

All providers had a geography target and either a participant or a school target, but not necessarily both.

In the context of the TLIF evaluation, a priority area is defined as Achieving Excellence Areas (AEAs) 5 or 6 (Opportunity Areas fall within this category), and a priority school is defined as a school with an Ofsted rating of Requires improvement (Ofsted grade 3) Or Inadequate (Ofsted grade 4).

Note: there are some discrepancies between the overall numbers from providers and those in the data set sent to us. The provider numbers cannot be broken down in school/area type etc. so analysis will not be conducted on this data, however headline figures will be presented where available.

Targets: Breakdown

Ambition Institute delivered the "Transforming Teaching" programme, a whole-school project aiming to improve the quality of teaching in priority schools. Ambition Institute had the following KPI targets:

Geography Level:

- At least 70% of schools were to be recruited from "priority areas" (AEA Category 5/6 areas).
- At least 70% of schools located in "priority areas" were also required to be "priority schools" (Ofsted Rating 3/4).
- All schools outside of priority areas were required to be priority schools.
- The programme was available nationwide.

School Level:

- The target was for a minimum of 61 schools to be recruited during the programme
- The programme was aimed at both primary and secondary schools.

Participant Level:

- A minimum of 1365 participants were to be recruited during the programme.
- The programme was targeted at teachers, middle leaders, teacher educators and school leaders.

Total school numbers

A total of 55 schools participated over three cohorts. The target was 61.

Note: Ambition Institute's own data puts the number of schools at 61, but these aren't all present in the DfE participant data set.

- 84% of schools were located in priority schools. The target was 70%.

Note: Ambition Institute's own data puts the proportion of schools in priority areas at 87%.

- 80% of schools in priority areas were also priority schools. The target was 70%.
- Of the 9 schools in non-priority areas, 7 were priority schools (78%). The target was 100%.

Note: One non-priority school had no Ofsted rating at the time of recruiting, but was approved by the Department for Education. The other non-priority school had, at the start of the programme, recently merged with a priority school.

Total participant numbers

The total number of teachers that participated in the course was 1445. 86 teachers withdrew from the programme, leaving 1356 who completed. The target number of participants over two cohorts was 1365.

Note: Ambition Institute's own data puts the number of participants at 1365, which would be exactly on target.

Schools by Phase

Of all schools recruited by Ambition Institute (including withdrawals):

- 33% of schools were primary schools,
- 67% were secondary,
- none were special.

Nationally 78% of schools are primary, while 16% are secondary.

Schools by Region

Ambition Institute recruited from schools in four of the eight RSC Regions. 47% of schools recruited were in Lancashire and West Yorkshire (compared to 16% nationally) and 47% were in the West Midlands (compared to 12% nationally).

The rest were split between East Midlands and the Humber (4% compared to 12% nationally) and North of England (2% compared to 8% nationally).

Schools by AEA Category

AEA categories are DfE classifications of Local Authority Districts (LADs) by educational performance and capacity to improve, introduced in 2016. It splits areas into six categories from "Strong" Category 1 areas to "Weak" Category 6 areas.

Ambition Institute recruited from schools in AEA Categories 2, 4, 5 and 6.

84% of recruited schools were located in Category 5 or 6 areas, compared to 34% nationally.

Schools by Index of Multiple Deprivation Decile

The Index of Multiple Deprivation (IMD) is a "neighbourhood" measure of deprivation produced by the Ministry of Housing, Communities and Local Government. Each neighbourhood is placed into a decile with decile 1 containing the most deprived areas and decile 10 containing the least deprived.

Ambition Institute over-recruited from more deprived areas, with 40% of schools recruited in the most deprived decile.

Participants by role

Roles were provided in TLIF Management Information as free text and matched to a standardised leadership level. These have been compared to national figures taken from the 2018 School Workforce Census publication.

Ambition Institute recruited participants from all teaching and leadership levels.

- Including withdrawals, most participants (53%) were Classroom Teachers. This is similar to the national figure, which shows that 57% of teachers are Classroom Teachers.
- 17% of participants were Middle Leaders, compared to 28% nationally,
- 9% were Senior leaders, compared to 10% nationally.
- 2% of those recruited to the programme were headteachers, compared to 5% nationally.
- 1% of participants were non-teaching staff.
- 18% of participants did not return role data.

Appendix I Practical summary of the evidence about effective CPD (Coe, 2020)

CPD that aims to support the kinds of changes in teachers' classroom practice that are likely to lead to substantive gains in student learning should:

- 1) Focus on promoting the teacher skills, knowledge and behaviours that are best evidenced as determining student learning. Such content should be appropriately sequenced and differentiated to match the needs of participants.
- 2) Have sufficient duration (two terms) and frequency (fortnightly) to enable changes to be embedded.
- 3) Give participants opportunities to:
 - a) be presented with new ideas, knowledge, research evidence and practices
 - b) reflect on and discuss that input in ways that surface and challenge their existing beliefs, theories and practices
 - c) see examples of new practices/materials/ideas modelled by experts
 - d) experiment with guided changes in their practice that are consistent with these challenging new ideas and their own context
 - e) receive feedback and coaching from experts in those practices, on an ongoing basis
 - f) evaluate, review and regulate their own learning
- 4) Create/require an environment where:
 - a) participants can collaborate with their peers to support, challenge and explore
 - b) school leadership promotes a culture of trust and continuous professional learning
 - c) teachers believe they can and need to be better than they are
 - d) the process and aims of the CPD are aligned with the wider context (e.g. accountability)

Source: Coe, R. (2020). 'The case for subject-specific CPD.' Paper presented at the Subject CPD Roundtable, Institute of Physics, London, 22 January.



Department
for Education

© Department for Education 2022

Reference: DFE- RR1255

ISBN: 978-1-83870-397-4

For any enquiries regarding this publication, contact us at:

www.education.gov.uk/contactus

This document is available for download at www.gov.uk/government/publications