Double standards and first principles: framing teaching assistant support for pupils with special educational needs

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Double standards and first principles: framing teaching assistant support for pupils with special educational needs

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Teaching assistants (TAs) are part of a growing international trend toward paraprofessionals working in public services. There has been controversy over TAs' deployment and appropriate role when supporting the learning of pupils with special educational needs (SEN) in mainstream schools. Such debates have been transformed by findings from a large study of school support staff in the UK (the DISS project). The findings from this study show that TA support has a negative impact on pupils' academic progress, especially pupils with SEN. The findings render the current system of support for SEN highly questionable: TAs have inadvertently become the primary educators of pupils with SEN. This paper sets out the likely explanations for the negative effects in terms of three 'frames' – deployment, practice and preparedness – and then uses these frames to identify specific implications for pupils with SEN. We offer suggestions on how to make the most productive use of TA support.

Keywords: teaching assistants; paraprofessionals; inclusion; deployment; impact

Introduction

Teaching assistants[1] (TAs) are part of a growing international trend toward paraprofessionals working in different professional areas, often in public services (e.g., health and social care). There has been controversy over TAs' deployment and their appropriate role in supporting learning. But recent findings from the largest ever study of TAs (the Deployment and Impact of Support Staff (DISS) project), presented in this paper, have called into question current ways in which TAs are deployed. Other findings from the DISS project presented in this paper show that the implications of TA support are greatest for pupils with special educational needs (SEN) included in mainstream schools.

In this paper, we will use three 'frames' – deployment, practice and preparedness – to organise the presentation of findings from the DISS project and to explore the implications they have on the use of TAs to support pupils with SEN. We will see how the current system of support for pupils with SEN (in the UK at least) is highly questionable. We argue that the effects of this system, in terms of the impact on pupil outcomes, is best understood in the context of wider, interlinking factors, concerning the decisions made *about*, rather than by, TAs.

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We first summarise the context in which the DISS project was carried out, and then describe the distinctive research design. We provide the impetus for the main body of the paper by presenting key findings on the impact of TA support on pupils' learning. We then move on to the findings on TA deployment, practice and preparedness, which help to explain the impact results and expose the current system of support for pupils with SEN as inappropriate. We will consider the implications for pupils with SEN and how we might reconceptualise the work of TAs in relation to the support they provide for these pupils.

Background to the DISS project

The rise in support staff

In 2009, more than half of the school workforce in England and Wales were paraprofessionals, known collectively as support staff. The largest category of support staff in the UK are teaching assistants. The number of TAs has trebled since 1997 and they now make up about a quarter of the entire school workforce – about 181,100 people (Department for Children, Schools and Families [DCSF] 2009). A number of developments have contributed to the growth in the range and number of TAs since the mid-to-late 1990s, including the drive to include greater numbers of pupils with SEN in mainstream schools and the introduction of literacy and numeracy strategies. TAs were seen to be a key part of the drive to include greater numbers of pupils with SEN. In 2003, TA numbers increased further following the implementation of *The National Agreement*, a policy response to teacher recruitment and retention problems that had the twin aims of raising pupil standards and tackling excessive teacher workload via new and expanded support staff roles (Department for Education and Skills [DfES] 2003).

Broadly speaking, the effect of these initiatives has meant that the typical role of TAs in mainstream UK schools is to provide support to pupils, mostly but not exclusively, to those with learning and behavioural needs. TAs work mainly in classrooms by supplementing teacher input and providing more opportunities for one-to-one and small group work. Many TAs also work with pupils outside of the class, helping to boost the attainment of those who are not making the expected levels of progress in English and mathematics by delivering structured intervention programmes.

Previous research on TAs

Much of the existing research suggests a generally positive view about TAs and other classroom/pupil support staff, but until recently there were significant gaps in knowledge regarding their preparation and training, deployment and practice (e.g., their interactions with pupils). In addition, both in the UK and internationally, there is ambiguity about the TA role in relation to teachers and teaching, and the inclusion of pupils with SEN (in the UK, see: Bach, Kessler, and Heron 2004; Beeson, Kerry, and Kerry 2003; Cremin, Thomas, and Vincett 2005; Farrell, Balshaw, and Polat 1999; Mistry, Burton, and Brundrett 2004; Moran and Abbott, 2002; and Schlapp, Davidson, and Wilson 2003. For debates in Cyprus, Finland and the USA respectively, see: Angelides, Constantinou, and Leigh 2009; Takala 2007; and Finn et al. 2000 and Giangreco 2009). Government policy in the UK that has led to the sustained and significant increase in TA numbers has proceeded on the assumption that they help to raise standards for *all* pupils, not just those that TAs support – typically pupils with

SEN. Whilst there has been some research into the impact of TAs on teachers (for example, on teacher workload), there has been little systematic research on their impact on pupil outcomes. Such evidence as it exists tends to be derived from small-scale intervention studies, involving specific subjects and/or year groups (see Alborz et al. 2009). There is even less research over sustained periods (e.g., a school year) and under everyday classroom conditions.

The DISS study[2] was designed to help fill gaps in knowledge regarding TA deployment and the school and classroom processes through which their impact is maximised or inhibited. The broad aims of the DISS project were twofold:

(1) to provide an accurate, systematic and representative description of the types of support staff and their characteristics and deployment in schools, and how these changed over time; and
(2) to analyse the impact of support staff on teachers, teaching and pupil learning, behaviour and academic progress.

The study had a wide remit and focused on all types of school support staff and all pupils, not just those with SEN. Research was conducted on a large scale, over a pivotal five-year period (2003–08) that saw an increase in, and expansion of, paraprofessional roles in education. The project was funded by the Department for Children, Schools and Families (now renamed the Department for Education) and the Welsh Assembly Government. More information about the DISS project and full findings from the study can be can be found in Blatchford et al. (2008, 2009a and 2009b).

DISS methodology: a distinctive research design

In contrast to much of the previous research in the area of classroom paraprofessionals, the DISS project was longitudinal and conducted on a much larger scale. In addition it was naturalistic in design and did not involve a targeted intervention. Instead, the study captured everyday circumstances in schools, allowing an analysis of differences over time, by school type and by support staff category. Strand 1 comprised three waves of national questionnaire surveys of schools, teachers and support staff, generating data on support staffs' characteristics and employment. Strand 2 used a multi-method approach, integrating quantitative and qualitative analyses. It included a detailed longitudinal study of the effect of the amount of support received by pupils on their academic progress and approaches to learning (the Main Pupil Support Survey, or MPSS), as well as systematic observation studies of deployment and practice. The components of the DISS project data collection strands are explained in Table 1 below, together with the response rates.

Findings on the impact of TA support on pupils' learning and behaviour

It is worth noting that findings from teacher questionnaires consistently showed that, from the teachers' perspective, TAs and other support staff had a strong positive effect on their job satisfaction, levels of stress and workload – chiefly by relieving teachers of many of their administrative duties. Results from systematic observations also confirmed teachers' views that TAs in particular had a positive effect in classrooms, in terms of reducing instances of off-task behaviour or disruption and allowing more time for the teacher to teach.

Table 1.   DISS data collection methods and responses.

Strand 1	
Surveys	• Three biennial large scale, national questionnaires sent to mainstream and special schools • Responses from 6,079 schools, 4,091 teachers and 7,667 support staff, including 1,864 (24%) TAs

Strand 2	
Timelogs	• Support staff recorded which of 91 tasks they did every 20 minutes for one working day in the academic year 2005/06 • Respondents recorded duration of each task per 20 minute slot • 91 tasks were grouped into six categories for analysis • 1,670 responses from individual support staff, including 310 (19%) from TAs
Structured observations	• 27 TAs across 18 schools (nine primary; nine secondary) were shadowed for one day each • Predominant activities of teachers and TAs recorded every five minutes, with the context and task TA-supported pupils carried out • 1,500+ observations of teachers, TAs and pupils took place in 140 lessons, both in and away from the classroom
Systematic observations	• 686 pupils in Years 1, 3, 7 and 10 were observed for two days, across 49 schools (27 primary; 22 secondary) • Observations of TA-to-pupil interactions made in English, mathematics and science lessons • 34,400+ observations made in 10 second intervals
Case studies	• Observations carried out in 65 mainstream and special schools (30 primary; 21 secondary; 14 special) • 591 interviews conducted with: 65 school leaders; 105 teachers; 233 support staff (including 114 TAs); and 188 pupils (mainstream only)
Adult-to-pupil interaction	• 42 simultaneous digital voice recordings made of teacher-to-pupil and TA-to-pupil talk in lessons • 32 lesson-length transcripts used for analysis (16 teacher-to-pupil; 16 TA-to-pupil) • Sample for analysis restricted to recordings made in English and maths lessons • Utterances: 5,226 teacher; 2,295 TA
Main pupil support survey (MPSS)	• Survey of effects of TA support over a school year on pupils' Positive Approaches to Learning (PAL) (e.g., motivation, confidence) and academic progress • 8,200 pupils across 153 schools: 2,528 pupils and 76 schools in Wave 1; 5,672 pupils and 77 schools in Wave 2 • Seven year groups covered: Years 1, 3, 7 and 10 (in Wave 1) and Years 2, 6 and 9 (in Wave 2) • PAL outcomes: teacher ratings of whether pupils' PAL had improved, remained unchanged or decreased • Academic progress outcomes: attainment at start and end of school year, based on Key Stage assessments, National Curriculum levels and teacher assessments • PAL and academic progress predictors: teacher estimates of amount of time TA support received

However, results on the effect of TA support on pupils' academic progress, as revealed through the MPSS, are at variance with this generally positive view. There were two separate cohorts in which pupils in seven age groups overall were tracked over one year. The aim was to address the effects of TA support on what we called

pupils' Positive Approaches to Learning (which we explain below) and their academic progress[3] over a school year. The analyses used multi-level regression and controlled for factors known to affect progress, such as pupils' SEN status, prior attainment, eligibility for free school meals, English as additional language, deprivation, gender and ethnicity. The key findings are now summarised.

Effects of TA support on pupils' Positive Approaches to Learning

The first analysis assessed the amount of TA support in relation to the 'softer' types of pupil functioning in school that we referred to as Positive Approaches to Learning (or PAL). We amended a version of the Pupil Behaviour Rating Scale developed in the Class Size and Pupil Adult Ratio project (Blatchford, Edmonds, and Martin 2003). For the purposes of the DISS project, the instrument was adapted to produce one item and scale for each dimension. Dimensions were representative of those previously developed, which had proven reliability. There were eight dimensions:

- distractibility
- task confidence
- motivation
- disruptiveness
- independence
- relationships with other pupils
- completion of assigned work
- follows instructions from adults.

Teachers were asked near the end of the school year to describe change over the year on each of the dimensions in terms of a three-point scale:

(1) pupil had improved over the year
(2) pupil had stayed the same
(3) pupil had deteriorated over the year.

The results showed little evidence that the TA support received by pupils 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 PAL outcomes. At that age pupils with the most TA support had a noticeably more positive approach to learning.

Effects of TA support on pupils' academic progress

The second set of analyses assessed the effects of TA support on pupils' academic progress in core subjects over the course of a school year. There were two cohorts and seven year groups overall. In each year, progress was assessed in English, mathematics and science. The results were particularly striking (Table 2): 16 of the 21 results were in a negative direction and there were no positive effects of TA support for any subject or for any year group. In summary, those pupils receiving most TA support made less progress than similar pupils who received little or no TA support, even after controlling for factors likely to be related to more TA support (e.g., prior attainment and SEN status).

Table 2.   Effect of TA support on pupils' academic progress.

Wave	Year	English	Mathematics	Science
1	1	✓n	✓n	✗
	3	✓n	✓n	✗
	7	✓n	✓n	✗
	10	✓n	✗	✗
2	2	✓n	✓n	✓n
	6	✓n	✓n	✓n
	9	✓n	✓n	✓n

Notes: ✗ = No significant effect of TA support; ✓n = Significant negative effect of TA support.

Additional effects of TA support of academic progress of pupils with SEN

The analysis of TA support in relation to academic progress found that at Wave 1 there was not a clear difference between pupils with and without SEN. However, for the larger sample that followed in Wave 2 there was evidence that the effect of TA support on academic progress was more marked for pupils with higher levels of SEN.[4] This was found in Years 2 and 9 for English, and in Year 6 for English, mathematics and science. In general, the pupils with the highest level of TA support made less progress, and this trend was most marked for the pupils with the highest level of need (i.e., those on School Action Plus or with an SEN statement). The data in Table 3 are drawn from a larger table presented in Blatchford et al. (2009b), and show, for each group and each of the three school subjects, the regression coefficients for the full sample of pupils compared to the pupils who were classified as School Action Plus or SEN statemented. The figures (odds ratios) indicate the odds of a pupil receiving the highest amount of TA support (51+%) showing improved attainment over the school year relative to pupils receiving the lowest amount of TA support. An odds ratio of above one would mean that improved attainment is more likely, whilst an odds ratio of below one would imply that improved attainment is less likely. In addition to the odds ratios, the corresponding 95% confidence intervals are also reported in brackets, along with the p-values (in bold) indicating whether there was a significant effect of TA support (a p-value of less than 0.05 is usually regarded as evidence of statistically significant results). Only results for which a significant interaction between the amount of TA support and pupils with the highest level of SEN was found are presented.

In order to conceptualise these negative effects in another way, the figures in Table 3 can be translated into National Curriculum sub-levels: two units equate to one Nation Curriculum sub-level.[5] Although this kind of calculation rests on questionable assumptions and should be treated with caution, in general pupils are expected to progress by three national curriculum sub-levels every two years. Using this conversion, we can see that pupils with SEN are behind their peers by up to two sub-levels, as a result of TA support.

The data presented in Tables 2 and 3 give rise to two questions:

(1) what might account for the negative relationship between TA support and pupil progress; and
(2) why are these effects greatest for pupils with SEN?

Table 3. Effect of highest amount of TA support received by pupils.

Year	English		Mathematics		Science	
	All pupils	SEN only	All pupils	SEN only	All pupils	SEN only
2	−2.9 (−3.5, −2.3) **<0.001**		−2.0 (−2.9, −1.2) **<0.001**	−4.3 (−6.0, −2.5) **<0.001**	−1.6 (−2.7, −0.5) **0.01**	
6	−1.7 (−2.3, −1.1) **<0.001**	−2.9 (−4.3, −1.5) **<0.001**	−1.3 (−2.2, −0.4) **<0.001**	−1.8 (−3.5, 0.0) **<0.001**	−1.9 (−3.4, −0.4) **0.03**	−3.6 (−5.9, −1.2) **0.003**
9	−1.7 (−2.8, −0.6) **<0.001**	−1.6 (−3.5, 0.3) 0.16	−1.5 (−2.6, −0.5) **0.003**		−2.3 (−3.2, −1.3) **<0.001**	

Note: SEN = pupils on School Action Plus or those with a statement of SEN.

Accounting for the negative relationship between TA support and pupil progress

Perhaps the most obvious explanation for the negative relationship between TA support and pupil progress is that pupils who were given most TA support would have been likely to make less progress. The explanation here is therefore in terms of pre-existing characteristics of pupils. However, the key pupil characteristics that typically affect progress, such as SEN status, prior attainment or measures of deprivation, were controlled for in the statistical analyses, and so this explanation is very unlikely. The main reasons why pupils were given TA support were already taken into account. There may be other characteristics of pupils not accounted for in the analyses, but it is hard to conceive what these might be. To be of any consequence, any potential factor would need to be systemic across all year groups and subjects, and related to both attainment and TA support.

One other possible explanation for the negative relationship is that it may owe something to the different levels of TAs' experience and qualifications relative to teachers. The majority of TAs have qualifications at a lower level than that of teachers. Unlike teaching, there is no minimum entry-level qualification required for working as a TA. The Strand 1 surveys revealed that only 15% of TAs had a degree as their highest qualification; in contrast, teaching in the UK has been a graduate profession for many years. It was not possible to examine this potential explanation directly in the DISS study. We note, however, that in a major study on class size effects, background characteristics, including qualifications, were not found to have an impact on pupil progress (Blatchford et al. 2004).

Research designs that can provide a robust answer to questions about the impact of TA qualifications are difficult to construct as they would need to link the qualifications of individual TAs to the learning outcomes of individual pupils and account for any mediating factors. In their systematic literature review of the impact of TA training and professional development, Cajkler et al. (2007) concluded that the quality of reporting of the research designs in the studies included in their review was 'poor', and that the evidence of impact of TA training is instead 'often impressionistic, based on participants' reports, teacher or head-teacher perceptions'.

So, if pupil factors and TA qualifications and length of experience do not appear to be explaining the negative relationship between TA support and pupil progress, what is?

Accounting for the greater negative effects of TA support on the progress of pupils with SEN

In essence, the effects on academic progress and the greater effects on pupils with SEN seem to be best explained by findings from the DISS project on the deployment and practice of TAs, and the preparedness of teachers and TAs. In the discussion section later, we will describe the implications of the findings for pupils with SEN and how, in future, we might reframe paraprofessional support in order to ensure better outcomes for the pupils in most need.

Findings on the deployment of TAs

Although TAs now comprise nearly a quarter of the school workforce in England, there remains much debate about their appropriate role. There is ambiguity, because in one sense, TAs can help pupils *indirectly* by assisting the school in order to enhance teaching (e.g., by doing teachers' clerical tasks). However, the DISS study has shown that many TAs have a *direct* role supporting pupils (e.g., leading interventions for literacy and numeracy). Here we present the key findings from the DISS project that shows what it is that TAs do and the effects of their deployment. Further detail on the results from each of the data sources below can be found in Blatchford et al. (2009b), and for findings from the systematic observations, in Blatchford et al. (2009c).

Timelogs

The timelogs enabled us to build a broad picture of the work TAs do on a daily basis, based on the specific tasks and activities they carry out. The results show that TAs spent over half their day in a *direct* pedagogical instructional role, supporting and interacting with pupils (nearly four hours), exceeding time spent supporting the teacher and curriculum (1.4 hours) or performing other tasks (0.9 hours).

Structured observations of TAs and teachers

The main finding from the structured observations of teachers' and TAs' interactions with pupils revealed a striking difference between the contexts in which they mainly operate. Teachers' interactions with pupils were weighted towards whole class contexts in both primary (90% of observations) and secondary schools (80%); they tended to walk around the classroom as pupils worked, or addressed the class to teach, relay instructions, etc. Teachers in primary and secondary schools infrequently worked with pupils on a one-to-one basis or with groups.

In contrast, TAs interactions with pupils both inside and away from the classroom tended to be with individual pupils (82%) or groups (85%) (typically, these were small groups of up to five pupils). There was a difference between how TAs worked in primary and secondary schools: in two-thirds of the observations, primary TAs supported groups, whilst for almost the same proportion of time, TAs in secondary schools worked with individuals.

Systematic observations of pupils

Results from the systematic observations of pupils are based on a larger sample than the results for the structured observations above, and provide more detail on which pupils receive TA support. Firstly, we found that the majority of support provided by TAs, both in and away from the classroom, was for pupils failing to make the expected levels of progress (e.g., defined as School Action or School Action Plus) or those with a statement of SEN. Teachers provided less support to such pupils than did TAs. In a similar way, the structured observations also showed that TAs hardly ever supported pupils of middle or high ability. Table 4 below shows a particularly interesting relationship between adult support and pupil need: TA interaction with pupils increased – and teacher interaction decreased – as pupil level of SEN increased.

The second key finding from the systematic observations concerns the role of the pupil in interactions with adults. We found that pupils were nine times more likely to have sustained interactions with TAs than with teachers (44% vs. 5%). In this analysis, 'sustained' means that the pupil was the focus of the TA's attention for longer than the length of the observation interval (10 seconds). Furthermore, pupils were six times more likely to be actively involved in their interactions with TAs (63%) than with teachers (11%). 'Active' involvement here is defined in terms of beginning, responding to or sustaining an interaction with an adult during the 10 second observation interval. In contrast, for the vast majority of their interactions with teachers, pupils were one of a crowd (87%).

Findings on teacher and TA practice

We have seen that pupils' interactions with TAs are more sustained and interactive than those they have with teachers. In addition, data gathered from audio transcripts produced a more nuanced description of the 'practice' of TAs (i.e., the nature of TA-to-pupil exchanges). Previous studies have indicated some positive features of TA-to-pupil talk: often, it is less formal and more personalised than teacher-to-pupil talk; it aids pupil engagement and helps to keep pupils on-task, or at the least, compliant with behaviour standards in the classroom; and with a TA close by, pupils have access to immediate support and differentiation (see systematic reviews by Howes et al. 2003 and Alborz et al. 2009; see also Fraser and Meadows 2008).

But what does close examination of the talk between TAs and pupils reveal? As we described in the section on the DISS methodology, analysing transcripts of a sample of simultaneous digital voice recordings of teacher-to-pupil talk and TA-to-pupil talk was a unique component of the DISS study, and the findings add depth to what is already known about TA-to-pupil talk.

There were several broad ways in which teacher-to-pupil and TA-to-pupil talk differed. In summary, it was found that teachers spent more time explaining concepts, provided more feedback, linked the current lesson to pupils' prior knowledge, and

Table 4.   Interaction by pupil level of SEN.

	Teacher	TA
Non-SEN	**55%**	27%
School Action	24%	32%
School Action Plus or SEN statement	21%	**41%**

attempted to promote pupils' thinking and cognitive engagement in a task. In contrast, compared with teachers, TAs were more likely to prompt pupils. Of concern were the findings that TAs' explanations were sometimes inaccurate or confusing, and that TAs frequently supplied pupils with answers. There were two over-arching characteristics of TAs' talk:

(1) it was frequently more concerned with *task completion*, rather than ensuring that any learning and understanding had taken place; and
(2) TAs' interactions with pupils could be broadly characterised as *reactive* – unlike teachers', who had planned and were guiding the lesson with learning aims in mind, TAs found themselves responding to the needs of the pupil and the lesson in the moment.

For more detailed findings from the DISS project on the similarities and differences between teacher-to-pupil and TA-to-pupil talk, readers are recommended to read Rubie-Davies et al. (in preparation) and Radford, Blatchford, and Webster (in preparation).

Findings on preparedness

We use the term 'preparedness' to describe two facets of TAs' work: firstly, the training and professional development of TAs and the teachers in whose classes they work (e.g., how teachers manage and organise the work of TAs); and secondly, the day-to-day aspects of preparation (e.g., time for joint planning and feedback between teachers and TAs). Once again, we can only outline the key findings on preparedness in this paper, but more detail on the aspects discussed below is available in several reports from the DISS project (see Blatchford et al. 2008, 2009a and 2009b).

Teacher and TA training

Overall, the DISS project Strand 1 surveys found that the majority of support staff attended Inset (in-service training) or other training, and that satisfaction with training was high. However, there was relatively less satisfaction with the opportunities available for training. Given the growing presence of TAs in UK classrooms and their role in supporting teacher-led learning, it might be expected that training to help teachers work with TAs would feature as part of pre-service and/or Inset training. However, findings from each wave of the Strand 1 teacher questionnaire consistently showed that 75% of teachers had not had any such training. This is despite the fact that over the duration of the study, a greater proportion of teachers became involved in directly training TAs and other support staff; indeed, by Wave 3, over half of teachers (55%) trained support staff.

Over half of class teachers (54%), some of whom have a responsibility for SEN (such teachers are known in the UK as SEN co-ordinators), line managed one or more TAs. Yet, once again, a high proportion of these teachers who acted as line managers – two-thirds – had not had any training for this role. Teachers who had received training in relation to working with and/or line managing TAs had mixed views about it. For both types of training, the majority of respondents said it lasted only one day or less, and only half rated the training as useful.

Day-to-day preparation

The second aspect of preparedness concerns the preparation that TAs receive from teachers in order to support pupil learning. A main finding from the study was that 75% of teachers reported having no allocated planning or feedback time with the TA or TAs with whom they worked. The situation in secondary schools was more troubling: 95% of teachers claimed that they had no such time.

Evidence from the questionnaires and the case studies showed that communication between teachers and TAs tended to be *ad hoc*, taking place during lesson changeovers, before and after school, and during break and lunch times. In a great many cases, this communication relied on the goodwill of TAs. Another key finding was that at Wave 3, 71% of support staff worked extra hours, largely voluntarily, and that half were not paid for this extra work. TAs were prevalent among this group and very often used this unpaid time to meet with teachers.

Data from the case studies were particularly useful in providing a better understanding of preparedness. Interviews with TAs revealed that many felt under-prepared for the tasks they were given. There was little or no time to liaise prior to the lesson and TAs described how, in most cases, they have to 'tune in' to the teacher's delivery in order to pick up vital subject and pedagogical knowledge, and information and instructions relating to the tasks they supported pupils with. As noted above, feedback after lessons is rare, and TAs described being frustrated when feedback they did provide to teachers about pupils was not utilised or acted on.

Discussion: reframing paraprofessional support for SEN

Findings from the DISS project show that TAs in the UK have become the primary educators of pupils with SEN, and that there is a strong negative effect of TA support on the academic progress of these pupils. These findings prompt us to ask serious questions about the current system of supporting pupils with SEN in the UK. The findings from the DISS study highlight the 'double standard' described by Michael Giangreco (2003) following his extensive work with colleagues on the effects of para-professional support in the USA: 'Most educators would consider these situations [e.g., primary instruction by a TA] unacceptable for students without disabilities, yet these situations occur all too frequently for those with disabilities'.

In this discussion section, we use the themes of deployment, practice and preparedness as frames through which we will examine the implications of TA support for pupils with SEN, and suggest how we might reconceptualise that support. We argue that before educators and policymakers can conceive of what reform is required, we must return to 'first principles' in our expectation of TAs and the role they have in schools.

Frame 1: deployment

Deployment is the first frame through which we can begin to reconceptualise paraprofessional support for pupils with SEN. To summarise the key findings: it is clear that TAs have a direct pedagogical role supporting and interacting with pupils, usually in one-to-one and group contexts, and usually with pupils with SEN. The interactions pupils with SEN have with TAs are much more sustained and interactive than those they have with teachers, where pupils tend to be passive.

On the face of it this kind of support might seem pedagogically valuable, but we also found there were serious and unintended consequences. A main effect of the current and widespread model of TA deployment is that it leads to pupils with SEN becoming separated from the teacher and the curriculum. These pupils miss out on everyday teacher-to-pupil interactions. (They also miss out on peer-to-peer interactions). As such, TA support for pupils with learning needs more accurately represents an 'alternative' to the teacher; it is not, as it is often described, 'additional' to teacher input. Many TAs are given the responsibility for leading pupil tasks and interventions (e.g., literacy booster programmes), often away from the classroom. Some TAs even plan and assess these tasks and interventions. When pupils with SEN work with TAs away from the class, it is routinely on differentiated or different tasks; therefore, they spend less time in mainstream curriculum coverage.

It seems clear that TA employment and deployment has become inextricably linked to the inclusion of pupils with SEN in mainstream schools. TAs enable pupils with SEN to be included in mainstream classes and access learning, and – as we are frequently told – without them schools would struggle to cope. However, the DISS project has shown that TAs have inadvertently become the primary educators of these pupils, and that, as a consequence, greater distance is put between pupils with SEN and the teacher, and TA supported pupils make less academic progress.

How then might we reframe TA deployment with regard to pupils with SEN? The DISS project has called for pupils in most need to have more of teachers' time and to not be routinely supported by TAs. Teachers are, after all, trained classroom professionals with legal responsibility for pupils' learning. Also, teachers must take back the responsibility for lesson-by-lesson curriculum and pedagogical planning for all pupils, and in particular, the intervention programmes given to TAs to deliver away from the direct supervision of the teacher. Teachers must do more to ensure that learning that occurs outside the classroom is not remote by drawing it into their own whole class teaching.

Frame 2: practice

As the findings on deployment make clear, the majority of TAs' interactions are with pupils with SEN. Whilst the length of pupils' one-to-one interactions with TAs are longer, more sustained and more interactive compared with their interactions with teachers, it is equally clear that the *quality* is questionable: TAs are more concerned with task completion than with learning and understanding, and inadequate preparation leads to TAs' interactions being reactive rather than proactive. In addition, Radford, Blatchford and Webster (in preparation) found that a key difference between teacher-to-pupil talk and TA-to-pupil talk is that teachers generally 'open up' the pupils whereas the TAs 'close down' the talk, both linguistically and cognitively. TAs do not, therefore, make the best use of the extended, more frequent interactions they have with pupils, compared with teachers: 'TAs' interactions fail to foster active pupil participation which has longer-term implications for creating passive learners' (Radford, Blatchford and Webster in preparation). Practice is the second frame through which we can rethink the role of TAs in SEN provision.

These findings add another layer to our understanding and interpretation of the results on the effect of TA support on the academic progress of pupils with SEN. As pupils with SEN receive more support from TAs, it is likely that the more marked

effects on progress can be explained in terms of these lower quality interactions. This again reinforces the need for such pupils to have more teacher time, not less.

We recommend that teachers need to monitor closely TA-to-pupil interaction and modify these interactions where appropriate. Knowing how to do this with sensitivity requires good people management skills; so training – as we describe below – is an essential component of the holistic approach to improving TA practice. But there is a more fundamental point that arises from the findings on practice. These findings, seen in light of what we know about TA deployment, feed into debates about the ambiguity about the TA role in relation to teachers and teaching.

The DISS findings impress upon us an urgent need to ask serious questions regarding the appropriate role of TAs. It should be noted that not all pupils who are allocated TA support receive the same input. Different pupils will receive different 'mixes' of support: for example, in certain subjects and certain contexts (e.g., on a one-to-one basis), some pupils will receive more input from a teacher than they do from a TA. The most effective forms of input will depend on sound classroom management and inclusive practice on the part of the teacher. The DISS findings, however, suggest that the models of TA deployment that allow the more effective types of input to take place are not evident in the greater part of teacher practice. On the basis of these findings, we argue that the TA's role has evolved – quite unintentionally – in such a way that TAs have become the *de facto* primary educators of pupils with SEN. TAs are placed in situations each day in which they have to make pedagogical decisions beyond their expertise, and the effects of this are more damaging for the pupils who struggle most.

In the UK at least, the development of the TA role has proceeded on the basis of unproven assumptions about impact (i.e., that TA support raises standards, and indeed is necessary if pupils with SEN are to make progress). Findings from the DISS project offer a serious challenge to the status quo and prompt us to reconceptualise the TA role on elemental grounds. In short, we need to go back to first principles.

Our first consideration might logically be to ask whether TAs *should* have a pedagogical role at all? If the answer is yes, we need to work out what this appropriate pedagogical role should be. It is our view that this has been given far too little attention, even though it is central to the work of a group of personnel who now comprise nearly a quarter of the school workforce in England. If we take the view that they should not have a pedagogical role, then we must decide: what instead is the appropriate role for TAs?

If we consider that the evidence from the DISS project and other studies that have shown TAs have a limited or detrimental effect on pupil progress (see Gray et al. 2007; Klassen 2001; Reynolds and Muijs 2003) is enough to suggest that TAs should not have a pedagogical role, what might we considered to be a valid alternative? Giangreco (2009) argues that any instruction delivered by paraprofessionals should be 'supplemental, rather than primary or exclusive', so that they are not required to make pedagogical decisions. One way in which we might conceive of this alternative *non*-pedagogical role is to build on the DISS findings on Positive Approaches to Learning (PAL). TAs may be more effective in terms of having an indirect effect on pupil learning by helping with classroom organisation, limiting negative and off-task behaviour, and ensuring lessons run more smoothly. TAs could support pupils' development of what are sometimes referred to as 'soft' skills – confidence and motivation, dispositions toward learning and facilitating collaborating between pupils – that many now see as important for work in school, but also beyond. Such factors were measured in the DISS study in the PAL survey, and a consistently positive effect of TA support

was found for pupils in Year 9. Further research is required to shed light on the practice that produced these outcomes in order to inform TA development.

If, on the other hand, we take the view that TAs do have a potentially valuable contribution to make to pupils' academic development, and that they can be deployed in face-to-face pedagogical interactions, then the DISS findings make it clear that we need more clarity over just what it is expected of them. The potential of TAs to impact pupil learning directly in a positive direction can be seen in several studies that collected systematic data on the impact of TAs on pupil progress in learning interventions – something that the DISS project was not designed to do. Reviews by Alborz et al. (2009) and Slavin et al. (2009) show that studies that examined the effect of TAs who have a pedagogical role delivering specific curricular interventions (mostly for literacy) tend to have a direct positive impact on pupil progress when TAs are prepared and trained, and have support and guidance from the teacher and school about practice.

This evidence for the effects of TA-led intervention sessions on pupil learning is positive, but the DISS project data shows we need to ask how commonly these take place in everyday school contexts. The structured observations found that leading interventions only accounted for about around 40 minutes of a TA's day; for the majority of the time, their pedagogical role was less structured and less precise and exposed weaknesses in their subject and pedagogical knowledge. Therefore, if TAs are to retain a pedagogical role, we argue that it should be limited to delivering structured and well-planned interventions, and they must be properly trained and prepared for it. Interventions should ideally be on a one-to-one basis, but if delivered in groups, the number of pupils per group should be limited.

In order to avoid the inadvertent drift in which many TAs have become the primary educators of pupils with SEN, the development of a pedagogical role must be grounded in good evidence derived from further research. We require a solid evidence base if we are to ensure that the effect of TA support on pupils is in a positive direction. At the sharp end of practice, what these two broadly defined TA roles have in common is the need for training, and it is to preparedness – the third of our frames for reconceptualising paraprofessional support for SEN – to which we now turn.

Frame 3: preparedness

The issues relating to preparedness outlined above are deeply connected to those relating to deployment and practice. The DISS project found that many TAs go into lessons 'blind', unaware of what teachers will ask them to do in order to support the learning and engagement of pupils with special needs. This is largely due to a lack of time for teacher-TA communication prior to lessons and this – together with a lack of training – has a bearing on learning outcomes for pupils with SEN.

TAs, as the primary educators of pupils with SEN, are routinely deployed to support such pupils in ways that separate them from everyday interactions with the teacher. TAs perform their role with little guidance from teachers because:

(1) teachers do not have the time to prepare TAs prior to the lesson; and
(2) even where they do, they lack the formal training to know how to make best use of it and to impart information effectively.

Class teachers and TAs have a collective deficit of knowledge concerning SEN. Neither are adequately trained or prepared to support the needs of pupils with SEN (Anderson and Finney 2008; Lamb 2009; Norwich and Lewis 2001), and where TAs have received training – no matter how scant – there is a tendency for teachers to relinquish instruction of these pupils to TAs. Giangreco (2003) calls this the 'training trap'.

We recommend, on the basis of the DISS findings, that more attention be given to pre- and in-service training for both teachers and TAs, and it is worth noting that since the publication of the DISS project findings in September 2009, the British government has published plans to investment for training and resources for teachers relating to SEN (Department for Children, Schools and Families [DCSF] 2010).

We stated earlier that, if we accept that TAs should or do have a pedagogical role, it should be limited to delivering structured and well-planned interventions to pupils of lower ability and those with SEN. Therefore, TAs will require specific formal training to teach these sessions. A key point to consider in developing such training will be to overcome the intuitive, but mistaken, assumption that less pedagogical skill is required when teaching pupils with SEN; if anything, a higher level of skill is needed.

The DISS project has called for more joint planning and feedback time for teachers and TAs, especially in secondary schools. Therefore, the need to prepare teachers to work with and manage TAs through formal initial training and professional development is paramount; there is little use in providing more time for them to liaise with TAs if it results in the same models of deployment and practice that lead to negative learning outcomes.

Even if the models of deployment do not change (that is, pupils with SEN continue to be primarily supported by TAs rather than teachers), there remains a clear need for thorough pre-lesson preparation. The DISS findings relating to practice show how TAs operate in the moment: much of their interaction with pupils is reactive, largely due to the lack of preparation and, arguably, considerable gaps in their own subject and pedagogical knowledge. Teachers, therefore, have a duty to brief the TAs fully who work in their place, supporting the learning of the most needy pupils. Elsewhere we have developed some practical solutions for teachers concerning lesson planning and sharing subject and pedagogical knowledge (Webster et al. 2009). Radford, Blatchford and Webster (in preparation) suggest that one relatively straightforward way in which teachers can help to improve TAs' practice is by 'sharing their own higher order skills and knowledge and helping TAs to develop questioning techniques that open up interactions with pupils and to know how to provide quality feedback'. Finally, if TAs are to continue to teach interventions, schools must consider giving them paid non-contact time of their own for preparation in order to avoid trading on their goodwill.

Conclusions

TAs are the principal means by which mainstream schools accommodate pupils with SEN. The DISS project has revealed that this arrangement has serious unintended negative effects on supported pupils' academic progress, although we stress that to hold TAs responsible for the impact of the support they provide is far too simplistic. To demonstrate this, we have presented a contextualised picture of how TAs' practice and the effects of the support they provide needs to be seen in terms of the decisions

made about their deployment and preparedness, made by school leaders and teachers, which are outside the control of TAs.

We have argued that in order to address the double standard that TA support has inadvertently come to represent within the existing SEN provision, we must return to first principles in order to establish their appropriate role.

The three frames of deployment, practice and preparedness were used to sharpen our focus, revealing the implications of TA support for pupils with SEN and helping us identify recommendations for improving the current system of support for SEN. Yet what underpins these recommendations is the fundamental question of whether TAs should continue to have a pedagogical role, teaching, supporting and interacting with pupils with SEN. If we decide that they should retain this role, it is clear that it should be more tightly defined and supported by better training and monitoring; at the least, the TA's role should be restored to a secondary, not primary, educator role.

If we conclude they should have a non-pedagogical role we must decide what this role should consist of. Further research is needed in order to answer this question; for example, a study that would develop and then evaluate school-based strategies for the effective deployment of TAs to support pupils with SEN.

Acknowledgements

Notes

1. In line with common usage, we use the term 'teaching assistant' (TA) to cover equivalent classroom based paraprofessional roles, such as 'teacher aide' and 'paraeducator' in the USA, and 'learning support assistant' and 'classroom assistant' in the UK. We also include 'higher level teaching assistants' in this definition.
2. Research reports and other publications stemming from the DISS project are available to download from http://www.schoolsupportstaff.net.
3. Measures of pupil attainment were collected at the end of the year ('outcome' scores) and at the beginning of the year ('baseline' scores). This was repeated for each of the three subjects in each of the seven year groups in the study, and so different measures had to be used to cover the wide age range involved. Government-collected assessments in English, mathematics and science were used, comprising end of Key Stage assessments, optional tests and teacher assessments, with the addition of predicted GCSE grades for the end of Year 10 scores. An advantage of these assessments is that they related very closely to the curriculum areas covered in schools. As baseline scores were controlled for, the statistical analysis addressed relative progress of pupils over the year.
4. In this paper, we have banded the three commonly used levels of SEN status used in England and Wales in following way: School Action is the first level of SEN; School Action Plus is the second level; and having a statement of SEN is the highest level. Almost all pupils in special schools in England and Wales will have an SEN statement. The key test for initiating School Action, moving a pupil on to School Action Plus, or considering whether a statutory assessment – leading to a statement – is necessary, is whether the pupil is making adequate progress. The SEN Code of Practice (Department for Education and Skills 2001) defines 'adequate progress' and lists different kinds of progress, depending on the starting point and expectations for a particular pupil. Essentially, what is considered to be adequate progress for a particular pupil is down to the teacher's professional judgement.

5. National Curriculum levels and sub-levels are the commonly understood indicators of pupil attainment used in England and Wales. There are eight National Curriculum levels between Year 1 and Year 9. One National Curriculum sub-level is equal to one-third of a National Curriculum level. So, in essence, there are 24 sub-levels between Years 1 and 9.

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