Preparing Teaching Assistants for Including All Learners

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Summary and Keywords

The early 21st century has seen a considerable increase in both the number and presence of teaching assistants (TAs) and learning support staff in classrooms. In the United Kingdom and elsewhere, TAs have assumed responsibility for teaching lower-attaining pupils and especially those with special educational needs or disabilities (SEND). This drift has occurred in a largely uncritical way and has attracted little attention because of the attendant benefits additional adult support has for teachers. However, evidence from research in the United Kingdom and the United States have revealed troubling and unintended consequences of this arrangement in terms of impeding pupil progress and increasing the likelihood of pupils' dependency on adult support. Of particular concern are research findings that show how a high amount of support from TAs for pupils with high-level SEND leads to a qualitatively different experience of schooling compared to pupils without SEND, particularly in terms of having fewer interactions with teachers and peers.

Heavy reliance on the employment and deployment of TAs to facilitate the inclusion of pupils with often complex learning difficulties in mainstream settings can be seen as a proxy for long-standing and unresolved questions about how teachers are prepared and trained to meet the learning needs of those with SEND and the priority school leaders give to SEND. Future efforts to meaningfully educate pupils with SEND in mainstream schools must attend to teachers' confidence and competence in respect of this aim. In addition, extensive and collaborative work with schools in the United Kingdom is offering a more hopeful model of how TAs can supplement this endeavor. Improving how teachers deploy TAs and how TAs interact with pupils, together with addressing persistent problems relating to the way TAs are trained and prepared for their roles in classrooms, schools can unlock the potential of the TA workforce as part of a wider, more inclusive approach for disadvantaged pupils.

Keywords: teaching assistants, special educational needs, pupil interaction, scaffolding, paraeducators, paraprofessionals, pupil independence, professional development

Introduction

Many mainstream schools in many jurisdictions worldwide employ additional adults to support the inclusion of children and young people with special educational needs or disabilities (SEND; Masdeu Navarro, 2015). However, research from the United Kingdom and elsewhere has raised questions about the educational effectiveness of this model of pupil support (Blatchford, Russell, & Webster, 2012; Giangreco, Doyle, & Suter, 2014). This article discusses the role and impact of teaching assistants (TAs) in inclusive classrooms, and attributes some of the challenges relating to ensuring consistent and positive impact to what we call the "persistent problem of preparedness." With particular reference to the United Kingdom, we explore the evidence on the training and professional development of teachers and TAs and the key aspects of daily planning and preparation. On the basis of our extensive collaborative and developmental work with schools, we argue for a reconceptualization of the TA role and for models of deployment that promote pupil independence. We outline how schools can rethink TAs' training and preparation requirements in support of their role and offer practical strategies for implementation.

Background

Around 1.2 million pupils in England have SEND. Around a quarter of pupils with SEND have needs entitling them to an Education, Health and Care Plan (EHCP), which is a legal document setting out pupils' needs and the support they should receive. Prior to 2014, another legal document called a Statement performed the same function. The proportion of the overall pupil population with a Statement or EHCP has remained stable at 2.8% since 2010, rising slightly to 2.9% in 2018, and a marginally greater proportion of these pupils are educated in mainstream schools (41.9%) compared with special schools (41.5%; Department for Education [DfE], 2018B).

Concurrent with the long-term, international trend toward inclusion, the increase in the number of pupils with SEND educated in mainstream UK schools since the 1990s has been accompanied and assisted by an increase in the number of support paraprofessionals. Schools in Australia, Italy, Sweden, Canada, Finland, Germany, Hong Kong, Iceland, Ireland, Malta, New Zealand, South Africa, and the United States have experienced large increases in this section of their education workforces (Giangreco et al., 2014). Policies of inclusion and provision for children and young people with learning difficulties and disabilities in mainstream settings in other Organisation for Economic Co-operation and Development (OECD) countries rely heavily on this "non-teaching" workforce (Masdeu Navarro, 2015).

Known variously as teaching assistants, learning support assistants, or classroom assistants in the United Kingdom and as paraeducators, paraprofessionals, teacher aides, and education assistants in the United States, Australia, and New Zealand, this article refers to all those with equivalent classroom-based support roles collectively as teaching assistants (TAs). No education system in the world has expanded both the number and role of

TAs to quite the extent that England has. The number of full-time equivalent TAs in mainstream schools has almost tripled since 2000, from 79,000 to 224,000 in 2017. TAs comprise 28% of the school workforce in England (DfE, 2018A). The national annual spend on TAs is around 5 billion pounds (Webster, Russell, & Blatchford, 2016). On the face of it, this might seem to be a worthwhile investment. School leaders, for example, report that a main reason for the increase in TAs is that inclusion policies would be impossible to implement without them (Blatchford, Russell, & Webster, 2012).

The Impact of Teaching Assistants on Learning

The evidence on the impact of TAs on learning outcomes can be split in terms of the two key ways in which they are deployed to work in schools: (i) delivering structured intervention programs and (ii) providing support in mainstream classrooms alongside the teacher, which typically happens outside of the classroom during and away from mainstream lessons. Here, we summarize the evidence base with respect to each of these areas, starting with structured interventions.

Structured Interventions

The area of research showing the strongest evidence for TAs having a positive impact on pupil attainment relates to their role in delivering structured intervention programs in one-to-one or small group settings. This research shows a consistent, moderate impact on attainment of approximately three to four additional months' progress over an academic year (Higgins et al., 2013; Slavin, Lake, Cheung, & Davis, 2008; Slavin, Lake, Davis, & Madden, 2011). The average impact of TAs delivering structured interventions is, perhaps unsurprisingly, less than that for interventions delivered by experienced qualified teachers, who typically provide around six additional months' progress per year (Higgins et al., 2013; Slavin et al., 2011). However, teacher-led interventions tend to be expensive to deliver, requiring additional, and often specialist, staff. TA-led interventions typically produce better outcomes than volunteers who deliver interventions; these effects are typically one to two months' additional progress (Slavin et al., 2011).

Crucially though, the positive effects are only observed when adults work in structured settings with high-quality support and preparation (Sharples, Webster, & Blatchford, 2015). The research investigating TAs delivering interventions is small but growing. The majority of this research has been conducted internationally, and is small-scale work involving between 30 and 200 pupils. However, the emerging findings from larger-scale evaluations in the United Kingdom, funded by the Education Endowment Foundation (EEF), are showing consistency with the international picture (Sharples, 2016). Overall, more research has been conducted on literacy interventions than for mathematics, although positive impacts are observed for both.

Studies showing positive impacts on learning outcomes tend to measure learning outcomes at the end of the intervention (Sharples et al., 2015). Less is known about the extent to which any immediate, positive improvements translate into long-term learning and

performance on national tests. Encouragingly, an evaluation of Abracadabra, a 20-week literacy program delivered by trained TAs to small groups of pupils in Key Stage 1, showed that pupils who participated in the program continued to do better than their peers in the comparison group a year after the intervention finished (as measured by national standardized tests; Martell, 2018). Studies of a reading intervention for similar aged children have also found residual impacts (Savage & Carless, 2005, 2008).

TAs in Everyday Classrooms

The evidence on TA-led structured interventions stands in contrast to the research on the effect of classroom deployment (Sharples et al., 2015). Where TAs are used in more informal, unsupported instructional roles, there is little or no impact on pupil outcomes. Much of the research investigating the use of TAs in everyday classroom environments is on a small scale and describes what TAs do. Almost all of it has some focus on how TAs facilitate the inclusion of children and young people with SEND (Alborz, Pearson, Farrell, & Howes, 2009; Sharma & Salend, 2016). Early research in this field looked at teamwork between teachers and other adults, such as parent helpers and TAs (Geen, 1985; Thomas, 1992), and led to a useful collaborative study with schools on alternative ways of organizing classrooms (Cremin, Thomas, & Vincett, 2005). Both the qualitative and quantitative work on impact relies principally on impressionistic data from school staff.

Findings from large-scale systematic analyses investigating the effects of TAs on learning outcomes are particularly revealing. Experimental studies are rare, but Finn, Gerber, Farber, and Achilles (2000) found no differences in the outcomes for pupils in classes with TAs present. Longitudinal research in the United Kingdom has produced similar results (Blatchford, Russell, Bassett, Brown, & Martin, 2004).

There are very few randomized controlled trials (RCT) that investigate the impact of TAs in everyday classrooms, but two conducted in Denmark have found mixed effects (Masdeu Navarro, 2015). One study involving 125 schools found no strong effect on learning, but positive impact on teachers' job satisfaction and workload. A second RCT involving 105 primary schools measured the impact of qualified teachers working as teacher aides and unqualified teacher aides, compared to a control group. There was a positive impact on reading for both types of aide, but not on math. However, there were insufficient data on school leaders' decision making and classroom practices to conclude what drove these effects.

Secondary analyses of school expenditure have suggested the expenditure on TAs is positively correlated with improved academic outcomes (Brown & Harris, 2010; Hemelt & Ladd, 2016; Nicoletti & Rabe, 2014). However, these analyses of TA impact do not adequately rule out the possibility that other school factors might explain the correlations found, and the conclusions drawn are not supported by the evidence collected—in particular, they do not include data on what happens in classrooms.

The largest and most in-depth study ever carried out on the use and impact of TA support in everyday classroom environments is the multimethod Deployment and Impact of Support Staff (DISS) project (Blatchford, Russell, & Webster, 2012). Unlike other studies, it linked what TAs actually do in classrooms to effects on pupil progress. The results show that TAs have a predominantly pedagogical role and spend much of their time supporting pupils with SEND and lower-attaining pupils. This has obvious benefits: it allows hard-pressed teachers to devote time to the rest of the class in the knowledge that pupils in most need are given potentially valuable individual attention by TAs. There are additional benefits in terms of reductions of teacher workload. But unfortunately, the DISS project also found there are serious unintended consequences, including a negative relationship between the amount of TA support received and the progress made by pupils (n = 8,200), particularly, pupils with the highest levels of SEND (Webster et al., 2010). The more support pupils received from TAs, the less progress they were found to make. This finding was not explained by pupil characteristics such as prior attainment, SEND status, or income deprivation, and was found consistently over seven-year groups in mainstream primary and secondary settings.

If pupil factors cannot explain the negative relationship between TA support and pupil progress, what can? The wider pedagogical role (WPR) model (Webster et al., 2011) was developed to explain the DISS project results. It was built on the basis of an extensive data collection effort, which combined results from classroom observations, staff surveys and interviews, and audio recordings of lessons (Blatchford, Russell, & Webster, 2012). The WPR model serves both explanatory and developmental purposes. It has provided the structural and theoretical underpinning for decision making and action, and has been used as the basis for official government-approved guidance to schools in England (Sharples et al., 2015), Western Australia (Government of Western Australia, 2018) and New Zealand (Ministry of Education, 2018).

There are three main components of the WPR model: deployment, practice, and preparedness. The main explanation for the DISS project results on attainment appeared to be the way TA-supported pupils spent less time interacting with the teacher and became separated from the teacher and curriculum (deployment). The DISS project concluded that the least qualified staff were, in effect, assigned primary educator status for the pupils in most need. It is perhaps therefore unsurprising that these pupils made less progress than their peers. It is difficult to avoid the conclusion that the pupils who receive high amounts of support from TAs receive a different, and less effective, pedagogical diet (practice). TAs assumed much of the responsibility for moment-by-moment pedagogical decision making for these pupils. They provided a high amount of verbal differentiation, in part to make classroom teaching accessible but also to compensate for the teachers' failure to set appropriate tasks. These findings from the DISS project have been validated in further work that has focused specifically on pupils with high-level SEND educated in mainstream settings (Webster & Blatchford, 2015, 2018). While TAs' interactions with pupils are well-intentioned, their nature and appropriateness is qualitatively different to teacher-to-pupil talk. More detailed studies of adult-pupil interactions have found that TAs tend to close talk down rather than open it up, as teachers do. TAs are more likely to

focus on task completion and to provide answers or very high levels of support (Radford, Blatchford, & Webster, 2011). Elsewhere, analyses by Rubie-Davies, Blatchford, Webster, Koutsoubou, and Bassett (2010) found that TAs are more concerned with task completion and correction than learning. Similar issues have been found in literacy intervention sessions led by TAs (Bosanquet & Radford, 2018).

The DISS project findings are best explained, therefore, in terms of situational and structural factors within which TAs work but, crucially, over which they have little or no influence. This is an important point because the effects of TA support are consequences of decisions made *about* TAs, not decisions made *by* TAs. Writ large in the DISS project and other research on the effectiveness of TAs is the issue of preparedness, which is the main focus of this article.

Gaps in the Evidence

Before we unpack and explore what we call the "persistent problem of preparedness," we briefly consider the gaps in the evidence on TA impact. The first matter to address is the impact of TAs on nonacademic outcomes. It can be argued that the impact of TAs is felt in other important ways, unrelated or indirectly related to learning. The DISS project found no evidence that support from TAs impacted pupils' 'positive approaches to learning', which included task confidence, motivation, independence, and relationships with other pupils. Other research points to concerns that TAs can encourage dependency because they act in ways that do not encourage pupils to think for themselves (Moyles & Suschitzky, 1997). Evidence shows that over-reliance on one-to-one TA support leads to a wide range of detrimental effects on pupils in terms of interference with ownership and responsibility for learning and separation from classmates (Giangreco, 2010). Overall, however, the evidence of the impact of TAs on what we might call "soft" outcomes is quite thin and largely based on impressionistic data. It is an area to which researchers need to pay more attention.

Arguably, in light of the DISS project, the most salient gap is in terms of the impact of the most commonplace model of TA deployment: providing support in everyday classrooms. At the time of writing, there is no substantive evidence showing a positive impact. There has been good observational evidence, however, from the Effective Deployment of TAs (EDTA) project, which demonstrated the positive impact of changes to school and classroom processes made in line with guidance by the authors, but no measures on pupil attainment were taken as part of this research (Webster, Blatchford, & Russell, 2013).

The underlying model developed through the EDTA project and the written guidance (Webster et al., 2016) has been subjected to further refinement and extensive professional validation through collaborative work with schools via the Maximising the Impact of Teaching Assistants (MITA) school improvement and professional development program. A trial of MITA is currently underway to fully test the extent to which reforming TA deployment, practice, and preparation in everyday classrooms can improve pupil attainment and engagement (EEF, 2018). This large-scale trial involving 128 schools directly address-

es the gap in research relating to TA deployment in classrooms and pupil attainment and will report in 2020.

The Persistent Problem of Preparedness

Preparedness has a direct bearing on the effectiveness of TA deployment and practice. The WPR model defines "preparedness" as:

1. The training and professional development of teachers and TAs: how teachers manage and organize the work of TAs; and how TAs are trained to support learning.
2. Day-to-day preparation: time for joint planning, preparation and feedback between teachers and TAs, before and after lessons.

The DISS project revealed a general lack of preparedness for both teachers and TAs in relation to both of these aspects, which contributes to our explanation of why TA support negatively affects pupils' academic progress. Teachers lack training on how to organize and manage TAs, although they are increasingly involved directly in their training and line management. The problems with finding enough time for liaison time, especially in secondary schools, add to the difficulties faced in terms of the day-to-day preparedness of TAs and the teachers who deploy them. The DISS project showed that most teachers did not allocate time for planning with or providing feedback to the TAs they worked with in the classroom. TAs' goodwill was found to be essential in allowing time for teachers and TAs to meet (Webster et al., 2011).

Training and Professional Development

The lack of training and preparation for teachers on understanding how to manage and organize the work of TAs is revealed annually in the national survey of newly qualified teachers (NQTs). Each year, the U.K. Department for Education asks a proportionately stratified sample of NQTs to rate aspects of their initial teacher training (ITT) program in terms of how well it prepared them for teaching. The survey for 2017 (Ginnis, Pestell, Mason, & Knibbs, 2018) found that knowing how to deploy classroom support staff effectively was one of the lowest rated aspects of ITT (54%), and was on a par with confidence in knowing how to teach pupils with SEND (53%). This is consistent with the previous year (Pye, Stobart, & Lindley, 2016), where both aspects were rated 52%. In 2014 and 2015, researchers used a less nuanced rating scale, and although NQTs rated their preparation to deploy classroom support staff higher (67% for both years), preparation for this aspect of teaching was still lower relative to almost all other aspects (National College for Teaching and Leadership, 2015).

There are no comparable data in the United Kingdom for evaluating TAs' professional development; however, we know from systematic reviews of the literature on this topic that training varies in both its availability (Cajkler et al., 2007) and quality (Alborz et al., 2009) and that TAs "rarely receive adequate training and supervision" (Sharma & Salend, 2016). In the United Kingdom, for example, there are no agreed training or induction pro-

grams for new and in-service TAs. Professional standards do exist for TAs in England, but they are not statutory and there are no data on the extent to which they are used by schools.

Day-to-Day Preparation

Preparedness is a persistent problem, not only in terms of preservice and on-going training but also in terms of the day-to-day aspects of readiness for lessons. The picture regrading day-to-day preparedness revealed through the DISS project is consistent with other U.K. studies (e.g., Butt & Lance 2005; Howes, Farrell, Kaplan, & Moss, 2003; Lee, 2002). In their review of the literature, based on 28 peer-reviewed articles, Sharma and Salend (2016) cite additional research from 2005 onward, which identifies TAs "having effective communication and collaboration [and] planning time with supportive teachers" as "critical factors contributing to their efficacy." Conversely, where this is absent, TAs report that their performance is "hindered."

A TA interviewed as part of the EDTA project (Blatchford, Webster, & Russell, 2012) typifies the reactive position that TAs are in when they lack prelesson preparation: "You come into a classroom, you listen to the 20 minutes of teaching, and from that, you should know. And then you're to feed it to the children. It's scary." Unpacking this, we can see that in the absence of a prelesson briefing, this TA has to tune in to the teacher's whole class input to understand the concepts being taught, skills to be learned or applied, tasks and instructions, and the intended learning outcomes. Then the TA is expected to apply her judgment and provide any differentiation she deems necessary; this is what she means by "feed it to the children." Add to this the very probable subject and instructional knowledge differential that exists between the teacher and the TA, and the fact that the TA is working with pupils who find it hardest to access teaching, it is small wonder she describes this situation as "scary."

The picture from the research evidence aligns with what we hear from school leaders, teachers and, of course, TAs in our developmental work with schools. Two of us (Bosanquet and Webster) have worked extensively with staff across a wide range of schools in the United Kingdom. Perhaps the most common refrain we hear is that the lack of opportunities for teachers and TAs to meet—to plan, prepare, discuss feedback, and talk about pupils' learning and progress—is the biggest barrier to fully unlocking the potential of classroom support. Although key information may be provided in other ways (e.g., via lesson plans shared ahead of time), TAs report that this rarely happens.

Rethinking the Utilization of TAs

The debate about the deployment and effectiveness of TAs in England has been informed and sharpened by research and commentary on major reforms to SEND policy and practice (Bernardes, Shaw, Menzies, & Baars, 2015; Blatchford & Webster, 2018; Galton & MacBeath, 2015; Lehane, 2017; Peacey, 2015; Skipp & Hopwood, 2016; Webster & Blatchford, 2013, 2015, 2018). It is difficult to avoid the conclusion that the model of inclusion

we have drifted toward stands as a proxy for unresolved questions about how pupils with SEND are taught in mainstream settings. Rather than improving the quality of teaching for those with SEND (Hodkinson, 2019), the education system has looked to other forms of support and provision. In the case of the English system (and indeed others), this has meant a considerable increase in the number of TAs.

A key conclusion from the DISS project aimed at policy makers and practitioners is that TA deployment is the fundamental issue, not TA employment. In other words, the point of departure post-DISS is to ensure that schools make best use of TAs, not that they should get rid of them. That message, however, seems to have eluded some policy makers. In 2013, the idea of reducing TAs was suggested by the Reform think tank in a report on how to lower schools' running costs (Thorpe, Trewhitt, & Zuccollo, 2013). This prompted some alarming headlines, including "Classroom Assistants Face Axe" in *The Sunday Times* (Woolf & Griffiths, 2013). The U.K. government did not act on this recommendation, but in the United States, North Carolina state legislators used a one-sided interpretation of the DISS project findings to cut thousands of TA jobs in second- and third-grade classrooms (six- to eight-year-olds) in 2014 (Curliss, 2014).

The remainder of this article focuses on the use of structural components of the WPR model in an alternative approach to TA deployment and practice, and pays particular attention to how TAs can be prepared for these roles. We provide some practical strategies, many of which have been developed and validated by schools that have participated in the MITA program.

Supplement, Not Replace

The essence of effective TA deployment is to ensure TAs supplement, and do not replace, the teacher. This is essential in the case of pupils with SEND, as a key conclusion arising from the evidence is that TAs are often used as an informal teaching resource for pupils in most need. In England and elsewhere, it is common to deploy TAs on a one-to-one basis to support children and young people with high-level SEND in mainstream settings (in England, this would be those with an EHCP). This practice is justifiable in many cases (e.g., where a pupil has sensory or mobility needs). What concerns us is not only the way this practice has become routine for almost all pupils with SEND but also that it endures in spite of empirical evidence of its harmful, though unintended, consequences.

Guidance for school leaders, formulated on the basis of the evidence, makes clear that decisions about TA deployment provide the starting point from which all other decisions about TAs flow (Webster et al., 2016). The critical first step is for schools to determine the broad types of roles that TAs are required to perform. One central issue facing school leaders is to determine the appropriate pedagogical role for TAs, relative to teachers. If the expectation is that TAs have an instructional teaching role, it is important they are trained and supported to make this expectation achievable. There may be a case for some TAs to have a full or partial role in nonpedagogical activities, such as easing teachers' administrative workload or helping pupils to develop social skills. Ultimately, the require-

ments of the pupils must drive decisions around TA deployment, and everyone (staff and pupils) needs to be clear on the roles, boundaries, and expectations of teachers and TAs.

Allied to this is the need for teachers to retain full responsibility for pupils who receive TA support. In England, for example, the SEND Code of Practice (DfE, 2015) reminds teachers that they are accountable for the learning of all pupils (p. 99), and that "special educational provision is underpinned by high quality teaching and is compromised by anything less" (p. 25). It is important, therefore, that teachers receive training and guidance to improve their confidence and competence with SEND, as well as support to know how best to deploy additional adults in their classrooms.

Scaffolding for Independence

Central to the MITA trial are efforts to improve the way TAs interact with pupils to promote independence in line with the work led by Bosanquet and Radford (Bosanquet, Radford, & Webster, 2016). We argue that, as they often work in small groups or one-to-one with pupils who are trying to acquire clearly defined knowledge and skills, the most appropriate pedagogical role for TAs is in scaffolding learning. Scaffolding is designed to support the pupil to move to a position of independence through three key aspects (Van de Pol, Volman, & Beishuizen, 2010):

1. Contingency: The TA's response to each pupil turn is carefully calibrated to address difficulties and move the pupil forward.
2. Fading: The TA's responses provide the least possible amount of help needed to move the pupil forward. This is essential for supporting the development of independence.
3. Hand over: The TA needs to ensure that responsibility for the task is handed over to the pupil over a period of time.

Scaffolding has to be done in the moment, and so requires the adult to have a good level of both pedagogical and subject knowledge. Starting with pedagogical knowledge, a key aspect is knowing how to work contingently. In order to support TAs in working contingently, we have developed the scaffolding framework shown in Figure 1 (Bosanquet et al., 2016):

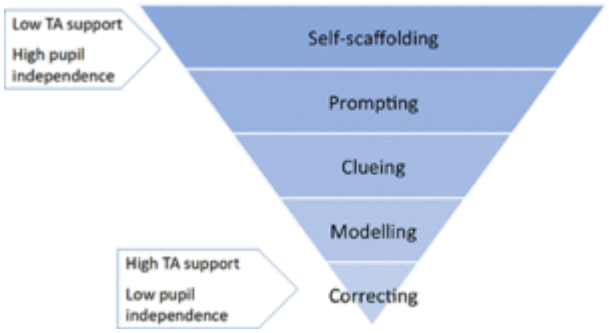

Figure 1. Scaffolding framework.

The framework assumes that appropriate modeling or instruction has been provided first, through a whole-class teacher introduction or by the TA at the start of working with a group or individual pupil. The TA should then follow the framework, starting at the top, and only moving to the next level of support if the responses from the pupil indicate that they are unable to move forward.

Self-Scaffolding

Starting at the top of the framework, the initial assumption by the TA should be that the pupil will self-scaffold their learning. Self-scaffolding involves the pupil being able to plan, problem solve, and review their work. Planning skills include being able to listen to and remember the teacher's instructions; using prompt sheets (in the form of words or pictures); and identifying the resources needed for the task. Problem-solving skills include using a resource (such as a word bank or a number line) and asking for help in a specific way (for example: "Can you model how to . . .?"). Reviewing skills include checking against success criteria regularly. Pupils need strategies to be able to do this, therefore, the skills that they already have in each of these areas should be regularly assessed by teachers and, where appropriate, by TAs. Any strategies that the pupil does not yet have should be taught directly. Regular teaching and reinforcement of planning, problem solving, and reviewing skills provides pupils with strategies for independent working.

Prompting

If the pupil is unable to self-scaffold, then the TA should move to the next level of the framework: prompting. Prompting does not involve giving any help, but simply providing encouragement. The most important type of prompt is offering wait time; that is, to ensure a pupil has enough time to process and act on the step they are trying to carry out. The processing time each pupil needs can vary widely, so it is important that the TA knows the thinking time that is typical for the individual student. Other forms of prompting include verbal cues (e.g., "What could you do?") and gesture (e.g., pointing toward a prompt sheet).

Clueing

Clueing is the next level down on the framework and is used if self-scaffolding and prompting techniques have not been sufficient to move the pupil forward in their learning. Clueing can be in the form of a statement ("It is a large gray animal") or a question ("What animal did we see that was large and gray?"). In keeping with the strategy of providing the least help first, we recommend that TAs offer a small clue initially, followed by additional clues if needed, which build incrementally.

Modeling

If the pupil is not able to move forward following self-scaffolding, prompting, and clueing, then a further model is needed. At this level of the framework, the TA should model the small step that the pupil is stuck on, and the pupil should have the opportunity to repeat the model immediately. If they are unable to repeat the step, then a smaller intermediary step should be modeled.

Correcting

Correcting is at the bottom of the framework and is something that should be avoided. It might be argued that modeling is, in effect, correcting, as it gives the pupil the answer or shows them what to do. However, the key difference is that modeling provides an opportunity for the pupil to demonstrate understanding by repeating the step modeled.

Teachers can be confident that where TAs have been trained to consistently use the scaffolding framework to inform their daily interactions with pupils, pupils will be receiving the least amount of support necessary and retain the responsibility for their learning. However, changing this fine point of moment-by-moment practice requires more than simply training TAs in better methods of classroom talk. It requires liaison between the teacher and TA to establish the current self-scaffolding skills of each pupil and to support pupils to develop additional strategies. It also requires the task that the pupil undertakes to be planned at the right level and be suitably challenging. Finally, teachers should also observe TAs and provide them with feedback on their interactions with pupils, and support TAs to develop the subject knowledge needed to clue and model effectively.

Teacher-TA Liaison for Planning and Feedback

Few things exemplify the persistent problem of preparedness more vividly than the comment from the TA quoted earlier. Mitigating, if not avoiding altogether, the effects of TAs "going into lessons blind" (Blatchford, Russell, & Webster, 2012) is an essential component of ensuring TA effectiveness. Finding extra time within schools is, of course, never easy. It is probably why so many school leaders on our MITA program zero in on this practical barrier. Nevertheless, without adequate out-of-class liaison it is difficult for teachers and TAs to work complementarily and collaboratively.

In the EDTA project, schools found creative ways to ensure teachers and TAs had time to meet (Webster et al., 2013). For example, headteachers standardized TAs' hours of work, so that they started and finished their day earlier, thereby creating essential joint planning time between TAs and teachers before school. Other schools that have created dedicated liaison time report that teachers and TAs feel the benefits almost instantly, and TAs' sense of value and confidence soar. To ensure teacher-TA preparation time is spent productively, it may be necessary to set expectations of what it is for, and what it is not for. For example, in the EDTA project, one school had to introduce a loose planning framework to guide meetings after TAs were found to be doing administrative tasks instead of discussing lessons and learning.

For all the emphasis on *joint* preparation time, the responsibility for planning lessons and setting appropriate tasks for pupils lies with the teacher. It is essential that teachers plan lessons effectively, and that they explicitly plan in the TA's role. Lessons should allow opportunities for TAs to be deployed in ways that supplement teaching. Teachers need to think about how to make use of the additional capacity in their classroom to achieve learning objectives and to ensure they spend time with the learners who are struggling most. Effective and efficient lesson planning starts with a good understanding of what

pupils can and cannot do at the end of the previous lesson. Teachers should encourage TAs to record their observations of pupil performance during lessons and be clear about what they want TAs to feed back at the end of the lesson. The scaffolding framework provides a simple structure for annotations on pupils' work, indicating the level of independence with which they were able to complete each part of a task.

Encouragingly, it is possible for schools to create time for teachers and TAs to meet, and the effects of achieving this are roundly positive. In the EDTA project, the quality and clarity of teachers' lesson plans improved, and plans were shared with TAs and supplemented with daily discussion that made explicit the role and tasks of the TA for each lesson (Webster et al., 2013). Very early informal indications from the MITA project suggest that primary schools are replicating and extending these practices and drawing benefits; school leaders report that TAs feel more valued and some of the palpable problems of "going into lessons blind" are being alleviated.

Conclusion: Lessons from Schools

This article has explored the evidence on the impact of TAs in mainstream settings. We highlighted the divergent effects of using TAs to deliver structured curriculum intervention programs (typically away from the classroom) and deploying them to support teachers and pupils in lessons. With reference to the wider pedagogical role model, we identified preparedness as a particular barrier to effective TA deployment. We describe it as a persistent problem, because structures and processes in schools tend to militate against practices such as creating liaison time. There is also a financing issue. Extending TAs' contracts and hours of work requires funding, which can be difficult to find or to justify given the acute shortage of funds for education in England, which has persisted since at least 2010. We ended by sharing some actionable strategies that schools in the EDTA project (Webster et al., 2013, 2016) and the MITA program have successfully developed and used to improve TAs' preparedness.

The following conditions have been put in place in schools we have worked with to successfully address the key issues concerning TA training and day-to-day preparation:

- Regarding the time for teachers and TAs to meet as an essential prerequisite of successful classroom collaboration decreases the risk of TAs' interactions with pupils being driven by guesswork and erroneous assumptions.
- Reconfiguring TAs' hours of work is the surest way to creating teacher-TA liaison time.
- Improving the quality and clarity of the information provided to TAs ahead of lessons reduces instances of TAs going into lessons blind or relying on picking up information via teachers' whole-class delivery.

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