Title: The re-alignment of educational psychologists in supporting primary schools to enhance provision for children with speech, language and communication needs

Authors:

Dr Joanna Vivash, Educational Psychologist, Northamptonshire County Council.

Contact details: jvivash@northamptonshire.gov.uk

Northamptonshire County Council, Children, Families and Education Directorate, William Knibb Centre, Montagu Street, Kettering. NN16 8AE

Professor Julie Dockrell, Professor of Psychology and Special Needs, UCL Institute of Education

Contact details: j.dockrell@ucl.ac.uk

UCL, Institute of Education, Department of Psychology and Human Development, 25
Woburn Square, London. WC1H 0AL

Dr Frances Lee, EP University Tutor, UCL Institute of Education

Contact details: f.lee@ucl.ac.uk

UCL, Institute of Education, Department of Psychology and Human Development, 25
Woburn Square, London. WC1H 0AL

The re-alignment of educational psychologists in supporting primary schools to enhance provision for children with speech, language and communication needs

Aims: The role of educational psychologists (EPs) in relation to Speech, Language and Communication Needs (SLCN) has been relatively unexplored and when studies have targeted the role of EPs, their role has been at best peripheral. This paper aims to show how the re-alignment of EP practice could be made through exploring the different perspectives of how SLCN can be supported in schools, and to see where gaps and opportunities may exist between these perceptions and practice.

Method: Three focus groups with professionals (EPs, Speech and Language Therapists (SLTs) and Specialist Teachers (STT)) were conducted and analysed using thematic analysis. 12 observations of Key Stage 1 classrooms using the Communication Supporting Classroom Observation Tool, and questionnaires with school staff (N=40) were carried out and analysed using descriptive statistics.

Findings: There was variability of perceptions and inconsistency of practice around strategies and approaches for supporting SLCN, such as the use of evidence-based interventions, adult talk and opportunities to develop emerging literacy skills.

Conclusions: There are challenges in delivering provision for children with SLCN, confounded by an apparent discrepancy within and between professionals' and schools' views as to how such provision should be delivered. EPs are uniquely positioned to support schools in overcoming these challenges, particularly through joint problem solving and resolving tensions which may exist between services, and supporting schools to translate research into effective practice.

Key words: Speech, language and communication needs; educational psychologists; provision; inclusion; interventions

Introduction

The role of educational psychologists (EPs) in relation to Speech, Language and Communication Needs (SLCN) has been relatively unexplored (Lindsay *et al.*, 2012) and when studies have targeted the role of EPs, their role has been at best peripheral. This is regrettable given the potential role for EPs in supporting teaching and learning, and subsequently improving wellbeing and outcomes for children and young people.

Government statistics indicate that SLCN continues to be the most prevalent primary need for children with Special Educational Needs in state-funded primary schools, affecting 29 per cent of children and young people with Special Educational Needs (Department for Education, 2017). SLCN impacts on both academic performance and socio-behavioural functioning, with research indicating that children with SLCN attain less well than their typically developing peers both at the end of Key Stage 2 (Conti-Ramsden et al., 2002) and the end of Key Stage 4 (Dockrell et al., 2011; Durkin et al., 2009). Moreover, children with SLCN also experience difficulties with skills which are arguably necessary for classroom learning. For example, children with language difficulties have been shown to have difficulties with acquiring literacy skills (Stothard et al., 1998), writing (Dockrell et al., 2014), numeracy (Harrison et al., 2009), working memory (Baddeley, 2003) and executive functioning skills (Henry et al., 2012). Further, a wide range of studies exist examining the socio-behavioural functioning of children with SLCN and there is widespread acknowledgement of the risk of negative social and emotional outcomes for a significant proportion of children with SLCN (Bakopoulou & Dockrell, 2016; Conti-Ramsden et al., 2013; Lindsay et al., 2002; Rannard & Glenn, 2009).

Given the negative outcomes associated with SLCN mentioned above and the significant proportion of children affected, particularly in mainstream primary and secondary schools, it is surprising that EPs are not seen as having a prominent role in supporting better outcomes. Further, whilst research has explored the collaboration and views of Speech and Language Therapists (SLTs) and school-based practitioners (Dockrell et al., 2017; Hartas, 2004) less attention has been paid to the role of EPs. When the role of EPs has been studied, a disparity between the views of EPs and those of other professionals has been identified. Palikara et al. (2007) highlighted that EPs and SLTs differed in their views of their roles within assessment and including children within the mainstream environment. Specifically, it was found that whilst both groups of professionals emphasized their role in identifying a child's learning needs, SLTs additionally viewed diagnosis as an integral part of this assessment process, which contrasts with the views of the majority of EPs. This divergence in perspectives was evident in other studies (Dockrell et al., 1997; Dunsmuir et al., 2006), where it has been argued that there appears to be a 'mismatch' of understanding between SLTs and EPs around the needs of children with SLCN. The recent Special Educational Needs and Disability (SEND) reforms (DfE/DH, 2014) which emphasise joint commissioning between Education

and Health means these differing perspectives can bring increased variability and inconsistencies in approaches as to how best meet the needs of children with SLCN.

It is concerning that a common theme throughout research into teachers' perspectives of supporting children with SLCN was one of teachers not feeling adequately skilled and lacking the knowledge and understanding to meet the child's language learning needs (Dockrell *et al.*, 2017; Dockrell & Lindsay, 2001; Marshall *et al.*, 2002; and Sadler, 2005). Further, integral to meeting these needs is the delivery of effective interventions as part of a graduated response. Whilst there are many interventions targeted at supporting children with SLCN, including published and locally produced programmes and classroom-based approaches, it would seem that many interventions used in practice lack an evidence-base (Law *et al.*, 2014). Despite an increasing drive from the Government to enhance the evidence-base (Department for Education and Department of Health, 2015), the challenges of implementing evidence-based practices in education is becoming increasingly well documented (Biesta, 2007).

Despite the increasing number of studies examining the outcomes for children with SLCN, and a recognition of the contribution and differing perspectives of SLTs and EPs, schools are arguably struggling to deliver better outcomes for those with SLCN. The lack of research into how EPs can actively contribute to supporting schools with overcoming these challenges further compounds the challenges. Furthermore, the changing landscape of schools' commissioning and purchasing of EP services as part of traded services in Children's Services is common practice. This may have implications for what type of services schools choose to purchase. Subsequently, ethical dilemmas, may arise for EP Services' balancing financial issues alongside whole school systemic approaches informed by evidence-based and practice based interventions and approaches. EPs have a moral and ethical duty of care and beneficence to service users to promote inclusion and wellbeing enshrined in their professional and statutory bodies (BPS & HCPC). It is imperative therefore that consideration is given as to how EPs can re-align themselves with the SLCN population and support schools to achieve better outcomes for children and young people with SLCN.

Design and methodology

This study aims to address the following research questions:

• What do professional groups including EPs, SLTs and specialist teachers perceive as the characteristics of effective provision for supporting children with SLCN?

- Do perceptions of characteristics of effective provision for supporting children with SLCN differ between different professional groups?
- How is provision for children with SLCN realised in practice?

To explore professionals' perspectives and provision in practice, a two-phase sequential, mixed methods design was used utilising focus groups (EPs, SLTs and Specialist Teachers), Key Stage 1 (KS1) classroom observations (N=12) and questionnaires with school staff (N=40) in a large shire Local Authority in the East of England. This mixed methods approach was deemed necessary to gain a fuller understanding of the complexities inherent in educational research (Mertens, 2014), with Morgan (2014) deeming such approaches appropriate when one method will not accomplish as much as a combination. Within this research, six primary schools were recruited with contrasting provisions and demographics to participate in the research.

Phase 1 - Focus Groups

Three focus groups were undertaken with separate professional groups, each lasting for approximately one hour. This included a focus group for EPs (N=5), SLTs (N=3) and Specialist Teachers (N=3). All participants were female, had over one year's experience and five had more than 15 years' experience in their role, and were recruited through joint Local Authority meetings. A semi-structured focus group schedule was used (see Appendix A), and the focus groups were recorded, transcribed and analysed using thematic analysis. A rigorous approach to the thematic analysis was followed, as suggested by Braun and Clarke (2006), whereby five distinct steps were completed (familiarisation with the data, generation of initial codes, the search for themes, review of themes, then finally the defining and naming of themes).

The integrity and rigour of these elements of the research were aided by a number of appropriate measures, including all the focus groups being carried out by the researcher, focus group schedules which were used in all groups to ensure the same areas were broadly covered by each group and that the recordings were all transcribed by the researcher. Further, the integrity of the research was aided by the triangulation of participant responses whereby the same information was sought from different sources. Additionally, a peer reviewer was asked to verify both coding processes to determine the accuracy of the coding systems, and regular collaboration ensured scrutiny of codes and themes.

Phase 2 - Classroom Observations

For the classroom observations (*N*=*12*), each school's Special Educational Needs Coordinator (SENCo) identified two KS1 lessons for the observations to take place in. Multiple observations took place in each school with all taking place during a morning session which included phonics / literacy activities. Observations lasted approximately one hour and were recorded using the Communicating Supporting Classroom (CsC) Observation Tool (Dockrell *et al.*, 2012), an evidenced-based observational tool which aims to explore classroom features which support oral language growth. Three dimensions were measured: Language Learning Environment (LLE), Language Learning Opportunities (LLO) and Language Learning Interactions (LLI) and mean ratio scores were obtained for each of these using descriptive statistics.

Phase 2 - School Staff Questionnaires

From the six primary schools, all staff were invited to participate in the questionnaire study. Forty responses were received across the six schools and a number of professions were represented including teachers (n=23), teaching assistants (n=11), SENCO's (n=4), inclusion officer (n=1) and a Head teacher (n=1). All participants indicated that they had experience of working with children with SLCN and the majority of respondents (58 per cent) had more than 10 years' experience working in schools.

The questionnaires for school staff were developed and piloted and presented in both paper and online form (see Appendix B). There were 20 questions in total, 16 of which were related to delivering provision for children with SLCN, and the questionnaires took approximately 15 minutes to complete. The questions contained a mixture of open and closed responses, and the closed questions utilised a number of response types dependent on the questions, including scaling responses, numerical scales and multiple response. The questions were derived from the themes identified from the focus group thematic analysis (Child Experience, Professional Involvement, School and Classroom Practice, Support, and Understanding), Cronbach's Alpha demonstrated good reliability: Child Experience 0.897, Professional Involvement 0.850, School and Classroom Practice 0.887, Support 0.897 and Understanding 0.860. The analysis of the responses involved mainly descriptive statistics, where frequencies, means and standard deviations were calculated.

Findings

There was variability of perceptions and inconsistency of practice around strategies and approaches for supporting SLCN, such as the use of evidence-based interventions and opportunities to develop emerging literacy skills. Further, professionals identified the importance of how adults interacted with children in the classroom, however in practice adults appeared to be more confident in the use of techniques which may be considered classroom practice rather than using specific language development techniques.

Variability of perceptions

From the thematic analysis of the focus groups, six overarching themes were identified, as illustrated in Figure 1.

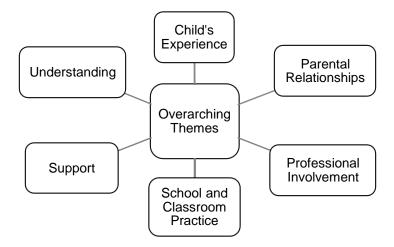


Figure 1 - Overarching themes

Child's Experience encapsulated the factors which may influence the child's experience of provision, including confidence, social skills and language development opportunities.

Parental Experience considered the role of the child's family, including parental perceptions of SLCN, parental anxiety, parental involvement and home school relationships.

Professional Involvement concerned the role of a number of professionals working with children with SLCN, including expertise, responsibility and joint working, and additionally considered the opportunities and challenges that existed for those professionals, including conflicts across and within professions.

School and Classroom Practice considered how provision was delivered for children with SLCN in the school environment, including factors such as strategies and approaches, including whole school influences such as the school's priorities and ethos.

Support included the factors related to the support a child with SLCN may receive from both school staff and external agencies, and how this support may or may not meet their needs.

Finally, the theme "Understanding" related to how well SLCN is understood and how knowledge of how to support children with SLCN may impact on provision.

Within the overarching theme of 'School and Classroom Practice', whilst there were some similarities, there appeared to be a difference between professionals' perceptions of the characteristics of effective provision. In particular, there were differing views on how, and to what extent, children with SLCN should be included in the classroom. For example, there was a view from participants in the EP focus group that children benefited from inclusion within a mainstream classroom and an emphasis was placed on supporting SLCN through classroom practice. Indeed, Participant 5 (EP) described how:

if the school believes that this is, should be an everyday practice you'll more likely to going see the children having lots and lots of opportunities to have lots of speech and language, opportunities as opposed to interventions
(EP FG, line 490-492)

However, participants in the SLT and Specialist Teachers focus groups perceived that children with SLCN benefited from withdrawal as highlighted by Participant 6 (SLT):

they're missing school therefore that's the end of the world, well actually, if their speech and language isn't improved they're going to struggle through the rest of their school life

(SLT FG, line 511-513)

Further, when considering school-based interventions which may support children with SLCN, there were very few examples provided by either the EPs or SLTs, and when provided they tended to focus on classroom practice.

Within the overarching theme 'Support', a number of differences in perceptions related the role of specialist support arose, particularly between the views of EPs and SLTs, and those of Specialist Teachers. The Specialist Teacher focus group suggested times arose when children with SLCN require specialist input, whereas EPs and SLTs emphasised how schools could increase their own capacity instead of relying on external agencies. For example, Participant 5 (EP) explained how:

I guess supporting teachers and schools about how can they make these resources part of quality first teaching in their classroom and so it's not requiring additional support

(EP FG, line 357-359)

Within the overarching theme 'Professional Involvement', there were differing perceptions over whose responsibility it was for delivering effective provision, and it highlighted a lack of agreement over who should support children with SLCN. For example, Participant 11 (Specialist Teacher) commented:

if it is just to be speech and language then we tend to just leave it for them [Speech and Language Therapists] to go into the settings (Specialist Teachers FG, line 408-409)

However, this view was not necessarily shared by SLTs; indeed, Participant 8 (SLT) noted how they felt some children may be inappropriately referred to them:

the children who have got literacy difficulties, send them to the speech and language therapist, well actually, that's not for us.

(SLT FG, line1250-1251)

In general, when considering responsibility, the EP participants did not consider that this was their responsibility either, as noted by Participant 5 (EP):

you could look at even something around responsibility of meeting the needs of children with speech and language difficulties and whose do they feel it is. Do they feel like it is the teacher or speech and language therapist?

(EP FG, line 863-866)

This therefore illustrated a view from participants that children with SLCN may be inappropriately referred, and further illustrated how the overall responsibility for supporting children with SLCN did not appear to be clearly understood or defined.

Implementation of interventions

Whilst there are a range of interventions and approaches that can be used to help support children with SLCN, there was disparity between professionals' perceptions as to how interventions should be delivered, for example, either as typical classroom practice or withdrawal. Further, the school staff questionnaires indicated that when choosing which

interventions they should deliver, staff do not generally consider its evidence base as the most important factor. Table 1 illustrates how school staff focus on the practical aspects when choosing interventions, and broadly focus on the ease of implementation of interventions, rather than factors that may indicate whether the intervention might actually work, such as whether there was an evidence base for an intervention's effectiveness, or whether it had worked for other children in the school.

Table 1 *Mean rating of respondents of the staff questionnaire on the factors to consider when implementing an intervention*

Item	Mean ^a	SD
Children are motivated	3.88	.404
Staff and children have a positive relationship	3.83	.385
Time the intervention takes	3.60	.545
It is easy to measure its impact	3.53	.599
It is easy to implement	3.48	.599
Focuses on developing social skills	3.40	.672
Can be incorporated into mainstream lessons	3.38	.807
There is an evidence base for its effectiveness	3.35	.662
Incorporates multi-sensory learning	3.33	.694
Focuses on a transferable skill	3.25	.707
Designed for individuals	3.20	.992
Designed for groups	3.08	.944
It has worked for other children in the school	2.90	.810

^a Mean has a range of 1 to 4

For context, school staff were asked to rate each of these factors from 1 to 4 to describe what they felt was important when choosing an intervention with 1 being "not very important", and 4 being "very important".

Further, when considering which interventions school staff felt confident in applying, it was interesting to note that respondents tended to be more familiar with, and use confidently, those approaches which may be thought of as general classroom practice such as using visuals, timers and reducing language levels. When asked about specific named intervention programmes in the Staff Questionnaire, it was found they were generally unfamiliar to the respondents and few reported using them confidently; when coded such that 1 = 'never heard of it' up to 4 = 'use confidently', the mean responses to each item is shown in Table 2. These specific named interventions were generated based on the interventions discussed in the professionals' focus groups.

Table 2 *Mean responses to how confidently school staff utilise particular interventions*

Item	Meana	SD
Talking partners	3.40	0.782
Visuals	3.30	0.736
Reducing noise levels	3.03	0.698
Timers	3.03	0.609
Reducing language levels	3.00	0.606
Structured play activities	2.63	0.552
Chunking	2.50	0.204
A Time to Talk	2.22	0.496
Blank level questioning	2.22	0.281
Inclusion Development Programme	1.83	0.622
Spiral	1.60	1.000
Black Sheep	1.55	0.957
Language Link	1.53	0.955
Talk Boost	1.48	0.933

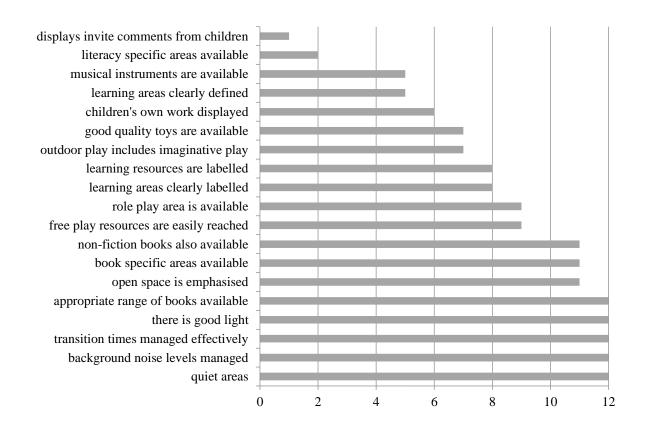
^a Mean has a range from 1 to 4

Developing literacy skills

The staff questionnaires identified variability amongst staff's views on the relative impacts of SLCN, however literacy and writing were highlighted as the areas most impacted, with 62.5 per cent of respondents rating each of literacy and writing as areas which SLCN had a significant impact.

However, whilst it was recognised by school staff that SLCN impacted on a child's literacy skills, it is noted that in practice, opportunities to develop these skills further were missed. Figure 1 highlights how almost all classroom environments observed (92 per cent) failed to produce displays which invited comments from children, and failed to have literacy specific areas available (83 per cent).

Figure 1Number of classrooms each Language Learning Environment item was observed in



Further, there were also very few opportunities (mean 0.50, SD=0.52) for children to engage in interactive book reading, as seen in Table 3.

Table 3 *Mean number of observations per class for each LLO item*

LLO Item	Mean ^a	SD
small group work facilitated by an adult	3	1.54
structured conversations with adults	2.83	1.4
children included in small group activities	2.67	1.56
structured conversations with peers	1.83	1.7
interactive book reading	0.5	0.52

^a Mean number of observations in a single class, with a range of 0 to 5

Talking with children

Finally, professionals within the focus groups identified the role of school staff in supporting children with SLCN. When considering language learning interactions between adults and children, the observations highlighted that a number of these occurred frequently including the use of open questions, repeating more or less exactly what the children had said, adults getting down to the child's level and using a slow pace during conversations with the children. However, as Table 4 illustrates, there were a number of language learning

interactions that occurred on average less than once during the observation including repeating what the child says and adding a small amount of syntactic or semantic information, providing a verbal routine to the child's activities, highlighting differences in lexical items and syntactic structures and modelling language.

 Table 4

 Mean number of observations of Language Learning Interactions

LLI Item	Mean ^a	SD
open questioning	4	1.13
Imitating	3.25	1.14
adults get down to the child's level	3.08	1
Pacing	3	1.28
turn taking is encouraged	2.75	1.48
natural gestures and some key word signing are used	2.75	1.48
adults use children's name	2.75	1.06
Commenting	2.67	1.3
symbols, pictures and props are used	2.5	1.31
Confirming	2.5	1.09
Pausing	2.42	1.78
listening skills are praised	1.92	.79
adult encourages children to use new words	1.75	1.66
adult provides children with choices	1.33	1.3
Labelling	1.25	.62
non-verbal communication is praised	1	.6
adult models language	.83	1.03
Scripting	.75	.87
Extending	.75	.87
differences in lexical items and syntactic structures are highlighted	.33	.49

^a Mean number of observations in a single class, with a range of 0 to 5

Discussion

The current study has identified some of the challenges in delivering provision for children with SLCN. Specifically, the data highlight a discrepancy within and between professionals' and schools' views as to how such provision should be delivered.

Specifically, professionals appeared to differ on where additional support should occur, for example whether children benefited from greater inclusion in the classroom or from withdrawal from the classroom. The Inclusion agenda has suggested that children will achieve better outcomes from greater inclusion in the classroom (Dyson *et al.*, 2004). However, there appears a lack of evidence as to the effectiveness of inclusion on attainments (Lindsay, 2007). Given the results of the current study an alternative approach which focuses on how children's SLCN respond to different interventions and how more effective language learning in the classroom can be achieved would be more powerful.

The data also point to current challenges in addressing children's needs. In the classroom observations, despite recognising the impact of SLCN on literacy, opportunities to develop these skills were missed. Alongside environmental features which could be utilised such as literacy specific areas, opportunities to engage in interactive book reading was not an activity that was widely seen during the observation period, despite the promising gains which children make in terms of emergent literacy skills and vocabulary development when exposed to this opportunity (Hargrave & Sénéchal, 2000; Justice *et al.*, 2009).

Further, when considering the nature of the interactions between the children and school staff, school staff appeared to be more confident in the use of techniques which may be considered classroom practice; for example, getting down to the child's level, using a slow pace and using the child's name. However, whilst these are important techniques, there appeared to be few examples of adults talking *with* children or using specific interaction techniques relating to directing language learning or language modelling responses, which may additionally support children's language development (Chapman, 2000; Justice, 2004).

Finally, a key point arising from the research was the complexity of implementing interventions. Within the professional focus groups, professionals appeared to have inconsistent ideas of the role of interventions including what constituted an intervention and how these should be delivered. There are many challenges a school may face when implementing an intervention, not including problems they may face in consistently implementing interventions as they were designed (Lendrum & Humphrey, 2012). The staff questionnaires highlighted a number of factors which affected the implementation of interventions, for example, the time the interventions took and the importance of the relationship between the child and the member of school staff, however these factors appeared to be in contrast to the current Government drive of evidence-based practice. There

are a number of reasons why a school may select an intervention and arguably ease of implementation and familiarity may be stronger drivers of choice than evidence of effectiveness (Law *et al.*, 2014). Further factors which may relate to the enjoyment of the intervention such as being motivated and having positive relationships with the facilitators were deemed most important by school questionnaire respondents and whilst these are important factors in implementing interventions (Dockrell *et al.*, 2014; Roulston *et al.*, 2012), less is known as to how these factors impact on the outcomes of the intervention.

It is argued that EPs are in a unique position to overcome these identified challenges and support schools to develop their language practice, particularly given the role of EPs to work with schools at an individual, group and systemic whole school level. It was noted within the focus groups that EPs emphasised the importance of developing classroom practice and indeed, all children are entitled to effective teaching to support SLCN (Dockrell *et al.*, 2014). However, the feasibility of achieving this is challenged by teachers' lack the pedagogical skill, confidence or understanding of SLCN to do so (Dickinson *et al.*, 2014; Dockrell *et al.*, 2017; Wilson & Demetriou, 2007).

One option would be for EPs to provide training to schools in order to develop adults' understanding and skill. Indeed, delivering training is a key part of EP practice (Fallon *et al.*, 2010) however, the evidence as to whether training leads to more effective language provision is limited (Neuman & Cunningham, 2009). In addition EPs could play a crucial role in increasing school practitioner capacity through a consultation model of service delivery, allowing for EPs to work collaboratively with schools (Wagner, 2008), and provide opportunity to joint problem solve around a school's provision for children with SLCN, extending the practice of those directly involved in delivering SLCN provision.

Further, EPs could play a critical role in supporting schools with the implementation of interventions and integrating research from education and psychology into practice. Indeed, whilst it is not necessarily unexpected that there are difficulties faced in transferring an evidence base into real world contexts (Kelly, 2012), and that evidence alone should not be used to drive implementation (Law *et al.*, 2014), EPs are well placed to understand the rationales and influencing factors on which the choice of interventions have been based, to seek the views and experiences of the child in relation to these interventions, and to assist in ensuring interventions are appropriate and are adequately monitored such that evidence is gathered for their ongoing use.

In summary, EPs are uniquely positioned to support schools in improving provision for children with SLCN particularly through joint problem solving and resolving tensions which may exist between services. Indeed, difficulties in cross-professional working are numerous (McConnellogue, 2011; Martin, 2008) and whilst the onus on joint commissioning within the revised Special Educational Needs and Disability 0-25 Code of Practice, makes overcoming these barriers is both a necessity, there is also opportunity for EPs to work more collaboratively with others, Furthermore, EPs have a specific role in supporting schools to translate research into practice, particularly around evidence-based interventions and utilising opportunities within the classroom to enhance learning. However, in order for EPs to demonstrate the pivotal role they could play, EPs need to refrain from identifying others, rather than themselves, as best placed to provide this support and re-align themselves with the SLCN population, giving greater consideration to the EP role, skill set and unique positioning in order to support schools to meet the needs of children with SLCN and promote the achievements, wellbeing and voice of children with SLCN.

Limitations and Future Research

There are a few limitations with this study that should be noted. Firstly, the classroom observations highlighted how provision was realised in practice; however, whilst the observations were a reflection of what was occurring at the school during the observation period, it does not mean to say that the items not observed were not happening at other times of the day. Further, it is recognised that the classroom observations explored how provision was realised in practice for KS1 only, whereas other measures such as the staff questionnaires explored provision across both KS1 and KS2. Additionally, the study was limited to a single local context, and given the variability that exists between different local authorities, further research is needed to understand the generalisability of the results.

Word count excluding references: 4815

References

Baddeley, A. (2003). Working memory and language: An overview. *Journal of communication disorders*, 36(3), 189-208.

Bakopoulou, I., & Dockrell, J.E. (2016). The role of social cognition and prosocial behavior in relation to the socio-emotional functioning of primary aged children with specific language impairment. *Research in developmental disabilities*, 49, 354-370.

Biesta, G.J.J. (2007). Why 'what works' won't work. Evidence-based practice and the democratic deficit of educational research. *Educational Theory* 57(1), 1-22.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

Conti-Ramsden, G., Knox, E., Botting, N., & Simkin, Z. (2002). Focus on Practice: Educational placements and National Curriculum Key Stage 2 test outcomes of children with a history of specific language impairment. *British Journal of Special Education*, 29(2), 76-82.

Conti-Ramsden, G., Mok, P. L., Pickles, A., & Durkin, K. (2013). Adolescents with a history of specific language impairment (SLI): Strengths and difficulties in social, emotional and behavioral functioning. *Research in developmental disabilities*, 34(11), 4161-4169.

Chapman, R. S. (2000). Children's language learning: An interactionist perspective. *Journal of Child Psychology and Psychiatry*, 41(1), 33-54.

Department for Education. (2017). Statistical First Release: Special Educational Needs in England. London: DfE.

Department for Education and Department of Health (DfE/DH; 2014). *Special educational needs and disability code of practice: 0 to 25 years.* London: DfE.

Department for Education and Department for Health (2015). *Special educational needs and disability code of practice: 0 to 25 years.* London: DfE

Dickinson, D. K., Hofer, K. G., Barnes, E. M., & Grifenhagen, J. F. (2014). Examining teachers' language in Head Start classrooms from a Systemic Linguistics Approach. *Early childhood research Quarterly*, 29(3), 231-244.

Dockrell, J. E., Bakopoulou, I., Law, J., Spencer, S. & Lindsay, G (2012). Communication Supporting Classroom Observation Tool.

http://www.thecommunicationtrust.org.uk/media/93866/tct_bcrp_csc_final.pdf (accessed 7th August, 2017)

Dockrell, J., George, R., Lindsay, G., & Roux, J. (1997). Problems in the identification and assessment of children with specific speech and language difficulties. *Educational Psychology in Practice*, 13(1), 29-38.

Dockrell, J. E., Howell, P., Leung, D., & Fugard, A. J. (2017). Children with Speech Language and Communication Needs in England: Challenges for Practice. In *Frontiers in Education*, 2, 35.

- Dockrell, J., & Lindsay, G. (2001). Children with specific speech and language difficulties— The teachers' perspective. *Oxford Review of Education*, 27(3), 369-394.
- Dockrell, J., Lindsay, G., & Palikara, O. (2011). Explaining the academic achievement at school leaving for pupils with a history of language impairment: Previous academic achievement and literacy skills. *Child Language Teaching and Therapy*, 27(2), 223-237.
- Dockrell, J., Ricketts, J., Charman, T., & Lindsay, G. (2014). Exploring writing products in students with language impairments and autism spectrum disorders. *Learning and Instruction*, 32, 81-90.
- Dunsmuir, S., Clifford, V., & Took, S. (2006). Collaboration between educational psychologists and speech and language therapists: Barriers and opportunities. *Educational Psychology in Practice*, 22(02), 125-140.
- Durkin, K., Simkin, Z., Knox, E., & Conti-Ramsden, G. (2009). Specific language impairment and school outcomes. II: Educational context, student satisfaction, and post-compulsory progress. *International Journal of Language & Communication Disorders*, 44(1), 36-55.
- Dyson, A., Farrell, P., Polat, F., Hutcheson, G., & Gallannaugh, F. (2004). *Inclusion and pupil achievement*: Department for Education and Skills London.
- Fallon, K., Woods, K., & Rooney, S. (2010). A discussion of the developing role of educational psychologists within Children's Services. *Educational Psychology in Practice*, 26(1), 1-23.
- Hargrave, A. C., & Sénéchal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly*, 15(1), 75-90.
- Harrison, L. J., McLeod, S., Berthelsen, D., & Walker, S. (2009). Literacy, numeracy, and learning in school-aged children identified as having speech and language impairment in early childhood. *International Journal of Speech and Language Pathology*, 11(5), 392-403.
- Hartas, D. (2004). Teacher and speech-language therapist collaboration: being equal and achieving a common goal?. *Child Language Teaching and Therapy*, 20(1), 33-54.
- Henry, L. A., Messer, D. J., & Nash, G. (2012). Executive functioning in children with specific language impairment. *Journal of Child Psychology and Psychiatry*, 53(1), 37-45.
- Justice, L. M., Kaderavek, J. N., Fan, X., Sofka, A., & Hunt, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher—child storybook reading and explicit print referencing. *Language, speech, and hearing services in schools*, 40(1), 67-85.
- Justice, L. M. (2004). Creating language-rich preschool classroom environments. *Teaching Exceptional Children*, 37(2), 36-45.
- Kelly, B. (2012). Implementation science for psychology in education. Handbook of implementation science for psychology in education, 3-12.

- Law, J., Lee, W., Roulstone, S., Wren, Y., Zeng, B., & Lindsay, G. (2012). 'What Works': interventions for children and young people with speech, language and communication needs. Department for Education.
- Law, J., Roulstone, S., & Lindsay, G. (2014). Integrating external evidence of intervention effectiveness with both practice and the parent perspective: development of 'What Works' for speech, language, and communication needs (SLCN). *Developmental Medicine & Child Neurology*.
- Lendrum, A., & Humphrey, N. (2012). The importance of studying the implementation of interventions in school settings. *Oxford Review of Education*, 38(5), 635-652.
- Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology*, 77(1), 1-24.
- Lindsay, G., Dockrell, J., Law, J., & Roulstone, S. (2012). The Better Communication Research Programme: improving provision for children and young people with speech, language and communication needs.
- Lindsay, G., Dockrell, J., Letchford, B., & Mackie, C. (2002). Self-esteem of children with specific speech and language difficulties. *Child Language Teaching and Therapy*, 18(2), 125-143.
- Marshall, J., Ralph, S., & Palmer, S. (2002). 'I wasn't trained to work with them': mainstream teachers' attitudes to children with speech and language difficulties. *International Journal of Inclusive Education*, 6(3), 199-215.
- Martin, D. (2008). A new paradigm to inform inter-professional learning for integrating speech and language provision into secondary schools: A socio-cultural activity theory approach. *Child Language Teaching and Therapy*, 24(2), 173-192.
- McConnellogue, S. (2011). Professional roles and responsibilities in meeting the needs of children with speech, language and communication needs: joint working between educational psychologists and speech and language therapists. *Educational Psychology in Practice*, 27(1), 53-64.
- Mertens, D. M. (2014). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods: Sage Publications.
- Morgan, D. L. (2014). *Integrating qualitative and quantitative methods*: SAGE.
- Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American educational research journal*, 46(2), 532-566.
- Palikara, O., Lindsay, G., Cullen, M. A., & Dockrell, J. (2007). Working together?: the practice of educational psychologists and speech and language therapists with children with specific speech and language difficulties. *Educational and Child Psychology*, 24, 77-88.
- Rannard, A., & Glenn, S. (2009). Self-esteem in children with speech and language impairment: an exploratory study of transition from language units to mainstream school. *Early Child Development and Care*, 179(3), 369-380.

Roulstone, S., Wren, Y., Bakopoulou, I., Goodlad, S., & Lindsay, G. (2012). Exploring interventions for children and young people with speech, language and communication needs: A study of practice.

Sadler, J. (2005). Knowledge, attitudes and beliefs of the mainstream teachers of children with a preschool diagnosis of speech/language impairment. *Child Language Teaching and Therapy*, 21(2), 147-163.

Stothard, S. E., Snowling, M. J., Bishop, D., Chipchase, B. B., & Kaplan, C. A. (1998). Language-Impaired Preschoolers. A Follow-Up Into Adolescence. *Journal of Speech*, *Language, and Hearing Research*, 41(2), 407-418.

Wagner, P. (2008). 'Consultation as a Framework for Practice'. In B. Kelly, L. Woolfson and J. Boyle (Ed.), *Frameworks for Practice in Educational Psychology: A Textbook for Trainees and Practitioners*. London: Jessica Kingsley Publishers.

Wilson, E., & Demetriou, H. (2007). New teacher learning: substantive knowledge and contextual factors. *The Curriculum Journal*, 18(3), 213-229.

Word count including references: 6053

Appendix A – Focus Group Schedule

Can you each describe to me your current role?

Can you describe to me your experience of working with children with SLCN?

For this research SLCN refers to children with a primary need of speech, language and communication difficulties and excludes those who may have other needs, for example Autism or behavioural needs. In what ways do you think this is representative of the children with SLCN you have worked with?

What support do you think children with SLCN benefit from in a mainstream primary?

How do you think schools can best support children with SLCN?

Can you provide any examples of school practices or interventions which you think are particularly effective for supporting children with SLCN?

How do you think support for children with SLCN differs throughout the key stages?

In your experience how have you seen school's measure the outcomes of the provision they have provided for children with SLCN?

How would you measure the effectiveness of a school's provision for children with SLCN?

<u>Educational Psychologists:</u> Some research suggests that there can be a 'mismatch' of understanding between EPs and other professionals who work with children with SLCN, and that there is little involvement from EPs past the assessment stage. In what ways do you think EPs are able to support children with SLCN?

<u>Speech and Language Therapists:</u> Some research suggests that parent's value individual, direct therapy from speech and language therapists and that teaching assistants are not qualified to be delivering therapy. In what ways do Speech and Language therapists manage this conflict?

<u>Specialist Teaching Team:</u> Within this local authority many school staff attend training that is not included within the Communication Trust's What Works national database of evidence-based interventions and programmes for children with SLCN. Is evidence-based practice necessary for supporting children with SLCN in real-world situations?

In your experience what do you think makes the most significant difference to children with SLCN?

Is there anything you wish to add, or anything that I haven't covered?

<u>Appendix B – School Staff Questionnaire (Abridged)</u>

What works in supporting children with SLCN, and why?

5: How would you rate your knowledge of Speech Language and Communication Needs (SLCN)?

	No knowledge	Some	Quite	Very
	at all	knowledge	knowledgeable	knowledgeable
SLCN	0	0	0	0
Knowledge		5	5	O

6: How confident do you feel in being able to meet the needs of children with SLCN?

	Not confident	Somewhat confident	Quite confident	Very confident
Confidence	0	0	0	0

8: How much impact do you feel SLCN has on the following areas?

Please choose the appropriate response for each item:

	Significant negative impact	Small negative impact	No impact at all	Small positive impact	Significant positive impact
Social development	0	0	0	0	0
Peer relationships	0	0	0	0	0
Child confidence	0	0	0	0	0
Writing	0	0	0	0	0
Literacy	0	0	0	0	0
Numeracy	0	0	0	0	0
Behaviour	0	0	0	0	0
Academic achievement	0	0	0	0	0

^{9:} Are there any other areas that you feel SLCN has an impact on?

14: Which of the following strategies / approaches / interventions are you familiar with for supporting children with SLCN?

Please choose the appropriate response for each item:

	Never heard of it	Familiar but not used	Familiar and have used	Use confidently
Visuals	0	0	0	0
Reducing noise levels	0	0	0	0
Reducing language levels	0	0	0	0
Blank level questioning	0	0	0	0

Chunking	0	0	0	0
Black Sheep	0	0	0	0
A Time to Talk	0	0	0	0
Talking Partners	0	0	0	0
Spiral	0	0	0	0
Inclusion Development	0	0	0	0
Programme	0	0))
Talk Boost	0	0	0	0
Structured play activities	0	0	0	0
Timers	0	0	0	0
Language Link	Ô	0	0	0

15: For the strategies / approaches / interventions which you have used, please rate their effectiveness.

Please choose the appropriate response for each item:

	Never	Ineffective	Relatively	Quite	Very
	used	menective	ineffective	effective	effective
Visuals	0	0	0	0	0
Reducing noise levels	0	0	0	0	0
Reducing language levels	0	0	0	0	0
Blank level questioning	0	0	0	0	0
Chunking	0	0	0	0	0
Black Sheep	0	0	0	0	0
A Time to Talk	0	0	0	0	0
Talking Partners	0	0	0	0	0
Spiral	0	0	0	0	0
Inclusion Development	0	0	0	0)
Programme))))	
Talk Boost	0	0	0	0	0
Structured play activities	0	0	0	0	0
Timers	0	0	0	0	0
Language Link	0	0	0	0	0

16: Are there any other strategies / approaches / interventions which you have used to support children with SLCN, and were they effective?

17: How important are the following when implementing an intervention / approach for children with SLCN?

Please choose the appropriate response for each item:

	Not very	Somewhat	Quite	Very
	important	important	important	important
There is an evidence base for its effectiveness	0	0	0	0
Time the intervention takes	0	0	0	0
It is easy to implement	0	0	0	0
It is easy to measure its impact	0	0	0	0

Designed for individuals	0	0	0	0
Designed for groups	0	0	0	0
It has worked for other children in the	0)	0)
school))))
Focuses on a transferable skill	0	0	0	0
Can be incorporated into mainstream	0	0		
lessons))	0)
Focuses on developing social skills	0	0	0	0
Incorporates multi-sensory learning	0	0	0	0
Staff and children have a positive	0	0		
relationship))))
Children are motivated	0	0	0	0

20: Are there any other factors which you feel contribute to effectively supporting children with SLCN?

Total Word Count (Article, References, and Appendices): 6,796