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# Supporting learning?: How effective are teaching assistants?

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## Introduction

The huge and unprecedented increase in teaching assistants (TAs) is one of the most profound changes to have taken place in UK schools over the past two decades. This rise in numbers of TAs can be seen as part of a general increase in education paraprofessionals with similar roles worldwide. Schools in Australia, Italy, Sweden, Canada, Finland, Germany, Hong Kong, Iceland, Ireland, Malta, South Africa, as well as the USA, have experienced similar increases in paraprofessionals. Yet no other education system in the world has expanded both the number and role of its paraprofessionals to quite the same extent as the systems in England and Wales. (They are also known as 'learning support assistants' and 'classroom assistants' in the UK and in the USA; the titles 'teacher aides' and 'paraeducators' are commonplace. In this chapter, we refer to all those with equivalent classroom-based support roles collectively as TAs.)

The number of full-time equivalent TAs in mainstream schools in England alone has more than trebled since 1997 to about 190 000 in 2011. In all, TAs comprise a quarter of the workforce in English and Welsh mainstream schools.2 Around 6 per cent of TAs are 'higher level' TAs. The expansion of the TA workforce represents a considerable investment of public money. According to government data in 2008/09 £4.1 billion was spent on TAs and other education support staff.3

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#### BAD EDUCATION: DEBUNKING MYTHS IN EDUCATION

In this chapter we critically examine the evidence of the impact of TAs, drawing heavily on the results from the recent Deployment and Impact of Support Staff (DISS) project. First though, we look briefly at the two main drivers that have led to the huge growth in TA numbers in English and Welsh schools: (1) the drive to include greater numbers of pupils with Special Educational Needs (SEN) in mainstream education; and (2) policy aimed at remodelling the school workforce.

### **Inclusion**

The idea that TAs could help schools meet the needs and demands of including pupils with SEN and disabilities can be traced back to the Plowden Report of 1967. But the idea really took off in 1994 with the introduction of the government's SEN Code of Practice, which promoted the idea of employing TAs to help pupils who had an individual education plan or a statement of SEN. These documents set out bespoke provisions such as curricular interventions and, where appropriate, remedial therapies. By 2000, the proportion of statemented pupils being educated in special schools in England had decreased from around half to around one third.4

Furthermore, since 2000, there has been a steady increase in the number of pupils with SEN who do not have a statement. These pupils are currently categorized as either School Action or School Action Plus. Government data show that in 2003, the proportion of pupils with SEN (with and without a statement) in mainstream schools in England was 16.6 per cent; the corresponding figure for 2010 was 20.7 per cent.<sup>5</sup> Given that TAs and the number of pupils with SEN have both increased, it is perhaps no surprise that they have - as we shall see - become interconnected.

# School workforce remodelling

During the mid-to-late 1990s, the performance culture in education and the public sector at large, along with the heavily bureaucratic processes that accompanied it, were a major contributing factor to increased teacher workload and feelings of pressure. This strain inevitably effected teacher recruitment and retention, so much so that the government commissioned the consultancy firm Pricewaterhouse Cooper (PwC) to conduct an independent review to investigate.

PwC recommended that central to 'a programme of practical action to eliminate excessive workload and...raise standards of pupil achievement' was the 'extension of the support staff role'. The then education secretary Estelle Morris developed this theme, envisioning TAs 'supervising classes that are undertaking work set by a teacher, or working with small groups of pupils on reading practice', as part of a remodelled school workforce.

In its 2001 White Paper, *Schools: Achieving Success*, the government heralded TAs as 'central to what has been achieved so far in raising standards', in terms of 'provid[ing] high quality daily teaching in the basics', and set out formal proposals to greatly increase their number.

In January 2003, *The National Agreement: Raising Standards and Tackling Workload*, was signed by the government and all but one of the unions representing teachers and support staff. The agreement introduced a series of measures designed to 'tackle workload', such as employing and deploying TAs to take on teachers' routine, clerical tasks and cover short-term teacher absences, which in turn would allow teachers to 'raise standards' by allowing them to spend more time on planning and assessment.

# Assumptions about the impact of teaching assistants

There are two main assumptions that flow from the ways in which schools deploy TAs in service of the inclusion and workforce remodelling agendas: (1) that support from TAs leads to positive outcomes for pupils, particularly lower-attaining pupils and those with SEN; and (2) that there are positive effects for teachers. There has until recently been very little research on the impact of TAs and the support they provide. We now look at the research evidence that does exist to help us determine the veracity of these assumptions.

## Assumption 1: Support from TAs has a positive impact on pupil outcomes

#### Learning outcomes

The majority of what little evidence there is on TAs' impact on learning, reported in systematic reviews and syntheses of evidence,<sup>8</sup> tends to focus on curriculum intervention studies aimed at improving the academic progress of lower-attaining pupils and those with SEN. The broad conclusion we can draw from experimental studies that examined the effect of TAs who have a pedagogical role delivering specific curricular interventions (mostly for literacy) is that TAs tend to have a direct positive impact on pupil progress when they are prepared and trained, and have support and guidance from teachers and the school about practice. However, the data also shows that these kinds of curricular interventions (which are not always well-planned) account for only around 30-40 minutes of a TA's day,9 and are not at all typical of how TAs are used for the majority of the day.

So what about the rest of the time? What effect does TA support have on pupil learning in normal, everyday circumstances; that is, the contexts within which they spend most of their time? The best data we have on this comes from the largest study of TAs even undertaken: the longitudinal Deployment and Impact of Support Staff (DISS) project. In contrast to much previous research on TAs, the DISS project was naturalistic in design. It did not involve a targeted intervention, nor did it examine what was possible under certain circumstances (e.g. the impact on pupil progress of TAs trained to deliver curricular interventions). Instead, it sought to capture the effects of TAs in normal everyday circumstances over the school year.

The DISS project studied effects of TA support (based on teacher estimates and measures from systematic observation) on 8,200 pupils' academic progress in English, mathematics and science. Two cohorts of pupils in seven age groups in mainstream schools were tracked over one year each. Multi-level regression methods controlled for potentially confounding factors known to affect progress (and TA support), such as pupils' SEN status, prior attainment, eligibility for free school meals, English as an additional language, deprivation, gender and ethnicity. The

results were striking: for 16 of the 21 results (there were seven age groups and three subjects), support from TAs had a negative effect on progress; there were no positive effects of TA support on pupil progress over the school year in any subject or for any year group. Those pupils receiving the most support from TAs made less progress than similar pupils who received little or no support from TAs. It is extremely unlikely that these results are explained by existing characteristics of pupils who received TA support, because the analysis controlled for pre-existing pupil characteristics that typically affect progress and the reason why pupils are allocated TA support, in particular SEN status and prior attainment. Furthermore, there is evidence from the DISS study that the negative effect of TA support on learning outcomes is most marked for pupils with the highest levels of need.

An alternative way of conceptualizing the negative effects of TA support on pupil progress is to translate the results from the regression analyses into national curriculum levels – the commonly understood indicator of pupil attainment used in England and Wales. In general, pupils in Key Stage 2, for example, are expected to progress by three national curriculum sub-levels every two years (there are three sub-levels to one national curriculum level). Using this conversion, pupils who received the most TA support were behind their peers by just over one sub-level – which equates to about eight months – as a result of TA support. Great care should be taken over the accuracy of this kind of age equivalent calculation – not least because it depends on some questionable, general assumptions – but it does help obtain some measure of the scale of the difference in attainment between those with the most and least support from TAs.

#### Behavioural, emotional and social development

In addition to the effect of TAs on academic outcomes, the DISS project also assessed the effects of the amount of TA support in relation to the 'softer' types of pupil functioning in school, which we called 'positive approaches to learning'. These included distractibility, confidence, motivation, disruptiveness, independence and relationships with other pupils. The results showed little evidence that the amount of TA support pupils received over a school year improved their positive approaches

to learning, except for those in Year 9 (13-14-year-olds), where there was a clear positive effect of TA support across all eight outcomes.<sup>12</sup> At that age, pupils with the most TA support had noticeably more positive approaches to learning.

## Assumption 2: TAs have a positive impact on teachers and teaching

The DISS study found that there had been significant improvements in terms of teacher workloads, job satisfaction and levels of stress, largely as a result of TAs and other support staff taking on routine clerical tasks. As noted above, this was an anticipated outcome of the National Agreement and, as expected, helped free up teachers' time in order to concentrate on teaching and related activities. So, the contribution of TAs to meeting the first aim of the National Agreement – tackling workload – can be seen as successful.

In terms of the effects on teaching, the DISS project showed that the presence of TAs had two general beneficial effects. First, TA presence was associated with a greater amount of adult individual attention towards pupils. Second, there seemed to be benefits in terms of classroom control, with the presence of TAs leading to a reduction in the amount of talk from adults addressing negative behaviour. This is an important contribution by TAs and should not be underestimated.

## Where do the assumptions about TA impact come from and why do they persist?

Largely as a result of the DISS project, a more rounded picture of TA impact on pupils' academic outcomes has begun to emerge. It is possible to offer some speculative suggestions on the origin and subsequent pervasiveness of the assumptions that underpinned the fairly rapid expansion of TAs in both number and role.

We described earlier how the drive to include greater numbers of pupils with SEN in mainstream settings led to an increase in TA recruitment. Building on the parent-helper model, many schools recruited mothers and carers to the TA positions that were created and connected to support for pupils with SEN. This 'discourse of care', 13 shows TAs' functional priorities as a predominantly nurturing role, in contrast to the educative one adopted foremost by teachers.

That schools should almost collectively arrive at the view that it should be TAs and not teachers who should work directly with lower-attaining pupils and those with SEN is itself a questionable notion, and one that seems to have grown out of convenient assumptions about impact and convenient resourcing arrangements (TAs are cheaper to employ than teachers).

When a statement of SEN is drawn up, it is frequently the case that it specifies that a TA or TAs will deliver most or all of the various provisions. This detail, we argue, has become conflated with the overall legal status of the statement itself. Secondary schools, in particular, describe being fettered by their 'legal obligation' to provide adult support for pupils with a statement in the form of TA support, despite the guidance in the 2001 SEN Code of Practice being quite unequivocal that such a model of support is advisory, not mandatory.<sup>14</sup>

The ubiquitous model of TAs working with lower-attaining pupils and those with SEN, it seems, partly informed the New Labour Government's policies on how the TAs' role could be extended as part of the school workforce remodelling reforms. It took as read that increasing the number of TAs to support such pupils would lead inexorably to improved outcomes for *all* pupils.

On the face of it, this is a common-sense view and is reflected in findings from two large-scale surveys on the impressions of TA impact (one being from the DISS project), which together surveyed over 7,000 teachers. Both surveys reported that teachers believed TAs (and some other support staff) had a strong effect on learning outcomes by allowing teachers more time for planning and preparation.<sup>15</sup> At the time, however, neither the PwC review nor the White Paper (among a number of government documents from the time) contained any systematic, clear research data to support this assumption. There was a reliance on case studies which, while they can have merit as a research tool, are not well suited to tell us anything about causality. In fact, at the time these policies, which would greatly extend the role of TAs, were being drawn up, rigorous empirical evidence on the impact of TA support on pupil attainment was so scant as to be non-existent.<sup>16</sup>

The assumption that support from TAs equals academic progress seems to have passed unchallenged into educational folklore via the mechanisms of practice, policy and statute. However, as we have seen, this assumption has not only turned out to be unfounded, but also, as the results from the DISS project in particular have shown, they have had a damaging effect on the learning of the most disadvantaged pupils. We can, however, explain why we think support from TAs has the impact it does, and in doing so, we can begin to highlight clear ways in which schools can rethink the main effects of TA deployment.

## Alternative explanations for the impact of TAs on pupil outcomes

At a time when the UK education systems face closer scrutiny as expenditure is squeezed, it is perhaps not surprising that there have been strong views expressed about the appropriateness of retaining 'cost-ineffective' TAs.<sup>17</sup> This was no doubt fed by media headlines following the publication of the DISS project findings, such as, 'Teaching assistants blamed for poor results' (The Daily Telegraph) and 'Teaching assistants impair pupil performance' (The Times Educational Supplement). These partial views of the research represent another assumption about TA impact that we must address: that the relationship between TA support and pupils' academic progress is somehow the fault of TAs. This, as we shall now explain, is erroneous. It is far more likely that it is the organizational factors governing TAs' employment and deployment that explain the provocative impact findings.

The data collected as part of the multi-method DISS project facilitated the creation of the 'Wider Pedagogical Role' (WPR) model (presented in Figure 5.1), which summarizes and interprets other results from the study concerning the broader context within which TAs work, and factors which are likely to maximize or impede their effectiveness. The model summarizes results from the UK, but there are likely to be similarities with situations in other countries.

Characteristics of TAs, such as qualifications, are, in isolation, unlikely to account in any significant way for the negative effects of TA support. Similarly, the key finding from the DISS project relating to TAs' conditions of employment – that schools tend to rely on TAs' goodwill in

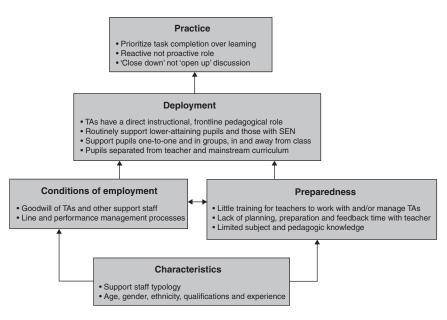


Figure 5.1 The wider pedagogical role model

order to have time to meet with teachers after school – contributes to, but does not fully explain, the impact results. We argue that it is the WPR model's core components – preparedness, deployment and practice – which have a greater bearing on TA effectiveness, and therefore provide the most fruitful explanations for their impact. We now expand on this, and begin to highlight the ways in which these components can be reconceptualized and modified, so that TAs might have a more positive impact on pupil outcomes in future. <sup>18</sup>

## **Preparedness**

Preparedness concerns the DISS study's findings about the lack of training and professional development of TAs and teachers, and day-to-day aspects of planning and preparation before lessons, and feedback afterwards, which are likely to have a bearing on learning outcomes for pupils. For example, the DISS survey of over 4,000 teachers found that 75 per cent reported having had no training to help them work with TAs, and 75 per cent reported having no allocated planning or feedback time with TAs.

### Deployment

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The extent to which TAs have a teaching, or pedagogical, role was revealed through the analysis of over 1,600 work pattern diaries collected as part of the DISS project. These results showed that TAs spend over half their day (6.1 hours) in a direct pedagogical, instructional role, supporting and interacting with pupils (3.8 hours), and this exceeds time spent supporting the teacher and curriculum (1.4 hours) or performing other tasks (0.9 hours). This was confirmed by many hours of classroom observation made as part of the project. These observations also confirmed that the TA's role is routinely to support lower-attaining pupils and those with SEN in one-to-one and group contexts. Furthermore, findings from systematic observations revealed that such pupils were nine times more likely to have sustained (e.g. lasting longer than 10 seconds) interactions with TAs than with teachers, and that they were six times more likely to be actively involved (i.e. beginning, responding to or sustaining) an interaction with TAs than with teachers. In summary, the more severe a pupil's needs, the more interactions with a TA would increase, and interactions with a teacher decrease. These findings are in line with the unintended consequences of one-to-one paraprofessional support described by Professor Michael Giangreco<sup>19</sup> in the USA.

Using TAs to support pupils who have the greatest difficulty with learning and participation might seem pedagogically valuable, but it also means that TA-supported pupils become separated from the teacher and miss out on everyday teacher-to-pupil interactions and mainstream curriculum coverage (especially where TAs are given responsibility for leading curriculum interventions away from the classroom).

#### Practice

The DISS project showed that pupils' interactions with TAs are much lower in quality than those they have with teachers.20 TAs are more concerned with task completion than learning, and inadequate preparation leads to TAs' interactions being reactive – or, as TAs themselves frequently described it in interviews – working 'on the hoof'. In addition, analysis of these data found that teachers generally 'open up' pupil talk, whereas TAs 'close down' talk, both linguistically and cognitively.<sup>21</sup>

TAs, therefore, do not at present know how to make the best use of the extended, more frequent interactions they have with pupils.

# Ways forward: The Effective Deployment of Teaching Assistants project

As Michael Giangreco has succinctly argued, we would not accept a situation in which children without SEN are routinely taught by TAs instead of teachers.<sup>22</sup> Therefore, following the DISS project, there was a clear case for challenging the status quo regarding TA deployment in UK schools, and in particular, how, without action, the most disadvantaged children would continue to be let down by the current arrangements.

To address this situation, we worked in collaboration with 10 primary and secondary schools to set up an intervention study to address the main effects of the widespread and problematic models of TA employment and usage, by developing more effective models of deployment and preparedness. The key strength of the Effective Deployment of Teaching Assistants (EDTA) project was the way in which the WPR model provided a clear, credible and robust structuring framework for the intervention. The model is not only an explanatory framework, but also a useful organizing structure for reconfiguring the management and deployment of TAs in ways that we believe can release their huge potential. The introduction of fairer conditions of employment, improved day-to-day lesson planning, decision-making about the appropriate roles of adults in the classroom – especially with regard to meeting the needs of pupils with SEN – and a clearer purpose to TA–pupil interaction, we argue, can lead to improved educational outcomes.

The EDTA study employed an innovative methodology consisting of a developmental phase and an ongoing evaluation. The developmental phase consisted of an intervention over the school year in which participants worked through the key components of the WPR model in a series of three trials, each lasting a school term. The study adopted a within-school comparative approach, evaluating practice before and after the introduction of the trials. The evaluation sought to compare new models developed through the trials with existing models of TA deployment and teacher and TAs working together, as evidenced in pre-intervention visits. The main research question was whether involvement in the study led to more effective deployment, preparation and practice of TAs.

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The evaluation of the study involved analyses of data from several sources: audits of participants' perceptions of the frequency and quality of TA preparation and training, and the ways in which teachers and TAs were deployed in the classroom; structured observations of the actions and roles of teachers and TAs in the classroom; and semistructured interviews. The data collection tools were structured around the key components of the WPR model: preparedness, deployment and practice.

The evaluation showed that the trials conducted by each school had the overwhelming effect of improving the way school leaders and teachers thought about and deployed TAs. The prevailing refrain from the participants was one of 'no going back to the ways things were done before'. The EDTA study showed that when schools clearly understood and fully engaged with the main problems associated with the widespread and problematic models of TA preparation, deployment and practice, the true value of TAs became evident.

Not only did the project trials help to raise the status of TAs and greatly improve their confidence, but the process of developing alternative models of TA deployment prompted teachers to evaluate the impact of their own practice and develop a meaningful understanding of the TA role. Below, we summarize the key changes that occurred in schools and classrooms across the three WPR model dimensions.

#### Preparedness

Involvement in the intervention greatly improved TAs' pre-lesson preparation. The quality and clarity of teachers' lesson plans improved over the year, and reduced instances of TAs going into lessons 'blind' or relying on picking up information via teachers' whole class delivery. This also addressed TAs' sense of pressure associated with working 'on the hoof'. Teachers made more effort to meet with TAs before lessons, and some schools went further, adjusting TAs' hours of work in order to create meeting time. The creation of time to meet had a positive effect on both teachers' and TAs' perceptions of preparedness. Greater awareness of the specific issues relating to TAs' practice led to schools providing tightly focused training on pedagogical techniques.

## Deployment

Having presented them with findings from observations in their own classrooms of how they deployed not only TAs, but also themselves, teachers changed their models of classroom organization. TAs worked more often with middle- and higher-attaining pupils, creating the opportunity for teachers to spend more time working with lower-attaining pupils and those with SEN. These alternative models of deployment not only reduced the occasions when TA-supported pupils were separated from the teacher, the curriculum and their peers, but also greatly improved and enriched teachers' understanding of the learning needs and progress of struggling pupils.

Involvement in the EDTA project prompted school leadership teams to think more strategically about the purpose of the TA role and the appropriateness of what is expected from them in terms of pupil outcomes. The process brought to the surface entrenched and unhelpful mindsets towards the use of TAs in general and in relation to the provision for pupils with SEN, which school leaders had begun to challenge. The positive experiences of participation in the project were used to develop and formalize new models of TA deployment, which were to be implemented across the school.

#### **Practice**

The fine-grained detail of TAs' interactions with pupils gathered in the DISS project helped teachers and TAs obtain a thorough understanding of the effects of ineffective types of talk (e.g. spoon-feeding). Following training, the quality of TAs' questioning techniques improved. Teachers also introduced strategies to support greater pupil independence and decrease dependency on adult support.

# Conclusion: How effective are TAs and how effective could they be?

The EDTA study was formulated on the basis of findings from one of the most credible research studies on TA impact ever undertaken (the DISS project). While we must stop short of making any claims relating P1: OTA/XYZ

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to academic progress, we are confident that the findings from this albeit small-scale study show that the type of innovative models, strategies and techniques schools developed to address the issues concerning TA preparation, deployment and practice are of the kind that are very likely to improve the efficiency and effectiveness of TAs.<sup>23</sup> A book of guidance for school leaders and teachers compiling the models, strategies and techniques developed in this project is currently in press.<sup>24</sup> That the schools involved in the study were able to make positive, and in some cases fundamental, changes to TA deployment without additional resources is also significant, given the austerity measures facing not only the UK education systems, but many more worldwide.

So, how effective are TAs? On the basis of the DISS study findings, we would have to conclude that under current arrangements, TAs are nowhere near as effective as they could be. But, as we have seen in the results of our recent developmental research, it is possible that by systematically addressing all the factors that comprise the WPR model chiefly TAs' preparedness, deployment and practice – schools can put into place the type of systems and models of deployment that we believe can lead to a demonstrable positive impact on outcomes for all pupils.

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