

Bowles, D., Radford, J. and Bakopoulou, I. (2017 online publication)

British Journal of Educational Psychology.

Scaffolding as a key role for teaching assistants: perceptions of their  
pedagogical strategies

**Abstract**

**Background.** Inclusive education policies have led to a worldwide increase in the number of teaching assistants (TAs) working in mainstream schools. TAs have a large amount of responsibility for supporting children with special educational needs and disabilities (SEND), a role which by default has become instructional in practice, and for which training and preparation are rarely adequate. Whilst there is some research into the nature of TAs' interactions with pupils and the strategies they use which are helpful for children's learning, TAs' perspectives on their own classroom practice have yet to be explored.

**Aims.** To explore TAs' perceptions about their use of inclusive pedagogical strategies.

**Sample.** The study involved eleven TAs in two mainstream primary schools.

**Methods.** The TAs were interviewed face-to-face to explore their views about inclusive pedagogical strategies. The data were analysed using thematic analysis.

**Results.** TAs were clear about the strategies they use to offer emotional and relational support to children. There were some gaps, however, in their knowledge about how children learn, specifically in terms of transferring responsibility for learning onto children.

**Conclusion.** The study advances understanding of scaffolding from a TA perspective and highlights the importance of training TAs in scaffolding theory.

## **Introduction**

### **Pedagogical Role of TAs**

As part of a global trend towards inclusive educational policies, teaching assistants (TAs) now comprise 24% of the UK's school staff (DfE, 2012a, b) and are also a significant part of the workforce in other countries such as Canada, USA, Ireland and Finland (Giangreco & Doyle, 2007). They are widely recognised to contribute towards the inclusion of children with special educational needs and disabilities (SEND) in mainstream schools (Rose, 2000). There are several benefits: TAs have been shown to develop positive and trusting relationships with children (Groom and Rose, 2005); teachers also report that they reduce their workload and stress levels (Blatchford, Russell, and Webster, 2012).

On the other hand, TAs are taking a heavy responsibility for teaching children with SEND (Blatchford et al., 2012). This is worrying because they are rarely adequately prepared or supported to carry out such an important job (Giangreco & Broer, 2005; Webster et al., 2010). Indeed, TAs spend over half their day in a direct pedagogical role which means that our most vulnerable pupils are interacting with TAs for extended periods of time (Webster et al., 2010). It is therefore vital that their interactions are shown to be effective.

In a comprehensive meta-analysis of the worldwide literature on TAs, Giangreco (2013) has highlighted a number of persistent findings, including an expectation to perform tasks more appropriately delivered by qualified teachers, and a lack of

clarity over their precise role. It is vital that further clarification of the role is required, and a better understanding of how TAs can help children's learning needs to be reached. The aims of the present study are therefore to improve our understanding of how TAs conceptualise their own contributions to inclusive pedagogy. This will be of value to Educational Psychologists (EPs) who support schools with respect to the effectiveness of their SEND support.

### **High quality discourse in inclusive classrooms**

Successful interactions between adults and children are the key to effective inclusive practice (Radford, Blatchford & Webster, 2011). A systematic review of inclusive classrooms highlighted the importance of a number of factors relating to high quality classroom discourse (Rix et al., 2006). For teachers, this means: using questions that involve higher order thinking, reasoning and implicating a point of view from the children; giving pupils opportunities to problem solve, discuss, describe their ideas, and relate learning to their own experiences and prior understandings; encouraging pupils to identify their thoughts, particularly through one-to-one discussion with a teacher. From this, we can conclude that effective inclusive pedagogy is complex, and requires not only adaptation of teaching and curricula, but a focus on encouraging individual learners to bring their own thinking and experience into the learning process.

Since TAs have more frequent opportunities for extended interactions with pupils than teachers (Radford, Bosanquet, Webster, Blatchford & Rubie-Davies

2014), they are well placed to support children verbally. However, in a comparison of teacher and TA interactions within the same lessons, TAs' talk strategies were of a lower quality; teachers were better at developing children's thinking, checking understanding, and giving clearer explanations (Rubie-Davies et al., 2010). However, this is an unfair comparison, given the fundamentally different roles of teachers and TAs. The TAs' interactions may be of educational value in a supplementary way since they primarily offer support for youngsters with SEN. For example, they could provide daily emotional support, encouragement, reassurance, and, in terms of behaviour management, foster the development of positive relationships with staff and peers. This would not have been captured by the measures in the study (which were designed for teacher effectiveness). There is clearly a need for a better understanding of TA to pupil interactions in their own right and the present study aimed to do this by uniquely seeking the views of TAs about what they do and say in the classroom.

Given that TAs have ample opportunities for one-to-one and small group interactions, they are in a unique position to offer tailored support that will maximise learner independence. This is why, in our study, we uniquely propose scaffolding as a key theory to inform TA practice.

### **Scaffolding: a key role for the TA**

The concept of scaffolding is rooted within the socio-cultural theory of Vygotsky (1978), and Bruner's (1978) work on early language learning, and can be

understood as the temporary support provided to a child to enable them to complete a task that they may not otherwise be able to complete alone (Van de Pol, 2010). Vygotsky understood learning to be a social and interactive process in which children are active participants rather than passive recipients. He developed the idea of the 'zone of proximal development', which is the prime area between what children can currently achieve on their own, and what they can potentially learn with support (Vygotsky, 1978).

In a review of the scaffolding literature from the previous decade, Van de Pol (2010) highlights three common principles which must be adhered to in order for scaffolding to take place, known as contingency, fading, and transfer of responsibility. Contingency requires adults to alter their support according to children's responses, with a view to fading this support over time, the ultimate aim being a transfer of responsibility for a learning item to the child. TAs have regular opportunities to use contingent talk strategies that are pitched within the child's zone of proximal development, owing to their proximity to the child but we do not know if they fade their input in order to transfer responsibility to the learner.

Recent research illustrates a model of scaffolding for TAs that includes three roles with separate but related functions (Radford, Bosanquet, Blatchford & Webster, 2015). A 'support' role keeps children motivated and engaged with a particular task, a 'repair' function helps them when they encounter difficulty, and a 'heuristic' role encourages them to use their own learning strategies. The support role entails the TA using strategies to encourage, re-assure and direct

children and also helping them to pay attention and listen effectively (Radford et al., 2015). However, the authors argue that the heuristic role is a particularly skilful endeavour which needs to be explicitly taught to TAs, because it demands knowledge of the end result of a problem as well as how to work it out. An adult needs to know relevant strategies related to the task as well as what is currently in the grasp of the learner, in order to eventually enable a transfer of responsibility. In this respect the heuristic role is more complicated than the support and repair roles (Radford et al., 2014, 2015).

A key aim of our study is to make recommendations for the training and management of TAs, and to provide a framework for TA interactions with pupils. To address this aim, we have sought the views of the TAs themselves about their classroom practice and explored their understanding of their own inclusive pedagogical strategies, and their thinking behind what they do and say in the classroom. The study is therefore original since the views of TAs have not been sought before with respect to what they consider their role to be in relation to supporting children's learning.

RESEARCH QUESTION - what are TAs' views about their own inclusive pedagogical strategies?

## **Method**

### **Participants**

Eleven TAs from two primary schools in a London borough were interviewed face-to-face (see Table 1).

Each participant was given a unique reference number beginning with the first letter of the name of their school. Some TAs worked only with children with SEN, while others worked in more general roles.

Insert Table 1 here

### Measures

Semi-structured interviews were used to explore TAs' views about their classroom practice. The literature around effective inclusive pedagogy and classroom discourse influenced the design of the interview schedule, with each question relating to a specific aspect of the literature. The schedule included questions such as scaffolding a child's learning, perceived end goals of TA support and their understanding of children bringing their own experience and thinking of the learning process. It also covered questions related to dialogic teaching, children's self-concept, staying on-task, managing challenging behaviour, pupil participation, cooperative learning, and the importance of increasing understanding in the learner as opposed to task completion. A pilot study was conducted with one participant to establish order, structure, length, and appropriateness and wording of questions before continuing the interview data collection.

Liaison with the schools was made through the Special educational needs coordinator (SENCO), who then approached TAs to be interviewed. Those TAs who agreed were given an information sheet about the aims of the research,

issues around confidentiality and their right to withdraw at any time. Interviews were recorded using an audio recording device and lasted for up to 30 minutes.

Data from the interviews were analysed using thematic analysis following Braun and Clarke's (2006) six phases: familiarization with the data, generation of codes, searching and reviewing of themes, defining and naming themes, and the production of a written account. Phase 1 involved the verbatim transcription by the first author to ensure a more thorough understanding of the data. For Phase 2, a provisional list of codes (N = 41) was generated. Coding was focussed on the research question and particular features from the literature such as 'repair', 'emotional support' and 'increasing participation' guided and focussed the process. The transcripts were coded using NVIVO, a software package for qualitative data. The next two phases, the searching and reviewing of themes, entailed the construction of a range of initial thematic maps in order to identify the relationship between codes and which of them could form themes or subthemes.

At the end of these stages, a final thematic map was developed; this included the overall thematic areas of *Support* and *Repair*. Support was sub-divided into 3 main themes and 14 sub-themes; repair entailed 4 main themes and 1 sub-theme. A heuristic theme did not emerge from the data, an omission that will be discussed later.

## **Results**

The results are set out below under the thematic areas of *Support* and *Repair* to illustrate the main themes and associated sub-themes (See Figures 1 and 2).

Insert Figure 1 here

### **Support role of the TA**

'Support' is made up of three sub themes: *emotional support*, *curricular support* and *relational support*, which concern supporting children to take part in everyday learning experiences. *Emotional support* was concerned with building children's confidence and self-esteem in order for them to feel ready to learn. *Curricular support* was concerned with practical strategies to increase their access to the curriculum, for example by helping them to think about the processes of learning as well as the outcomes, or to bring their own experiences and ideas into the learning process. *Relational support* was concerned with helping children to engage with what is being said by their teachers and their peers, enabling them to participate in whole class discussions. Example quotes are provided below. The letters and numbers in brackets refer to the individual TAs and their setting.

#### *Emotional Support*

Nine of the eleven TAs talked about the importance of providing emotional support to children. This often involved reminding them of their competence and progress and giving praise and encouragement.

*A lot of encouragement, lots of praising... it doesn't matter if you haven't got it right...we all learn together, there's something you don't understand, that's fine.* (W6).

Eight of the eleven TAs talked about providing emotional support to increase children's confidence and self-esteem.

*I do sometimes go back in their books...you just say look how much progress has been made from the beginning of the year to now, all your sentences, your spelling, your handwriting.* (W3)

Finally, a part of the emotional support provided was about adapting to the children's moods, remaining calm and patient and enabling a state of readiness to learn (n=2). For example,

*Making sure that they're in the right frame of mind to do that lesson, there's no point...just drilling at them work work work, maybe you need to have a little chat first, get their brain in gear.* (W6)

### *Curricular Support*

All of the TAs talked about the strategies they use to help children access the curriculum. Most (N=8) talked of simplification of either what the teacher has said

or the learning materials, with the use of repetition mentioned by two TAs. The use of visual prompts, concrete materials and practical activities was also considered important, and 6 TAs said how these approaches were particularly necessary for children with learning difficulties or English as an Additional Language (EAL).

*If they are finding it difficult...I'll simplify it. (H4)*

*If there's something you don't understand, that's fine, I'll explain again. (W6)*

*I would use the whiteboard, and draw visual materials, pictures, so they can actually see it for themselves. (W1)*

#### *Focus and concentration*

All the TAs talked about keeping children focussed and concentrated on learning. Strategies included asking children to repeat back what the teacher has said, prompting them to pay attention either with brief verbal interactions or gestures, removing distractions, giving a tap on the shoulder, seating them with good role models, and giving short breaks.

*Well I usually sit behind them... give them a little tap...make sure they're watching and listening...and say...did you understand what she just said...or...I'll ask them again what do we have to do (W2)*

#### *Fostering independence*

Five of the eleven TAs talked about the importance of children becoming independent learners. This could be demonstrated by the children listening to the teacher, making contributions to class discussions, and starting or continuing with learning tasks without support. One TA talked about the differences in expectations of staff as children move up the school, with increased independence in their work being important.

*I'd support them to solve the problem, but make sure they get there themselves. It's no good...me doing it, so you sort of reach the conclusion with them. (W5)*

#### *Relational Support*

All the TAs shared their thoughts on how they encouraged children to learn from their peers. Class discussion and 'Talking Partners' were built into every day learning experiences by teachers, but TAs also spoke about things they did and said to enable cooperative learning, such as encouraging them to listen to each other, to share their ideas and help each other with learning tasks. Ten TAs talked of ensuring that all children were able to take a turn in group activities. These included praising them for waiting patiently, explaining the importance of having a fair system, and encouraging them to be actively involved in making sure everybody has a chance to speak.

*I make sure they're all aware that they all need to take turns and everybody needs to express themselves and have their own voice. So it's saying you've had your go, now it's this person's turn, but doing it in an orderly fashion. (W1).*

### *Increasing participation*

Nine TAs talked about the importance of children being able to participate in whole class discussions. Strategies included telling them that their ideas are worth sharing, encouraging them to put their hand up, asking questions to check or develop understanding, or making eye contact with the teacher in order to prompt them to come to a particular child. Some TAs talked about the need to differentiate what the teacher was saying to the developmental level of the child.

*I'll lean in with my group and talk to them...then what I'll often find is they'll come up with good ideas but they won't share them....So then you can just give them a nudge and say you know you had a really good idea. (W5)*

### **Repair role of the TA**

Insert Figure 2 here

'Repair' is made up of four themes relating to what TAs do or say when children encounter difficulty in their learning. This might include children's silence when being asked a question, as well as incorrect or incomplete answers, or difficulty working through a task independently.

'Withholding correction' relates to TAs not giving children the answer to a question they have answered incorrectly, but finding other ways to help them work it out themselves. Four of the TAs talked about this, with strategies including giving clues or hints, or asking certain kinds of questions in order to give children responsibility for their own learning. 'Prompting' in this context was talked about as an alternative to giving children ideas as well as avoiding outright correction of incorrect answers.

*I might, if it's in literacy, give them certain words they could use in a sentence, like maybe you could use an adjective to up-level this sentence, not really telling them what words to put in (W1)*

Eight TAs talked about different kinds of questions to use with children. There was some acknowledgement that open questions provide a richer learning experience but also that in some cases, such as when working with children with EAL or significant language difficulties, these might not be possible, and that closed questions can be useful to check understanding.

*I do try to ask more open questions, it depends on the topic, if it's maths there's a set answer isn't there, but if it's literacy or other topic work, I try to get them thinking as much as possible. (W6)*

Four TAs talked about modelling as a strategy to use when children encounter difficulty by demonstrating how to go about a task as an example for a child to

follow. This was considered useful by TAs for children who may not have been able to get started on a task, perhaps because of difficulties understanding the language teachers use, remembering instructions, or not understanding a particular concept as initially presented.

*...sometimes I have to do it like a sample, so I will encourage them to copy, and look and learn and then just let them do it for themselves (H1)*

Eight TAs talked about the zone of proximal development, with one TA making an explicit reference. The TAs talked about the importance of learning tasks and interactions being pitched at the 'right' level for children, whereby they are not so easy that no learning progress is being made, but equally not so difficult that engagement with a task is futile. One TA talked about the necessity of knowing a child's developmental level in order to work this way, through ongoing work with the child as well as discussion with the teacher. Another TA talked about building on prior knowledge by referring to previous learning, with a view to the children using that knowledge to help move onto the next step of the learning process.

*But don't take over, read by the child, how they're going, if they're coming forward then maybe give them a bit of information to edge them on. It's that zone of, ZPD, the zone of proximal development, you know that one. So I always remember that from the learning. That's what I'd normally do. (H3)*

## **Discussion**

Our study offers a unique contribution to the research by presenting the perspectives of TAs about the scaffolding strategies that they use. First, all TAs spoke confidently about providing emotional support to children, describing with clarity how this is accomplished in practice. This extends our existing understanding of the TA role with respect to increasing children's motivation, self-esteem and confidence (Blatchford et al, 2009), and in fostering positive approaches to learning (Blatchford et al, 2012). Descriptions of the use of praise and encouragement were particularly prevalent, and although this may have benefits in terms of enhancing children's motivation and confidence, it could be argued that a degree of caution is required about the potential longer-term implications of children being over-dependent on positive feedback.

Previous studies have shown that TAs perceive themselves to have a positive impact on children's classroom engagement (Blatchford et al., 2009; Radford et al., 2011). This study adds new evidence in that TAs reported *how* they encourage children's participation in whole class discussion, through giving them confidence in their own ideas, and prompting the teacher to select particular children to speak. Research has suggested that equal value should be placed on contributions from all children in inclusive classrooms but prior research had not involved TAs (Florian and Black-Hawkins, 2004; Kyriacou and Issitt, 2008). In our study, the TAs described several valuable strategies for managing turn-taking so that all children could participate. They also explained that they gained children's attention and increased concentration through using verbal prompts,

taps on the shoulder, and asking children to summarise their understanding of tasks.

An area where TAs did not display any knowledge, according to our data, was with respect to heuristics. There were no examples to show that they understood the nature of learning strategies. It is an important omission, given the importance of learners using self-scaffolds to maximise their independence from adults in the classroom (Radford et al., 2015). This finding may not be surprising, however, given the complexity of heuristics: TAs would need to have knowledge of the precise strategies relevant to any given learning activity. Our earlier work has shown that TAs were able to use heuristics in mathematics' lessons where the strategy had been clearly modelled by the teacher in an earlier part of the lesson (Radford et al., 2014). EPs have an important role to play, given their training in psychology: they could support schools via professional development about heuristics and also provide direct feedback following classroom observations of TAs.

### **TAs' knowledge of principles but lack of strategies**

This study is the first to ask TAs how they conceptualise scaffolding and understand the principle of learner independence. The interviews showed they were aware of the importance of fostering independence in children, describing the ideal goal of developing confident, independent students. Explaining the kind of strategies they might use to achieve this, however, proved substantially more

challenging, as exemplified by one TA's assertion that "you sort of reach the conclusion with them." It could be argued, therefore, that working towards independence is one area in which TAs may be less knowledgeable and confident.

In relation to scaffolding theory (van De Pol, 2010), operationalising the core principle of transfer of responsibility appears to be where the most significant gap lies in terms of TAs' understanding of how children learn. It could be argued that until all TAs have a good understanding of scaffolding principles and how these translate in the classroom, it will be difficult for them to foster children's independence, despite their best intentions (Bosanquet, Radford & Webster, 2016).

### **Reactive strategies**

Observation research in the UK has indicated that TAs work reactively in the classroom, as opposed to having pre-planned strategies (Webster et al., 2010). This study adds much-needed detail regarding the TAs' conceptualisation of curricular support. TAs reported differentiating the teachers' instructions 'in the moment'; using repetition and simplification; modelling; and visual prompts. Although these strategies could be regarded as useful, there is a danger that without sufficient planning and knowledge of learning principles, they could be offering too high a level of initial support, failing to give children enough responsibility for their own learning. Repetition and modelling alone, for example, could simply be telling children an answer or explaining a concept without

encouraging active participation. Similarly, visual prompts could be used in high support mode, providing too heavy a hint, and, therefore failing to foster independence. In order to be effective for learning, strategies need to increase learner independence and, therefore, be consistent with scaffolding theory (Van de pol, 2010).

### **Towards self-scaffolding**

One way of conceptualising the kind of support that will help TAs to foster children's independence is the 'Planning and Assessing for Independence' model (Author, 2016). This framework contains various strategies structured to ensure that the child does as much as they can on their own. Prompting and questioning, for example, are lower support strategies which can be attempted prior to modelling, so that such a high level of support is not automatically given at the beginning of a task. The aim is for students to self-scaffold by equipping them with learning strategies that they can use on their own when the TA is no longer there. One way that TAs could assist the learner towards self-scaffolding is through the use of good questions. Evidence from the interviews suggests that TAs are aware of different types of questions and the implications of these for children's learning. As outlined in the review on inclusive pedagogical interactions carried out by Rix and colleagues (2006), it is known that more thought provoking questions which require higher level thinking from children are more helpful for developing their learning. Those questions which require reasoning and implicate children's point of view, require them to problem solve,

discuss and describe their ideas, as well as bring their own experience into the learning process, are known to enable both academic and social inclusion for children (Rix et al, 2006).

TAs' interviews indicated that they understood the premise that open questions provide richer learning opportunities than closed questions, and that they tried to avoid asking closed questions. This differs from earlier research in mathematics lessons where TAs asked more closed questions than open ones (Author, 2011). However, one TA in our study explained how he tried to use open questions but suggested that 'set answers' in mathematics required more closed questions. This again raises potential issues around lack of understanding of subject areas and the need for adequate training and qualifications. Simple mathematical operations have correct answers but there are various skills involved in reaching them which TAs can support children to develop using open questions, such as asking them how they worked something out.

### **Scaffolding role of the TA: implications for professional development**

While teachers should be expected to take overall responsibility for the education of children with SEN, they do not have as many chances for extended interactions with children as TAs do. It may be TAs who are in the best position to advocate for those children with additional needs who may not have the confidence to put their hand up in class, or share their ideas with a group. For

example, it could be preferable for a TA to quietly encourage a child to participate in a whole class discussion than for a teacher to simply call the child's name out.

Within a scaffolding model working towards independence, one recommendation for training is to help TAs begin their support with harder questions and then reduce the degrees of freedom and increase support as required. This style of interaction fits the fundamental principles of contingency, fading and transfer of responsibility and is consistent with the scaffolding roles described by Radford and colleagues (2014, 2015).

### **Limitations and future research**

A number of methodological issues need to be considered. Caution needs to be placed on interpreting the effectiveness of strategies reported by TAs because of a lack of observation data with which to triangulate the interview data. For example, the usefulness of prompting, questioning or modelling depends on whether these are working towards self-scaffolding, or not, and this cannot be evidenced from interview data alone; the children's responses and interpretations would also need to be recorded and analysed. Future research using recorded observations would further understanding in this area.

There is also a question around whether it is appropriate to expect TAs to be able to explain in detail the pedagogical strategies they use in the classroom in an interview situation for which they have had no preparation. The areas covered in the interviews are complex and it is possible that TAs have more knowledge

and skills than they would be able to explain. For example, the TA who talked about there being a 'set answer' in mathematics also shared many good ideas in other areas such as using previous knowledge about children's emotional wellbeing and skill levels in order to know what question to ask next. His response to that particular question has resulted in interpretations around a lack of training in that area, but the extent to which this is fair given there is no observation data to back it up, is perhaps questionable.

### **Conclusions and implications for EP practice**

The present study has advanced our understanding of scaffolding from a TA perspective and highlighted the importance of training TAs in scaffolding theory by investigating TAs' understanding of the pedagogical strategies they use. The TAs interviewed appeared to have good working knowledge and skills in a number of areas. They were particularly strong with respect to strategies that provide emotional and relational support to children since they helped to increase children's confidence and self-esteem. They also helped children participate in class discussions, contributed to maintaining their attention and encouraged cooperative learning with peers.

However, there appears to be some gaps in TAs' knowledge about how children learn, specifically in terms of the need for children to take responsibility for their own learning. Although TAs demonstrated awareness of important educational principles, such as fostering independence, and avoiding outright

corrections, they found it difficult to describe the specific strategies needed to achieve such goals. Therefore, TAs require more training in the area of scaffolding, particularly around starting with low levels of support initially before contingently adjusting to higher levels, if necessary, in order to encourage children to self-scaffold. Practical knowledge around how to adhere to the scaffolding principle of transfer of responsibility is the main missing ingredient in TAs' knowledge.

Owing to their training in psychology, EPs have an important role to play when supporting schools. and are well placed to bring about changes at a whole-school level. EP support usually takes place at a number of levels which has the potential to improve the practice of TAs. At a whole-school level, EPs often support schools' Senior Management Team (SMT) to lead effective practice in improving the deployment of TAs. EPs have a good knowledge of the school context as an organisation and can support senior leaders by providing the guidance on the complementary roles of teachers and TAs and prioritising TA work by including it in the school improvement plan. In that way, EPs can support schools to ensure that policy and practice cascades throughout the school and to the wider school community.

EPs also deliver training to groups of TAs and their managers. Our findings suggest that professional development programmes should, first of all, include sessions on explaining the key principles of scaffolding as a framework for developing pupil independence (contingency, fading and transfer of

responsibility). Next, oral strategies that reduce the degrees of freedom could be illustrated (modelling, questioning and prompting) and how these contribute to self-scaffolding in the learner (see Bosanquet et al, 2016, for examples).

These principles and strategies should also guide EP work at the individual child level, and classroom level, through lesson observation feedback, and consultation with TAs and teachers about individual children's learning needs. Such work takes place regularly as part of EPs' aim to support reflective teaching practices in schools by all school staff (teachers and TAs). Findings of the present study highlight that such support from EPs is essential if we want to ensure that all learners with SEND are supported as independently as possible.

## References

- Blatchford, P., Bassett, P., Brown, P. & Webster, R. (2009). The effect of support staff on pupil engagement and individual attention. *British Educational Research Journal*, 35, 661-686. [doi.org/10.1080/01411920902878917](https://doi.org/10.1080/01411920902878917)
- Blatchford, P., Russell, A. & Webster, R. (2012). *Reassessing the impact of teaching assistants: How research challenges practice and policy*. Oxon, UK: Routledge.
- Bosanquet, P., Radford, J., & Webster, R. (2016). *A teaching assistants' guide to effective interaction: how to maximise your practice*. London: Routledge.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3, 77-101.
- Bruner, J. (1978). The role of dialogue in language acquisition. In A. Sinclair, R., J. Jarvella, & W. J. M. Levelt (eds.) *The Child's Concept of Language*. New York: Springer-Verlag.
- Department for Education (2012a). Local authority and school expenditure on education, children's services and social care for 2010-11, including school revenue balances (OSR/ 03/2012). London: Department for Education.
- Department for Education (2012b). Statistical first release (SFR06/2012): School workforce in England (provisional) November 2011. London: Department for Education.
- Giangreco, M.F, (2013). Teacher Assistants in Inclusive Classrooms. In Florian, L. (Ed.) *Sage handbook of special education (2nd edn.)*. London: Sage.
- Giangreco, M. F. & Broer, S. M. (2005). Questionable utilization of paraprofessionals in inclusive schools: Are we addressing symptoms or causes? *Focus on Autism and Other Developmental Disabilities*, 20, 10-26.
- Giangreco, M.F. & Doyle, M.B. (2007). Teacher assistants in inclusive schools. In L. Florian (Ed.), *The SAGE handbook of special education* (pp.429–439). London: Sage.

Groom, B., & Rose, R. (2005). Supporting the inclusion of pupils with social, emotional and behavioural difficulties in the primary school: the role of teaching assistants. *Journal of Research in Special Educational Needs*, 5, 20-30.

Radford, J., Blatchford, P. & Webster, R. (2011). Opening up and closing down: how teachers and TAs manage turn-taking, topic and repair in mathematics lessons. *Learning and Instruction*, 21, 625-635. <https://doi.org/10.1016/j.learninstruc.2011.01.004>

Radford, J., Bosanquet, P., Webster, R., Blatchford, P., & Rubie-Davies, C. (2014). Fostering learner independence through heuristic scaffolding: A valuable role for teaching assistants. *International Journal of Educational Research*, 63, 116-126. <https://doi.org/10.1016/j.ijer.2013.02.010>

Radford, J., Bosanquet, P., Webster, R., Blatchford, P. (2015). Scaffolding learning for independence: clarifying teacher and TA roles for children with SEN. *Learning and Instruction*, 36, 1-10. <https://doi.org/10.1016/j.learninstruc.2014.10.005>

Rix, J., Hall, K., Nind, M., Sheehy, K., & Wearmouth, J. (2006). A systematic review of interactions in pedagogical approaches with reported outcomes for the academic and social inclusion of pupils with special educational needs. Technical report. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Rose, R. (2000). Classroom support: Using classroom support in a primary school. *British Journal of Special Education*, 27, 191-196.

Rubie-Davies, C. M., Blatchford, P., Webster, R., Koutsoubou, M., & Bassett, P. (2010). Enhancing learning? A comparison of teacher and teaching assistant interactions with pupils. *School Effectiveness and School Improvement*, 21, 429-449. [doi.org/10.1080/09243453.2010.512800](https://doi.org/10.1080/09243453.2010.512800)

Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher–student interaction: A decade of research. *Educational Psychology Review*, 22, 271-296. doi:10.1007/s10648-010-9127-6

Vygotsky, L.S. (1978). *Mind and society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Webster, R. P., Blatchford, P., Bassett, P., Brown, P., Martin, C., & Russell, A. (2010). Double standards and first principles: Framing teaching assistant support

for pupils with special educational needs, *European Journal of Special Needs Education*, 32, 319–336.

Webster, R., & Blatchford, P. (2013). The educational experiences of pupils with a Statement for special educational needs in mainstream primary schools: results from a systematic observation study. *European Journal of Special Needs Education*, 28, 463–479. [doi.org/10.1080/08856257.2013.820459](https://doi.org/10.1080/08856257.2013.820459)

**Table 1: TA Characteristics**

	<b>W1</b>	<b>W2</b>	<b>W3</b>	<b>W4</b>	<b>W5</b>	<b>W6</b>	<b>H1</b>	<b>H2</b>	<b>H3</b>	<b>H4</b>
<b>Age</b>	23	24	50	42	25	23	55	45	47	39
<b>Ethnicity</b>	Black Caribbean	Black Caribbean	Greek / Irish	White British	White British	White British	White British	Vietnamese	White British	Indian
<b>Gender</b>	Female	Female	Female	Female	Male	Female	Female	Female	Female	Female
<b>Years of Experience</b>	2	2	14	1	3	1	9	5	10	4
<b>Deployment</b>	General TA and SEN	General TA and SEN	General TA and SEN	General TA and SEN	General TA	SEN	SEN	General TA and SEN	Nurture Group Interventions	SEN
<b>Qualifications</b>	BSc Psychology degree- 2.1  3 A Levels: Psychology, English Lit, Biology	11 GCSEs A-D incl. English, Maths Science  3 A-Levels  BA Hons Early Childhood	5 O levels  HLTA Status	O Levels C+  CYPW Level 3 and 4	10 GCSEs A*-C  3 A-Levels  CACHE Level 3	FdSc Speech, Language Communication Science  BSc Human Physiology	7 CSEs  British Sign Language  Level 2 Numeracy, Literacy	CACHE Level 2  TA and working with young children	NVQ Level 3 in Childcare in Education  BA Hons Early Years	5 GCSEs incl. English Maths Science

	10 GCSE's A*-C	Studies (2:2)					Level 3 TA Diploma  First Aid			
<b>Job-specific training</b>	6 Day TA Induction  Behaviour  Grammar  Numicon  Multi- Sensory Room	Behaviour  ASD  Epilepsy	Behaviour  RML Literacy  Numeracy  Child protection  First Aid  HLTA	Tiger Team  Makaton  6 Week TA Induction	ICT  Behaviour	Behaviour Management  Literacy  Numeracy  Child Protection  Speech and Language	Numicon  Widjet  Speak Easy parents, carers and sex ed.  CP and mental health	ASD	Principles of Nurture  Writing with Symbols  Level 2 Hygiene  TA Training  Communication and Language	TA Level 2 and 3  HI  ASD

**Note:** HLTA Higher level teaching assistant; ASD Autism spectrum disorder; HI Hearing impairment; RML Ruth Miskin literacy; CP Child protection

Figure 1: Thematic area: support

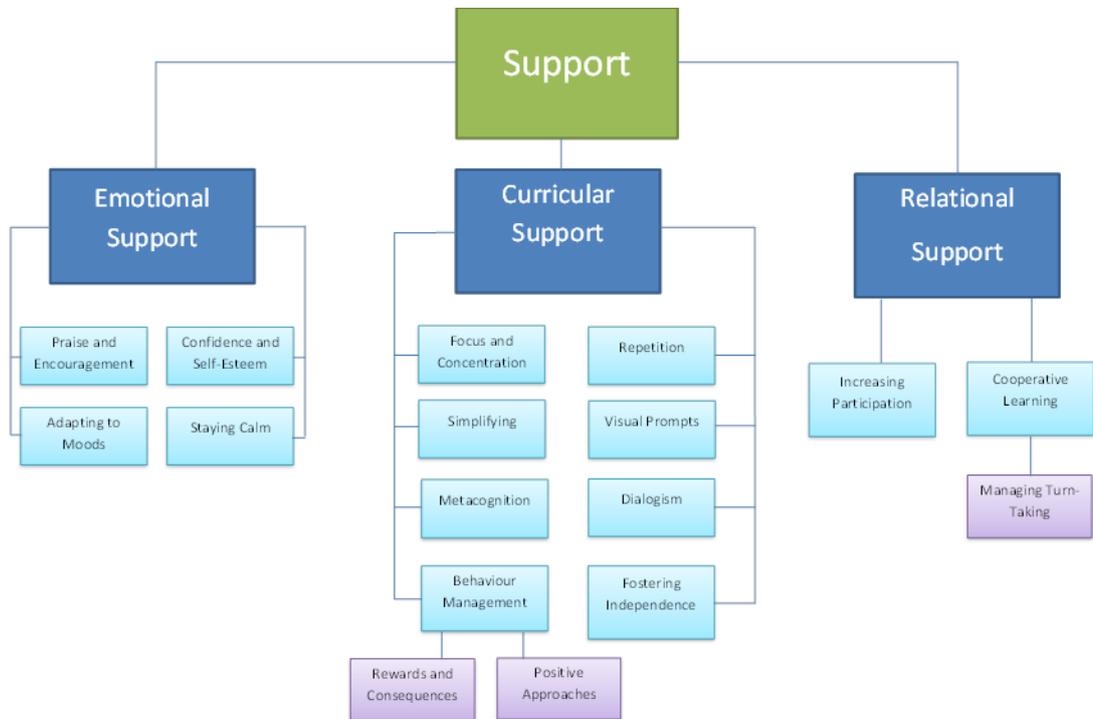


Figure 2: Repair

