

Working with adults

A systematic literature review on the perceptions of ways in which support staff work to support pupils' social and academic engagement in primary classrooms (1988-2003)

Review conducted by the Working With Adults Review Group

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The results of this systematic review are available in three formats:

SUMMARY

Explains the purpose of the review and the main messages from the research evidence

TECHNICAL REPORT

Includes the background, main findings, and full technical details of the review

DATABASES

Access to codings describing each research study included in the review

These can be downloaded or accessed at <http://eppi.ioe.ac.uk/reel/>

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ABBREVIATIONS

AEI	Australian Education Index
BEI	British Education Index
BGC	Bishop Grosseteste College
BTA	bilingual teaching assistant
CAs	classroom assistants
CIREA	Centre for Innovation in Raising Educational Achievement
CPD	continuing professional development
DfEE	Department for Education and Employment
DfES	Department for Education and Skills
EAL	English as an additional language
EPPI-Centre	Evidence for Policy and Practice Information and Co-ordinating Centre
ERIC	Education Research information Centre
FTE	full-time equivalent
HEI	higher education institution
HLTAs	higher level teaching assistants
IBSS	International Bibliography of the Social Sciences
ITE	initial teacher education
ITT	initial teacher training
LEA	local education authority
LSAs	learning support assistants
NQT	newly qualified teacher
PGCE	Postgraduate Certificate of Education
QA	quality assurance
SEN	special educational needs
STA	specialist teaching assistant
TA	teaching assistant
TDA	Training and Development Agency for Schools

Summary

Background

This review has been carried out in the context of:

- a. the 'National Agreement' on workforce reform (DfES, 2003), which set out plans to remodel the school workforce by freeing teachers to focus on teaching and learning, and by developing the roles of support staff in schools
- b. the need to prepare new teachers for working as part of a team in support of pupils' learning (DfES/TTA, 2002)

In recent years, UK classrooms have seen a large increase in the number of teaching assistants. There is a widely held belief amongst policy-makers and authors of literature reviews that support staff play a significant role in lightening teachers' workloads and in supporting learning and increasing the level of pupil engagement, thereby securing inclusion for pupils with special needs and raising standards. Some studies have explored the conditions of service of support staff, while others have revealed a wide range of tasks that support staff take on in supporting pupils' learning. However, the majority of the studies appear to provide overviews rather than an in-depth analysis of particular contributions that support staff play in supporting pupils' learning and engagement.

In addition, questions remain as to how participants in the process perceive these contributions. Listening to the views of stakeholders is an important way of informing practice about effectiveness and quality.

Aims

This review aims systematically to identify which voices are represented in the research literature and what their views are about support staff contributions to academic and social engagement. The specific aims of the review are as follows:

- to identify studies which explore the perceptions and views of principal educational stakeholders (pupils, parents, teachers and pupil support staff) about the contributions of support staff working to support pupils' academic and social engagement
- to make recommendations for initial teacher education (ITE) practice and continuing professional development (CPD), policy and research, with particular reference to staff working in support of pupils' academic and social engagement

Review questions

This review set out to answer one main question:

What are the perceptions and experience of the principal educational stakeholders (pupils, parents, teachers and pupil support staff) of what support staff do in relation to pupils' academic and social engagement?

Methods

Methods using the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) guidelines and tools for conducting a systematic review (EPPI-Centre, 2003a, 2003b, 2003c and 2003d) were employed throughout.

Reports were identified from the following sources:

- searching of electronic bibliographic databases: ERIC (Educational Resource Index and Abstracts) BEI (British Educational Index) AEI (Australian Educational Index) PsycInfo ISI Web of Science IBSS (International Bibliography of the Social Sciences) ArticleFirst
- handsearches of journals

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- citations in reference lists of all included systematic and non-systematic reviews
- personal contacts

The method we used to conduct this systematic consisted of a number of stages:

- Studies were identified by conducting systematic searches on databases, relevant journals and websites. Database was set up to store references, using EndNote software.
- All identified studies were included in the systematic map, if they met predefined inclusion/exclusion criteria. We screened these studies with quality assurance (QA) of our screening provided by EPPI-Centre staff members.
- Studies in the systematic map were coded, using the EPPI-Centre's Core Keywording Strategy for Education research (EPPI-Centre, 2002a). This allowed us to describe studies that have been undertaken according to, for example, their bibliographical detail, the country in which the study was carried out, the topic focus and the study types. As well as applying the EPPI-Centre's keyword, studies were coded with additional review-specific keywords that are specific to the context of this review.
- Studies identified as meeting the additional set of inclusion/exclusion criteria were included in the in-depth review. The application of the in-depth criteria allowed us to narrow down studies to those that took place in mainstream primary classrooms in Europe.
- Studies included in the in-depth review were analysed in depth, using the EPPI-Centre's Data-Extraction Tool (EPPI-Centre, 2002d). These questions enabled reviewers to explore and identify key components of each study. The EPPI-Centre weight of evidence (WoE) tool considers three criteria in order to make it possible to ascribe an overall quality and relevance to each study in a transparent way. These weights of evidence are based on:
 - Soundness of studies (internal methodological coherence), based upon the study only (WoE A)
 - Appropriateness of the research design and analysis used for answering the review question (WoE B)
 - Relevance of the study topic focus (from the sample, measures, scenario, or other indicator of the focus of the study) to the review question (WoE C)
 - An overall weight (WoE D), taking into account A, B and C
- The data was then synthesised to bring together the studies which answer the review question and which meet the quality criteria

relating to appropriateness and methodology. A coding comparison analysis was made of the perceptions found in each study and a narrative commentary was produced.

Pairs of Review Group members, working first independently and then comparing their decisions before coming to a consensus, conducted data-extraction and assessment of the weight of evidence judgments. Members of the EPPI-Centre helped with data-extraction and quality assurance of a sample of studies.

Results

A total of 10,023 potentially relevant papers was identified from the initial searches. After screening for relevance to the review, using the pre-established inclusion and exclusion criteria, 162 papers were included in the systematic map of research in the field. Some of these papers found to meet the criteria were reporting on the same study, so the map was effectively reduced to 145 studies.

The detailed characteristics of the 145 mapped studies are as follows:

- Of 145 studies, 83 were conducted in the USA, 52 in Europe (48 in the UK), 5 in Australia and New Zealand, and 5 in Canada.
- 144 studies focused on non-teaching staff.
- All studies were characterised as being about 'teaching and learning' due to their focus on support staff contributions in schools and classrooms.
- The majority of studies (N=119) were characterised as 'descriptions'.
- The majority of support staff were paid (N=136), and the rest worked on a voluntary basis (N=13).
- In terms of distribution of voices among the stakeholders, teachers and support staff were the most represented (N=106, 109 respectively). Headteachers were represented in 50 studies, pupils in 21, and parents in 20.

The characteristics of the studies in the in-depth review

Seventeen studies were identified for the in-depth review. These studies were identified through the application of the review-specific keywords to the studies in the map and to new inclusion criteria that limited the studies to *mainstream primary school* settings in the UK/EU. The following points summarise the characteristics of the 17 studies:

- The 17 studies selected for in-depth review were all descriptive in nature and all written in English (the latter also a condition for the review).

- All studies reported stakeholder perceptions about contributions made by TAs as a significant feature in the report.
- In terms of weight of evidence, the studies were generally of medium weight. However, the narrative overview did not focus in particular on dividing the studies by weight of evidence, but analysed the studies for the type of contributions made by support staff in mainstream primary schools in Europe (usually referred to as TAs).
- Only eight studies focused exclusively on primary schools, while eight further studies included perceptions from both secondary and primary schools and one from the pre-school phase.
- The 17 studies focused only on paid support staff contributions (volunteer staff were excluded).
- The stakeholder voices emerging in the in-depth review reflected the dominance of teacher (N=12), support staff (N=12) and headteacher (N=11) perceptions. Only four studies included parent perceptions and five offered some opportunity to pupils to express their views. Only one study focused in particular on the views of pupils (Bowers, 1997).
- Of the 17 studies, 11 reported on working with one pupil, while 8 studies reported on the perceived support given to groups of pupils. 11 studies reported general support duties in which TAs engage.
- Reasons for support being available varied, but non-specific classroom support was the largest category (N=9) in the in-depth study. This was followed by academic support for pupils with a physical disability (N=4), general SEN support including inclusion of all pupils (N=3), behaviour management (N=2), academic support for diagnosed conditions, such as autism (N=2), support for young children (N=1), support for English as additional language (N=1), carer support for a child with a physical disability (N=1), and academic support for low attainers (N=1). The variety confirms the wide range of support staff contributions.
- The vast majority of studies included a focus on both social and academic contributions to pupils' engagement (N=16). Just one described contributions that appeared to be principally academic in nature. As this review progressed, it became increasingly clear that support staff are now principally involved in direct support for learning.
- The principal research instruments were questionnaire surveys (N=9) and interviews (N=13).
- All are published reports or articles, with dissertations excluded from the study on the basis that they are not published; in fact, many were unavailable. Conference papers were included in our definition of published texts.
- Fifteen studies were conducted in the UK, one in Sweden and one in France.
- The principal titles given to classroom support staff in the UK are 'TA classroom assistant' (CA) and 'learning support assistant' (LSA). Sometimes, 'specialist teaching assistant' (STA) is used and this refers to supporting pupils' specific needs in support of learning. Some authors attach specific functions to each term: for example, LSAs who support for inclusion and CAs who have general classroom assistant duties. These terms contrast with those used in US studies where the terms 'teacher aide', 'paraprofessional' and 'paraeducator' are most frequent.
- It was somewhat difficult to identify accurately the numbers of voices represented in the in-depth review. However, the review data appears to be dominated by teacher (2,700) and support staff (961) views. This was followed by pupil (712), headteacher (333) and parent (220) perceptions. However, it should also be noted that 2,100 of the 2,700 teachers' perceptions came from one study (Neill, 2002a), and 552 of the 712 pupils' perceptions came from one particular study (Bowers, 1997).

The synthesis of evidence/TAs' contributions

The TAs' contribution to pupils' social and academic engagement are categorised under four major themes:

- **Direct academic and socio-academic contributions to pupils:** Direct support for pupils was broadly academic in nature: for example, supporting learning or interpreting teacher instructions. Some contributions are described as socio-academic because they enabled access to learning but also included management of social engagement activities: for example, providing interaction opportunities in class, improving/maintaining pupil motivation, promoting independence and autonomy, and maintaining relations between participants.
- **Contributions to inclusion:** TAs supported the inclusion of pupils by maximising the opportunities for pupils to participate constructively in the social and academic experience of schooling. This involved building pupils' self-esteem and confidence, mediating social interaction with peers, 'bridging' between pupils and teachers, and managing in-class behaviour.
- **Stakeholder relations:** The linking of stakeholders was a contribution identified principally by TAs themselves. This process is held to be assisted by the TA's role in acting as a link person, by maintaining relationships between differ-

ent stakeholders: for example, between parents and schools (in some cases as a cross-cultural link), and bridging between teachers and pupils (e.g. listening to pupil perspectives and feeding back to teachers).

- **Contributions to teachers/curriculum:** There was general recognition of the support that TAs offered to teachers, performing routine tasks that enabled teachers to focus on securing academic engagement. While TAs and teachers felt that TAs were there to support teachers, there seems to be a growing sense of these supporters of learning (TAs) seeing their role as co-educator with teachers.

Synthesis of findings: the stakeholder perceptions

- **TA responses** were enthusiastic and tended to focus on their direct contributions to learners, while acknowledging their support role for teachers. Clearly, they believed that they made significant contributions to pupil engagement: acting as a bridge between teacher and pupil, interpreting and adapting teacher input to enable more successful learning, supporting groups and individuals, and promoting autonomy.
- **Teacher perceptions** were generally positive, welcoming the support and especially the flexibility that the presence of an additional adult gave them. Teachers (and headteachers) generally reported that TAs were very valuable to them as resources and as support for their work. In addition, they valued their contribution to children's learning and development within a working partnership.
- **Headteachers** identified a wide range of contributions (e.g. to inclusion, academic engagement and support for teachers) and recognised TAs' support for small groups and their contribution to supporting learning, including the development of pupils' confidence and their ability to learn.
- **Pupil perceptions** were rather limited, but centred around the support staff member being someone to turn to, someone to listen to them, and someone who helped the teacher.
- **Parent perceptions** were much less frequently reported in the studies. Although studies report inconsistent results on how much parents understood the role of TAs, there was a common perception among parents that teachers planned programmes, but TAs supported them to operationalise these and to teach effectively. They also associated TAs' roles with providing feedback to them on their child's progress.

Conclusions

The results of the present in-depth review point to one clear conclusion: that support staff are

believed to make significant contributions to academic and social engagement.

This review highlighted the widening range of functions of TAs. This results in TAs facing a range of challenges, as they become ever more significant contributors to pupils' learning: for example, in how to support pupils' engagement more effectively, how to promote independent learning and how to engage constructively to form a working partnership with other school staff. Hence, their views and those of teachers are essential to an understanding of current initiatives. There was a perception in some studies that insufficient time was available for planning and evaluation.

Despite the generally positive perceptions discovered in the literature, this review also confirmed that the presence of additional adults in the classroom is not a guarantee of social and academic engagement. While most perceptions appear to be positive, the negative perception of pupils over-protected by support staff was mentioned in a number of the included studies.

It has been argued that TA and pupils' voices are under-represented. This is particularly the case for pupil voices. While development of TA policies needs to be undertaken with an appreciation of the significant contribution they make, it is also important that we listen to stakeholders' views to inform practice.

Implications

The review offers the following implications for key groups.

Teaching assistants

The studies included in this review suggest that TAs have an increasingly important pedagogic role. TAs may well be under the formal guidance of teachers and senior managers in schools, but, in their direct interactions with pupils, they are perceived to be making significant pedagogic decisions. As far as academic engagement is concerned, the mediating perceptions that TAs identified beg the question about TAs' subject knowledge, in that they first have to understand the teacher's input if they are to be able to support learning and evaluate outcomes successfully. For some TAs, this may be a challenge in specialist areas of the curriculum, such as in science or numeracy. As this role develops, further training will be essential to sustain quality input and support from the range of support staff now operating in schools.

Teacher trainers and trainees

This review highlights forms of support likely to be available in mainstream primary settings. Teacher-trainers could use the outcomes of this review as the basis for:

- discussion of classroom approaches that take account of TA contributions
- preparation of trainees for planning to incorporate TA contributions
- consideration of working with others

For trainers of TAs, particularly higher level teaching assistants (HLTAs), the findings may well confirm the current focus of training and give greater authority to the definition of the HLTA contribution to academic and social engagement.

Moreover, trainees will need to prepare for work with others; understand and work with TAs to ensure inclusive approaches which do not lead to dependence; and develop skills of collaboration, people management, negotiation and conflict resolution.

Educational planners

TAs support learning under the direction of the teacher but are semi-autonomous and make pedagogical decisions in their interactions with pupils. These contributions need to be understood by senior stakeholders. TAs also have a key role in inclusion, which has implications for their training: for example, what to include, opportunities for supervision, observation, feedback and guidance. We need to know more about the added value of their presence and what happens when their support is not available.

Teachers

Teachers need to plan for inclusion of the assistant. Teachers working closely with TAs, as part of a team, welcome the interpreting/mediating contributions of TAs, plan for their inclusion and review the teaching 'enterprise'. However, the extent of the evidence of this 'quality-sensitive' approach being implemented could not be measured by this review. Teachers need to ensure that TAs' 'bridging' contribution does not impede learning but facilitates inclusion and access.

General

Support staff are valued and their impact is believed to be positive but this impact is only partially understood. Thus, further investigation is required: for example, to what extent are TAs guided by teachers; to what extent do they follow scripts/teacher plans or make their own pedagogical decisions about individual children's needs?

Questions for research

Further evidence is required on the following:

- the kinds of discourse in which TAs engage when supporting pupils as individuals and when supporting groups of pupils

- how TAs decide when to support, how to support and when not to intervene
- how pupils feel about the contribution of TAs
- the extent to which TAs' work is supplementary, complementary or replaces teachers
- how TAs support language development

Strengths and limitations

Strengths

A consistent picture of stakeholder perceptions emerged from the review. The disciplines of screening, using exclusion criteria and data-extraction of the EPPI-Centre tools, enabled reviewers to focus very firmly on the issue of stakeholder perceptions about TAs' contributions (e.g. supporting learning and intervening) when appropriate.

The protocol set the agenda for the review with the elaboration of the key question and the description of the process that would be undertaken to explore the question. This gave a structured framework for the study of the literature.

The team approach to screening, keywording and data-extraction, involving pairs of reviewers checking and moderating each other's work, was a strength of the review. Three reviewers checked all studies in the data-extraction phase before the final version was agreed. A similar level of quality assurance was achieved when the findings in the data-extractions were analysed by a minimum of three reviewers, using a coding-comparison method. The EPPI-Centre procedure enabled the team to identify a significant number of relevant studies that address, at least in part, the question posed by the review. What has emerged is an understanding of how, and to what extent, stakeholders have been asked to present their views about support staff contributions. Some important implications emerged from the review.

Limitations

A major weakness relates to the difficulty of disentangling views in studies of TA practice. A further weakness lies in the imbalance of stakeholders represented in the research. We learn little about what pupils think of the additional adults who help them in the classroom and even less about the views of parents.

A further difficulty arose with the educational setting of studies, which were often cross-phase. Of the 17 studies in the final in-depth review, eight included perceptions about support staff in secondary schools and it was difficult to separate phase-specific perceptions. As a result, the findings of this first review can be taken as indicative rather than emphatically accurate.

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The review question also posed difficulties and may have led to lost opportunities: focusing on identifying perceptions perhaps led to the exclusion of important studies, such as studies in which observations are a major part, evaluations of the impact of TA interventions, and trials (e.g. comparison of classes with/without TAs).

There are other limitations: for example, key-wording the mapped studies. This provided only

an overview and proved to be difficult to exploit, because the review-specific keywords were limited in scope. Reducing the map to a manageable number of studies for in-depth review meant that some decisions regarding the final focus related to workload management. Had time permitted, the Review Team would have included studies from all over the world. However, this would have meant data-extracting up to 40 studies. Limiting our focus to Europe reduced the number to 17.

CHAPTER ONE

Background

1.1 Aims and rationale

This review focuses on the broad area of working with support staff employed to support pupils' learning. The aims of the review are to:

- identify studies which explore the perceptions of principal educational stakeholders (pupils, parents, teachers and pupil support staff) about the contributions of support staff working to support pupils' academic and social engagement
- make recommendations for initial teacher education (ITE) practice and continuing professional development (CPD), policy and research, with particular reference to staff working in support of pupils' academic and social engagement

Through the review, we explore the experiences of school staff and pupils in relation to support staff: that is, participants' perceptions of the contributions made by support staff to academic and social engagement in the classroom. A distinctive feature of this review is that it sought to illuminate how pupil support works and how it is experienced.

Recent years have seen a huge increase in the number of assistants in UK classrooms. In January 2005, there were 147,400 fulltime equivalent (FTE) teaching assistants in schools in England, with 431,700 FTE teachers, giving a ratio of 1 teaching assistant for each 2.9 teachers (DfES Statistics, 2005:1997). This represents a large rise from January 1997, when the total was 61,300 and the corresponding ratio was 6.5 (ibid). The National Agreement (DfES, 2003) set the parameter for further deployment of support staff to 'remodel' the teaching workforce and relieve teachers of routine tasks, aiming to

- reduce (progressively) teacher workloads

- remodel the workforce with redistribution of routine tasks
- reform the roles of support staff
- establish higher level teaching assistants (HLTAs) in all schools

This study uses a systematic literature review to explore views about the contributions of support staff at a time when their roles are being considered in the context of the remodeling of the school workforce. Listening to the views of stakeholders about their experiences is an important source of information about educational change and its effects.

Papers in the domain of public health (for example, Harden *et al.*, 2004) argue that synthesising studies of stakeholders' views should lead to greater understanding of the different perspectives of participants in the process under review. In our case, such a synthesis should lead to greater understanding of how stakeholders - principally teaching assistants, teachers and pupils - view support for pupils' learning and engagement.

This will enable us to enrich teacher education programmes so they can take account of the Training and Development Agency for Schools (TDA) expectations related to the National Agreement on work force reform. For example, Straker (2003, p 9) writes, 'For those teachers coming into the profession over the next five years, working effectively with support staff in their classrooms will be a significant and challenging part of learning to be a teacher'. Consequently, this systematic review aims to synthesise perceptions about support staff contributions in order to inform policy, research and teacher education programmes.

1.2 Definitional and conceptual issues

1.2.1 Theoretical background

There is a widely held belief amongst policy-makers (DfES, 2002) and authors of literature reviews (Lee, 2002) that support staff play a significant role in lightening teachers' workloads, and in supporting learning and increasing the level of pupil engagement. This is supported by primary studies (Farrell et al., 1999; Lacey, 2001; Wilson et al., 2002b) in a range of ways: reducing teacher workload, supporting individual pupils, securing inclusion for pupils with special needs, and raising standards.

However, questions remain as to how participants in the process perceive these contributions. Listening to the views of stakeholders is an important way of informing practice about effectiveness and quality. This review aims to identify which voices are represented in the research literature and what their views are.

This study analyses social and academic engagement from four major angles:

1. support staff's direct academic and social-academic contributions
2. contributions towards pupils' inclusion
3. the functions that support staff play in stakeholder relations
4. support towards curriculum and teachers

Although it was not always equally clear where one category started and finished, they provided us with a valuable framework from which to explore support staff's roles and functions in mainstream education.

1.2.2 Defining the stakeholders

For the purposes of the study, several definitions were adopted.

The principal stakeholders consulted in the literature are teachers, headteachers, support staff, pupils and parents. However, this does not exclude the perceptions of other educational practitioners as the literature may also reveal other voices, such as those of local education authority officers.

Support staff refers principally to teaching assistants (TAs) (sometimes called 'learning support assistants' (LSAs)), classroom assistants (CAs), specialist teaching assistants (STAs), learning mentors, and technicians who work in support of classroom activities (for example, ICT/Science support staff).

Initially, volunteer support staff were not necessarily excluded simply because they were unpaid, but a decision was made later in the study to focus on paid support staff for the in-depth study.

Consequently, studies investigating the perceptions of volunteer support staff were included in the systematic map, but were excluded from the second stage in-depth review.

Acronyms are used to refer to support staff, principally TAs, but also LSAs and CAs when these are the terms used in the original report. Higher learning teaching assistants (HLTAs), a 2003 initiative in England would be included in the review, if any studies involving them have been concluded.

Consideration of **support staff contributions** in this review is limited to work that relates to in-class support. By this, we mean activities that contribute directly to pupils' learning and engagement in the classroom. This means perceptions about working together to deliver a programme of study, such as additional literacy activities; it can mean perceptions about the value of support in a homework club; or, support staff working together with teachers to inform parents of progress or lack of progress in an attempt to promote learning. It includes a range of roles related to inclusion and in-classroom support work, such as the following:

- support for a student with a physical disability (caring only)
- support for a student with a physical disability (academic support)
- academic support for pupils with an intellectual disability
- academic support for a diagnosed condition (e.g. dyslexia, autism)
- helping pupils with English as additional language
- behaviour management activities
- foreign language lesson support
- bilingual support activities
- academic support for slow learners
- general special educational needs (SEN) work
- general classroom support, working with individuals or groups

It does not include perceptions about extra-curricular activities, such as running lunchtime chess clubs nor classroom-distant activities (for example, consulting the premises officer about school security). Overall, we are interested in studies that explore the dynamics of engagement, how support staff help to engage pupils in learning in mainstream settings.

Social and academic engagement relates to involvement in the curriculum, in classroom activities and in activities that are designed to promote or secure access to the learning in the curriculum. Marjorie Boxall (Bennathan and Boxall, 1998) has a very useful concept that helps us conceptualise what is at the heart of educational inclusion, when we think about this from a cognitive perspective.

She refers to *organisation of experience* which is related to pupils giving purposeful attention, participating constructively, connecting up experiences, showing insightful involvement and engaging cognitively with peers.

In addition to the cognitive organisation of experience, when we are discussing educational engagement, in a way we are referring to social inclusion. We are also concerned with the individual's *active engagement* in formal learning (Cooper et al., 2006).

The academic and social aspects of engagement are difficult to disentangle and the Review Group argued that social engagement - for example, through appropriate behaviour in the classroom or through interaction with peers - is not readily separable from academic engagement. So, social and academic engagement refers to ways in which individual students are in active participation in learning. This depends upon adults fostering positive relations with pupils, providing pupils with appropriate and structured educational experiences that contribute to learning, that bring about interactions with peers and the teacher, or boost confidence and develop skills.

As a result, issues explored could include perceptions about adults working with pupils to support their social and academic engagement; these include classroom tasks in groups or study support activities, such as alternative or additional lessons.

Perceptions cover notions associated with terms, such as views, perspectives, opinions, beliefs, thoughts, ideas and attitudes.

1.3 Policy and practice background

It is no longer accurate to 'think of most children being taught by a stand-alone teacher' (Hancock et al., 2001, p 31). Therefore, it is no longer reasonable that we should prepare trainees for a stand-alone classroom teacher role, given the standards required for Newly Qualified Teachers (NQTs) and changes to conditions of service (DfES/TTA, 2002, DfES, 2002).

The Review Group believes that there is a knowledge base about the practice of support staff that needs to be incorporated into ITE and CPD to prepare teachers for informed and effective collaboration with support staff, in school cultures that are increasingly collaborative in nature.

This review has been carried out in the context of the 'National Agreement' on workforce reform (DfES, 2003), which set out plans to remodel the school workforce by freeing teachers to focus on teaching and learning, and developing the roles of support staff in schools, as well as the need to prepare new teachers for working as part of a team in support of pupils' learning (DfES/TTA, 2002).

This review of relevant studies will inform the development of remodelling by providing information about roles, contributions and experiences from the perspectives of the principal participants in the classroom. This will also enable us to enrich teacher education programmes so they can take account of TDA expectations associated with the National Agreement. For example, Straker (2003, p 9) writes, 'For those teachers coming into the profession over the next five years, working effectively with support staff in their classrooms will be a significant and challenging part of learning to be a teacher.' (p 9)

In addition, as this study identifies how stakeholders (pupils, parents, teacher and support staff) view classroom support, it reveals how the voices of the participants in the process have been reported. Insights gained from this are a useful source of evidence both for policy-makers and educationists (headteachers, teachers, trainers and advisers), who are entrusted with the development of this important part of the school workforce. These insights will also illuminate the potential of support staff; and the processes, which enable or disable their contributions, which in turn would help practitioners to maximise the function of support staff.

There has been an argument in the press suggesting that the voices of support staff have not been heard and have therefore not contributed to policy and practice guidelines (Todd, 2003), supported by claims in research studies that teaching assistant voices have rarely been heard (for example, O'Brien and Garner, 2001; Shaw, 2001). Todd argued that the decision to give greater responsibility for whole class teaching to HLTAs had occurred without listening to existing teaching assistants.

This may or may not be a widely held belief but its expression leads one to question whether teaching assistants have been objectified in recent decisions about their future roles. In spite of the fact that educational researchers have increasingly focused on the voices of participants as a key source of insight into what constitutes good educational practice, to what extent have support staff and pupils, who are in possession of extensive knowledge of classrooms and teaching and learning processes, been consulted?

1.4 Research background

Since the mid-1970s in the UK, research has been conducted into the ways that support staff contribute to children's education. Several studies have described support staff roles and contributions: Blatchford et al., 2002; Farrell et al., 1999; Hancock et al., 2001; Hodgson et al., 1984; Kennedy and Duthie, 1975; Lacey, 2001; Mortimore et al., 1994a; Moyles and Suschitzky, 1997; Schlapp et al., 2001; Wilson et al., 2002b. Neill (2002a) also explored roles and conditions of service. Many

small-scale studies focused on the roles of support staff in the classroom: Thomas (1987, 1991) and Clayton (1993). The work of bilingual support staff has attracted increasing interest: Martin-Jones and Saxena (1996) and, more recently, Cable (2003, 2004) investigated the ways in which bilingual assistants contribute. An even greater amount of research has been conducted in the United States. In recent years, notable studies have been undertaken by French (1998, 2001), Giangreco *et al.* (1997, 2001, 2002, 2003), and French and Chopra (1999) who investigated parent perspectives about the role of support staff. These studies and many more provide evidence of how support staff roles have evolved in recent decades.

In the UK, many of the studies have been at primary schools, key stages 1 and 2, although the growth of support staff employed in the secondary sector has led to more attention from researchers to the ways in which secondary schools deploy support staff: for example, the detailed study by Farrell *et al.* (1999), and smaller scale investigations by Bearn and Smith (1998), and Dew-Hughes *et al.* (1998). There have also been small-scale studies of in-class support by teachers in secondary schools (Bibby, 1990; Lovey, 1996; Tennant, 2001), which explored the organisation and effectiveness of teaching teams to meet the needs of pupils with special needs.

Lacey (2001) investigated TA contributions to inclusive learning in 24 case-study schools and concluded that they were essential to efforts to include children with severe learning disabilities. Farrell *et al.* (1999), who investigated practice in both primary and secondary schools, concluded that effective TA contributions promote pupils' participation in social and academic processes, enable children to achieve more independence as learners, and help to raise standards for all pupils. They found that TAs and teachers may be involved in alternating roles at certain times and that TAs were expected 'to carry out a whole variety of tasks both within and between lessons' (p 51). They arrived at specifications relating to good practice and proposed how TAs could be effective: for example, in enabling children to achieve more independence as learners. Hancock *et al.* (2001) found that primary TAs 'often work with children away from the teacher' (p 30) and take on a wide range of tasks, depending on their confidence, training and levels of experience. They also noted that teachers and their pupils had come to rely on the availability of assistants and that TAs now do work traditionally done by teachers, a finding echoed by the study in Scotland by Wilson *et al.* (2002b).

However, statistically measurable effects on pupil attainment are hard to find (as noted by Blatchford *et al.*, 2004) though this applies to many educational initiatives when considering impact. In the US, Achilles *et al.* (2000) and Gerber *et al.* (2001) studied the effect of TA contributions on

pupils' attainment and expressed doubt about their effectiveness. In the UK, Elliott *et al.* (2000) warned against 'simplistic expectations' that the presence and employment of additional adults necessarily leads to measurable gains in children's learning. Their quasi-experimental study looked at the impact of volunteer helpers on the reading development of 4-5 year-olds. While the study did not identify a positive effect, the discussion listed a number of constraints that had probably hindered the contribution (Elliott *et al.*, 2000, pp 240-241) of some volunteers who had difficulty keeping children on task. Others had difficulty persevering with tasks when children were unresponsive, and some emphasised superficial knowledge at the expense of the child's cognitive growth. The researchers concluded that support staff, working relatively independently in the classroom, were unlikely to be of particular benefit. Wilson *et al.* (2002b) on the TA (teaching assistant) initiative in Scotland were unable to say what specific direct impact support staff had on pupil attainment.

TAs are involved in direct interactions with pupils, but there is a need 'to consider what kind of contribution is appropriate' (Blatchford *et al.*, 2002, p 63). Exactly how support staff contribute has only been lightly drawn through observation of their practice. For example, we know of no studies of support staff-pupil discourse, though there have been some observations (Blatchford *et al.*, 2002; Moyles and Suschitzky, 1997). Such uncertainties and difficulties with impact studies provide justification for the study of perceptions. The views of participants in the process are perhaps one of the most informative indicators available in research to advise policy-makers, teacher trainers and trainee teachers about the challenges and opportunities that support staff bring to classroom teams. Participant views are an important source of feedback about the experience and success of children who receive in-class support.

Lee (2002) has reviewed some of the research and presented useful guidance on what we know and what we need to know on the role of TAs. However, her study provided an overview rather than an in-depth systematic analysis of the field. Howes *et al.* (2003) provided a crucial source for shaping the thinking towards our review and considered the following questions in relation to paid support staff:

- *What is the impact of paid adult support on the participation and learning of pupils in mainstream schools?*
- *How does the impact vary according to the type of support?*

They concluded that paid adult support staff:

- promote inclusion of pupils with SEN (p 4)
- have little demonstrable consistent impact on class attainment scores (p 5)

- play an important role as mediators, whose knowledge and understanding of pupils can be utilised to help pupils engage in learning and participation (p 5)
- can positively effect pupil on-task behaviour, although overlong proximity can also have unintended negative outcomes - for example, reduction in teacher engagement with the pupil and isolation from the teacher (p 6)

Howes et al. (2003) considered perceptions with regard to impact of adult support on the participation and learning of pupils. While the focus of the review by Howes et al. (2003) is relevant to this review, our focus is to explore key educational stakeholders' perceptions about the nature of support staff roles (the processes, not just impact). Furthermore, we focus on how TAs' roles are perceived by school staff and themselves, how pupils view their contributions, and how parents perceive their role and input.

From the synthesis and the research studies by Howes *et al.* (2003), briefly reviewed above, there are indicators that support staff contribute effectively in a range of ways: reducing teacher workload, supporting individual pupils, securing inclusion for pupils with special needs, and raising standards. In addition, the studies reveal the development of teaching assistants or teacher aides (the US term) from general auxiliaries for teachers to supporters of pupils' learning, with a variety of roles (learning support assistants for named pupils, general classroom assistants).

However, exactly how they perform these functions and what they do is only lightly drawn in many of the studies and in rather general terms. While Howes et al. (2003, p 9) in their summary concluded that there is a 'lack of research that has systematically sought pupils' views about the types of support that they most value', they acknowledged the importance of identifying and reporting views. This review, therefore concentrates on stakeholder reflections, perspectives, opinions and views, not only about impact but also about roles, responsibilities, approaches and relationships.

With the partial exception of the review of paid support staff impact on inclusion by Howes et al. (2003), no systematic review to date has sought to extract the views of key participants about the working dynamics of the support role in the class-

room and to explore the extent to which existing research has given a voice to stakeholders. By highlighting the perceptions of key stakeholders, this review will act as a catalyst for reflection about the contributions made by support staff and lead to the identification of issues that need to be addressed in policy, practice and research.

1.5 Authors and funders

The review was funded by the Teacher Training Agency (now the Training and Development Agency), managed by the EPPI-Centre Review Team, and conducted under the auspices of the Centre for Innovation in Raising Educational Achievement (CIREA) at the School of Education, University of Leicester. Participants in the Review Group were Wasyl Cajkler, Professor Paul Cooper, Dr Rosie Sage, Rachel Tansey, Dr Geoff Tennant, Claire Taylor of Bishop Grosseteste College, Lincoln; and Dr Stan Tucker of Newman College, Birmingham.

1.6 Review questions

This review set out to answer one main question:

What are the perceptions and experience of the principal educational stakeholders (pupils, parents, teachers and pupil support staff) of what support staff do in relation to pupils' academic and social engagement?

Review question for the in-depth review:

What are the perceptions and experience of the principal educational stakeholders (pupils, parents, teachers and pupil support staff) of what support staff do in relation to pupils' academic and social engagement in primary classrooms (1988-2003)?

This review explores beliefs, feelings and views about the roles, contributions and processes, in which support staff engage. This involves considering perceptions about the effects of support staff on teaching and learning in classrooms in which they are engaged. Given the nature of the pupils that are supported, such studies have to employ a mixture of methods but also rely on individual interviews, questionnaires and possibly focus group discussions.

CHAPTER TWO

Methods used in the review

The chapter describes participants in the review, the stages of the review, the criteria used to determine which studies were relevant to the review, and the systematic quality of the process. We begin with a consideration of the people involved before proceeding to describe the process.

2.1 User involvement

2.1.1 Review and Advisory Groups

The review was managed by the Review Group (in liaison with the Advisory Group). The Review Group was responsible for:

- co-ordinating the tasks and stages associated with the review
- screening studies for inclusion or exclusion
- keywording studies in the systematic map
- conducting in-depth study of the final set of studies
- inviting participation from teacher educators, trainers of support staff, a headteacher, teaching assistants and other users (for example, local education authority (LEA) advisers)
- agreeing the allocation of responsibilities for different parts of the review
- preparing and editing the final report

The Review Group included members of staff from the University of Leicester, Bishop Grosseteste College (BGC), Lincoln, and Newman College, Birmingham. All three institutions are involved in initial and continuing teacher education programmes. Therefore, the Review was informed by consultation with an established network of higher education institute (HEI) staff (who are involved in training both support staff and teachers), as well as with a range of other practitioners in the Advisory Group.

The Advisory Group was composed of a range of practitioners all associated with training or man-

agement of support staff. It acted as consultants to the review and met three times. Its role was to:

- review the progress of the Review at key stages (e.g. after initial screening, after keywording and before data-extraction)
- respond to interim findings, offering user perspectives on messages emerging from the review (e.g. about support staff roles in primary schools)
- advise on current practice and developments especially about policy initiatives, such as the remodelling of the workforce
- advise on the direction of the review - for example, whether it should focus on a particular sector, age range or geographical location; the Advisory Group was instrumental in determining that the review's final focus would be on mainstream primary schools in Europe

It included three special needs teachers (from primary and secondary schools), two principals of colleges of higher education, teacher educators in three institutions (pre-service and in-service), LEA advisers with particular interest in working with support staff and the director of a school of education. The remaining members were volunteer teachers or teaching assistant educators. We explored means by which pupils could be included in the user group but this did not prove possible in the time available for this review. A teaching assistant became a permanent member of the Advisory Group and two groups of teaching assistants (21 primary TAs, 11 secondary) acted as focus groups in the later stages of the review. They reviewed and offered their perspectives on the findings about perceptions.

2.1.2 Methods used

Screening of studies was moderated by four pairs of reviewers, drawn from the membership of the Review Group. The process was informed by regular communications with members of the Advisory Group. For the detailed analysis and assessment of the quality of studies (data extraction), review teams of two people were drawn from the Review Group. Following this stage, interim findings were presented to other Initial Teacher Training (ITT) colleagues in the three participating institutions: BGC, Newman College and University of Leicester. Colleagues made presentations about the interim findings to members of the Advisory Group and to a wider audience of Post Graduate Certificate of Education (PGCE) tutors through a 'Food for Thought' lunchtime seminar in January 2005. In addition, as noted above, two presentations were made to teaching assistants who responded to the interim findings, offering their own perceptions about support staff contributions.

2.2 Identifying and describing studies

2.2.1 Defining relevant studies: inclusion and exclusion criteria

The inclusion criteria are a set of agreed conditions that studies must meet in order to be included in different stages of the review. The following were used for the screening of the studies following the initial search.

Inclusion

1. SCOPE

To be included, a study had to:

- be about supporting pupils for academic and social engagement (including special educational needs (SEN)/English as an additional language (EAL)) as defined in section 1.2.2
- be about the perceptions of stakeholders on the effects of support staff on social and academic engagement (including SEN, EAL)
- report on pupils' learning in the 4-19 age range in primary and secondary schools, and their equivalents in other countries

2. TIME, PLACE and LANGUAGE

To be included, the study had to be *both*:

- reported and published in English; *and*
- published in the period 1970-2003 (i.e. from the decade when the school-leaving age rose to 16 in the United Kingdom).

Although the Review Group recognises that there are likely to be studies conducted in other languages, time and resource limitations mean that

the scope of the review was limited to studies published in English. For the initial search, the three-decade span was agreed because interest in the work of pupil support staff in the UK (for example, Kennedy and Duthie, 1975) and US (for example, Bennett and Falk, 1970) began in the 1970s.

3. STUDY TYPE: methods

To be included, a study had to:

- be based on primary empirical research (case studies, reporting of perceptions through questionnaires, interviews and meetings)

Exclusion

Studies were excluded on any one of the following grounds:

1. SCOPE

- If they were not about perceptions of stakeholders on the effects of pupil support staff on social and academic engagement (including SEN, EAL)
- If they were not about support staff (see note below)
- If they were not about pupils' learning from Foundation Stage to Key Stage 5 (age 4-19)
- If they were not about supporting pupils for academic and social engagement (including SEN/EAL)
- If they were not about the pupils' curriculum (including SEN, EAL); extra-curricular activity lunchtime clubs would be excluded, but not initiatives such as homework clubs which relate to the curriculum
- If the support staff were working on tasks that did not relate directly to learning (e.g. liaison with school premises officer about security in the classroom)

2. TIME, PLACE and LANGUAGE

- Not published in English
- Not published in the period 1970-2003

3. STUDY TYPE

Papers that were not drawn from primary research were excluded, for example:

- editorials, book reviews, literature reviews, position papers
- policy documents (e.g. a DfES consultation paper, 2002), syllabuses, frameworks
- resources
- handbooks (e.g. Fox, 1998)
- methodology papers
- bibliographies and literature reviews

g. non-empirical papers

During the process of keywording, the definition of support staff was further limited. It was agreed that the following categories of support staff (which regularly appeared in the trawl of databases) should be excluded:

- school librarians and library assistants as these were too numerous to manage and a separate synthesis would need to focus on the perceptions of how school librarians contribute (there is certainly need for such a synthesis)
- psychologists and counsellors as these were not only numerous but also not directly concerned with curriculum engagement in ways comparable with roles undertaken by classroom-based support staff
- parents when they were acting only as parents (e.g. in parent-teacher meetings) not as *helpers* in the classroom; *helper* was taken to mean someone who supports the learning of pupils in a direct way (e.g. by hearing reading or by attending to social needs to facilitate inclusion)

2.2.2 Identification of potential studies: search strategy

Key search terms were developed drawing on keywords used in recent articles and the Howes et al. (2003) review. A set of search terms was generated to take account of variations in the use of names to describe support staff (teaching assistants, classroom assistants, classroom aides, teacher aides, learning support staff, learning support assistants, special needs support staff, learning mentors, ancillaries, paraprofessionals) and to identify perceptions (views, roles, expectations, perspectives, attitudes).

However, this strategy did not work as inclusion of terms for perceptions brought up many studies that were unrelated to the topic and excluded some studies that we knew to be in the bibliographical databases. As a result, the search strategy was narrowed to focus on terms for support staff (see Appendix 2.2 for the search strings used). Unfortunately, each database required a different approach.

Reports and articles were identified from the bibliographic databases:

- British Education Index (BEI)
- Educational Research Information Center (ERIC)
- PsychInfo
- ISI Web of Knowledge
- Australian Education Index (AEI)
- International Bibliography of the Social Sciences (IBSS)
- Article First
- Education On-line

This was supported by handsearching of key journals recommended by members of the Review and Advisory Groups: for example, *British Education Research Journal* and *Support for Learning* (See appendix 2.3 for further details). In addition, there were other handsearches, for example of review articles. Reference lists of key authors/papers were also searched and citation searches were made of key authors/papers: for example, Blatchford et al. (2002), Farrell et al. (1999), Gerber et al. (2001), and Wilson et al. (2002b). References on key websites, such as the following, were explored: NFER, DfES, Current Educational Research in the UK (CERUK), EUDISED, SCRE, NICER and BERA.

An Endnote database was set up to store and code studies found during the review. Titles and abstracts were entered electronically or manually depending on the source. Then, we applied the above inclusion/exclusion criteria to identify whether studies were about perceptions/views of support staff contributions to pupils' academic and social engagement.

2.2.3 Screening studies: applying inclusion and exclusion criteria

We conducted the searching of the databases and journals between January and June 2004. Inclusion and exclusion criteria were applied successively to (i) titles and abstracts, and (ii) full reports. Each reviewer applied the inclusion criteria sequentially to titles and abstracts. Where there was any doubt, cases were deferred for further checking by pairs of reviewers. This led to a broad screening of titles and abstracts in the first instance, with criteria applied cautiously so as not to exclude any papers that might contain insights about views or perceptions. Full reports were obtained for those citations that appeared to meet the inclusion criteria or where there was insufficient information to be sure to exclude. The inclusion and exclusion criteria were reapplied to the full reports.

2.2.4 Characterising included studies

Studies meeting the inclusion criteria were assigned a series of codes, using the *EPPI-Centre Core Keywording Strategy for Education Research. Version 0.9.7* (EPPI-Centre, 2002a). The keywording tool enabled reviewers to categorise reports and articles according to the following features:

- bibliographical detail
- how the report was identified
- whether a report or article was published, or unpublished
- links to other reports
- the country in which the study was carried out
- the topic focus of the study

- population on which the study focused (e.g. teaching assistants, nursery nurses in Key Stage 1; bilingual teaching assistants)
- the context of participants in the study (e.g. curriculum and educational setting of the participants)
- type of study (e.g. descriptive study)

Additional keywords (see Appendix 2.4), which were specific to the educational context of the review, were added to those of the EPPI-Centre. The review-specific mapping of studies focused in particular on whether the studies related to the reporting of perceptions about support staff contributions to pupils' engagement, thus coding studies according to:

- stakeholder perceptions
- support staff roles and contributions
- information about the type of study (case study; interview studies; perceptions of headteachers, teachers, pupils, support staff)

All the keyworded studies were used to create a descriptive map of the research literature, and added to the larger EPPI-Centre database, REEL, for others to access via the website.

2.2.5 Identifying and describing studies: quality-assurance process

Quality assurance (QA) processes were carried out at two stages: (i) screening of titles, abstracts and full text documents; and (ii) keywording of studies. QA procedures for data-extractions are discussed in section 2.3.5.

Screening of reports: quality assurance

In order to establish clear criteria for inclusion, two reviewers subjected 200 citations to initial screening to evaluate the reliability and validity of the criteria, and quality assure the screening process. EPPI-Centre staff also screened a sample of 50 citations to check for consistency and accuracy in the Review Group's screenings. Following confirmation of consistency, 500 citations were issued to each of four reviewers for initial trial screening. The two 'lead' reviewers, who had been moderated by an EPPI-Centre staff member, subjected the resulting 500 screenings to scrutiny to check again for consistency.

When screening full papers acquired for whole text screening (440 reports), a 10% sample of the full texts was subjected to further moderation by members of the Review Group. EPPI-Centre staff sampled 10 papers to advise on levels of consistency. This procedure lengthened the process but secured greater rigour and consistency.

Keywording of studies

Six reviewers applied review-specific 'pilot' keywords independently to ten studies. Then, they compared their decisions and came to a consensus about the usefulness of the keywords. In addition, two reviewers conducted a similar exercise with the EPPI-Centre staff member. This helped to refine the review-specific keywords. Following agreement on the use of keywords, keywording was undertaken by all members of the Review Group. Keywordings were checked for consistency by one lead reviewer.

2.3 In-depth review

2.3.1 Moving from broad characterisation (mapping) to in-depth review

Having completed the descriptive map of the literature, the focus was further refined to target studies that directly inform the question about contributions to academic and social engagement. This ensured that the synthesis was based on a coherent set of studies and that the review was manageable within available resources. Members of the Advisory Group suggested that users would be principally interested in UK and other European countries perspectives in the first instance.

A specific topic focus of primary schools was chosen both to ensure further homogeneity across the studies and also to enable the Review Team to complete a separate review considering secondary school settings. A narrower time period of 1988-2003 was chosen to reflect the introduction of the Education Reform Act in England and Wales, the growth in the use of learning support in inclusion programmes, as well as the increasing use of general teaching assistants as helpers in the classroom.

The following in-depth criteria were applied to the 145 studies in the systematic map to identify the studies for inclusion in the in-depth review:

- They were published in or after 1988.
- They focused on the primary (5-10) age group.
- The type of engagement described in the study was both academic and/or social.
- Support staff were paid.
- They were carried out in Europe.
- They focused on pupils engaged in mainstream education.
- Studies focused on stakeholders' descriptions of the activities that support staff are involved in, thus containing at least some description of TAs' activities.
- Stakeholders' perceptions of the contribution that such activities make to social and or academic engagement were:

- a. a clearly stated aim of the study, or
- b. explicitly discussed in the findings
- Studies reported their research methodology including at least:
 - a. a description how the sample was generated, and
 - b. some information on the methods for collecting views/perspectives

2.3.2 Detailed description of studies in the in-depth review

Studies identified as meeting the in-depth inclusion criteria, were analysed in depth, using the *EPPI-Centre Review Guidelines for Extracting Data and Quality Assessing Primary Studies in Educational Research. Version 0.9.7* (EPPI-Centre, 2002b). These questions enabled reviewers to explore and identify the following key components in each study:

- aims of the study, research question
- study design, nature and characteristics of the sample
- methods of analysis and data collection
- outcome measures, results and conclusions

Details of each study were recorded, including the focus of the study, the nature of the sample (i.e. the principal stakeholders: support staff, headteachers, teachers, pupils, parents), and the research methods and perceptions/views described in the study. The Review Group recorded the results and conclusions relating to perceptions exhaustively, to form the basis of the synthesis. Where possible, direct quotations were recorded in full to facilitate subsequent analysis. Teams of two reviewers applied the guidelines, working independently then comparing results, using EPPI-Reviewer software. Then, the sample of studies was subjected to review by the Review and Advisory Groups meeting in February 2005.

2.3.3 Assessing quality of studies and weight of evidence (WoE) for the review question

The EPPI-Centre weight of evidence (WoE) tool considers three aspects of research quality and relevance in order to make it possible to ascribe an overall weight of evidence to each study in a transparent way. These weights of evidence are based on the following:

- A. Soundness of studies (internal methodological coherence), based upon the study only (WoE A) and their own research questions
- B. Appropriateness of the research design and analysis used for answering the review question (WoE B)
- C. Relevance of the study topic focus (from the sample, measures, scenario, or other indicator of the focus of the study) to the review question (WoE C)

A fourth overall weight is calculated (WoE D), taking into account A, B and C.

The overall weight (WoE D) should not be higher than WoE A in any case, because, if the study is low in methodological coherence, it can contribute little to the findings of the synthesis. So, the weight ascribed to it should not be high.

2.3.4 Synthesis of evidence

The data were synthesised to bring together the studies that answered the review question, taking into account criteria relating to relevance and methodological quality. Again, EPPI-Reviewer was used. Detailed guidelines about the approach to be followed were issued to reviewers, with particular focus on the extraction of the results from the studies and the conclusions about support staff contributions (in sections K2 and K6), using direct quotations wherever possible, as these sections were crucial to the descriptions (see below) of perceptions about support staff contributions. All the reported results (section K2) and conclusions (section K6) relating to stakeholder perceptions from all the studies were extracted from each study.

Following this, a summary of findings was sent to members of the Advisory Group for responses to the contributions identified and to a staff member at the EPPI-Centre, and revised in the light of their comments. Reviewers had been instructed to use the section of the EPPI-Centre's data extraction in which a study's findings are recorded (section K2) to record perceptions in as full detail as possible. Subsequently, this allowed report-writers ready access to the perceptions reported in the studies.

The findings were then analysed systematically using a coding comparison method (see section 2.3.5, *Synthesis*). This involved reviewers independently identifying perceptions of support staff contributions to academic/social engagement in the findings and describing the findings accordingly in synthesis tables. With the first studies, coders were free to choose the label to be attached to the activity (for example, adapting materials to the needs of children, promoting independence). See Appendix 4.2 for the synthesis tables.

2.3.5 In-depth review: quality-assurance process

Data-extraction

As with the keywording, the processes of data-extraction and assessment of the weight of evidence for each study in relation to the review question were conducted by pairs of Review Group (RG) members, working first independently and then comparing their decisions and coming to a

consensus. Three studies were also data-extracted by a member of the EPPI-Centre, according to standard EPPI-Centre procedures. The team involved in data-extraction comprised Wasyl Cajkler, Paul Cooper, Rachel Tansey, Claire Taylor, Geoff Tennant and Stan Tucker (RG members), and Abigail Rowe, Katy Sutcliffe and Mukdarut Bangpan (EPPI-Centre colleagues).

Synthesis

At the stage of synthesising the data, the reviewers coded the perceptions about TA contributions independently using a coding comparison method. Each reviewer coded perceptions about contributions independently (coding each with a descriptor such as 'promoting interaction with peers' or 'supporting literacy work') and then met to agree their codings and consider how the contributions identified could be grouped, where appropriate, to generate a coherent and meaningful analysis. Twelve of the studies were independently coded

by four reviewers working in pairs (with checks for consistency made by a member of the EPPI-Centre staff using a sample of papers). The remaining five were completed by three reviewers for practical reasons, two acting as a pair of reviewers coding independently, the other making comparison checks.

Following independent analysis, each pair of reviewers met to agree the accuracy of their codings. As a result of this rigorous collation and scrutiny of the reported perceptions in each study, summaries of different perceptions held by stakeholders could be tabulated and then grouped thematically under four headings (see Appendix 4.2). This process reached a distillation of the views expressed by the stakeholders about the contributions made by support staff to the social and academic engagement of their pupils, and a map of where the perceptions are reported (see Appendix 4.2).

CHAPTER THREE

Identifying and describing studies: results

This chapter describes the systematic map of 145 studies, illustrates the sources of the studies, their focus and scope, terms used to describe support staff, and the voices of stakeholders represented in the mapped studies. This may provide a general overview of research activity in the field. It is from the systematic map that the final set of studies is derived (discussed in Chapter 4).

3.1 Studies included from searching and screening

The review process had several distinct, systematic and exhaustive stages:

- agreement on the research question
- identification of potential studies: search of bibliographical databases and journals (9,966 titles and abstracts were identified through bibliographical databases and 57 through handsearches)
- creation of an Endnote database
- application of inclusion and exclusion criteria (Appendix 2.1) to titles and abstracts (reducing to 440 papers)
- screening of 440 full papers (reducing them to 145 studies for the systematic map)
- characterising the included studies by EPPI-Centre keywording tool
- in-depth criteria and refinement of question
- in-depth review (17 studies): EPPI-Centre data-extraction tool (see Chapter 4)

Following screening of the titles and abstracts, 469 papers were identified as being potentially relevant for inclusion in the map. These required full text screening. Of the 469 papers ordered, a total of 440 were received and then screened on the basis of the full text report. Full-text screening enabled a more detailed check of each paper to be carried out, to ensure that each study met the inclusion criteria. This process, carried out by pairs of reviewers, reduced the sample to a total of 145

studies (reported in 162 papers) which were to be included in the systematic map.

These 145 studies were keyworded using the *EPPI-Centre Core Keywording Strategy for Education Research. Version 0.9.7* (2002a). Application of further criteria (in-depth inclusion criteria presented below) following the systematic mapping of the 145 studies resulted in 17 studies being identified for inclusion in the in-depth review. Figure 3.1 summarises the stages of the systematic review.

The most productive searches occurred using the ERIC database, which also gave detailed guidance on each study including an abstract. The BEI was less useful and surprisingly less productive, with information often restricted to the title and bibliographical details. 57 papers were identified through handsearching of relevant journals and from bibliographies of relevant papers. Ideally, more handsearching would have taken place to check that all relevant studies had been identified but limits had to be placed on the searches in order to complete the review.

As illustrated in Figure 3.1 (section 2), exclusion criteria were applied to arrive at the systematic map.

Exclusion criteria for the systematic mapping

Studies were excluded from the map if they were

- *not* about perceptions of stakeholders (teachers, support staff, pupils, headteachers or parents): X1

- *not* about support staff: X2
- *not* about Foundation Stage to Key Stage 5 (4-19): X3
- *not* about supporting pupils for academic and/or social engagement (including SEN/EAL): X4
- *not* about the pupils' curriculum (including SEN, EAL): X5
- *not* about support staff working on tasks that relate directly to learning/social engagement: X6
- *not* primary empirical research studies: X7
- *not* published in the period 1970-2003: X8
- *not* published in English: X9
- about librarians: (X0)
- theses: XA
- newspaper articles: XGAZ
- not available: XNA (only applied to a small number of papers at a later date when they could not be retrieved)

Section 1 of Figure 3.1. shows how these criteria were used to exclude over 9,000 studies, with X1 and X2 being the common reasons for exclusion (i.e. 5,530 of the papers were not about perceptions nor about support staff as defined in section 1.2.2).

Inclusion criteria for the in-depth review (also see appendix 2.1)

Studies in the systematic map were *included* for data-extraction if they met all the following additional criteria:

Criterion 1

- They were published in or after 1988 (NX 1).
- They focused on the primary (5-10) age group (NX 2).
- The type of engagement described in the study was both academic and/or social (NX 3).

- Support staff were paid (NX 4).

Criterion 2

Studies were published in Europe.

Criterion 3

Scope:

- Studies focused on stakeholders' **descriptions of the activities that support staff are involved in**, thus containing at least some description of TAs' activities (NX 5).
- Stakeholders' **perceptions of the contribution that such activities make to social and or academic engagement** were:
 - a clearly stated aim of the study, *or*
 - explicitly discussed in the findings (NX 6).
- Studies reported their **research methodology** including *at least*
 - a description how the sample was generated *and*
 - some information on the methods for collecting views/perspectives (NX 7).
- Studies focused on pupils engaged in mainstream education (NX 8)

See Appendix 3.1 for non-European studies (which were not conducted in Europe but met all other criteria 1 and 3) excluded from the in-depth review.

3.2 Characteristics of the 145 included studies (systematic map)

Following application of the exclusion criteria to 440 full documents, the 145 studies remaining were characterized, using the generic EPPI-Centre and review-specific keywords to create a systematic map of the research literature. The following sections report the results of the two keywording exercises: the generic EPPI-Centre keywording and the review-specific keywording.

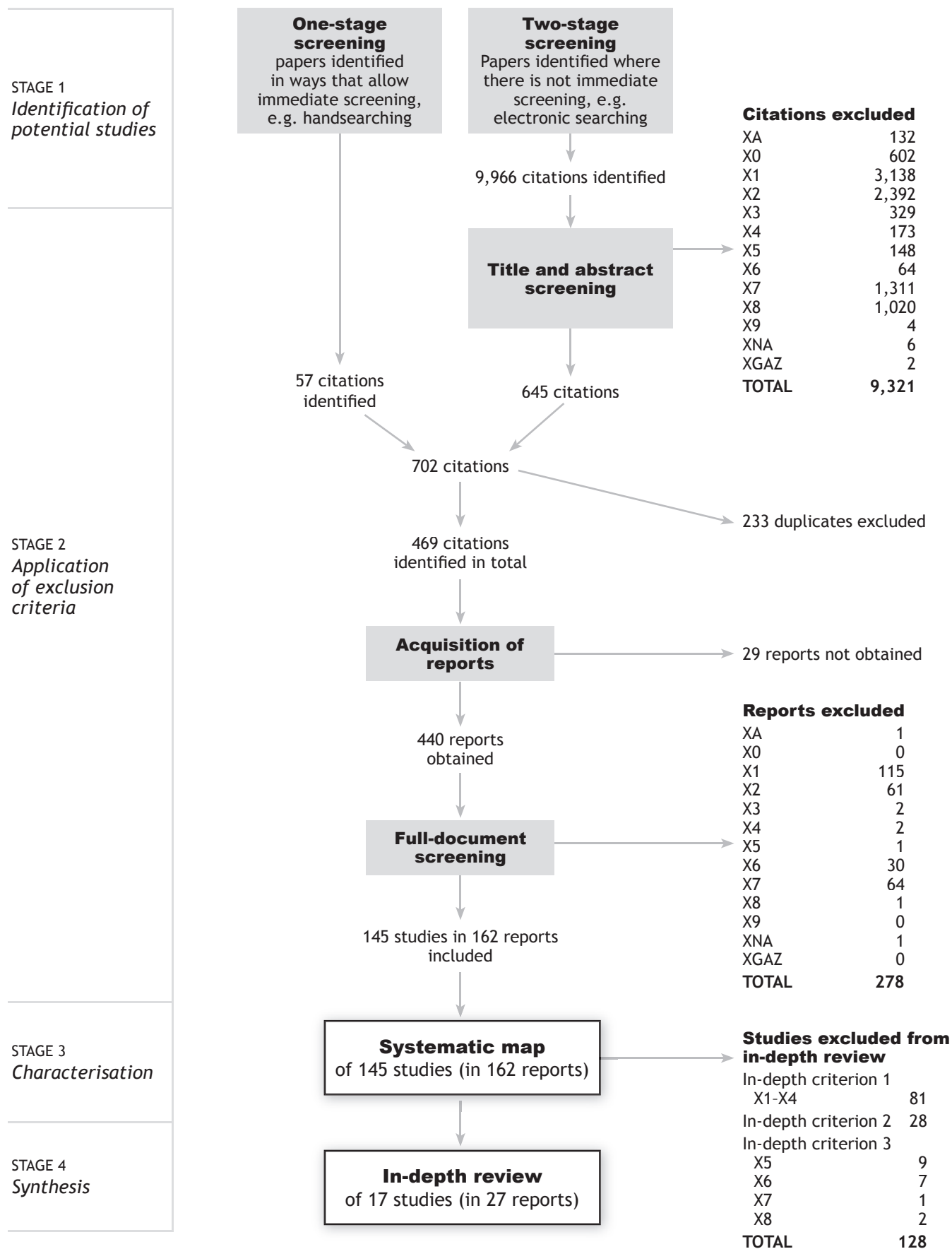
Table 3.1

Database or other origin of the papers

	Found	Included in the map
ERIC	6,513	92
BEI	442	27
Psychinfo	2,045	16
AEI	515	1
ISI Web of Science	203	8
IBSS	81	1
Article First	167	1
Handsearching	57	16
Total	10,023	161

Note: The 161 papers in the map were found to form 145 studies as 15 papers were linked to others in the map.

Figure 3.1 Filtering of papers from searching to map to synthesis



3.2.1 Generic EPPI-Centre Keywords

The generic EPPI-Centre keywords (see section 2.2.4) allow reviewers to identify the following features in the studies:

- how it was found (see table 3.1)
- status: whether published or not and whether the study is linked to others
- country of the study
- language in which it is written
- topic focus (e.g. teaching and learning, equal opportunities including inclusion)
- curriculum focus, if applicable (most had a general focus, so this is not discussed below)
- population focus (e.g. on learners, teachers, parents, non teaching staff)
- age and sex of learners (but only if they are the focus of the study, so age will be discussed under review-specific keywords)
- educational setting of the study
- study type (e.g. trial, evaluation, description)

Results of this keywording are briefly reviewed in this section.

Origin of studies

The 145 studies keyworded by the Review Group were derived from a total of 162 papers, as some were linked. They originated from eight countries, with 52 studies from Europe, five from Australia and New Zealand, and five from Canada. The majority of studies (N=83) had been conducted in the USA. There were no trans-national studies comparing data from different countries, which is perhaps surprising given the prominence afforded to support staff in the US and the UK in the last thirty years. (See Table 3.2.)

Table 3.2
Country of the 145 mapped studies (1970-2003)

Country	Number
USA	83
UK	48
Australia	3
Canada	5
New Zealand	2
Sweden	1
France	2
Italy	1
Total	145

Educational setting of the study

Some of the studies spanned phases of education (for example, collecting data from primary and secondary schools), so codes in Table 3.3 are not mutually exclusive. In the screening of studies, all phases of education were considered, but for data-extraction the focus was narrowed to studies that included data from primary schools. Such studies were in the majority (N=107), perhaps reflecting the fact that teaching assistants have been more common in primary schools.

Educational settings and countries in which the study was carried out

Table 3.4 shows the age range versus school types covered by this study. 54 of 145 focused exclusively on primary schools, but a further 53 included partial focus on primary schools. Eight studies focused exclusively on special schools. 24 studies included at least some focus on nursery level/pre-school provision. The exact focus of 5 studies was not clear.

Population focus

144 studies were coded by reviewers as focusing on non-teaching staff (i.e. support staff). However, the focus in the studies in the map was not exclusive and the exact or principal focus of a study was sometimes difficult to extract as such descriptive studies often had a multiple focus: for example, on all the participants in the inclusion process (pupils, parents, teachers, support staff, as in the case of Ebersold, 2003). (See Table 3.5.)

Despite this, 144 studies were deemed to focus on support staff. An anomaly occurred with Bang and Lamb (1996) whose central focus was deemed to be on learners. However, the study reported the important perception that support staff greatly assisted secondary students with understanding directions and staying focused on tasks, but stu-

Table 3.3
Educational setting (N=145, not mutually exclusive)

Educational setting	Number
Nursery school	24
Primary school	107
Pupil referral unit	1
Residential school	1
Secondary school	60
Special needs school	18
Other educational setting	13

Table 3.4 Focus of 145 studies in the systematic map (mutually exclusive)

	Nursery	Nursery & Primary	Nursery, Primary & Secondary	Nursery, Primary, Secondary & Special	Primary & Secondary only	Primary & Primary Secondary only	Secondary only	Primary, Secondary & Special	Primary & Secondary Special & Special	Secondary Special	Not clear	
USA	4	7	5		20	26	7	3	1	1	4	5
UK	2	2			4	24	8	3	1		4	
Australia				1		1	1					
New Zealand					1	1						
Canada			1		1	1	2					
France			1		1	1						
Sweden					1							
Italy			1									
Total	6	9	8	1	27	54	18	6	2	1	8	5

dents often became 'so absorbed in their small-group interactions with the paraprofessional that their engagement with the teacher and their non-disabled peers became limited' (p 13). As a result, it was included in the map.

Topic focus

All studies were characterised as being about 'teaching and learning' due to their focus on support staff contributions in schools and classrooms. However, almost half the studies (N=70) were also keyworded as 'organisation and management' because they also related to how support staff were deployed and managed in schools, some in support of one learner, others in more general roles.

In addition, a large number of studies, which were keyworded as 'equal opportunities' (N=61), focused on inclusion in mainstream settings (for example, Baskind and Monkman, 1998; Bowers, 1997; Escudero and Sears, 1982; Hemmingsson *et al.* 2003)). Again, codes are not mutually exclusive. Few studies focused specifically on an aspect of curriculum, for example support for the teaching of science (Busher and Blease, 2000); on the contrary, most had a general educational focus. (See Table 3.6.)

From the map, however, we could conclude that support staff are perceived to be engaged in issues related to teaching and learning, i.e. supporting pupils and their learning.

Study type

The majority of studies were characterised as 'descriptions' (N=119). One study was classified as an exploration of relationships. Where the authors claimed to be conducting evaluations, reviewers characterised them accordingly, even where their interpretation might suggest that 'description' was a more apt classification for the study. (See Table 3.7.)

The descriptive studies in this review are regarded as the ones that provide rich and in-depth data on the perceptions towards support staff contributions. The descriptive nature of the majority of studies reflects the fact that there have been relatively few studies of the impact of support staff in relation to pupils' attainment and that most studies have been cross-sectional. The evaluations focused on trying to describe the impact of teaching assistants: for example, on teacher activity, teacher workload, or pupil achievement. However, the final data for this review was contained in the studies keyworded as 'descriptions'.

3.2.2. Review-specific keywords

This section presents the findings for the review-specific keywording, the purpose of which was to discover:

1. the status of the support staff (paid, unpaid, volunteer)
2. which stakeholder perceptions are reported (headteachers, teachers, support staff, pupils or parents or others)
3. to whom support is offered (individuals, groups or whole class)
4. the reason for support (e.g. general, SEN, disability)
5. type of engagement involved (academic, social or both)
6. type of method used to collect perceptions/ views in study (e.g. interviews)
7. terms used to describe support staff (e.g. teaching aide, teaching assistant, learning support assistant)
8. the age of the pupils assisted by support staff

Status of support staff

The majority of support staff investigated in the 145 studies were paid (N=136); a small number of studies (N=13) provided a sample of unpaid volunteer support. (See Table 3.8.)

Stakeholder perceptions

The mapped studies gave voice to a range of stakeholders, with teachers and support staff being most strongly represented. Their perceptions about the contributions of support staff to social and academic engagement predominate, possibly rebutting the view that support staff have rarely been given a voice (O'Brien and Garner, 2001; Shaw, 2001). In these research studies, support staff was on a par with teachers in the numbers of studies that consulted them.

The next most frequently heard voice was that of headteachers. Much less frequently consulted in research studies were the pupils, who found a voice in 21 studies. Their parents' views were similarly less prominent than other stakeholders. The result is that the perceptions reported in Chapter 4 of this report are dominated by teachers, teaching assistants and headteachers. (See Table 3.9.)

To whom support is offered and reasons for support

Studies in the map were characterised as being in mainstream or special schools. Identifying the reason for the presence of support staff in the mainstream classroom revealed the increasing use in recent decades of assistants in mainstream classrooms for general support. While many additional adults were assigned to individual pupils, 45% of the studies described support staff being deployed for general support to groups of pupils, working with a teacher in primary and secondary schools. The codes were not mutually exclusive as

Table 3.5

Population focus/foci of the study
(N=145, not mutually exclusive)

Population focus	Number
Learners	46
Senior management	23
Teaching staff	76
Non-teaching staff	144
Other education practitioners	1
Local education authority officers	3
Parents	9
Other population focus	7

Table 3.6

Topic focus of the study
(N=145, not mutually exclusive)

Focus	Number
Teaching and learning	145
Organisation and management (people and resources)	70
Equal opportunities (inclusion)	61
Curriculum	13
Classroom management (including behaviour)	8
Policy	8
Assessment	1
Teacher careers	1
Other topic focus	5

Table 3.7

Study type of 145 keyworded studies

Study type	Number
Description	119
Exploration of relationships	1
Evaluation: naturally occurring	22
Evaluation: researcher-manipulated	3
Total	145

Table 3.8

Status of support staff
(N=145, not mutually exclusive)

Status of support staff	Number
Paid only	136
Volunteer	13
Other	2

Table 3.9 Status of support staff (N=145, not mutually exclusive)

Stakeholder perceptions reported	Number	% of mapped reports
Headteachers/senior management team	50	34
Parents	20	14
Pupils	21	15
Governors	3	2
Support staff	109	75
Teachers	106	73
Other	13	9

many studies described support of different types (to include individuals with a physical disability, to offer general SEN support, to help manage behaviour).

Some studies focused on specialist support staff contributions to sub-groups of learners: working with children with English as an additional language, children with behavioural and emotional difficulties, and support workers securing inclusion for children with a physical disability. Support for children with a physical disability could be divided into two categories, one focusing principally on the pastoral/caring role (N=17), and the other on providing academic support (N=32).

Relatively few studies (N=12) declared that the reason for the presence of support staff related to behaviour management, although this was clearly a factor in contributing to social engagement for many support staff. The reasons given suggested that inclusion of pupils with particular needs and general classroom support (N=64) were the principal reasons for the deployment of support staff.

Most contributions have both a social and academic dimension. For example, general classroom support could involve keeping pupils on tasks, getting pupils to work together, or managing difficult behaviour. Some support assistants might be involved in explaining the nature of a disability to other pupils to assist the process of inclusion; others offered support for pupils with reading or numeracy. The contributions are very varied. (See Table 3.10.)

Type of engagement involved

In a minority of studies, it was difficult to classify the nature of the contributions that support staff were expected to make. Studies tended to blur this, making it difficult to distinguish whether the contributions were social (e.g. caring only) or academic in nature, hence the classification of 24 studies as 'general SEN.' To be socially disengaged (e.g. engaged in aggressive, destructive and disruptive behaviour, or not interacting constructively with peers and adults) tends to mean that pupils are academically disengaged.

As a result, we worked on the assumption that support staff roles could not be readily labelled purely one or the other. What was clear was that very few support staff appeared to be limited in their contribution; rather, they fulfilled a number of diverse functions in relation to classroom support with the vast majority clearly involved in both social and academic engagement. For instance, one study (Leslie, 1973) was coded as 'academic' and 'both academic and social' as the contribution was considered to be principally academic in relation to curriculum interventions within the class, but in one-to-one interventions with a specific pupil, there was both a social and academic dimension.

In short, support staff are involved in significant interactions with pupils (for example, Baskind and Monkman, 2002; Blatchford et al., 2002; Downing et al., 2000; Farrell et al., 1999; Giangreco et al., 1997, 2003; Mc Garvey et al., 1996; Shaw, 2001). (See Table 3.11.)

Terms used to describe support staff

There are several terms used to describe support staff. In the US, this is usually teacher aide or paraprofessional (e.g. Falk, 1975; French and Chopra, 1999; Giangreco et al., 2001); in the UK, classroom assistant, learning support assistant or teaching assistant (which first began to be common in 1998).

Until recently, *teaching assistant* was less common than other terms in the UK, but this term is now favoured by the DfES (2002, 2003) and appears to be in general use, irrespective of the type of contribution made. *Paraeducator* is also a term that may be gaining ground with recent studies in the US preferring this (e.g. Giangreco et al., 2003; Marks et al., 1999; Monzo and Rueda, 2001, a, b). A complication for reviewers is that the term 'teaching assistant' in US papers usually referred to teaching in Higher Education, with the exception of a few studies (e.g. Minondo et al., 2001). All higher education related papers were excluded at the screening stage.

The 'other' category includes a range of titles, many of which were variations on the above: for example, paid aide, special assistant, integration assistant and non-teaching assistant. Some of these titles reflect developments in assistant roles from a focus on welfare or general support for the teacher to becoming more strongly focused on working with pupils (i.e. learning supporters - the term used by Shaw, 2001). (See Table 3.12.)

Age range of pupils

The following table identifies the age range of pupils supported by additional staff in the classroom. The EPPI-Centre Keywording Strategy only requires keywording of the age of learners if the topic focus of the study is recorded as 'learners'. We solved this issue by including age as a compulsory keyword under review-specific keywords. (See Table 3.13.)

Methods used to collect perceptions

Most of the studies employed a variety of data-collection methods, but the predominant approaches involved questionnaires (N=87, plus 5 methods described as 'opinionnaires') and interviews (N=73). This is not surprising given the large number of descriptions. A feature noticed incidentally was that there were relatively few studies (about one in five) with observations conducted to complement perceptions (30 in total). (See Table 3.14.)

Table 3.10 Declared reasons for the presence of support staff
(N=145, not mutually exclusive)

Declared reasons for the presence of support staff	Number
Support for young children (nursery nurse)	8
English as additional language	12
Physical disability (carer): a social contribution only	17
Physical disability (academic support)	32
Behaviour management	12
Foreign language lesson support	1
Academic support for diagnosed condition (e.g. dyslexia, autism)	11
Academic support for low attainer	15
General SEN	24
General classroom support	64
Other	14

Table 3.11

Type of engagement support staff identified with (mutually exclusive, taking into account Leslie study (1973) which was coded as 'academic' and 'both')

Type of engagement	Number
Academic	24
Social	2
Both	112
Not clear	8
Total	146

Table 3.12

Names of support staff used in mapped studies
(N=145, not mutually exclusive)

Name of support staff	Number
Teaching assistant	11
Teacher aide	34
Classroom assistant	10
Paraprofessional	36
Paraeducator	10
Instructional aide/assistant	9
Nursery nurse	4
Learning support assistant	6
Specialist teaching assistant	3
Special needs assistant	2
Support staff	4
Bilingual teaching assistant/paraprofessional	5
Bilingual aide	1
Welfare assistant	3
Auxiliary	2
Ancillary	1
Foreign language assistant	1
Other	33

Table 3.13

Age range of pupils with whom support staff are involved (N=145, not mutually exclusive)

Age range of pupils	Number
3-4 (pre-school)	24
5-10 (primary)	107
11-16 (secondary)	60
17-19 (post-16)	6

Table 3.14

Type of method used to collect perceptions/ views in study (N=145, not mutually exclusive)

Methods used	Number
Case study	9
Questionnaire study	87
Interview with stakeholders	73
Opinionnaire survey	5
Focus group	7
Other	45

3.3 Identifying and describing studies: quality-assurance results

Screening of citations

Of the 9,966 papers, 200 were subjected to initial screening by a pair of reviewers to evaluate the reliability and validity of the criteria, and to quality assure the screening process. A sample of 50 entries was screened by EPPI-Centre staff to check for consistency and accuracy in the Review Group's screenings. Following that, 500 entries were issued to each of four reviewers for initial trial screening. The subsequent 500 codings were subjected to scrutiny by two 'lead' reviewers who had been moderated by the EPPI-Centre staff member to check for consistency and accuracy.

Screening of full papers

A 10% sample of the 440 papers, which reviewers had decided to screen on the full text, was subjected to further moderation by pairs of reviewers. In addition, these papers were subjected to scrutiny at a meeting of Review and Advisory Groups. A sample of ten included papers, along with ten excluded papers were sent to each member of the Review Group to check for consistency in the application of the criteria. If any doubt arose, papers were referred for second opinions.

Quality assurance of keywording

First of all, two reviewers independently coded ten studies for moderation with a member of EPPI-Centre staff. A whole-group moderation exercise was undertaken for which four pairs of reviewers from the Review Group independently keyworded five studies and then tabulated results. The five studies were also keyworded by an EPPI-Centre staff member for comparison to assure consistency and accuracy. This quality-assurance check was conducted on two occasions with the EPPI-Centre staff member until agreement on keyword application was agreed.

The first phase saw agreement at 78%, largely as a result of interpretational difficulties with the term 'perceptions'. In the next exercise with a second set of five papers, 85% agreement was reached. Results of this process were discussed by the Review Group and discrepancies clarified. Particular difficulties arose with the curriculum focus, which in most cases was general. The remaining papers in the systematic map stage of the review were keyworded by three members of the group. All these were then reviewed by the co-ordinator of the review to secure consistency, making sure that all studies were keyworded in a uniform way.

3.4 Summary of results of map

The systematic map shows that the literature considering contributions of support staff is predominantly from the United States of America (US) and from the United Kingdom (UK):

- Literature about support staff contributions was predominantly from the US (N=83) and the UK (N=48), with smaller numbers from elsewhere: Canada (N=5), Australia (N=3), New Zealand (N=2), France (N=2), Sweden (N=1), Italy (N=1).
- Most studies focused on teaching and learning, rather than any particular aspect of the curriculum.
- Inclusion (keyworded as 'equal opportunities', involving the improvement of pupils' opportunities to learn and/or integrate through access to the curriculum) was the focus in many studies, with 61 studies focusing on inclusion in mainstream settings, often of pupils with specific needs (for example, Escudero and Sears, 1982; Hemmingsson *et al.*, 2003).
- The contribution of support staff to the inclusion of pupils with specific academic, physical or social needs was the subject of many studies. Support staff are clearly significant participants in the process of educational inclusion. Their impact on pupils and teachers was regularly reported by other stakeholders in a number of studies (for example, Dyson *et al.*, 2002; Wilson *et al.*, 2002b) but such claims tended to be generic in nature with respondents providing little detail about the activities that support staff carry out to secure academic and social engagement.
- Many studies were cross-phase, but 107 included data about primary schools and 60 about secondary schools.
- 136 studies of support staff investigated paid support staff; 13 studies included unpaid volunteer support.
- 129 studies were in mainstream and 8 exclusively in special schools, with a further 10 including some study of special schools.
- Paid support staff have a range of titles: teacher aide or paraprofessional or paraeducator in the US; classroom assistant, learning support assistant or teaching assistant in the UK, with variations on the above (e.g. paid aide, special assistant, integration assistant, non-teaching assistant and learning supporters). There were no trans-national studies in the map comparing data from different countries perhaps surprising given the prominence given to support staff in the US and UK in the last thirty years.

- Most studies had a multiple focus: for example, on all participants in the inclusion process (pupils, parents, teachers and support staff, as in the case of Ebersold, 2003). The mapped studies gave voice to a range of stakeholders, with teachers and support staff most strongly represented in more than 100 studies: for example, Downing *et al.* (2000) in the US on paraprofessional perspectives. The next most frequently heard voice was that of headteachers. Much less frequently consulted were pupils, who found a voice in 21 of the 145 studies. Their parents' views were represented in 20 studies: for example, in French and Chopra (1999) in the US.
- The studies were generally descriptive in nature, reflecting the tendency for data to be gathered through questionnaires and interviews with participants either engaged in or affected by support staff. The keywording exercise did not allow for more refined analysis of the interviews, whether semi-structured or structured, but the impression was that semi-structured dominated.

CHAPTER FOUR

In-depth review: results

This section describes the stakeholder perceptions of support staff culled from the 17 studies selected for in-depth study. It begins by comparing the 17 European studies with those included in the systematic map (N=145). Then, the 17 European studies are discussed in detail (see Appendix 3.1 for non-European studies excluded from the in-depth review). They were analysed using a coding comparison method to extract the views expressed by stakeholders about the contributions of support staff. This led to the contributions of teaching assistants being categorised under four headings (listed in section 1.2.1).

4.1 Selecting studies for in-depth review

Studies were selected for the in-depth review through the use of the additional inclusion criteria. Studies included in this second in-depth stage were published between 1988 and 2003, and were carried out in European countries. The population focus of the studies had to be paid support staff working in mainstream primary schools (or other equivalent) and perceptions had to be measured for either academic and/or social engagement. The studies had to meet a number of reporting requirements, including description of the activities in which support staff are engaged and methods of data collection. In addition, views about the contributions to academic and or social engagement needed to be either explicitly discussed in the findings or articulated as an aim of the study.

The table in Appendix 4.1 gives summary details of the included studies according to the review-specific questions.

4.2 Comparing the studies selected for in-depth review with the total studies in the systematic map

Study type

In the map, studies were often found to be unclear about their type, with some studies offering only limited explanation. However, in the final set of 17 studies, the dominant study type was descriptions. In the systematic map, 119 studies were descrip-

tions, with 25 evaluations and one exploration of roles and relationships.

Age of students

The focus for the final review was limited to primary schools, but many studies in the map were cross-phase with multiple focuses on primary and secondary schools. Only 8 of the 17 studies focused exclusively on primary schools. One included some feedback from the pre-primary phase, while a further 8 included perceptions from secondary schools as well as primary schools. The 17 European studies in the in-depth study were included because they focused at least in part on primary schools, but some studies included data relating to other age ranges. (See Table 4.1.)

Status of support staff

Volunteer support staff was excluded following the keywording stage, when new exclusion criteria were applied. As a result, all 17 studies focused only on paid support staff contributions. (See Table 4.2.)

Titles for support staff

The principal titles given to classroom support staff in the UK are teaching assistant (TA) (the preferred title in UK government policy documents), classroom assistant (CA) and learning support assistant (LSA). Sometimes, more than one title is used in a study to reflect different roles undertaken by support staff: for example, in Moyles and Suschitzky

Table 4.1 Comparison of age of students support staff involved with (not mutually exclusive)

Age of students	In-depth studies (N = 17)	mapped studies (N = 145)
3-4 (pre-school)	1	24
5-10 (primary)	17	107
11-16 (secondary)	8	60
17-19 (post-16)	0	6

Table 4.2 Status of support staff (not mutually exclusive)

Status of support staff	In-depth studies (N = 17)	mapped studies (N = 145)
Paid	17	136
Volunteer	0	13
Other	0	2

Table 4.3 Terms used for classroom support staff (N=17, not mutually exclusive)

Terms used for classroom support staff	Number of studies	Studies
Learning support assistants (LSA)	3	Farrell et al. (1999), O'Brien and Garner (2001), Lacey (2001)
Learning supporters	1	Shaw (2001)
Auxiliary support	1	McGarvey et al. (1996)
Integration assistants	1	Ebersold (2003)
Bilingual teaching assistants (BTA)	1	Cable (2003)
School assistants	1	Hemmingsson et al. (2003)
Classroom support staff	1	Moyles and Suschitzky (1997)
Classroom assistants	7	Clayton (1993), Moyles and Suschitzky (1997), Hancock et al. (2002), Wilson et al. (2002b), Bowers (1997), Bowers et al. (1994a), Farrell et al., 1999
Teaching assistants	2	Moran and Abbott (2002), Neill (2002a)
Specialist teaching assistants (STA)	1	Moyles and Suschitzky (1997)
Assistant	1	Baskind and Monkman (1998)
Associate staff, non-teaching staff; teaching auxiliaries	1	Mortimore et al. (1994a)

Table 4.4 Stakeholder voices reported (not mutually exclusive)

Status of support staff	In-depth studies (N = 17)	mapped studies (N = 145)
Support staff	12 (71%)	109 (75%)
Teachers	12 (71%)	106 (73%)
Headteachers	11 (65%)	50 (34%)
Parents	4 (23.5%)	20 (14%)
Pupils	5 (29%)	21 (14.5%)
Governors	1 (5.9%)	3 (2.1%)
Other	0	13 (9%)

(1997) who distinguish between specialist teaching assistants (STAs) and CAs, the former being focused on specific needs in support of learning, the latter having a general role, with a greater focus on resource provision and social needs. Farrell et al. (1999) distinguish between LSAs who support for inclusion and general classroom assistants. HLTA is a recent addition (DfES, 2003) to the labels used and was unlikely to feature in studies up to 2003.

Table 4.3 reflects the diversity found not just in the final set of studies but also in the systematic map already described. In the UK, the word 'assistant' was included in the title, as opposed to 'aide' and 'paraprofessional' or 'paraeducator' in USA studies. Studies use a variety of names for support staff (Farrell et al., 1999; Mortimore et al., 1994a; Moyles and Suschitzky, 1997) to reflect the fact that some studies focus on inclusion, some on specific needs and mainstreaming (e.g. bilingual learners, hearing-impaired pupils).

While acknowledging Shaw's argument (2001) that being a learning supporter is not merely an assistant post, the current generic term for pupil support staff in the UK is 'teaching assistant'. As a result, this term is preferred in this review.

Stakeholder voices

The stakeholder voices emerging in the in-depth review reflected the dominance of teacher, support staff and headteacher perceptions in the map. Only four studies included parent perceptions and five offered some opportunity to pupils to express their views. One study (Bowers, 1997) focused in particular on the views of pupils. (See Table 4.4.)

The above numbers suggest that support staff, headteachers and teachers are relatively well represented in the in-depth studies. Pupil and parent voices are much less frequent in terms of the number of studies, although, in terms of proportions, more frequent in the in-depth review than in the systematic map.

Focus of studies

Few studies focused on support staff *exclusively* working with one pupil. They were perceived to support groups of pupils, or even to have a general classroom support role in a majority of studies.

Most of the selected studies involved support staff working with more than one person. The distribution was broadly similar to that in the systematic map, as Table 4.5 illustrates. Eleven studies included consideration of the contribution to an individual but, in most cases, this was not an exclusive focus. Where support staff were employed for a designated pupil, most still offered support to small groups as well.

Reasons for support

The map and in-depth studies contained a similar range of reasons for support being available. The reasons varied but non-specific support was the largest category (N=9) in the in-depth study. Codes were not mutually exclusive as several studies had a multiple focus. The variety confirms the wide range of contributions required of support staff. Such was the variety that classification was not easy, leading to the use of the keywording term 'general SEN' to cover issues related to inclusion of all pupils in the classroom. (See Table 4.6.)

Type of engagement

The vast majority of studies (N=16) included a focus on both social and academic contributions to pupils' engagement. Just one described contributions that appeared to be principally academic in nature (McGarvey et al., 1996) but even this study stressed that the classroom assistant had to be 'capable of talking to the children' (p 301) and be 'able to talk to pupils in an appropriate way at the right time' (p. 300) implying that support staff would have regard for social considerations as well as academic. As this review progressed, it became increasingly clear that support staff are now principally involved in direct support for learning. (See Table 4.7.)

Type of research approach and method

As with the systematic map, the principal research instruments in in-depth studies were questionnaire surveys and interviews. (See Table 4.8.)

4.3 Further details of studies included in the in-depth review

In some cases, individual studies were reported in more than one document (17 studies were reported in 27 papers). The study by Wilson et al. (2002b), for example, was reported in four papers identified by the current in-depth review. For clarity, we refer to the principal paper from which findings are drawn; that is, the main paper is used to denote all the studies that informed that data-extraction.

All studies selected for the in-depth review focus on primary schools and have stakeholder perceptions about contributions made by TAs as a significant feature in the report. All are published reports or articles, with dissertations excluded from the study on the basis that they were not published and, indeed, many were unavailable. Fifteen studies were conducted in the United Kingdom, one in Sweden and one in France. The following section provides more detail about the 17 in-depth review papers.

Table 4.5 To whom is support offered? (not mutually exclusive)

Support offered to	In-depth studies (N = 17)	mapped studies (N = 145)
Individual	11	84
Small group	8	62
General	11	103

Table 4.6 Reason for support (not mutually exclusive)

Reason for support	In-depth studies (N = 17)	mapped studies (N = 145)
Support for young children (nursery nurses)	1	8
English as additional language	1	12
Physical disability (carer)	1	17
Physical disability (academic support)	4	32
Behaviour management	2	12
Foreign language lesson support	0	1
Academic support for diagnosed condition (e.g. dyslexia, autism)	2	11
Academic support for low attainer	1	15
General SEN	3	24
General classroom support	9	64
Other	0	14

Table 4.7 Type of engagement described

(mutually exclusive, taking into account Leslie study (1973) which was coded as 'academic' and 'both')

Type of engagement	In-depth studies (N = 17)	mapped studies (N = 145)
Academic	1	24
Social	0	2
Both	16	112
Not clear	0	8
Total	17	146

Table 4.8 Type of method used to collect perceptions/views in the study

(not mutually exclusive)

Reason for support	In-depth studies (N = 17)	mapped studies (N = 145)
Case study	3	9
Questionnaire study	9	87
Interview with stakeholders	13	73
Opinionnaire survey	0	5
Focus group	0	7
Other	8	45

Sources of stakeholder perceptions

It was somewhat difficult to identify accurately the numbers of voices represented in the in-depth review. Neill (2002a) had a sample of 3,822 teachers, with 55% being in the primary sector. As a result, the total number of teacher perceptions claimed in our review was 2,704 (2,100 being primary teachers in Neill's postal survey).

Teachers dominate the above, but at least 2,100 of these were respondents in the Neill study (2002a), which is not as rich as others in describing the detail of teaching assistant contributions. The Cable study (2003) had only three bilingual teaching assistants as participants but their descriptions of practice are much more informative about classroom and school-based activity. Teachers and headteachers together had 1,045 respondents, if one discounted the Neill questionnaire study, while support staff had 961. Some papers (e.g. O'Brien and Garner, 2001; Shaw, 2001) argued that teaching assistant voices were under-represented in the research and that their views had been under-reported. Unfortunately, it was not possible to identify the exact total number of support staff voices providing feedback in the reports, especially in the case of Shaw (2001) who made very important claims but without giving clear information about the number of participants.

Subjects' voices and perceptions

Five studies had a single set of stakeholders (Cable, 2003; O'Brien and Garner, 2001: teaching assistants; Bowers, 1997: pupils; Moran and Abbott, 2002: headteachers; Neill, 2002a: teachers), and 12 studies had multiple stakeholder respondents. Only four clearly reported the views of parents; five (possibly six) sought the views of pupils. The data-extractions revealed (although not in all cases) whose voices had been reported, presented in Table 4.9 (some of which are estimates as indicated). Where possible, perceptions were assigned to particular stakeholders. Thirteen studies included perceptions from teaching assistants so they could not easily be said to be under-represented in the final set of studies. Unfortunately, the reports did not always differentiate whose perceptions were being reported (for example, Clayton, 1993; Ebersold, 2003; Shaw, 2001) leading to uncertainty about which perceptions were being reported; Clayton (1993) and Hemmingsson *et al.* (2003), for example, group together perceptions from different stakeholders.

Despite this, it is possible to identify that TA perceptions tended to focus on their contributions directly to pupils. Baskind and Monkman (1998) reported that TAs 'support the teacher generally', and both Moyles and Suschitzky (1997) and Farrell *et al.* (1999) reported similar perceptions of their contribution. When given a clear voice TAs described how they helped pupils academically, and socio-academically: for example, Cable (2003)

whose bilingual teaching assistants (BTAs) stressed their role as integrators of pupils, as their supporters, bridges to participation and learning, and as their advocates.

In the map of 145 studies, TA voices were as well represented, but the focus on seeking to extract stakeholder perceptions (as opposed to researcher perceptions) led to studies in which TAs had been consulted predominating (with the exception of Neill's 2002a study, a postal survey commissioned by the National Union of Teachers).

Weight of evidence (WoE)

Following the procedures outlined in section 2.3, judgments about weight of evidence were made of all 17 included studies, together with an overall weight.

Table 4.11 indicates that most studies were seen as providing medium weight of evidence (N=11). In two studies (Bowers, 1997; Farrell *et al.*, 1999), while the quality of the study (WoE A) and the appropriateness of the design (WoE B) were considered of high weight, the studies could not be given a high weighting overall (WoE D) due to the lack of specific perceptions about TA contributions to academic and social engagement in primary mainstream settings (reflected in the judgements for WoE C).

Our specific interest in primary schools may have affected reviewers' judgement about the relative value of studies that looked at one or more groups of stakeholders and of those studies, which looked at all phases of mainstream education. As a result, some studies attracted lower weighting because their focus was very wide, as it was difficult to judge the weight of the evidence for primary schools alone: for example, O'Brien and Garner, who offer case studies of LSAs (one set of stakeholders) but from primary, secondary and special education settings.

Other studies describe a process of giving a voice to teaching assistants (for example, Shaw, 2001) but give so little detail about the numbers involved and the methods used (WoE A) that it is difficult to give high weightings. Reviewers found that perceptions were often reported in a generic way, with accounts of what TAs do and how they do it rather thin on detail, as in Mortimore *et al.* (1994a), or Ebersold (2003).

In addition, many studies have perceptions embedded within them in such a way that it is often difficult to determine the extent to which the research is focused on stakeholder perceptions, rather than on observations made by researchers (WoE C) (Ebersold, 2003; Hemmingsson *et al.*, 2003). In some cases, perceptions form only part of the study.

Table 4.9 Sources of stakeholder perceptions/views
(not mutually exclusive; from 17 studies in the in-depth review)

Studies	TAs	Teachers	Pupils	Headteachers	Parents	Other
Baskind and Monkman (1998)	10	9	-	1 head of service	-	Teacher of deaf
Bowers (1997)	-	-	585 primary	-	-	-
Cable (2003)	3	-	-	-	-	-
Clayton (1993)	100	81	-	72	-	-
Ebersold (2003)	61	62	-	-	51	-
Farrell et al. (1999)	135	113	47	-	35	-
Hancock et al. (2001)	275	113	-	133	-	-
Hemmingsson et al. (2003)	7	7	7	-	-	-
Lacey (2001)	43	25	13	-	30	-
McGarvey et al. (1996)	-	27	-	18	-	-
Moran and Abbott (2002)	-	-	-	11 in total; 5 mainstream	-	-
Mortimore et al. (1994a)	18	5	-	9	-	6 line managers
Moyles and Suschitzky (1997)	111	100	60	15	-	-
Neill (2002a)	-	2100 (est.) (primary)	-	-	-	-
O'Brien and Garner (2001)	Up to 67 (est.) (+11 secondary)	-	-	-	-	-
Shaw (2001)	Unclear	-	-	-	Unclear	-
Wilson et al. (2002b)	131	62	Unclear	74	104	-
Totals	961	2,704	712	333	220	7

As a result, the above judgements are not necessarily a reflection on the quality of the study but in part a result of the difficulty of finding detailed 'views' studies on the contributions of teaching assistants to pupils' academic and social engagement in mainstream classrooms. Nevertheless, all of the studies that were included for data-extraction offer some stakeholder perceptions and we were grateful for the parts they played in deepening our understanding of support staff contributions to social and academic engagement.

4.4 Synthesis of evidence

There is a number of ways in which a synthesis of the findings of the studies might logically be structured. However, because studies both in the map and in the in-depth review often failed to distinguish between the perceptions of different groups, it is impossible to differentiate and present different stakeholders' perspectives from all the reports in a systematic and consistently accurate way.

As a result, perceptions of the contributions made by teaching assistants were identified and listed through the coding comparison method (described in sections 2.3.4. and 2.3.5) in each data-extraction. These mappings were then analysed thematically, a process which led to the stakeholders' perceptions of TA contributions being categorised under four headings:

1. direct academic and socio-academic contributions to pupils (working with children on learning tasks, promoting independence, etc.)
2. contributions to inclusion (securing integration of learners)
3. stakeholders relations (acting as a link person between stakeholders in communication, feedback and advocacy roles)
4. contributions to teachers/curriculum (e.g. with routine tasks, such as display)

These divisions are not rigid, as categories 1 and 2 are firmly related to each other. Contributions could therefore be seen as activities contributing to social and academic engagement, with the proximity to pupils' learning activity and classroom work being at its greatest in 1 and 2, followed by 3 and 4. The first two categories represent direct contributions in support of pupils, involving interaction with them. In addition, contributions to maintaining stakeholder relations and support for teachers (categories 3 and 4) also help to secure academic and social engagement, but perhaps less directly as they often do not involve direct interventions or interactions with pupils.

4.4.1 Academic and socio-academic contributions to pupils

Direct support for pupils was broadly academic in nature: for example, supporting learning or interpreting teacher instructions. Some contributions

are described as socio-academic because they both enabled access to learning and also included management of social engagement activities, for example, providing interaction opportunities in class, improving/maintaining pupil motivation, promoting independence and autonomy, and maintaining relations between participants. These perceptions were often expressed by TAs, but also by other stakeholders. For instance, headteachers and teachers in the study by Wilson et al. (2002b) felt that TAs contributed to improving pupils' motivation and their behaviour.

Contributing by mediating learning

Mediating pupils' learning was seen as a significant TA contribution, most commonly by support staff. O'Brien and Garner (2001) had TAs talking in general terms about how they acted as mediators of learning, helping pupils access the curriculum, as did Moyles and Suschitzky (1997), Lacey (2001), and Baskind and Monkman (1998). TAs reported that their contributions took the form of interpreting teacher instructions and input, mediating the input to make it more accessible, or helping small groups with tasks set by the teacher (Baskind and Monkman, 1998; Cable, 2003; Hancock et al., 2002; Lacey, 2001; Moyles and Suschitzky, 1997; O'Brien and Garner, 2002; Shaw, 2001). 'Post-tutoring' was a term used to describe the contribution to reinforce what has been taught in Baskind and Monkman (1998). This interpretational contribution was reported by TAs in Hancock et al. (2002) and O'Brien and Garner (2001), with regard to teacher instructions, language and worksheets. Cable's three bilingual teaching assistants were also involved in translating language (Cable, 2003).

In this way, TAs perceive themselves to be fellow travellers with pupils, receiving teacher input and then adapting it to allow pupils to access it. They maximise opportunities for pupils to engage in, and respond to, the challenges of the mainstream classroom. Hancock et al. (2002, p 26) talked about semi-independent roles undertaken by TAs and they concluded by saying that there is 'under-acknowledgement of the contribution that assistants now make to children's school life and learning'. In their view, teachers and TAs are now interdependent team workers and teachers see TAs as a significant resource.

In a linked paper to O'Brien and Garner (2001), Garner claimed that TAs see themselves as connecting bridges between children and their learning (Garner, 2002, p 15), 'I'm sure that it works because, in a way, I am neither a teacher nor a pupil... I see things from both sides'. O'Brien and Garner (2001, p 144) concluded that the LSA is a 'bona fide, committed and active contributor to the learning of all pupils and to the life of schools as organic and inclusive learning environments'. They are staff who see themselves as 'professionals with particular skills and attributes' (Garner, 2002, p 16).

Table 4.10 Sources of stakeholder perceptions/views
(not mutually exclusive; from 17 studies in the in-depth review)

Sources of stakeholder perceptions/views	Frequency raw totals
Pupil perceptions	712 (552 in Bowers, 1997)
Support staff perceptions	961
Teacher perceptions	2,704 (approx)
Parent perceptions	220
Headteacher perceptions	333
Other stakeholders	7
Total number of stakeholders	4,933

Table 4.11 Results of assessment of weight of evidence for each study

	A (Trustworthy in terms of own question)	B (Appropriate design and analysis for this review question)	C (Relevance of focus to review question)	D (Overall weight in relation to review question)
Baskind and Monkman (1998)	Medium	Medium	High	Medium
Bowers (1997)	High	High	Medium	High/medium
Cable (2003)	Medium	Medium	Medium	Medium
Clayton (1993)	Medium	Medium	Medium	Medium
Ebersold (2003)	Medium	Medium/low	Low	Medium/Low
Farrell et al. (1999)	High	High	Medium	High/Medium
Hancock et al. (2002)	Medium	Medium	Medium	Medium
Hemmingsson et al. (2003)	High	Medium	Low	Medium
Lacey (2001)	Medium	Medium	Medium	Medium
McGarvey et al. (1996)	Medium	Medium	Low	Medium/Low
Moran and Abbott. (2002)	Medium	Medium	Medium	Medium
Mortimore et al. (1994a)	Medium	Low/medium	Low	Low/medium
Moyles and Suschitzky (1997)	Medium	Medium	Medium	Medium
Neill. (2002a)	Medium	Medium	Medium	Medium
O'Brien and Garner (2001)	Medium	Medium	Medium	Medium
Shaw (2001)	Low	Medium	Medium	Low
Wilson et al. (2002b)	Medium	High	High	Medium

Such claims suggest that TAs process teacher input (and intentions), then either adapt this or reprocess it to make it accessible to pupils. Mention was also made in three studies of adapting pedagogy to needs of pupils (including lessons or materials), although little was said about how this was done (O'Brien and Garner, 2002; Lacey, 2001; Farrell et al., 1999).

Supporting learning in groups

Help for small groups and individuals with tasks set by the teacher (including practical activities) was described in several studies (Baskind and Monkman, 1998; Cable, 2003; Hancock et al., 2002; Lacey, 2001; Moyles and Suschitzky, 1997; O'Brien and Garner, 2002; Shaw, 2001). While much of their contribution was targeted at individual assigned children, the general perception was that they worked with groups of pupils (Baskind and Monkman, 1998; Ebersold, 2003; Hancock et al., 2001; McGarvey et al., 1996; Mortimore et al., 1994a; Moran and Abbott, 2002; Moyles and Suschitzky, 1997; Neill, 2002a; Wilson et al., 2002b) and teachers expected them to support other pupils, even when they were assigned to a specific child. Headteachers supported this perception (Hancock et al., 2002; McGarvey et al., 1996; Moran and Abbott, 2002; Moyles and Suschitzky, 1997).

Supporting learners was among the most significant contributions reported by TAs (in seven studies), as they mediated learning for small groups of children. How they did this was not always made clear, but it involved directing interest to children's work, listening to them, and giving appropriate attention and interest to their work. Maintaining interest and pupils' interest helps to keep them on task.

Promoting pupils' independence

Promoting independence featured in seven studies; five of the eight studies reported this perception to be held by TAs (Baskind and Monkman, 1998; Cable, 2003; Ebersold, 2003; Lacey, 2001; O'Brien and Garner, 2001). This was often bound up with promoting self-esteem and motivation. One TA expressed her main aim as being to 'encourage Georgie to learn at her own pace, to encourage and help her work without doing the work for her and not to let her become over-dependent on me' (O'Brien and Garner, 2001, p 62). Lacey's respondents said they encouraged independence and interaction in order to promote inclusion. Baskind and Monkman (1998) reported that support staff only occasionally worked one-to-one with a hearing impaired child so that the child would not become too dependent on the support. TAs in Ebersold's study saw it as their responsibility to facilitate the child's autonomy and participation within the classroom (Ebersold, 2003).

There were occasional concerns raised in the research studies: for example, Moyles and Suschitzky (1997), whose observations led them to conclude that TAs needed more training about learning processes (p 11). TAs often emphasised the products of learning, focusing on procedural knowledge rather than conceptual knowledge, indicating that perhaps TAs were not equipped with the training and skills needed to know when and when not to intervene. Sometimes, they engaged learners in cognitively undemanding tasks. Occasionally, they completed work for pupils to make it look nice (p 51). This dependency is further explored in section 4.4.2, while their academic and socio-academic contributions are summarised in Table 4.12.

Many studies elicited views about one of the key skills that good TAs need, namely, determining when and when not to offer support. Clayton's (1993) study concluded that the best TAs knew when to offer support to learners and when to withdraw. They were adept at judging how much support to offer individual pupils; they knew when to allow natural interactions to continue and when to intervene to provide comprehensive support. In addition, they took responsibility and were involved in decision-making about children's learning; they felt supported in the decisions they made.

In a linked paper, Cable listed a range of contributions among which was the following key contribution: 'The BTAs in this study saw a key part of their role as developing children's confidence and ability to learn; in effect developing their learning dispositions' (Cable, 2004, p 218). 'They saw their role as supporting children's social integration, well-being and self-esteem, fostering their independence' (p 212). How training programmes prepare the TAs for these tasks is an issue for consideration.

4.4.2 Contributions to inclusion

Enabling inclusion

TAs were identified as critical to educational inclusion in a number of reports by a range of stakeholders: teachers (Ebersold, 2003; Neill, 2002a), TAs (Ebersold, 2003; Farrell et al., 1999; Lacey, 2001; O'Brien and Garner, 2001; Shaw, 2001) and, where consulted, by parents and headteachers (Ebersold, 2003; Farrell et al., 1999; Moran and Abbott, 2002). Table 4.13 illustrates the breakdown of studies that reported these perceptions.

Disentangling the voices in relation to support for educational inclusion was a challenging task. Although some perceptions of good practice were reported, the studies did not report in detail exactly what the TAs did to support or impede inclusion. Shaw (2001) reported how supporters described their inclusive function mainly in relation to 'easing the way for pupils and encouraging them through difficulties' (p 7).

Table 4.12 Academic and socio-academic contributions (N = 17, not mutually exclusive)

Total number of voices reporting this perception	Contribution	Number of studies	TA views	Teacher views	Pupils	Headteachers	Parents	Unclear
25	Helping small groups with tasks set by teacher (including practical activities)	15	7	9	0	4	0	5
21	Supporting learning; mediating learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities	13	7	5	1	4	0	4
15	Helping individuals (with tasks set by teachers)	14	3	4	1	1	1	5
12	Interpreting (instructions/language/worksheets); translating language	11	3	4	0	1	0	4
13	Supporting literacy/language development	8	5	4	1	0	0	3
10	Adapting pedagogy to needs of pupils (lessons or materials)	8	3	2	0	1	1	3
9	Providing interaction opportunities in class	8	4	2	0	1	0	2
8	Promoting pupils' independence/autonomy	7	5	1	0	1	0	1
5	Assessing children's work/contributing to assessment	5	2	3	0	0	0	0
5	Helping pupils in general, mediators of learning/curriculum	5	1	1	1	1	0	1
5	Helping specific children with needs	5	3	0	1	1	0	0
5	Improving/maintaining of pupil motivation	5	1	2	0	2	0	0
4	Post-tutoring (reinforce teaching)	4	2	1	0	0	0	1
4	Being someone to turn to/a helper	4	1	0	2	1	0	0
3	Listening to children	3	3	0	0	0	0	0
2	Supporting numeracy/mathematics	2	0	1	0	0	0	1
2	Facilitating play	1	1	0	1	0	0	0
1	Developing social conditions for learning	1	1	0	0	0	0	0
1	Pre-tutoring	1	0	1	0	0	0	0

Generic contributions were reported, although it is not clear by how many TAs these perceptions were shared: for example, 'They promoted inclusion by facilitating participation and learning, and helped build confidence, self-esteem and independence so that all children were enabled to reach their full potential alongside their peers. They were guides, contributing to preparing children for life' (Shaw, 2001, p 7). Shaw makes impressive claims for learning supporters, but limitations in the report mean that only low weight can be accorded to the evidence presented in the study.

However, the Farrell et al. (1999) study reported (WoE D: high/medium) that TAs believed they were 'making a genuine contribution towards helping pupils with special needs' (p 23). On the other hand, they also reported the perception that inclusion practices might cause embarrassment in some pupils (section 3.3, 19). Pupils wanted support to be given in as non-intrusive a way as possible, welcoming the support but preferring not to have their need highlighted. They found that strategies that gave 'space and distance to pupils' were particularly important (p 50). Pupil perspectives are particularly important as it is easy to assume that presence of additional adults is always welcome.

Disabling or disempowering factors

While they did not articulate arguments about the impact of TAs on participation and inclusion explicitly, Hemmingsson et al. (2003) found evidence from their observations of pupils who might avoid support if it threatened in any way their opportunities for social participation. In a way, this social aspect was being valued more than academic engagement. Hemmingsson et al. (2003) concluded that decisions about support for pupils with disabilities should take into account the perspectives of pupils. Such consultation with pupils was needed to make sure that social participation was not threatened by the way in which support was provided. This is a further argument in favour of more research aimed at describing views of key participants.

The contribution of TAs to inclusion was not always seen as necessarily positive (Hemmingsson et al., 2003) and some reports suggested that the attention of a TA could act as a cocoon, shielding pupils from both learning challenges and integrating with peers (Hemmingsson et al., 2003; Moran and Abbott, 2002; Moyles and Suschitzky, 1997; Shaw, 2001).

Hemmingsson et al. (2003) suggested that the presence of the TA (in what they called 'the help-teacher assistant role') could act to decrease communication by the pupil with the teacher. Such perceptions suggest that TAs could possibly offer a kind of academic and social buffer 'when teaching assistants were over-protective, thereby removing pupils' learning challenges' (Moran and Abbott, 2002). Moyles and Suschitzky (1997) suggested

that the presence of TAs could limit access to high quality teaching. The study by Moran and Abbott (2002), in which headteachers were generally positive about the contributions of TAs, demonstrates sensitivity to this issue at least on the part of one school:

One primary school had explicit guidelines for the TA supporting a child in to a mainstream class for the purpose of integration. These included ensuring that the child brought all the necessary materials to class, that the TA arrived as unobtrusively as possible, and that duties were properly clarified with the mainstream class teacher. Such tasks and activities were likely to involve working with the special unit child either individually or in a small group as translator, scribe and supporter... There were, additionally, explicit instructions as to what TAs must *not* do. First, they were not to talk to the child when the mainstream class teacher was talking, but to deliver any necessary explanation later; secondly, they were not to sit only with the unit child as this would cause both social and academic dependence; and thirdly, they were not always to interpret everything for the child, but to encourage him or her to ask the teacher for clarification. (p 166)

Developing dependency can be regarded as another barrier for pupils' social and educational engagement. Indeed, there was evidence that TAs themselves were aware of the possibility of dependency. Shaw (2001, p 16) reported that learning supporters in her study saw dangers in 'pupils becoming overly dependent on one adult'. Flexible rotation of TAs in support of children might act as a safeguard against this, but then parents expressed concern that responding to a range of different assistants might be too much for children with 'high level support needs'.

Clayton (1993), Ebersold (2003), and O'Brien and Garner (2001) highlighted perceptions about the facilitation of interactions between pupils in class. TAs reported that they promote independence, but this was only reflected by two other sets of stakeholders: one study by Moran and Abbott reporting headteachers' views, the other by Ebersold citing teachers. Lacey (2001) found that 'the best LSAs were good at judging how much support to offer to individual pupils' (p 166). TAs also stressed the role of listening to pupils, but how and where are not made clear, the inference being that they had more time for listening than teachers.

With regard to inclusion, TAs need to know when to offer individual support to particular pupils and when to act as a general resource, to avoid in-class segregation or marginalisation of included pupils. This contribution presupposes engagement with, and understanding of, the aims, content, stages and outcomes of each lesson. Ebersold (2003) reached a comparable conclusion, recommending that successful TA support requires a co-opera-

Table 4.13 Contributions to inclusion (N=17, not mutually exclusive)

Total number of voices reporting this perception	Contributions perceived	Number of studies	TA views	Teacher views	Pupils	Head-teachers	Parents	Unclear
17	Securing inclusion/overseeing integration	10	7	2	0	2	2	4
11	Addressing pastoral/social needs	6	4	3	1	0	1	2
9	Mediating social interaction, facilitating social interaction with peers (including advice about impairment)	5	3	1	0	1	1	3
9	Managing behaviour/discipline	7	2	2	1	1	1	2
6	Bridging between teachers and pupils	5	3	1	0	0	0	2
4	Protecting children from learning challenges and integrating with peers	4	1	1	0	1	0	1

Table 4.14 Contributions to stakeholder relations (N=17, not mutually exclusive)

Total number of voices reporting this perception	Contributions perceived	Number of studies	TA views	Teacher views	Pupils	Head-teachers	Parents	Unclear
11	Acting as a link between teacher/school and parent (including home visiting)	6	5	1	0	0	2	3
9	Acting as co-educator/important stakeholders in education process	7	3	3	0	1	0	2
5	Giving feedback to parents	5	2	0	0	0	2	1
3	Linking all stakeholders	2	2	0	0	0	0	1

tive system that binds all stakeholders (who are interdependent) in the same enterprise: 'Schooling practices cannot just be built around the child in the centre of the practice as this leads to the child being viewed 'only in the light of his/her difficulties' (p 104). The latter concluded that high-level preparatory work between what he called the 'integration assistant' and all other stakeholders is essential if the mainstreaming of disabled children is to be successfully achieved.

4.4.3 Stakeholder relations

The linking of stakeholders was a contribution identified principally by TAs themselves (see Table 4.14). The inclusion process is held to be assisted by the TA's role in maintaining relationships between different stakeholders: for example, between parents and schools (Shaw, 2001, p 18) through home-school diaries or reporting back on children's learning strategies. Shaw summarised this go-between role: TAs often acted as 'diplomats' or go-betweens' for pupils, teachers and the many other personnel now connected with schools' (p 7). TAs shares this perception in several reports, notably in Cable (2003) where bilingual teaching assistants reported how they acted as a cross-cultural bridge between home and school, explaining the school's mission and being the first port of call for bilingual parents. They saw it as their role to explain school policy and practice to parents, 'explaining school procedures to parents and reassuring them about what their child is doing' (Cable, 2003, p 4).

TAs see this linking role as being significant and they report it more than other voices in the studies (Cable, 2003; Ebersold, 2003; Lacey, 2001; O'Brien and Garner, 2001; Shaw, 2001). Cable's BTAs provide significant detail on TAs' contribution to managing relations with parents and acting as intermediaries for children with teachers. This kind of bridging role took many forms: for example, when reassuring a child that the teacher would understand a picture of an Indian meal (Cable, 2003) or seeking clarification from the teacher on behalf of pupils (Shaw, 2001, p 23).

Not surprisingly, this bridging role is not mentioned by pupils. Headteachers do not speak about it though there is some evidence (Hancock et al., 2001) that they recognise TAs as important stakeholders in the inclusive educational processes. Parents in two studies (Ebersold, 2003; Farrell et al., 1999) acknowledged the bridging contribution by TAs.

To be able to fulfil their support roles, Shaw (2001) concluded that teaching assistants require a range of attributes, notably being a good communicator, good listener, and having a sense of justice and a positive non-judgemental attitude. Her interviewees mentioned a range of desirable qualities: 'committed, respectful, adaptable, flexible, understanding, approachable, trustworthy, tolerant and

tactful' (p 9). To what extent TAs are prepared for such contributions is unclear or whether they are screened for such attributes before appointment.

4.4.4 Contributions to teachers/ curriculum

There was general recognition of the support that TAs offered to teachers, performing routine tasks that enabled teachers to focus on securing academic engagement. For example, Wilson et al. (2002b) reported that teachers felt that TAs gave them more time for planning, and for teaching, and that they spent less time on resources and routine tasks. It is noticeable that teacher views dominate this category (see Table 4.15), as TAs stressed this contribution much less than their own direct contributions to pupils listed above.

While TAs and teachers felt that TAs were there to support teachers, there seems to be a growing sense of the supporters of learning (TAs) seeing their role as co-educator with teachers. Eight studies reported teacher perceptions about the contribution of TAs to support for the teacher as teacher helper, but only three clearly reported what TAs perceived (Baskind and Monkman, 1998; Farrell et al., 1999; Moyles and Suschitzky, 1997) in relation to being a helper to the teacher: that is, enabling the teacher to concentrate on teaching. Other reports (Hancock et al., 2001; Lacey, 2001; O'Brien and Garner, 2001) reported TA perceptions of whole-class supervision to enable teachers to work with smaller groups

McGarvey et al. (1996) found that headteachers and teachers valued the support offered by TAs; one teacher claimed that the TA had transformed her teaching life. Ideally, according to headteachers and teachers, TAs should be 'helpers with initiative, unobtrusiveness, common sense and complete discretion' (p 300). They should also be adaptable enough to cope with 'teachers' differing needs and approaches' and know when and when not to talk to children (the Jills of All Trades of Moyles and Suschitzky). McGarvey et al. (1996) concluded that the onus was on teachers to train and use TAs effectively.

The only study to report TA perceptions about resource management and maintenance (preparing materials, tidying up after activities, etc.) was that of Cable (2003). Teachers, however, clearly perceived this as an important contribution (as did the headteachers consulted), reported in Baskind and Monkman, 1998; McGarvey et al., 1996; Moyles and Suschitzky, 1997; Wilson et al., 2002b

The bridging role that TAs have can be difficult to categorise and Table 4.15 shows that TAs give feedback to teachers about progress made by pupils. In this sense, it could be that they act as a bridge back to teachers and that they have a role in supporting formative assessment of pupils' learning. However, the success of this also depends

Table 4.15 Contributions to teachers/curriculum (N=17, not mutually exclusive)

Total number of voices reporting this perception	Contributions perceived	Number of studies	TA views	Teacher views	Pupils	Head-teachers	Parents	Unclear
20	Helping and supporting teachers (e.g. in class or with routine tasks to enable concentration on teaching)	12	3	10	1	2	0	4
10	Giving feedback on progress to teachers	7	3	2	0	1	1	3
10	Maintaining or developing resources	8	1	5	1	2	0	1
6	Supervising classes (e.g. to allow teachers to concentrate on small group); whole class teaching	6	3	2	0	0	1	0
3	Advising on cultural background	3	1	1	0	0	0	1
3	Contributing to individual education plans (IEPs)	3	2	0	0	0	0	1
2	Record-keeping	2	1	1	0	0	0	0
1	Programme planning	1	0	0	0	0	0	1

on the nature and delivery of feedback and the TAs' ability to diagnose the learners' strengths and weaknesses; however, studies were not found that described these processes in detail.

There was some evidence of the objectification of TAs in some perceptions: for example, Shaw's study (2001, p 24) referred to dissatisfaction among TAs about the way some teachers viewed them and the way society at large might have a negative view of them. Occasionally, a view was expressed that teachers had to develop ways of making best use of TAs. However, Shaw argued that being a learning supporter (her term) was not an assistant post; learning supporters were rather part of 'a shared endeavour to break down barriers to learning and increase participation for all learners' (ibid).

4.4.5 Summary of perceptions of TA contributions

Voices identified

The final set of 17 studies reported perceptions in the following way. (See Table 4.16.)

This suggests that pupils' perceptions and those of parents are relatively under-represented. Most of the pupils' voices were heard in the study of Bowers (1997) with 585 primary pupils consulted. Parents were well represented in the studies by Wilson et al. (2002b) and Ebersold (2003) (104 and 51 parents responded, respectively) and also in Farrell et al. (1999). TA voices, on the other hand, while often claimed to be unheard, appeared to be well represented in the final set of 17 studies. Eleven studies provided medium weight evidence of perceptions about TA contributions to academic and social engagement. These studies leave no doubt that TA contributions are considered valuable, and there is little doubt that TAs are engaged in activities that directly affect academic and social engagement, though not all studies make clear how. There are exceptions to this, notably Cable (2003) which gives detailed accounts of activities in which BTAs are engaged to bring about social and academic engagement. The impact of the contributions is much more difficult to determine, although Howes et al. (2003) have synthesised the available evidence and arrived at conclusions in four clusters:

Cluster A: Paid adult support and the inclusion of pupils with SEN

Cluster B: Effect of paid adult support on overall achievement

Cluster C: Sociocultural issues on impact

Cluster D: Detail of effective paid adult support practice

This review, while analysing different studies and not focusing on impact, has come to some quite similar conclusions about the contributions of TAs, particularly in relation to cluster A, C and D. Returning to the Howes et al. (2003) conclusions listed in section 1.4, we can confirm the following from our 17 selected studies:

- TAs are believed to promote inclusion of pupils with SEN (Howes et al., 2003, p 4). Baskind and Monkman (1997), Farrell et al. (1999), Hancock et al. (2001), Moran and Abbott (2002), and Shaw (2001) all report similar perceptions but we lack detailed studies of how the inclusion is achieved.
- TAs are believed to play an important role as mediators, whose knowledge and understanding of pupils can be utilised to help pupils engage in learning and participation (Howes et al., 2003, p 5); they act as mediators between teachers and pupils, and, in some studies, between parents and school (Cable, 2003); however, this view was not reported by pupils who need to be asked about this.
- TAs in particular believe that they have a positive influence on pupil on-task behaviour, although overlong proximity can also have unintended negative outcomes: for example, reduction in teacher engagement with the pupil and isolation from the teacher (Howes et al., 2003, p 6), the danger of the cocooning effect that we noticed in a range of our studies (for example, Farrell et al., 1999; Hemmingsson et al. 2003; Moran and Abbott, 2002; Moyles and Suschitzky, 1997).

Our review sought to identify perceptions about contributions, so studies of impact were not explored. We were interested in descriptions of the activities and processes in which TAs engage.

Table 4.16 Nature of studies selected for in-depth review (N=17, not mutually exclusive)

	TA	Teachers	Pupils	Headteachers	Parents	Other
Number of studies	13	12	5	8	4	2
Total voices identified	961	2,704	712	333	220	7

Table 4.17 Nature of studies selected for in-depth review (N=17, not mutually exclusive)

TAs are engaged in	Number of studies in which the contribution was coded	Number of stakeholder groups identified
Helping small groups with tasks set by the teacher (including practical activities)	15	25
Supporting learning; mediating learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities	15	21
Helping individuals (with tasks set by teachers)	14	15
Helping and supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching)	12	20
Interpreting (instructions/language/worksheets); translating language	12	12
Securing inclusion/overseeing integration	10	16
Supporting literacy/language development	8	13
Maintaining or developing resources	8	10
Acting as a link between teacher/school and parent (including home visiting)	8	9
Adapting pedagogy to needs of pupils (lessons or materials)	8	10
Providing interaction opportunities in class	8	9
Promoting pupils' independence/autonomy	8	9
Managing behaviour/discipline	7	9
Acting as co-educators, important stakeholders in education process	7	9
Addressing pastoral/social needs	6	8
Giving feedback on progress to teachers	6	10
Supervising the class (when required to allow teacher to concentrate on small group); whole class teaching	6	6
Mediating social interaction/facilitating social interaction, with peers (including advice about impairment)	5	9
Bridging between teachers and pupils	5	8
Contributing to assessment/assessing children's work	5	5
Helping pupils in general; mediating learning/curriculum	5	5
Helping specific children with needs	5	5
Improving/maintaining pupil motivation	5	5
Giving feedback to parents	5	5
Post-tutoring (reinforce teaching)	4	4
Being someone to turn to, a helper	4	4
Protecting children from learning challenges and integrating with peers	4	4
Listening to children	3	3
Advising with regard to cultural background	3	3
Contributing to individual education plans (IEPs)	3	3
Linking all stakeholders	2	3
Supporting numeracy/mathematics	2	2
Keeping records	2	2
Facilitating play	1	2
Developing social conditions for learning	1	1
Pre-tutoring	1	1
Programme planning	1	1

Principal contributions

The constant comparison analysis led to agreement about the principal contributions perceived by stakeholders. Grouping all stakeholders' perceptions, the most significant TA contributions appeared to be helping small groups with tasks set by teacher (including practical activities (N=15)) and supporting, developing children's confidence and ability to learn, encouraging children by giving appropriate attention and interest to their activities (N=15)

The full set, including less frequently mentioned contributions, are listed in Table 4.17. Teachers and headteachers saw TAs as valuable resources and as helpers to teachers with tasks requiring supervision, support for learning and materials management (including display).

4.5 In-depth review: quality-assurance results

Application of in-depth inclusion criteria

Pairs of reviewers conducted in-depth review screenings and compared results, which achieved a high degree of agreement on all criteria except NX7 (reporting of methods for collecting views data). Many studies failed to include unequivocal guidance on the research methods used, particularly sampling procedures, leading to some uncertainty and discussion between reviewers about inclusion and exclusion. Shaw (2001) was retained as it contains significant claims about the perceptions of learning supporters, but it was the subject of controversy among reviewers. The study could only be classified as having low weight of evidence (WoE D) as a result.

Data-extraction

The 17 studies (or groups of studies in the case of; Hancock et al., 2002; Moyles and Suschitzky, 1997; O'Brien and Garner, 2001; Wilson et al., 2002b) included for in-depth review were independently double data extracted by members of the Review Group working in pairs, and by Katy Sutcliffe and Abigail Rowe (our EPPI-Centre staff members). Following data-extractions, each pair of reviewers held a consultation to discuss results, resolve any differences of opinion and agree a final composite version of the data-extraction to be uploaded into the team review section of the EPPI-Centre's Research Evidence in Education Library (REEL). The data extractions were also subject to review by a meeting of the Review and Advisory Group, which focused on the final weight of evidence judgments in relation to the question guiding this systematic review. This led to some adjustments in the weight of evidence values assigned to each study.

4.6 Nature of users' involvement in the review and its impact

As with other systematic reviews, the Advisory Group made a significant contribution to suggesting the focus of the review, as well as reading and commenting on the draft protocol and the draft of the final report. The Advisory Group offered advice throughout the process of conducting the review. The group consisted of teachers, SEN advisors, teacher educators, researchers, teaching assistants and policy-makers. Our user groups contained teacher trainers, teachers, advisers, teaching assistants, and headteachers who were consulted at regular intervals throughout the review process. They helped to shape the review question, confirmed the relevance of the results of our initial searches and responded to the findings that detailed perceptions about TA contributions to social and academic engagement.

In addition, there was structured discussion of the emerging findings with three groups of TAs (two from primary schools and one secondary school) and their trainers on STA programmes. Findings were presented to TAs for comments. Six TAs offered to submit copies of pre-written assignments about the role of the TAs. These were compared with the findings and found to be broadly similar.

Following the data-extractions, two groups of TAs were also asked to respond to the findings, as described below. Following the identification of perceptions in the 17 studies, 21 primary TAs and 11 secondary TAs were asked to complete an informal verification check on the kinds of perceptions that we had extracted from the studies, by reflecting on their contributions and grading the actions below from 5 (always) down to 0 (never) to calculate a rough index of what they feel they do. Their weightings are given in Table 4.18.

The TAs consulted were very keen to confirm that their contributions now focused principally on direct support for pupils' learning, some in a general way, others with specific pupil in mind. However, we did not gather data from them about their respective roles in schools. In discussion, they acknowledged the danger in their role of shielding pupils and not encouraging independence, although they were very keen to stress that one of their principal aims with pupils was to promote independent learning. Knowing when to intervene and when to withdraw was a key skill in their jobs.

Both groups agreed that they made the contributions listed at least some of the time but found it difficult to articulate *how* they made the contributions (for example, interpreting teacher input, working out when to intervene). Respondents talked about 'instinct' in picking it up as they went along, and about the flexibility they needed as their contribution often depended on the kind of teacher they were working with, in any given class.

Table 4.18 Nature of studies selected for in-depth review (N=17, not mutually exclusive)

TA User Group's perceptions of the activities	How often?
Supporting literacy or language development	4.95
Listening to children	4.9
Acting as teacher helpers/supporting teachers (e.g. in class or with routine tasks to enable teacher to concentrate on teaching)	4.86
Being someone to turn to, a helper	4.86
Helping pupils in general; mediating learning/curriculum	4.86
Supporting learning; developing children's confidence and ability to learn; encouraging children	4.85
Giving feedback on progress to teachers	4.81
Helping small groups with tasks set by the teacher (including practical activities)	4.81
Helping individuals (including with tasks set by the teacher)	4.7
Improving/maintaining pupil motivation	4.7
Managing behaviour/discipline	4.7
Supporting numeracy/mathematics	4.7
Helping specific children with needs	4.62
Promoting pupil independence/autonomy	4.62
Securing inclusion/overseeing integration of pupil/pupils	4.6
Addressing pastoral/social needs of pupils	4.4
Providing interaction opportunities in class	4.2
Acting as co-educators, important stakeholders in education process	4.1
Bridging between T and pupil	4.1
Adapting pedagogy to needs of pupils (including lessons or materials)	4.0
Mediating social interaction with other pupils/facilitating social interaction, with peers (including advice about impairment)	4.0
Maintaining or developing resources	3.95
Keeping records	3.81
Post-tutoring (to re-enforce teaching)	3.8
Assessing children's work/contributing to assessment	3.7
Developing social conditions for learning	3.6
Facilitating play	3.43
Contributing to individual education plans (IEPs)	3.33
Acting as a link between teacher/school and parent (including home visiting)	3.3
Supervising the class (when required to allow T to concentrate on small group)	3.1
Interpreting (instructions/language/worksheets); may include translating language	3.0
Planning programmes of work	3.0
Giving feedback to parents	2.6
Linking all stakeholders	2.24
Pre-tutoring	2.2
Acting as a cocoon: protecting children from learning challenges and integrating with peers	1.7
Advising with regard to cultural background (including translation)	1.7
Whole class teaching	1.25

4.7 Summary of results of synthesis

17 studies (reported in 27 papers) were included in the in-depth review. They were published between 1988 and 2003, and carried out in UK or other European countries. The studies included paid support staff working in mainstream primary schools (or other equivalent) and focused on academic and/or social engagement. All the studies met a number of reporting quality requirements, including description of the activities in which support staff are engaged, methods of data collection and how the sample was identified.

In addition, the academic or social engagement outcomes needed to be either explicitly discussed in the findings or articulated as an aim of the study. Eleven of the studies were considered to provide overall medium WoE D, while three were considered to provide medium to low WoE D and one low. Two were considered of higher weight (Bowers, 1997; Farrell et al., 1999) than the rest, but even this classification was hedged. That there were no unequivocally 'high' studies reflects the fact that few studies sought to identify exclusively the perceptions of stakeholders about TAs' contributions, with the possible exceptions of Cable (2003), and O'Brien and Garner (2001). The latter, however, were limited to one set of stakeholders (teaching assistants in each case). The limitations of Shaw (2001) - for instance, in its imprecise reporting of voices - led to the low weight (WoE D). Our findings suggest that further studies of perceptions are required.

Four domains emerged from this analysis of perceptions about the TAs' contributions to pupils' social and academic engagement:

- Direct academic and socio-academic contributions to pupils: Contributions are described as 'academic', including helping small groups with tasks set by teachers, supporting learning, developing pupils' confidence and ability to learn, helping individual pupils. Some other contributions are described as 'socio-academic' because they included management of social engagement activities: for example, providing interaction opportunities in class, promoting independence, and improving and maintaining motivation.
- Contributions to inclusion: This involved securing inclusion, addressing social needs, mediating social interaction with peers, bridging between teachers and pupils, and managing in-class behaviours.
- Stakeholder relations: This process is held to be assisted by the TA's role in acting as a link person by maintaining relationships between stakeholders.
- Contributions to teachers/curriculum: There seems to be growing recognition of TAs' role as

co-educator with teachers. The contributions of TAs include supporting teachers, developing and maintaining resources, advising about cultural background, and giving feedback on progress to teachers.

Synthesis of findings: the stakeholder perceptions

Teaching assistants (TAs)

TAs responses were enthusiastic and tended to focus on their direct contributions to learners, while acknowledging their support role for teachers. Clearly, they believed that they made significant contributions to pupil engagement: acting as a bridge between teacher and pupil; interpreting and adapting teacher input to enable more successful learning; and supporting groups and individuals while promoting autonomy.

Teachers

Teacher perceptions were generally positive, welcoming the support and especially the flexibility that the presence of an additional adult gave them. Teachers (and headteachers) generally reported that TAs were very valuable to them as resources and as support for their work. 'They are worth their weight in gold' seemed to be a common perception held by teachers. One teacher in the study by Hancock et al. (2002) claimed that her TA had contributed significantly to raising standards. Wilson et al. (2002b) reported that TAs were widely perceived to have contributed to raising pupil achievement by enabling teachers to teach more effectively.

The shared nature of the contribution to children's learning and development was stressed, being part of an educational team, often mentioned as a key feature of TA work (for example, in Shaw, 2001).

Headteachers

Headteacher perceptions, although fewer in number than teacher voices, were reported in six studies: Clayton (1993), Hancock et al. (2001), McGarvey et al. (1996), Mortimore et al. (1994a), Moyles and Suschitzky (1997) and Wilson et al. (2002b). Unfortunately, the voices of headteachers were sometimes grouped with those of teachers, as in the case of Clayton (1993), so only generally held perceptions can be reported when this occurs. Moran and Abbott (2002) interviewed headteachers only and identified a range of perceived contributions (e.g. to inclusion, academic engagement and support for teachers). The headteachers in Moyles and Suschitzky (1997) gave similar responses.

Headteachers in McGarvey et al. (1996) valued TA contributions, recognising their support for small groups and the contribution to supporting learning, developing pupil confidence and ability to learn. Hancock et al.'s headteachers saw TAs as impor-

tant stakeholders in the education process, but it was difficult to pick out exactly what headteachers thought otherwise in this study (Hancock et al., 2002). A general perception reported in this study, which we assume to be shared by some of the 133 headteachers interviewed, was that TAs made significant contributions to pupils 'with perplexing learning difficulties and pressing behaviour needs' (p 26). It was clear that headteachers acknowledged the significant contributions made by TAs (McGarvey et al., 1996; Moran and Abbott, 2002) and recognised their support for learning and for building pupils' confidence. They were, however, aware of the dangers of TAs being over-protective (Moran and Abbott, 2002).

Pupil

Pupil perceptions were rather limited, but centred on the support staff member being someone to turn to, someone to listen to them and someone who helped the teacher.

Moyles and Suschitzky's pupils recognised the support for learning that support staff offered support, including for individuals and groups (Moyles and Suschitzky, 1997). The study by Lacey (2001), which included feedback from 13 pupils, recognised such support as well. Farrell et al. (1999) reported that pupils saw TAs as a helper, someone to turn to for support.

Bowers (1997), the principal source of pupil perceptions (585 pupils), found that pupils viewed the assistants' contributions in the following order: helping the teacher (146 responses), managing behaviour (108 responses), helping children in the classroom (89), helping a particular child with difficulties (35), and being a lower-order professional (12). Bowers concluded: 'it appears that younger children tended to explain the presence of additional adults in the classroom in terms of an over-worked or less than optimally effective teacher' (p 229). Pupils appeared to value the support,

although this was not universal or without qualification. A minority of pupils, felt singled out for attention because they were different. Bowers concluded that further research might usefully explore 'what discriminates between the classroom where additional adults are accepted, welcomed and valued and that where their presence is resented and may lead to barriers to inclusion' (p 231).

Parent

Parent perceptions were much less frequently reported in the studies (Ebersold, 2003; Farrell et al., 1999; Lacey, 2001; Wilson et al., 2002b). They understood (Farrell et al., 1999) that teachers planned programmes but that LSAs would operationalise these and effectively teach. They tended to refer to teachers when there was a problem (ibid, p 22) but saw LSAs as people who gave feedback on their child's progress. Farrell et al. concluded that parents understood the role of the LSA. On the other hand, little could be gleaned from Wilson et al. (2002b), who suggested that parents knew little about the role of TAs: 'Most parents were unaware of the CA role. This is a cause for concern if parents are to become full partners in children's education' (p 6).

Nevertheless, the findings of this review suggest that TAs often take semi-independent roles in schools and make significant decisions about learners, and their academic and social engagement. It is a role that is variously seen as semi-independent (O'Brien and Garner, 2001), not a support role (Shaw, 2001), and critical to inclusion (Baskind and Monkman, 1998; Ebersold, 2003; Lacey, 2001). Other studies seemed to focus more on the role of supporting the teacher (Moran and Abbott; 1998; Wilson et al., 2002b), in that the presence of the TA helped the teacher to focus more on the teaching and learning, thereby, one would hope, securing greater academic and social engagement than possible in traditional single-staffed classrooms.

CHAPTER FIVE

Findings and implications

This chapter considers the strengths and weaknesses of this review, and the implications of the findings for:

- policy, specifically that relates to use of TAs in classrooms
- guidance given to practitioners
- the professional practice of TAs and those who lead and manage their work in schools
- future research, specifically as it relates to the TAs' role in supporting pupils' social and academic engagement, but as importantly to a wider and deeper understanding about processes that support the effective collaboration of TAs with other participants

5.1 Strengths and limitations of this systematic review

Strengths

The disciplines of screening using exclusion criteria and data-extraction with EPPI-Reviewer software enabled reviewers to focus very firmly on the issue of stakeholder perceptions. The protocol set the agenda for the review with the elaboration of the key question and the description of the process that would be undertaken to explore the question. This gave a structured framework for the study of the literature. The EPPI-Centre procedure enabled us to identify a significant number of relevant studies that address, at least in part, the question posed by the review. What has emerged is an understanding of how and to what extent stakeholders have been asked to present their views about support staff contributions.

As a result, we were able to identify claims about contributions and, in some cases, to assign to these different voices. TAs believe that they make a significant contribution in supporting learning, and this view was supported by teachers, headteachers, pupils and parents. TAs also face many challenges, not least the need to know when to intervene and when to withdraw. This review was able to identify

both benefits and dangers of deploying support staff in classrooms. However, we found few studies which limited in their description how support staff work. As a result, the review has revealed that further studies are needed to yield 'thicker' data and get at the heart of TA practice, if this emerging important role is to be fully understood.

Limitations

A major weakness related to the difficulty of disentangling views in studies of TA practice, an issue already discussed in Chapter 4. The amount of description of contributions varied significantly between studies, those by Cable (2003, 2004) being rare examples of detailed descriptions of activities. A further weakness lies in the imbalance of stakeholders represented in the research. We learn little about what children think of the additional adults who help them in the classroom and even less about the views of parents. Headteacher views are represented but their perceptions were focused more on support for teachers, rather than on support for learners. That said, headteachers viewed TAs as making a significant contribution to the integration of pupils with special needs.

A further difficulty arose with the educational setting of studies, which were often cross-phase.

Eight studies of the 17 in the final in-depth review included perceptions about support staff in secondary schools. However, the Review Group intends to explore this issue more in the second review to determine if there are discernibly different perspectives about primary and secondary practice. As a result, the findings of this first review can be taken as indicative rather than emphatically accurate.

The review question also posed difficulties and may have led to lost opportunities, since focusing on identifying perceptions possibly led to the exclusion of important studies, such as:

- studies in which observations are a major part
- impact investigations of TA interventions
- trials (e.g. comparison of classes with/without TAs)

This may have led to a limited focus of what stakeholders think about support staff contributions. We were interested in what stakeholders thought, not how TAs were employed, nor necessarily how they were managed, nor in what impact they had on attainment.

There are significant limitations to this kind of research: for example, keywording the mapped studies provides only an overview; the exclusion of non-European studies was justified principally on grounds of experiencing. Reducing the map to a manageable number of studies for data-extraction meant that some decisions were influenced by workload management considerations. Nevertheless, some important implications emerge from the review and these are discussed below.

5.2 Initial implications

Following data analysis, the Review Group arrived at some implications for practice. These were discussed with the Advisory Group, which contains teacher trainers, teachers, teaching assistants and LEA staff. The implications discussed in the following sections will be subject to review as the group prepares its second report, which will focus on mainstream secondary classrooms.

Implications for teaching assistants

The studies included in this review suggest that TAs have an increasingly important pedagogic role. As far as academic engagement is concerned, the mediating perceptions that TAs identified beg the question about TA's subject specific knowledge, in that they first have to understand the teacher's input if they are to be able successfully to support learning and evaluate outcomes. For some TAs, this may be a challenge in specialist areas of the curriculum (for example, in science or numeracy). As this support role develops, further training will be

essential to sustain quality input and support from the range of support staff now operating in schools.

One of our user groups (21 primary TAs) was consulted about the findings and advised that their contributions focused on academic and social engagement in the ways suggested by this review. A point made repeatedly was that some teachers did not plan for inclusion of TAs; some limited their planning to the use of the TA to manage difficult children, while others expected the TA to think on her/his feet, interpret the teaching and identify where interventions were needed. This suggests a demanding task is being asked of some TAs.

Implications for teacher trainers

This systematic literature review offers an analytical framework for teacher trainers in that they might consider the four categories of contribution perceived to be made by TAs:

- direct contributions to pupils' academic and social engagement
- contributions to including children (inclusion)
- acting as a link between parents, school and the child (stakeholder relations)
- contributions in support of teachers

When preparing future teachers, the role of the TA could be explored in these terms, with caveats about the dangers of generalising from studies of perceptions about TA contributions, and also the limitations imposed by current legislation and professional agreements. Nevertheless, it may help to raise awareness of forms of support likely to be available in mainstream primary settings.

Teacher-trainers could use the outcomes of this review as the basis for:

- discussion of classroom approaches that take account of TA contributions
- preparation of trainees for planning to incorporate TA contributions
- consideration of working with others

For trainers of TAs, particularly HLTAs, the findings may well confirm the current focus of training and give greater authority to the definition of the HLTA contribution to academic and social engagement.

Implications for trainee teachers

Entering classroom teaching in the 21st century, the job can no longer be seen as a one-person enterprise. Our findings suggest that support staff are taking an increasingly important role in supporting learning. This has implications for trainees who will need to:

- prepare work for others
- understand the complementary role/contribution of pupil-proximate TAs
- develop skills of collaboration, people management, negotiation and conflict resolution
- learn how to work with TAs to promote and develop inclusion and learner autonomy, while not allowing TAs to be seen as a barrier limiting some children's interaction with the teacher

Such activities are likely to involve preplanning with one or more support staff, briefing and debriefing, and then evaluating the contribution of the whole team processes to the development of children's learning and wellbeing.

Implications for educational managers and planners (headteachers, advisers, inspectors, policy-makers)

The development of the TA as a semi-autonomous supporter of learning brings with it a series of challenges at administrative and planning level. TAs may well be under the formal guidance of teachers and senior managers in schools, but, in their direct interactions with pupils, they are perceived to be making significant pedagogic decisions. Indeed, Neill (2002a, p 4) concluded that teachers might be tempted to become TAs because the most pleasurable work appears to be passing away from teachers into the hands of their support staff.

A number of questions arise. First of all, to what extent is the contribution of TAs understood by senior stakeholders? If TAs really are acting in a vital mediating capacity in the classroom (interpreting teacher input, for example), how effective are they? What is the added value of their presence? What happens where such support is not available? In the absence of TAs, are children being inadequately supported? What happens where the TA is perceived to be shielding children and making a negative contribution? Who identifies and addresses this?

As early as 1993, Clayton concluded that TAs were substantially involved in the learning process and that teachers needed time to brief TAs and evaluate their work. Given the regular complaints about lack of dedicated time for planning and review (e.g. Neill, 2002a), it is unlikely that Clayton's conclusion has been uniformly acted upon in all areas of the country. LSAs in Lacey's study (2001) did not like going to lessons without prior planning and 11 interviewees rated communication difficulties resulting from lack of planning time as a significant problem in their daily work. On the other hand, several TAs reported that they liked to adapt work as lessons proceeded, this interpreting/mediating role being seen as a significant contribution by TAs in several studies (Baskind and Monkman, 1998; Cable, 2003; Clayton, 1993; Hancock et al., 2002;

Lacey, 2001; Moyles and Suschitzky, 1997; O'Brien and Garner, 2001) and also by teachers (McGarvey et al., 1996; Neill, 2002a); and by headteachers (Moran and Abbott, 2002).

One important message in the research findings relates to inclusion policies depending for success on the contribution of all stakeholders, including TAs (Ebersold, 2003), and the opportunity to plan for inclusion. This has implications for the following:

- training policies for TAs: for example, what to include; opportunities for supervision; observation, feedback and continuing guidance
- information for parents; inclusion of parents and children in planning for their inclusion

Development of TA policies needs to be undertaken with an appreciation of the significant contribution they now appear to make. The fact that an auxiliary role has evolved to the stage where a significant number of respondents see TAs as key stakeholders in the education process, not just helpers but also direct supporters of pupils' academic and social engagement, may have implications for the ways in which support staff are recruited, recognised and paid.

Implications for teachers

Teachers are classroom managers (Clayton, 1993). Teachers' approaches have evolved to accommodate the 'new' reality of teamwork that characterises most primary classrooms. If the perceptions reported in the in-depth studies are accurate and truly representative of what is happening in primary classrooms, then teachers who make good use of the opportunities now available welcome the interpreting/mediating contributions of TAs, plan for their inclusion, and review the teaching enterprise with regard to such processes. Whether time is made available for such a quality-sensitive approach could not be judged accurately from these studies. However, the general indications of these studies were not encouraging.

In addition, teachers need to make sure that the TAs' 'bridging' contribution does not impede learning, but facilitates inclusion and access (Moyles and Suschitzky, 1997). Teachers also need the skills to collaborate effectively and develop working partnerships with TAs, which require skills in leadership, negotiation, people management and conflict resolution.

Questions for research

The evolution of TAs gives rise to some perceptions that require further investigation. Examples of this include the extent to which they are guided by teachers, how far TAs follow scripts or teacher plans or make their own pedagogic decisions about individual children needs, and how they fulfil their

interpretational/mediating roles (such as interpreting teacher input, adapting pedagogy to suit the needs of individual pupils, promoting independence, improving motivation).

Such perceptions point to some issues for further exploration:

- What kinds of discourse do TAs engage in
 - (a) when supporting pupils as individuals?
 - (b) when supporting groups of pupils?
- How do they make judgements about when to support, how to support; when not to intervene?
- How do pupils feel about the contribution of TAs:
 - (a) in general?
 - (b) in support of a specific need?
- To what extent is TAs' work supplementary or complementary to, or simply replacing, teachers?
- How do TAs support language development (Cable, 2003)?

A number of questions arise, among which are related to the pedagogic subject knowledge of TAs:

- How do TAs cope with subject knowledge to fulfil their mediational/interpretive role?
- To what extent is their support work for literacy and numeracy scripted or independently constructed?

Conclusions

All the studies, whether of higher or lower weight, suggest that TAs are active agents in securing academic and/or social engagement, perceiving TAs as contributing to learning, as valuable resources, supporters of learning, mediators and intermediaries, as listeners and sources of support. They also imply that TA contributions are still not fully understood; that they are under-researched. While there have been claims that their voices are rarely heard (Shaw, 2001; O'Brien and Garner, 2001), this did not appear to be the case. TAs in one study (O'Brien and Garner, 2001) expressed concern that it is pupils' voices that are often submerged, and that TAs provide an opportunity for pupils to use their voices, to be listened to and appreciated. TA voices are increasingly being heard, but results from this review suggest that we need to listen more to participants, especially pupils. We also need to look at the classroom interactions in which they are engaged to identify with much greater specificity what they do to contribute to academic and social engagement. Then, we will depend less on perceptions of what is done, and rather more on detailed analysis of what happens.

In order to understand support staff contributions, which are wide and evolving, this review has explored the perspectives of a range of important stakeholders. TAs are valued and their impact is believed to be positive, although only partly understood.

Their contributions need fuller explanation to inform policy and practice. Improving our preparation of teachers and TAs for such significant contributions will require detailed study of interactions in which TAs engage. The data we have about TA contributions is limited, so there is a strong case for more studies of participants' views. In addition, we need to find ways of:

- evaluating TAs' understanding of how children learn
- investigating TAs' pedagogic content knowledge (presumably deployed in their support of individuals and small groups)
- exploring the quality of feedback they give to teachers on pupil performance
- exploring the quality of feedback given to parents (where appropriate)
- analysing TA-pupil discourse in one-to-one support work
- analysing TA-pupil discourse when supporting small groups

The presence of additional adults in the classroom is not a guarantee of social and academic engagement. While most perceptions appear to be positive, the negative perception of pupils over-protected by support staff was mentioned in a number of our included studies. There are studies in which the cocooning of pupils is mentioned and negatively evaluated, by all stakeholders not just pupils. Similar voices could be heard in the systematic map, so the way in which TAs intervene is an issue that requires greater understanding. This is not to suggest that there is not a strong belief that TAs contribute significantly to learning. However, we end on a cautionary note and argue for more study of stakeholder views, including retrospective studies of the experiences of former pupils who have been supported in the curriculum to find out how they now view the experience. Broer et al. (2005) is an example of a recent retrospective study of pupils' experiences of support seen through the eyes of young adults recalling experiences of school.

TAs face a range of challenges as they become ever more significant contributors to pupils' learning: for example, when to offer individual support to particular pupils; when to encourage interaction; how to promote learner independence; and how to engage in teamwork with both teachers and pupils. So, their views and those of teachers are also essential to an understanding of current initiatives.

It has been argued that TA voices are under-represented. This review suggests that their voice has begun to emerge, but pupils' voices are definitely under-represented in the research and listening to pupils about their experience is critical to our understanding of support staff contributions.

CHAPTER SIX

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6.1 Papers included in map and synthesis

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Appendix 1.1: Authorship of this report

This work is a report of a systematic review conducted by the Personal, Social and Health Education (PSHE) school-based review group.

The authors of this report are

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They conducted the review with the benefit of advice and active participation from the members of the review group.

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 Nicola Johnson (Teaching Assistant Consultant, Leicester City Council)
 Roy Kirk (Education Librarian, University of Leicester)

Conflicts of interest

In the conduct of this review, we have worked within the EPPI-Centre guidelines, methodology and quality assurance procedures for systematic reviewing. While we consulted the Teacher Training Agency (now Training and Development Agency for Schools) about the review and were consulted by them, we have worked in an independent way. There may have been occasions when our own educational interests and understandings impacted on our judgments. However, the system of pairs of reviewers arriving at independent judgments attempts to limit bias as much as possible. There are no conflicts of interest for any members of the group.

Acknowledgements

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We are grateful for the contributions of everyone who worked on the review, including all members of the Advisory Group above, and three groups of teaching assistants who responded to and commented on our findings.

Appendix 2.1: Inclusion and exclusion criteria

Inclusion criteria for the systematic map

Inclusion

1. SCOPE

To be included, a study had to:

- a. be about supporting pupils for academic and social engagement (including SEN/EAL) as defined in section 1.2.2
- b. be about the perceptions of stakeholders on the effects of support staff on social and academic engagement (including SEN, EAL); and
- c. report on pupils' learning in the 4-19 age range in primary and secondary schools, and their equivalents in other countries

2. TIME, PLACE and LANGUAGE

To be included, the study had to be *both*:

- a. reported and published in English; *and*
- b. published in the period 1970-2003 (i.e. from the decade when the school-leaving age rose to 16 in the United Kingdom).

Although the Review Group recognises that there are likely to be studies conducted in other languages, time and resource limitations mean that the scope of the review was limited to studies published in English. For the initial search, the three-decade span was agreed because interest in the work of pupil support staff in the UK (for example Kennedy and Duthie, 1975) and US (for example, Bennett and Falk, 1970) began in the 1970s.

3. STUDY TYPE: methods

To be included, a study had to:

- a. be based on primary empirical research (case studies, reporting of perceptions through questionnaires, interviews and meetings)

Exclusion

Studies were excluded on any one of the following grounds:

1. SCOPE

- a. If they were not about perceptions of stakeholders on the effects of pupil support staff on social and academic engagement (including SEN, EAL)
- b. If they were not about support staff (see note below)

- c. If they were not about pupils' learning from Foundation Stage to Key Stage 5 (age 4-19)
- d. If they were not about supporting pupils for academic and social engagement (including SEN/EAL)
- e. If they were not about the pupils' curriculum (including SEN, EAL); extra-curricular activity lunchtime clubs would be excluded, but not initiatives such as homework clubs which relate to the curriculum
- f. If the support staff were working on tasks that did not relate directly to learning (e.g. liaison with school premises officer about security in the classroom)

2. TIME, PLACE and LANGUAGE

Studies were excluded if they were:

- a. not published in English
- b. not published in the period 1970-2003

3. STUDY TYPE

Papers that were not drawn from primary research were excluded, for example:

- a. editorials, book reviews, literature reviews, position papers
- b. policy documents (e.g. DfES consultation paper, 2002), syllabuses, frameworks
- c. resources
- d. handbooks (e.g. Fox 1998)
- e. methodology papers
- f. bibliographies and literature reviews
- g. non-empirical papers

Inclusion criteria for the in-depth review

In-depth criterion 1

Studies were selected which:

- were published in or after 1988
- focused on ages 5-10 (primary)
- focused on engagement described in the study as academic and/or social
- include support staff that were paid

In-depth criterion 2

For purposes of manageability, it was decided that studies fitting the criteria should also be European or UK studies.

In-depth criterion 3

- Focus on pupils engaged in mainstream education
- Focus on stakeholders' **descriptions of the activities that support staff are involved in**, therefore must contain at least some description of TAs' activities
- Focus on stakeholders' **perceptions of the contribution that such activities make to social and or academic engagement**, therefore this must be *either*
 - a clearly stated aim of the study, *or*
 - explicitly discussed in the findings
- Clearly report the **research methodology** including *at least*
 - a description how the sample was generated *and*
 - some information on the methods for collecting views/perspectives

Appendix 2.2: Search strategies for electronic databases

Sources	Availability	Time period of search
<i>Databases</i>		
ERIC (Educational Resource Index and Abstracts)	Dialog@Site Web version	1966-1983 1984-1989 1990-September 2004
BEI (British Educational Index)	Dialog@Site Web version	1976-September 2004
AEI (Australian Educational Index)	Dialog@Site Web version	1976-September 2004
PsycInfo	Ovid Web version	
ISI Web of Science	MIMAS ISI Web of Knowledge Web version	1981-2004
IBSS (International Bibliography of the Social Sciences)	BIDS Web version	1970-2003
ArticleFirst	OCLC FirstSearch Web version	1970-2003

Strategies

ERIC

CLASS AID?
 OR TEACHER AID?
 OR CLASSROOM AID?
 OR TEACHING AID?
 OR CURRICULUM SUPPORT?
 OR TEACHING COACH?
 OR EDUCATIONAL THERAPIST?
 OR PSYCHOEDUCATOR?
 OR PARAEDUCATOR?
 OR BILINGUAL ASSISTANT?
 OR HELPER?
 OR CHILDRENS LIBRARIAN?
 OR SCHOOL LIBRARIAN?
 OR LEARNING MENTOR?
 OR ANCILLAR?
 OR AUXILIAR?
 OR PARAPROFESSIONAL?
 OR SUPPORT STAFF?

OR LEARNING SUPPORT ASSISTANT?
 OR SUPPORT ASSISTANT?
 AND SCHOOL?
 NOT UNIVERSIT?
 NOT COLLEGE?
 NOT MEDICAL SCHOOL?
 NOT HIGHER EDUC?

BEI

FACILITATOR?
 OR SPECIAL EDUCATIONAL NEEDS ASSISTANT?
 OR CURRICULUM SUPPORT?
 OR TEACHER AID?
 OR EDUCATIONAL THERAPIST?
 OR PARAEDUCATOR?
 OR BILINGUAL ASSISTANT?
 OR HELPER?
 OR CHILDRENS LIBRARIAN?
 OR SCHOOL LIBRARIAN?
 OR VOLUNTEER?
 OR LEARNING MENTOR?

OR ANCILLAR?
 OR AUXILIAR?
 OR PARAPROFESSIONAL?
 OR TEACHING ASSISTANT?
 OR CLASSROOM ASSISTANT?
 OR SUPPORT STAFF?
 OR LEARNING SUPPORT ASSISTANT?
 OR SUPPORT ASSISTANT?

AEI

SCHOOL?
 AND SPECIAL EDUCATIONAL NEEDS ASSISTANT?
 OR CURRICULUM SUPPORT?
 OR TEACHER AID?
 OR EDUCATIONAL THERAPIST?
 OR PARAEDUCATOR?
 OR BILINGUAL ASSISTANT?
 OR HELPER?
 OR CHILDRENS LIBRARIAN?
 OR SCHOOL LIBRARIAN?
 OR VOLUNTEER?
 OR LEARNING MENTOR?
 OR ANCILLAR?
 OR AUXILIAR?
 OR PARAPROFESSIONAL?
 OR TEACHING ASSISTANT?
 OR CLASSROOM ASSISTANT?
 OR SUPPORT STAFF?
 OR LEARNING SUPPORT ASSISTANT?
 OR SUPPORT ASSISTANT?
 NOT ADULT LEARNING
 NOT HIGHER EDUC?
 NOT UNIVERSIT?

PsycInfo

#15 ((school librarian* or learning mentor*) or (helper* or children's librarian*) or (paraeducator* or bilingual assistant*) or (psychoeducator* or school volunteer*) or (teacher aid* or educational therapist*) or (teaching aid* or teaching coach*) or (special educational needs assistant* or curriculum support*) or (class aid* or classroom aid*) or (learning support assistant* or support assistant*) or (classroom assistant* or support staff*) or (paraprofessional* or teaching assistant*) or (ancillar* or auxiliar*)) and ((education* or school* or classroom*) in de)
 #14 (school librarian* or learning mentor*) or (helper* or children's librarian*) or (paraeducator* or bilingual assistant*) or (psychoeducator* or school volunteer*) or (teacher aid* or educational therapist*) or (teaching aid* or teaching coach*) or (special educational needs assistant* or curriculum support*) or (class aid* or classroom aid*) or (learning support assistant* or support assistant*) or (classroom assistant* or support staff*) or (paraprofessional* or teaching assistant*) or (ancillar* or auxiliar*)
 #13 (education* or school* or classroom*)
 #12 psychoeducator* or school volunteer*
 #11 teaching aid* or teaching coach*
 #10 class aid* or classroom aid*
 #9 learning support assistant* or support assistant*

#8 classroom assistant* or support staff*
 #7 paraprofessional* or teaching assistant*
 #6 ancillar* or auxiliar*
 #5 school librarian* or learning mentor*
 #4 helper* or children's librarian*
 #3 paraeducator* or bilingual assistant*
 #2 teacher aid* or educational therapist*
 #1 special educational needs assistant* or curriculum support*

ISI Web of Science

#16 #15 and #16
 #15 TS=(school*)
 #14 #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14
 #13 TS=(psychoeducator* or school volunteer*)
 #12 TS=(teaching aid* or teaching coach*)
 #11 TS=(class aid* or classroom aid*)
 #10 TS=(learning support assistant* or support assistant*)
 #9 TS=(classroom assistant* or support staff*)
 #8 TS=(teaching assistant*)
 #7 TS=(paraprofessional*)
 #6 TS=(school ancillar* or school auxiliar*)
 #5 TS=(school helper* or children's librarian*)
 #4 TS=(paraeducator* or bilingual assistant*)
 #3 TS=(teacher aid* or educational therapist*)
 #2 TS=(school librarian* or learning mentor*)
 #1 TS=(special educational needs assistant* or curriculum support*)
 DocType=All document types; Language=English;
 Database(s)=SCI-EXPANDED, SSCI, AandHCI;
 Timespan=1981-2004

ArticleFirst

"special educational needs assistant*
 or "volunteer+"
 or "curriculum support+"
 or "teacher aid*"
 or "paraeducator+ "
 or "bilingual assistant+ "
 or "school helper+ "
 or "learning mentor+ "
 or "ancillar* "
 or "auxiliar* "
 or "paraprofessional+ "
 or "teaching assistant+ "
 or "classroom assistant+ "
 or "support staff+ "
 or "learning support assistant+ "
 or "support assistant+ "
 or "class aid* "
 or "classroom aid* "
 or "teaching aid* "
 or "teaching coach* "
 or "psychoeducator+ "
 or "nursery nurse+ "
 and "school+ "

Appendix 2.3: Journals handsearched

For handsearching, five journals were identified by members of the Review and Advisory Groups and all volumes accessible through the associated libraries of Bishop Grosseteste College, Newman College and University of Leicester were handsearched. The following journals were scrutinised in this way by members of the Review Group:

Education 3-13

British Journal of Special Education

British Educational Research Journal

Educational Research

Support for Learning

APPENDIX 2.4 EPPI-Centre keyword sheet, including review-specific keywords

V0.9.7 Bibliographic details and/or unique identifier

A1. Identification of report

Citation
 Contact
 Handsearch
 Unknown
 Electronic database (please specify)

A2. Status

Published
 In press
 Unpublished

A3. Linked reports

Is this report linked to one or more other reports in such a way that they also report the same study?

Not linked
 Linked (please provide bibliographical details and/or unique identifier)

A4. Language (please specify)

A5. In which country/countries was the study carried out? (please specify)

.....

A6. What is/are the topic focus/foci of the study?

Assessment
 Classroom management
 Curriculum*
 Equal opportunities
 Methodology
 Organisation and management
 Policy
 Teacher careers
 Teaching and learning
 Other (please specify)

A7. Curriculum

Art
 Business studies
 Citizenship
 Cross-curricular
 Design and technology
 Environment
 General
 Geography
 Hidden
 History
 ICT
 Literacy - first language
 Literacy further languages
 Literature
 Mathematics
 Music
 PSE
 Physical education
 Religious education
 Science
 Vocational
 Other (please specify)

A8. Programme name (please specify)

A9. What is/are the population focus/foci of the study?

Learners
 Senior management
 Teaching staff
 Non-teaching staff
 Other education practitioners
 Government
 Local education authority officers
 Parents
 Governors
 Other (please specify)

A10. Age of learners (years)

0-4
 5-10
 11-16
 17-20
 21 and over

A11. Sex of learners

Female only
 Male only
 Mixed sex

A12. What is/are the educational setting(s) of the study?

Community centre
 Correctional institution
 Government department
 Higher education institution
 Home
 Independent school
 Local education authority
 Nursery school
 Post-compulsory education institution
 Primary school
 Pupil referral unit
 Residential school
 Secondary school
 Special needs school
 Workplace
 Other educational setting (please specify)

A13. Which type(s) of study does this report describe?

A. Description
 B. Exploration of relationships
 C. Evaluation
 a. naturally-occurring
 b. researcher-manipulated
 D. Development of methodology
 E. Review
 a. Systematic review
 b. Other review

Review-specific keywords

The Review Team identified eight review-specific keywords that it applied to the 145 studies in the systematic map. It was important to identify which stakeholders' perceptions were reported in each study (A.2 below): heads, teachers, support staff, pupils or parents.

A.1 What is the status of the support staff (paid, unpaid, volunteer)?

A.2 Which stakeholder perceptions are reported (heads, teachers, support staff, pupils or parents)?

A.3 Who is support offered to (individuals, groups or whole class)?

A.4 What is the reason for support (general, SEN, disability)?

A.5 Type of engagement involved (academic, social or both)

A.6 Type of method used to collect perceptions/views in study (e.g. interviews)

A.7 What term is used to describe support staff (e.g. teaching aide, teaching assistant, learning support assistant)?

A.8 What is the age of the students the support staff are involved with? (Tick all that apply.)

Appendix 3.1: Non-european studies excluded from the in-depth review

List of non-European papers (primary, post 1988, focusing on academic and or social engagement)

Achilles CM, Finn JD, Gerber S, Zaharias JB (2000) It's time to drop the other shoe: the evidence on teacher aides. *Annual Meeting of the Mid-South Educational Research Association*. Bowling Green, New York. November 15-17, 2000.

Arthur M, Foreman, P (2002) Educational programming for students with high support needs: report data from teachers, paraprofessionals and other professionals working in Australian schools. *Developmental Disabilities Bulletin* 30: 115-139.

Dover WF (2002) Instructional management of paraeducators in inclusive classrooms: the perspectives of the teachers. *American Council on Rural Special Education (ACRES)*. Reno, Nevada. March 7-9 2002.

Downing JE, Ryndak DL, Clark D (2000) Paraeducators in inclusive classrooms: their own perceptions. *Remedial and Special Education* 21: 171-181.

Frank AR, Keith TZ, Steil DA (1988) Training needs of special education paraprofessionals. *Exceptional Children* 55: 253-258.

French NK (1998) Working together: resource teachers and paraeducators. *Remedial and Special Education* 19: 357-368.

French NK (2001) Supervising paraprofessionals: a survey of teacher practices. *Journal of Special Education* 35: 41-53.

French NK, Chopra RV (1999) Parent perspectives on the roles of paraprofessionals. *Journal of the Association for Persons with Severe Handicaps* 24: 259-272.

Giangreco MF, Broer SM, Edelman SW (2001) Teacher engagement with students with disabilities: differences between paraprofessional service delivery models. *Journal of the Association for Persons with Severe Handicaps* 26: 75-86.

Giangreco MF, Broer SM, Edelman SW (2002) That was then, this is now! Paraprofessional supports for students

with disabilities in general education classrooms. *Exceptionality* 10: 47-64.

Giangreco MF, Edelman SW, Broer SM (2001) Respect, appreciation, and acknowledgment of paraprofessionals who support students with disabilities. *Exceptional Children* 67: 485-498.

Giangreco MF, Edelman SW, Luiselli TE, MacFarland SZC (1997) Helping or hovering? Effects of instructional assistant proximity on students with disabilities. *Exceptional Children* 64: 7-18.

Giangreco MP, Edelman SW, Broer SM (2003) Schoolwide planning to improve paraeducator supports. *Exceptional Children* 70: 63-79.

Goessling DP (1998) The invisible elves of the inclusive school - paraprofessionals. *Annual Meeting of the American Educational Research Association*. San Diego, California. April 13-17 1998.

Hones DF (1999) Making peace: a narrative study of a bilingual liaison, a school and a community. *Teachers College Record* 101: 106-134.

Lamont IL, Hill JL (1991) Roles and responsibilities of paraprofessionals in the regular elementary classroom. *British Columbia Journal of Special Education* 15: 1-24.

Lloyd C, WiltonK, Townsend M (1997) Children at high-risk for mild intellectual disability in regular classrooms: six New Zealand case-studies. *World Congress, International Association for Scientific Study of Intellectual Disabilities*. Helsinki. June 1996.

Marks SU, Schrader C, Levine M (1999). Paraeducator experiences in inclusive settings: helping, hovering, or holding their own? *Exceptional Children* 65: 315-328.

Minondo S, Meyer LH, Xin JF (2001) The role and responsibilities of teaching assistants in inclusive education: what's appropriate? *Journal of the Association for Persons with Severe Handicaps* 26: 114-119.

Monzo LD, Rueda RS (2001) *Sociocultural factors in social relationships: examining Latino teachers' and*

paraeducators' interactions with Latino students. Research Report No. 9. Santa Cruz, California: Center for Research on Education, Diversity and Excellence.

Prochnow JE, Kearney AC, Carroll Lind J (2000) Successful inclusion: what do teachers say they need? *New Zealand Journal of Educational Studies* **35**: 157-177.

Riggs CG, Mueller PH (2001) Employment and utilization of paraeducators in inclusive settings. *Journal of Special Education* **35**: 54-62.

Rueda RS, Monzo LD (2000) *Apprenticeship for teaching: professional development issues surrounding the collaborative relationship between teachers and paraeducators. Research Report.* Santa Cruz, California: Center for Research on Education, Diversity and Excellence.

Smith MK, Dlugosh LL (1999) Early childhood classroom teachers' perceptions of successful inclusion: a multiple case study. *Annual Conference of the American*

Educational Research Association. Montreal. April 19-23 1999.

Stahl BJ, Lorenz G (1994) *Views on paraprofessionals.* St. Paul, Minnesota: Minnesota Department of Education.

Stinson MS, Liu Y (1999) Participation of deaf and hard-of-hearing students in classes with hearing students. *Journal of Deaf Studies and Deaf Education* **4**: 191-202.

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Wolery M, Werts MG, Caldwell NK, Snyder ED, Lisowski, L (1995) Experienced teachers' perceptions of resources and supports for inclusion. *Education and Training in Mental Retardation and Developmental Disabilities* **30**: 15-26.

Appendix 4.1: Details of studies included in the in-depth review

Baskind S, Monkman H (1998) Are assistants effectively supporting hearing-impaired children in mainstream schools?

Broad aims of the study

This is a descriptive study.

'The aim of this paper is to explore the issues of the role and training that surround the assistants employed to support hearing-impaired pupils in mainstream primary schools in one LEA' (p 15).

Total number of participants

10 TAs

9 teachers

1 head of service

1 teacher of deaf

Methods used to collect data

One-to-one interview

Observation

Self-completion questionnaire

Methods used to analyse data

This is not stated.

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Assessing children's work (TAs, patchy)

Helping children with specific needs (TAs)

Helping individuals (TAs)

Supporting learning (TAs)

Promoting independence/autonomy (TAs)

Supporting literacy/language (TAs/teachers)

Helping small groups (TAs/teachers)

Post-tutoring (teachers/TAs)

Adapting pedagogy (teachers)

Interpreting (teachers)

Pre-tutoring (3 teachers)

Contributions to teachers/curriculum

Helping or supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (pupils) (TAs/teachers)

Supervising the class (teachers)

Maintaining/developing resources (teachers) (14)

Conclusions

The authors conclude that the study demonstrated a positive attitude in the working relationship between teachers, assistants and the Support Service for the Hearing-Impaired in supporting pupils, and ensuring their successful integration into mainstream primary schools. The assistants are a valuable resource but, to obtain full benefit, many considerations have to be taken into account, including a clear description of roles and responsibilities; high quality and relevant training for assistants and teachers; clear and effective management of school and LEA special needs support systems; and input and co-operation from the Support Service for the Hearing Impaired.

It is suggested that future research could include a detailed analysis of the role of the peripatetic teacher of the deaf in supporting teachers and assistants in mainstream school, the development of a training package for teachers and assistants in mainstream schools, and an investigation into views and perceptions of hearing impaired pupils themselves. (p 21)

Bowers T (1997) Supporting special seeds in the mainstream classroom: children's perceptions of the adult role

Broad aims of the study

This is a descriptive study: 'to determine the types of explanations which children made for the presence of additional adults in the classroom. In particular, it was intended to examine the extent to which those explanations embraced 'need' on the part of a child or children, or on the part of the teacher.' (p 221)

Total number of participants

585 primary children

Methods used to collect data

Group interview

'Responses were individually written on a proforma response sheet' (p 221).

Methods used to analyse data

Descriptive counts given to basic data.
 'Responses were coded by allocating data to categories using the approach suggested for ethnographic research by Hammersley and Atkinson (1983)' (p 221).

Key perceptions of what TAs do (stakeholders in brackets)*Pupils' academic and/or social engagement*

Helping pupils in general; Mediating learning/ curriculum (pupils) Helping specific children with needs (pupils)

Inclusion

Managing behaviour/disciplining (pupils)

Contributions to teachers/curriculum

Helping or supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (pupils) (4)

Conclusions

It appears that the amount of contact with learning support staff decreased as pupils moved from infants to juniors and was similarly marked when they attended secondary school. In describing the distinction between the provision of help for the teacher and for the pupil, it appears that younger pupils tended to explain the presence of additional adults in the classroom in terms of an over-worked or less than optimally effective teacher. For older pupils, help was seen as pupil-focused, whereby help was given to those identified as needing something different from, or in addition to, what the bulk of the class received.

Most of the recipients of support enjoyed, appreciated or valued support. There were, however, consistent responses from a minority who saw support as somehow singling a student out as different.

There was also a sense, from some of the responses, of 'out-group denigration'. For some, one of these groups consisted of those singled out for attention on account of their special needs, while others felt that the 'out-group' were the visiting teachers who were in some way not 'real' teachers or were learning to be teachers. This suggested that for some, in-class proximity did not necessarily achieve full inclusion.

Finally, it is suggested that further work could be done in order to examine what discriminates between the classroom where additional adults are accepted, welcomed and valued, and that where their presence is resented and may lead to barriers to inclusion (p 229).

Cable C (2003) Bilingual teaching assistants: their contribution to learning**Broad aims of the study**

This is a descriptive study.

The specific focus of the paper is on what 'Bilingual Teaching Assistants thought was distinctive about their contribution to learning' (p 1).

Total number of participants

3 BTAs

Methods used to collect data

One-to-one interview
 Interviews were conducted with pre-shared questions.

Methods used to analyse data

Interviews were transcribed and analysed.

Key perceptions of what TAs do (stakeholders in brackets)*Pupils' academic and/or social engagement*

Assessing children's work/ contributing to assessment (TAs)

Developing social conditions for learning

Helping small groups with tasks set by the teacher (including practical activities)

Helping individuals (including with tasks set by the teacher)

Interpreting (instructions/language/ worksheets); translating language

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities

Supporting language development

Promoting independence/autonomy

Listening to children

Inclusion

Securing inclusion/overseeing integration

Catering for pastoral needs

Stakeholder relations

Giving feedback to parents

Acting as bridge/Intermediary between teacher and pupils

Linking teacher, school and parent (including home visiting)

Linking all stakeholders

Contributions to teachers/curriculum

Advising on cultural background

Giving feedback to teachers on pupil progress

Maintaining/developing resources

Conclusions

The writer concludes with the following paragraphs:

'The BTAs in this study felt they made contributions to children's learning that could not be provided by monolingual staff and that these were related to fostering the social conditions necessary for learning as much as to the actual teaching in the classroom.

'One of the key elements in the role was that of intermediary and advocate for children and parents. Schools remain largely monolingual and monocultural environments and for some parents and children bilingual teaching assistants make a critical contribution to children's ability to learn as well as to their learning both inside and outside the classroom. It appears that pedagogic practices in schools are still not drawing on children's backgrounds and experiences in ways that will support learning or learning dispositions. The knowledge and understanding that bilingual teaching assistants bring to their role by being bi-cultural as well as bilingual seems crucial.

'The role and contribution of bilingual teaching assistants warrants further analysis especially in

the area of support for language development in both English and children's first languages. However, their role in the developing the social conditions for learning is perhaps under recognised.' (p 8)

BTAs often have to act as intermediaries or advocates, being 'active in presenting often conflicting views and opinions'. This is not always a comfortable task, requiring understanding of different perspectives and sensitivity.

'BTAs are positioned between parents and school and between teachers and children...

'The role and contribution of bilingual teaching assistants is an under-researched area and their voices are rarely heard.' (p 220)

Clayton T (1993) From domestic helper to assistant teacher: the changing role of the British classroom assistant

Broad aims of the study

This is a descriptive study.

[Original PhD on which this paper is based]...

'investigated (i) the background experience of classroom assistants; (ii) their role, including ways in which their work was organised and managed as well as perceptions about their competence and the helpfulness to both pupils and teachers of particular activities undertaken; and (iii) their perceived support and training needs' (p 35)

Total number of participants

72 heads

81 teachers

100 TAs

grouped

Methods used to collect data

One-to-one interview

Self-completion questionnaire

Documentary analyses

Methods used to analyse data

Counting exercise of number of times different categories were cited, then converted into percentages

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Helping small groups with tasks set by the teacher (including practical activities)

Helping individuals (including with tasks set by the teacher)

Interpreting (instructions/language/worksheets); translating language

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities

Providing interaction opportunities in class

Inclusion

Securing inclusion/overseeing integration

Mediating or facilitating social interaction with peers

Catering for pastoral needs

Managing behaviour/disciplinarians

Stakeholder relations

Giving feedback to parents

Contributions to teachers/curriculum

Helping/Supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching)

Giving feedback on progress to teachers

Maintaining/developing resources

Contributing to individual education plans (14)

Conclusions

'The general conclusion of this study was that today's classroom assistants working with children with special educational needs in mainstream primary schools undertake a wide range of duties including important care and supervisory ones, but that, irrespective of the child's primary presenting problem, the bulk of their time is spent on 'educational' activities and, to a lesser extent, behavioural management support, under the direction of the class teacher. It was also found that these educational and behavioural management duties were the ones most valued by teachers and which also seemed to give the assistants greatest job satisfaction. They were also the ones in which they felt most competent.' (p 36)

In the final section the author concludes that the CA's role has evolved from one of care to one of 'substantial involvement in the learning process' (p 42).

Teachers are becoming classroom managers and there was a need for training for CAs and clear job descriptions. Teachers also need time 'to brief and support the assistants and also monitor and evaluate their work'.

Ebersold S (2003) Inclusion and mainstream education: an equal co-operation system

Broad aims of the study

This is a descriptive study.

The study seeks to identify some of the features contributing to the coherence of mainstream schooling, and to the quality of the guidance offered to assistants.

The study sought to analyse the preparatory work to support the disabled child during his/her school life and to facilitate their acceptance in the classroom. It investigated a range of factors including the assistants' level of integration in the classroom and the satisfaction of stakeholders concerning the assistants' work. (p 91)

Total number of participants

61 TAs

62 teachers

51 parents

Methods used to collect data

One-to-one interview

Methods used to analyse data

Factorial analysis (Cibois, 1985) was used on the questionnaires.

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Adapting pedagogy to needs of pupils (teachers/parents/general)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (TAs/teachers)

Helping small groups with tasks set by the teacher (including practical activities) (teachers)

Helping individuals (including with tasks set by the teacher) (teacher)

Improving/maintaining of pupil motivation (teachers)

Promoting independence/autonomy (TAs/teachers)

Providing interaction opportunities in class (TAs)
Inclusion

Mediating or facilitating social interaction with peers (TAs/teachers/parents)

Securing inclusion/overseeing integration (TAs/teachers/parents)

(28)

Contributions to teachers/curriculum

Helping/Supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (teachers)

Giving feedback on progress to teachers (parents)

Stakeholder relations

Teaching assistants: important stakeholders in education process/educators (TAs/teachers)

Acting as bridge/intermediary between T and pupil: 'interface between parents, the teachers and the child' (Teachers/TAs)

Link between teacher/school and parent (including home visiting) (TAs/parents)

Giving feedback to parents (parents)

Linking all stakeholders (TAs/general)

Conclusions

The writer concludes that schooling for a child with an impairment is rarely a coherent 'collective action organised so as to equally involve the teacher, the parents and the assistant in the child's school life. Assistants are either left alone, obliged to shape for themselves their function, or placed in a relationship of subordination to the teacher, without recognition of their specific skills'.

Teachers remain at a distance, with the child's work delegated to the assistant. The result is uncertainty and frustration for participants. 'Thus one has to admit that the quality of support work, and of the links and relationships created, seems to consist less in meeting the child's needs than in those of one or more of the stakeholders.' (p 103)

There needs to be a high degree of coherence and common focus to work to produce positive outcomes for children in mainstream education (p 103).

Conclusions lead to a discussion that centres around the richness of co-operation. The different stakeholders are interdependent. Schooling practices cannot just be built around the child being in the centre of the practice (p 103) as this leads to the child being viewed 'only in the light of his/her difficulties' p 104).

The writer argues that successful inclusion

requires schooling to be 'structured around an equal system of co-operation.'

It is possible to define the key characteristics/conditions of such 'coherence': a need for stakeholders to work together according to contractual relationships; high quality preparatory work (involving the integration assistant and all stakeholders) is essential to successful mainstreaming of disabled children.

There are conflicting views (especially between teachers and assistants) as to how roles, responsibilities and relations are perceived.

Farrell P, Balshaw M, Polat F (1999) The management, role and training of learning support assistants

Broad aims of the study

This is a descriptive study.

'to obtain the views of a range of stakeholders, including parents, teachers, senior staff in schools and LEAs, pupils and LSAs about their role in schools, the ways they are managed and supported, career structures and training opportunities' (p 2)

Total number of participants

149 TAs

113 teachers

47 pupils

35 pupils

Methods used to collect data

Focus group

One-to-one interview

Observation

Methods used to analyse data

Qualitative data categorised and reported back in chapters 3-5; precise methodology for this is not made clear.

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Adapting pedagogy to needs of pupils (teachers)

Supporting NLS or literacy development...

Supporting language development (TAs/general)

Helping individuals (including with tasks set by the teacher) (individual)

Helping small groups with tasks set by the teacher (including practical activities) (general)

Someone to turn to/helper (pupils)

Contributions to teachers/curriculum

Giving feedback on progress to teachers (TAs/general)

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (TAs/general)

Contributing to individual education plans (TAs)

Advising on with regard to cultural background (general)

Planning programmes of work (general)

Supervising the class (when required to allow T to concentrate on small group); whole class teaching (parents)

Inclusion

Securing inclusion/overseeing integration (TAs; heads; parents)

Managing behaviour (parents/general)
Stakeholder relations
 Giving feedback to parents (parents)
 Link between teacher/school and parent
 (including home visiting) (parents)
 Teaching assistants: important stakeholders in
 education process/educators (general)

Conclusions

The evidence of this study suggests that there is a clearly understood distinction between the role of LSAs and teachers. In the particular context of pupils with special educational needs, teachers are responsible for the overall success of the teaching programmes; they plan the programmes, monitor their success, plan review meeting and liaise with parents. Meanwhile, LSAs are seen as being responsible for implementing the programmes under the teachers' guidance.

LSAs tend to support pupils in mainstream classes by keeping regular contact with those who may need help but they do not sit with a pupil throughout a lesson unless s/he is working on a completely different curriculum activity from that of his/her peer group.

A wide variety of practices were observed in relation to withdrawing pupils from class for individual sessions. Teachers and LSAs adopted a flexible approach to this issue and were responsive to pupils' wishes.

A consistent problem in the mainstream sites, in particular the non-resourced schools, was the lack of time for day-to-day planning meetings when the LSA could give feedback to and receive advice from the teacher.

In mainstream primary schools LSAs were making a significant contribution in helping to implement the literacy hour.

In all sites LSAs undertook a range of extracurricular activities, often in out-of-school time.

All teachers and managers were very positive about the work of LSAs in schools and classrooms.

Parents and pupils understand the respective roles of LSAs and teachers.

The vast majority of LSAs are extremely enthusiastic about their job, despite reservations about their conditions of service, and most do not want to be teachers.

The following conclusions or recommendations are drawn out from the findings:

'The job title for staff working in schools and classrooms to support pupils should be the same. For reasons stated earlier in this report we prefer the term Learning Support Assistants which should be applied to all classroom and support assistants working in schools and not be restricted to those who work with pupils who have special needs.' (p 71)

Hancock R, Swann W, Marr A, Turner J, Cable C (2002) Classroom assistants in primary schools: employment and deployment

Broad aims of the study

This is a descriptive study.
 'to research the employment and deployment of classroom assistants in three English LEAs' (p 3)

Total number of participants

275 TAs
 113 teachers
 133 heads

Methods used to collect data

In the five case-study schools, data was gathered through interviews with heads, teachers, assistants and parents.

In LEA 3, interviews were carried out with headteachers and a number of teachers and assistants from two schools.

Observation of assistants and teachers in the five case study schools.

Self-completion questionnaire

Methods used to analyse data

Percentages for questionnaire evidence
 Synthesis of qualitative data, including choice of quotations, the basis of which is not made clear

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement
 Assessing children's work/contributing to assessment (teachers)

Helping small groups with tasks set by the teacher (including practical activities) (TAs/teachers/general)

Helping individuals (including with tasks set by the teacher) (general)

Interpreting (instructions/language/worksheets); translating language (TAs/teachers)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (teachers/general)

Supporting NLS or literacy development...
 Supporting language development (teachers/general)

Supporting numeracy/mathematics (general)
Inclusion

Managing behaviour/discipline (TAs)

Contributions to teachers/curriculum

Supervising the class (when required to allow T to concentrate on small group); whole class teaching (TAs)

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (teachers)

Stakeholder relations

Acting as bridge/Intermediary between T and pupil: 'interface between parents, the teachers and the child' Ebersold (general)

Teaching assistants: important stakeholders in education process/educators (heads/service managers)

Conclusions

The authors conclude that there has been significant change in classroom practice.

'Teachers - under considerable pressure to improve standards - have brought assistants into their professional lives in ways that would have been highly controversial a few years ago.

'The degree of assistant involvement in pupil learning in our study makes it inappropriate to think of classes of children in schools being taught by stand-alone teachers.' (p 25)

They conclude that there is 'under-acknowledgement of the contribution that assistants now make to children's school life and learning' (p 26)

In particular, they highlight contributions that relate to support for 'children with perplexing learning difficulties and pressing behaviour needs' and assistants' 'informal contributions to learning within the wider context of the school' (p 26).

They also highlight that 'teachers and assistants have become interdependent team workers' (p 26) and teachers now rely on them as a significant resource.

They also identify serious problems which include:

'the variability in the distribution of assistants and the need to standardise levels of resource, and, importantly, adapt them to identified pupil needs

'the anomalous way in which most assistants are graded and paid as 'manual workers' even though many have taken on expanded roles and aspects of a teacher's traditional work

'the way in which most assistants sometimes work with groups outside the classroom posing questions related to responsibility, pedagogy and legality' (p 26)

Classroom assistants are highly valued by LEA and school personnel but they are a feminised and structurally marginalised group of workers (see Olsson, 1992; Evetts, 1994). Like their counterparts in health and social services, they have a strong sense of public service and they are therefore liable to be taken for granted.

'The demands made on assistants by government and schools have been very considerable in terms of encouraging them to take on teaching-related duties.' (p 26)

Hemmingsson H, Borell L, Gustavsson A (2003) Participation in school: school assistants creating opportunities and obstacles for pupils with disabilities

Broad aims of the study

This study focuses on exploration of relationships.

'The current explorative study focuses on how assistance is provided in school to pupils with physical disabilities and how the assistants influence pupils' participation' (p 89).

Total number of participants

7 TAs

7 teachers

7 pupils

Methods used to collect data

One-to-one interview

Informal interviews and semi-structured interviews were carried out with children and support staff.

Observation was carried out during class and in some breaks.

Methods used to analyse data

A constant comparative method was used. All data accumulated was read several times and then coded in a line-by-line analysis

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Adapting pedagogy to needs of pupils (including lessons or materials)

Helping pupils in general; Mediating learning/curriculum

Helping individuals (including with tasks set by the teacher)

Interpreting (instructions/language/worksheets); translating language

Post-tutoring (to re-enforce teaching)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities

Providing interaction opportunities in class

Promoting independence/autonomy

Inclusion

Mediating or facilitating social interaction with peers (TAs and general)

Securing inclusion/overseeing integration

Catering for pastoral needs

Cocoon: protecting children from learning challenges and integrating with peers

Acting as bridge/intermediary between teacher and pupil: 'interface between parents, the teachers and the child' (Ebersold)

Contributions to teachers/curriculum

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching)

(15)

Conclusions

'This study contributes to the theoretical understanding of interventions in the school setting to enhance participation by pupils with disabilities. Therefore, the study is relevant for occupational therapists, teachers, and assistants. The findings have implications for the development of flexible assistance tailored to pupils with disabilities. One implication from our study is that one must have an awareness of the ambiguity of facilitating participation if one is to be able to organize and plan a flexible assistant role that might give priority to learning participation in some situations and social participation in others. Being aware of how the position of the assistant's seating guided the behaviour of both the assistant and the pupil might also be helpful when planning assistance.

'Further, it is important to consider that pupils may avoid help if it threatens social participation. There is not only a dilemma between what support is most beneficial, but also a strong need to understand the pupils' own priorities for social participation. Support to promote the participation of pupils with physical disabilities in school has to involve the pupils in the decisions governing how the assistance is provided and must take account of the pupils' perspective to ensure that social participation is not threatened by the help provided.' (p 97).

Lacey P (2001) The role of learning support assistants in the inclusive learning of pupils with severe and profound learning difficulties

Broad aims of the study

This is a descriptive study.

'The study's main aim was to establish the role of LSAs in the inclusive learning of pupils with SLD/PMLD' (p 159).

Total number of participants

43 TAs
25 teachers
13 pupils
30 parents

Methods used to collect data

Group interview
One-to-one interview
Observation

Methods used to analyse data

'All data were subject to inductive analysis, with interviewee comments grouped together to determine weight of opinion as well as considered separately to gather individual's perceptions' (p 160).

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Adapting pedagogy to needs of pupils (including lessons or materials) (TAs)

Helping specific children with needs (TAs)

Helping small groups with tasks set by the teacher (including practical activities) (TAs/General)

Interpreting (instructions/language/worksheets); translating language (general)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (TAs/general)

Promoting independence/autonomy (TAs)

Providing interaction opportunities in class (TAs)

Inclusion

Securing inclusion/overseeing integration (TAs/general)

Mediating or facilitating social interaction with peers (TAs/general)

Catering for pastoral needs (TAs/teachers/parents)

Managing behaviour/discipliners (TAs)

Stakeholder relations

Giving feedback to parents (TAs)
Link between teacher/school and parent (including home visiting) (TAs)
Teaching assistants: important stakeholders in education process/educators (TAs)
Contributions to teachers/curriculum
Supervising the class (when required to allow teachers to concentrate on small group); whole class teaching (TAs)
Giving feedback on progress to teachers (TAs/teachers/general)
Keeping records (TA)
(25)

Conclusions

The author concludes that LSAs seem essential to the continued presence of pupils with SLD and PMLD in inclusive settings. They also point out that the data suggests that the best LSAs were good at judging how much support to offer individual pupils. They knew when to withdraw allowing natural interactions to develop and when to provide more comprehensive support. They also suggest that the best LSAs supported groups of pupils rather than individuals, were given time to plan with teachers, were clear about their role in the classroom and felt their role was valued. They took responsibility, but felt supported in their decision-making. It is suggested that these conclusions correspond closely with the literature on the effective support of pupils with SENs in general and therefore recommends that the work of LSAs should broadly be the same whatever the severity of the difficulties of the pupils being included. In addition, with the numbers of pupils with SLD and PMLD likely to increase, the study suggests that it has provided evidence upon which to build and extend effective practice.

McGarvey B, Marriott S, Morgan V, Abbott L (1996) A study of auxiliary support in some primary classrooms: extra hands and extra eyes

Broad aims of the study

This is a descriptive study.

The study sought to explore the views of headteachers and teachers on how TAs could be used to support the delivery of the curriculum in primary schools.

Total number of participants

27 teachers
18 heads

Methods used to collect data

One-to-one interview
Semi-structured interviews with teachers and headteachers, using open-ended questions
Observation
Four case studies

Methods used to analyse data

Some form of analysis took place with regard to interviews under the headings of 'school policy, sources and skills, duties and calibre of non-teaching staff' (p 297).

Key perceptions of what TAs do (stakeholders in brackets)*Pupils' academic and/or social engagement*

Helping small groups with tasks set by the teacher (including practical activities) (teachers/heads)

Helping individuals (incl. with tasks set by the teacher) (teachers)

Interpreting (instructions/language/worksheets); translating language (teachers)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (heads)

Supporting literacy development... Supporting language development (Teachers)

Contributions to teachers/curriculum

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (teachers/heads)

Maintaining/developing resources (teachers/heads)

(10)

Conclusions

The authors conclude that appropriate training is required to develop the skills of classroom assistants. This issue is being responded to in Northern Ireland through the provision of new training courses that have been developed in this area.

'Headteachers and teachers were briefed, respectively, on the role and use of classroom assistants, and on working with another adult in the classroom' (p 304).

From the views gained through the study, it appears that headteachers and teachers value the contribution made by classroom assistants to the support of teaching and learning. The difficulties of financing such posts remain unaddressed and competing priorities mean that it was still felt by many to be a luxury they could not afford. They conclude that TA roles are expanding and that there may be a need to define more strongly just what their roles should be. Career structures for TAs also need consideration, as does the teacher's role of manager of a team. Benefits will accrue to teachers who become 'skilled at training and employing the right person as classroom assistant in what has been called their unique functions and responsibilities' (citing Fletcher-Campbell, 1992, p 141). (p 304)

The conclusion seems to be that the onus is on teachers to train and use TAs effectively.

Moran A, Abbott L (2002) Developing inclusive schools: the pivotal role of teaching assistants in promoting inclusion in special and mainstream schools in Northern Ireland**Broad aims of the study**

This is a descriptive study.

'This paper, focused on the roles and responsibilities of teaching assistants' (p 163).

Total number of participants

11 heads (of which 5 primary mainstream)

Methods used to collect data

One-to-one interview

Methods used to analyse data

'The data were analysed under the main headings to detect patterns of opinion, and to illustrate the experiences and views of the respondents' (p 165).

Key perceptions of what TAs do (stakeholders in brackets)*Pupils' academic and/or social engagement*

Adapting pedagogy to needs of pupils (differentiation))

Helping pupils in general; Mediating learning/curriculum

Helping specific children with needs

Helping small groups with tasks set by the teacher (including practical activities)

Helping individuals (including with tasks set by the teacher)

Interpreting (instructions/language/worksheets); translating language

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities

Someone to turn to/helper

Promoting independence/autonomy

Improving maintaining of pupil motivation

Inclusion

Securing inclusion/overseeing integration

Mediating or facilitating social interaction with peers

Cocoon: protecting children from learning challenges and integrating with peers

Contributions to teachers/curriculum

Giving feedback on progress to teachers

Maintaining/developing resources

(15)

Conclusions

The writers conclude by drawing on the work of previous studies. 'For the teacher 'who becomes skilled at training and deploying the right person as classroom assistant in what has been called their 'unique functions and responsibilities'' (Fletcher-Campbell, 1992, p 141), the benefits of an extra pair of hands and an extra pair of eyes can be immense (McGarvey et al., 1996). Good practice by teaching assistants includes fostering the social and academic participation, and hence inclusion, of all pupils, enabling them to become more independent learners, and helping to raise standards of achievement (see DfEE, 2000, p 9). Thus, 'the most fundamental aspect of the development of schools that are effective in meeting the needs of all children is the way teachers and assistants together consider teaching and learning processes and the strategies used in the management of the classroom to support these' (Balshaw, 1999, p 22)'. (p 171)

Mortimore P, Mortimore J, Thomas H (1994) Primary school case studies

Broad aims of the study

This is a descriptive study.

To assess the work undertaken by associate staff, and to look at its cost-effectiveness within the school. The aims of the study appear to be: to examine a number of 'innovations' non-teaching, teaching in schools, and to elicit perceptions of the clarity of each role, the benefits and non-benefits of each role and their cost-effectiveness.

Total number of participants

18 TAs
5 teachers
9 heads
6 line managers

Methods used to collect data

One-to-one interview
Other documentation
Financial information

Methods used to analyse data

Interview data presented in free text, with case studies presented in a common format: description of school, description of role, boundaries, perceived benefits, perceived disbenefits

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Adapting pedagogy to needs of pupils (including lessons or materials) (general)

Assessing children's work/ contributing to assessment (teachers)

Helping pupils in general; Mediating learning/ curriculum (teachers)

Helping small groups with tasks set by the teacher (including practical activities) (teachers)

Helping individuals (including with tasks set by the teacher) (teachers)

Interpreting (instructions/language/ worksheets); translating language by one teaching auxiliary and providing language support (general)

Providing interaction opportunities in class (teachers)

Stakeholder relations

Teaching assistants: important stakeholders in education process/educators (teachers)

Contributions to teachers/curriculum

Advising on with regard to cultural background (teachers)

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (teachers)

Giving feedback on progress to teachers (teachers)

Keeping records (teacher|)

(12)

Conclusions

In general, the implicit message of the work is that associate staff give good value for money. They concluded that their study indicates that the innovation posts were perceived to be valuable and

that they should be developed with a mind to some of the areas of difficulty identified in the study.

Support staff (case study 3, 1992) led to better staff-pupil ratio and assisted children with behavioural difficulties.

Two classroom assistants are quite clear about their role (case study 4, 1992) to provide support but 'their work contains a teaching element' (1992, p64).

Moyles J, Suschitzky W (1997) Jills of all trades: classroom assistants in KS1 classes

Broad aims of the study

This is a descriptive study.

For the purposes of this review, the key questions were the investigation at KS1 of working roles and relationships among CAs and teachers;

teachers' and CAs' perceptions of assistants' roles;

the reality of these perceptions in practice; headteachers' thinking about the use of CAs; 'children's perceptions of the adults' roles and activities in relation to their learning' (p 1).

Total number of participants

111 TAs
100 teachers
60 pupils
15 heads

Methods used to collect data

Group interview
Children were interviewed in pairs. Interviews were supported with the use of polaroid photos of classroom events to prompt recall.

Observation

Self-completion questionnaire

Methods used to analyse data

This response draws on the work of Howes et al. (2003).

Observations: tracking and monitoring of interactions were analysed using cross-tabulation of outcomes related to activities (p 114).

Video and field observations were analysed qualitatively (p 114).

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Helping specific children with needs (TAs)

Helping small groups with tasks set by the teacher (including practical activities) (TAs/ teachers/heads)

Helping individuals (including with tasks set by the teacher) (Pupils/general)

Interpreting (instructions/language/ worksheets); translating language

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (TAs/pupils/heads)

Supporting NLS or literacy development... Supporting language development (TAs/pupils/ general)

Providing interaction opportunities in class

(heads)

Improving/maintaining of pupil motivation (TAs)
 Listening to children (TAs)
 Facilitating play (TAs/pupils pp. 87-88)
 Catering for pastoral needs (TAs/teachers/pupils)
Inclusion

Cocoon: protecting children from learning challenges and integrating with peers (teachers)
Contributions to teachers/curriculum
 Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) (TAs/teachers/heads)
 Maintaining/developing resources (teachers/pupils)
 (26)

Conclusions

Perceptions differ about CA and STA roles. In addition, teacher roles are not always clear (p 98). Eight principal recommendations are made on page 9:

All schools should conduct an audit of CA duties.
 All CAS should have a role description.
 Teachers need to review their managerial focus in the classroom
 teamwork needs to feature more prominently in initial and continuing teacher education.
 Schools should give greater attention to children's learning processes (currently, teachers may be expecting too much of CAs, expecting them to have deeper teacher-style knowledge than is the case, see page 99).

Class size issues need to be reviewed in the light of quality support.

Involvement in the planning process (currently insufficient for CAs) impacts on the quality of CA contributions to activities.

Schools should consider how equitable are SEN children's curriculum experiences.

There is a need for more training for CAs in learning processes (p 11) and teachers need more training in team leadership and on re-focusing teaching around conceptual knowledge and understanding. In addition, 'teachers need support in defining both their own role responsibilities and those of the CA' (p 13).

There may also be an issue about restricting access to high quality teaching: 'CAs who work with individual SEN children often do so to the exclusion of teachers working with these children' (p 14). In such cases, the CA could be an obstacle to equal participation rather than someone who supports the integration of the child.

Unless there is a clearer definition of the role of the CA, skills for the job will not be determined and perceptions of others will continue to vary.

Neill SRStJ (2002) Teaching assistants: a survey analysed for the National Union of Teachers by the Teacher Research and Development Unit, Institute of Education, University of Warwick

Broad aims of the study

This is a descriptive study.
 To gather information on biographical

characteristics of teaching assistants; the degree of support teachers received in classrooms; the basis on which TAs were deployed; opinions on the value of the support, and the levels of administrative support received by teachers

Total number of participants

3,822 teachers (of whom 2,100 primary)

Methods used to collect data

Self-completion questionnaire

Methods used to analyse data

Statistical analysis for categorical questions, and reproduction of free text

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Assessing children's work/ contributing to assessment (teachers)

Helping individuals (including with tasks set by the teacher) (teachers)

Helping small groups with tasks set by the teacher (including practical activities)

Interpreting (instructions/language/ worksheets); translating language

Supporting numeracy/ mathematics

Supporting NLS or literacy development...

Supporting language development

Inclusion

Securing inclusion/overseeing integration

Catering for pastoral needs

Managing behaviour/disciplinaries

Stakeholder relations

Teaching assistants: important stakeholders in education process/educators

Contributions to teachers/curriculum

Supervising the class (when required to allow teachers to concentrate on small group); whole class teaching

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching)

Maintaining/developing resources

(13)

Conclusions

Government proposals for the increased use of TAs in schools need to take heed of teachers' concerns regarding the impact of those measures on teachers' sense of professionalism. Teachers value TAs for specific purposes, but see the expansion of their roles as threatening in some respects. An unforeseen consequence might be to exacerbate teacher shortages.

'While most teachers have highly positive relationships with their TAs, the discussion raises cautions about the extension of TA recruitment to make up for shortfalls in teacher recruitment.

'The analogy made by the Government between the education and health services ignores differences in the type of decision-making and time-sensitivity of support in the two services. This makes delegation from doctors to nurses an inadequate precedent for delegation from teachers to TAs.

'If TAs take over much of the most pleasurable

aspect of the teachers' job, face-to-face work with children - potential teachers may choose to be TAs instead.' (p 4)

O'Brien T, Garner P (2001) Untold stories: learning support assistants and their work

Broad aims of the study

This is a descriptive study.

The authors sought to provide 'a forum for LSAs to tell their own tales' (p 5) about 'the work they currently do and the range of influences on they way they operated' (Garner, 2002, 14). The authors were intent on securing a series of stories in which the 'voice of the LSA predominated' (Garner, 2002, p 14).

Total number of participants

67 TAs (primary)

Methods used to collect data

Focus group discussions (six to ten participants in three centres)

Semi-structured interviews to construct accounts of LSA work

Self-completion report or diary

Written accounts following a loosely structured framework

Methods used to analyse data

Stories were transcribed and verified by participants (written accounts).

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Adapting pedagogy to needs of pupils (including lessons or materials)

Helping pupils in general; Mediating learning/ curriculum

Helping small groups with tasks set by the teacher (including practical activities)

Helping individuals (including with tasks set by the teacher)

Interpreting (instructions/language/ worksheets); translating language

Post-tutoring (to re-enforce teaching)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities

Supporting NLS or literacy development...

Supporting language development

Providing interaction opportunities in class

Promoting independence/autonomy

Listening to children

Inclusion

Securing inclusion/overseeing integration

Stakeholder relations

Acting as bridge/intermediary between teacher and pupil : 'interface between parents, the teachers and the child' (Oversold).

Link between teacher/school and parent (including home visiting)

Contributions to teachers/curriculum

Supervising the class (when required to allow teacher to concentrate on small group); whole class teaching

Contributing to individual educations plans (16)

Conclusions

The LSA is a 'bona fide, committed and active contributor to the learning of all pupils and to the life of schools as organic and inclusive learning communities' (2001, p 144).

LSA support is now a core element of SEN provision; the range of their duties and responsibilities continues to increase. They see themselves 'as professionals with particular skills and attributes' Garner, 2002, p 16).

LSAs are seen as pivotal to inclusion but still regarded as second-class citizens reflected in pay and conditions.

Shaw L (2001) Learning supporters and inclusion: roles, rewards, concerns, challenges

Broad aims of the study

This is a descriptive study.

'The focus is on supporters' perspectives and the aim is to give a platform to what traditionally have been minority voices.' (p 2)

Total number of participants

Unclear

Methods used to collect data

One-to-one interview

Observations of learning supporters' practice

Methods used to analyse data

This is not discussed.

Key perceptions of what TAs do (stakeholders in brackets)

Pupils' academic and/or social engagement

Helping small groups with tasks set by the teacher (including practical activities) (TAs)

Supporting learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (TAs)

Inclusion

Cocoon: protecting children from learning challenges and integrating with peers (TAs)

Securing inclusion/overseeing integration (TAs/general)

Stakeholder relations

Link between teacher/school and parent (including home visiting) (TAs/general)

Teaching assistants: important stakeholders in education process/educators/ (TAs/general) (6/9)

Conclusions

'What has emerged is a story of dedication and hard work, of a complex job which demands diverse skills and substantial qualities of character...' (p 24).

'The story of learning supporters as they tell it raises challenging issues about status and roles in the classroom and indicates a review of existing personnel structures. There is also a debate about whether an approach which sees supporters as a resource for all children rather than attached to named pupils can serve the interests of children

with high level support needs.’ (p 24)

‘Supporters’ feelings of devaluation have been a clear and pivotal part of this report. Their feelings go beyond not being respected by some teachers to more generalised feelings of not being respected by society as a whole. Views of other members of school communities have not been covered in this report, though they need to be considered and taken into account.’ (p 24)

‘The purpose of this report was to provide a platform for new voices. Supporters have put forward their agenda of main issues to be addressed as: pay and conditions, training, qualifications, working with pupils with high level support needs and working with teachers. CSIE recognises that that some progress has been made on these matters but that there is still a way to go to meet the aspirations of supporters as expressed in this report. It hopes the report will contribute to a dialogue between inclusion workers, whatever their professions or job titles, in which they listen to and learn from each other to find solutions which revalue supporters’ roles without devaluing others.’ (p 25)

**Wilson V, Schlapp U, Davidson J (2002)
More than an extra pair of hands?
Evaluation of the Classroom Assistants
Initiative**

Broad aims of the study

The study describes itself as an evaluation.

The aim of the study is to evaluate the Classroom Assistant Initiative, which was supported by the Excellence Fund to provide funding for up to 5000 classroom assistants’ posts in Scottish primary schools.

Total number of participants

131 TAs
62 teachers
74 heads
104 parents
Pupils: unclear

Methods used to collect data

One-to-one interview
Observation
Self-completion questionnaire
‘stimulated recall discussions with teachers, classroom assistants and pupils’ (p 2).

Methods used to analyse data

Frequencies for closed question responses to questionnaire are calculated.

Key perceptions of what TAs do (stakeholders in brackets)

Pupils’ academic and/or social engagement

Helping small groups with tasks set by the teacher (including practical activities) (teachers/general)

Helping individuals (including with tasks set by the teacher) (general)

Supporting learning; developing children’s confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities (teachers/heads)

Someone to turn to/helper (pupils)

Providing interaction opportunities in class (teachers)

Improving/maintaining of pupil motivation (teachers/heads)

Inclusion

Managing behaviour/discipliners (teachers/heads)

Contributions to teachers

Helping/supporting teachers (e.g. in class or with routine task to enable teacher to concentrate on teaching) ((teachers/general)

Maintaining/developing resources (teachers) (12)

Conclusions

Among the conclusions reached by the authors are the following:

Attainment in primary schools had improved since the launch of the Classroom Assistant Initiative.

Classroom assistants were widely perceived to contribute to raising pupil attainment by enabling teachers to teach more effectively,

Their own work with individuals and groups of pupils contributed to pupils’ achievement.

Classroom assistants made a positive impact on teachers’ perceptions of their workload by relieving teachers of many routine tasks

The issue of balancing the allocation of classroom assistants time between routine tasks and support for pupils needs further attention

More support than currently provided by the initiative is needed if all schools are to benefit fully

Opportunities for training for support staff are not universally available.

Blurring of boundaries between the roles of classroom assistant, and SEN auxiliary roles and budgets may result in less time being available for classroom assistants to undertake the activities that have led our respondents to regard this initiative as such a success. This is another issue that would benefit from continued monitoring.

APPENDIX 4.2 Synthesis tables

Academic contributions

TA contributions to pupils' academic engagement	Perceived by:					Generally reported perception/not clearly stated
	TAs	Teachers	Pupils	Headteachers/service managers	Parents	
Helping small groups with tasks set by the teacher (including practical activities)	Baskind and Monkman (1998), Cable (2003), Hancock et al. (2002), Lacey (2001), Moyles and Suschitzky (1997), O'Brien and Garner (2001), Shaw (2001)	Baskind and Monkman (1998), Ebersold (2003), Hancock et al. (2001), McGarvey et al. (1996), Moran and Abbott, (2002), Mortimore et al. (1994), Moyles and Suschitzky (1997), Neill (2002), Wilson et al. (2002)	–	Hancock et al. (2001), McGarvey et al. (1996), Moran and Abbott (2002), Moyles and Suschitzky (1997, p 67)	–	Clayton (1993), Farrell et al. (1999), Hancock et al. (2002), Lacey (2001), Wilson et al. (2002)
Supporting learning; mediating learning; developing children's confidence and ability to learn; encouraging children by giving appropriate attention and interest to their activities	Baskind and Monkman (1998), Cable (2003; 2004, p 218), Ebersold (2003), Lacey (2001), Moyles and Suschitzky (1997), O'Brien and Garner (2002), Shaw (2001)	Clayton (1993), Ebersold (2003), Hancock et al. (2002), McGarvey et al. (1996), Wilson et al. (2002)	Moyles and Suschitzky (1997)	McGarvey et al. (1996), Moran and Abbott (2002), Moyles and Suschitzky (1997), Wilson et al. (2002)	–	Clayton (1993), Hancock et al. (2002), Hemmingsson et al. (2003), Lacey (2001)
Helping individuals (with tasks set by teachers)	Baskind and Monkman (1998), Cable (2003), O'Brien and Garner (2002)	Ebersold (2003), McGarvey et al. (1996), Mortimore et al. (1994), Neill (2002)	Moyles and Suschitzky (1997)	Moran and Abbott (2002)	Farrell et al. (1999)	Clayton (1993), Hancock et al. (2002), Hemmingsson et al. (2003), Moyles and Suschitzky (1997) Wilson et al. (2002)
Interpreting (instructions/ language/worksheets); translating language	Cable (2003), Hancock et al. (2002), O'Brien and Garner (2001)	Baskind and Monkman, (1998), Hancock et al. (2001), McGarvey et al. (1996), Neill (2002, p 41)	–	Moran and Abbott (2002, translator)	–	Clayton (1993), Hemmingsson et al. (2003), Lacey (2001), Mortimore et al. (1994)

continued over

Academic contributions (cont.)

TA contributions to pupils' academic engagement	Perceived by:		Teachers	Pupils	Headteachers/ service managers	Parents	Generally reported perception/not clearly stated
	TAs	TA					
Supporting literacy/ language development	Baskind and Monkman (1998), Cable (2003), Farrell et al. (1999), Moyles and Suschitzky (1997), O'Brien and Garner (2001)	Baskind and Monkman (1998), Hancock et al. (2002), McGarvey et al. (1996), Neill, 2002 (plus numeracy)	Moyles and Suschitzky (1997)	—	—	—	Farrell et al. (1999), Hancock et al. (2002, plus numeracy), Moyles and Suschitzky (1997, plus mathematics)
Adapting pedagogy to needs of pupils (lessons or materials)	Farrell et al. (1999), Lacey (2001), O'Brien and Garner (2001)	Baskind and Monkman (1998), Ebersold (2003)	—	—	Moran and Abbott (2002, differentiation)	Ebersold (2003)	Ebersold (2003), Hemmingsson et al. (2003), Mortimore et al. (1994)
Assessing children's work/ contributing to assessment	Baskind and Monkman (1998, patchy), Cable (2003, in part)	Hancock et al. (2002), Mortimore et al. (1994), Neill (2002, in part)	—	—	—	—	—
Helping specific children with needs	Baskind and Monkman (1998), Lacey (2001), Moyles and Suschitzky (1997)	—	Bowers (1997)	—	Moran and Abbott (2002)	—	—
Post-tutoring (re-enforce teaching)	Baskind and Monkman (1998), O'Brien and Garner (2001)	Baskind and Monkman, 1998	—	—	—	—	Hemmingsson et al. (2003)
Developing social conditions for learning	Cable (2003)	—	—	—	—	—	—
Helping pupils in general; mediators of learning/ curriculum	O'Brien and Garner (2001)	Mortimore et al. (1994, pupils not interviewed)	Bowers (1997)	—	Moran and Abbott (2002)	—	Hemmingsson et al. (2003)
Pre-tutoring (three of band M's ten teachers)	—	Baskind and Monkman, (1998)	—	—	—	—	—
Supporting numeracy/ mathematics	—	Neill (2002)	—	—	—	—	Hancock et al. (2001)

Socio-academic contributions

Academic and social engagement	Perceived by:						Generally reported perception/not clearly stated
	TAs	Teachers	Pupils	Headteachers/ service managers	Parents		
Providing interaction opportunities in class	Clayton (1993, by inference), Ebersold (2003), Lacey (2001), O'Brien and Garner (2001)	Mortimore et al. (1994), Wilson et al. (2002)	—	Moyles and Suschitzky (1997)	—	Clayton (1993), Hemmingsson et al. (2003)	
Promoting independence/autonomy	Baskind and Monkman (1998), Cable (2003), Ebersold (2003), Lacey, (2001), O'Brien and Garner (2001)	Ebersold (2003)	—	Moran and Abbott (2002)	—	Hemmingsson et al. (2003)	
Improving/maintaining pupil motivation	Moyles and Suschitzky (1997)	Ebersold (2003), Wilson et al. (2002)	—	Moran and Abbott (2002), Wilson et al. (2002)	—	—	
Being someone to turn to/helper	Cable (2003)	—	Farrell et al. (1999), Wilson et al. (2002)	Moran and Abbott (2002) (close personal relationship)	—	—	
Listening to children	Cable (2003), Moyles and Suschitzky (1997, pp 25, 87), O'Brien and Garner (2001)	—	—	—	—	—	
Facilitating play	Moyles and Suschitzky (1997)	—	Moyles and Suschitzky (1997)	—	—	—	

Contributions to inclusion

Academic and social engagement	Perceived by: TAs	Teachers	Pupils	Headteachers/ service managers	Parents	Generally reported perception/not clearly stated
Securing inclusion/overseeing integration	Cable (2003, bilingual), Ebersold (2003), Farrell et al. (1999, p 23), Lacey (2001), O'Brien and Garner (2001), Shaw (2001)	Ebersold (2003); Neill (2002)	—	Farrell et al. (1999), Moran and Abbott (2002)	Ebersold (2003), Farrell et al. (1999, p 53)	Clayton (1993), Hemmingsson et al. (2003, positive and negative), Lacey (2001), Shaw (2001)
Addressing pastoral/social needs	Cable (2003), Clayton (1993), Lacey (2001), Moyles and Suschitzky (1997)	Lacey (2001), Moyles and Suschitzky (1997, p 75), Neill (2002)	Moyles and Suschitzky (1997)	—	Lacey (2001)	Clayton (1993), Hemmingsson et al. (2003)
Mediating social interaction/facilitating social interaction with peers (incl. advice about impairment)	Ebersold (2003), Hemmingsson et al. (2003), Lacey (2001)	Ebersold (2003)	—	Moran and Abbott (2002)	Ebersold (2003)	Clayton (1993), Hemmingsson et al. (2003), Lacey (2001)
Managing behaviour/discipline	Hancock et al. (2002), Lacey (2001)	Neill (2002), Wilson et al. (2002)	Bowers (1997)	Wilson et al. (2002)	Farrell et al. (1999)	Clayton (1993), Farrell et al. (1999)
Protecting children from learning challenges and integrating with peers	Shaw (2001)	Moyles and Suschitzky (1997)	—	Moran and Abbott (2002)	—	Hemmingsson et al. (2003)
Bridging between Teacher and pupil	Cable (2003), Ebersold (2003), O'Brien and Garner (2002)	Ebersold (2003)	—	—	—	Hancock et al. (2002), Hemmingsson et al. (2003)

Stakeholder relations

Academic and social engagement	Perceived by:							Generally reported perception/not clearly stated
	TAs	Teachers	Pupils	Headteachers/ service managers	Parents			
Acting as a link between teacher/school and parent (including home visiting)	Cable (2003), Ebersold (2003), Lacey (2001), O'Brien and Garner (2001) Shaw (2001)	Cable (2003, claim made by BTAs)	–	–	Ebersold (2003), Farrell et al. (1999)	Shaw (2001)		
Acting as co-educator/ Important stakeholders in education process	Ebersold (2003), Lacey (2001), Shaw (2001)	Ebersold (2003), Mortimore et al. (1994), Neill (2002)	–	Hancock et al. (2001)	–	Farrell et al. (2001), Shaw (2001)		
Giving feedback to parents	Cable (2003), Lacey (2001)	–	–	–	Ebersold (2003), Farrell et al. (1999)	Clayton (1993)		
Linking all stakeholders	Cable (2003), Ebersold (2003)	–	–	–	–	Ebersold (2003)		

Contributions to teachers/curriculum

Academic and social engagement	Perceived by: TAs	Teachers	Pupils	Headteachers/ service managers	Parents	Generally reported perception/not clearly stated
Helping and supporting teachers (e.g. in class or with routine task to enable concentration on teaching)	Baskind and Monkman (1998: 'support the teacher generally'), Farrell et al. (1999), Moyles and Suschitzky (1997)	Baskind and Monkman (1998), Ebersold (2003), Hancock et al. (2001), McGarvey et al. (1996), Mortimore et al. (1994), Moyles and Suschitzky (1997), Neill (2002), Wilson et al. (2002)	Bowers, (1997): to help them cope	McGarvey et al. (1996), Moyles and Suschitzky (1997)	—	Clayton (1993), Farrell et al. (1999), Hemmingsson (2003), Wilson (2002)
Giving feedback on progress to teachers	Cable (2003), Farrell et al. (1999), Lacey (2001)	Lacey (2001), Mortimore et al. (1994)	—	Moran and Abbott (2002)	Ebersold (2003)	Clayton (1993), Farrell et al. (1999), Lacey (2001)
Maintaining or developing resources	Cable (2003)	Baskind and Monkman (1998), McGarvey et al. (1996), Moyles and Suschitzky (1997), Neill (2002)	Moyles and Suschitzky (1997, p 96)	McGarvey et al. (1996), Moran and Abbott (2002)	—	Clayton (1993)
Supervising class (e.g. to allow teachers to concentrate on small group); whole class teaching	Hancock et al. (2002), Lacey (2001), O'Brien and Garner (2001)	Baskind and Monkman (1998), Neill (2002)	—	—	Farrell et al. (1999: 'teacher under guidance')	—
Advising on cultural background (including translation)	Cable (2003)	Mortimore et al. (1994)	—	—	—	Farrell et al. (1999)
Contributing to individual education plans (IEPs)	Farrell et al. (1999), O'Brien and Garner (2001)	Farrell et al. (1999 - TAs consulted only)	—	—	—	Clayton (1993)
Record-keeping	Lacey (2001)	Mortimore et al. (1994)	—	—	—	—
Programme planning	—	—	—	—	—	Farrell et al. (2001)

The results of this systematic review are available in three formats:

SUMMARY

Explains the purpose of the review and the main messages from the research evidence

TECHNICAL REPORT

Includes the background, main findings, and full technical details of the review

DATABASES

Access to codings describing each research study included in the review

These can be downloaded or accessed at <http://eppi.ioe.ac.uk/reel/>

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