The role of the educational psychologist; perspectives on learning

A thesis submitted to The University of Manchester for the degree of Master of Philosophy (MPhil) in the Faculty of Humanities

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School of Education
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Abstract

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The role of the educational psychologist; perspectives on learning

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This thesis is a collation of three research papers, each of which explores an area of professional relevance to the practitioner educational psychologist. The research is undertaken in the context of a large, rural Local Authority and is related to the broad theme of cognition and learning in children and young people. The researcher adopts a Q-methodology to consider the subjective and collective viewpoints of educational psychologists in the Local Authority with regard to dyslexia and using factor analysis to process the data, three distinct viewpoints emerged. The literature review included in the thesis seeks to provide an overview of the research base which underpins formative assessment practices in educational settings in the UK. The importance of the role of teacher feedback in classroom learning is illustrated through meta-analyses research and studies. Formative assessment is considered in the review within the conceptual framework of constructivist learning theory. The role of pupil feedback in a junior classroom is then explored in a qualitative research study using a collaborative action research methodology. Thematic analysis is used to analyse the textual data from interviews with the participant teacher. The action research methodology was an effective model to enable the teacher to effect change in her practice. The three papers are set within an organisational context in the thesis, current challenges for the profession are summarised and many examples are given of the role and importance of research in the work of an educational psychologist. Implications for further research within the profession of educational psychology are suggested.
Declaration

No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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Section: 1 Introduction

1.1 Organisational context of the research papers

1.1.1 The role of the Educational Psychologist and rationale for the research papers

This thesis provides an introduction to, and reflections on, three research papers which were undertaken as part of the course requirements of the educational psychology part-time doctoral programme. This programme was embarked upon with the intention to develop my knowledge and understanding of research methods and to refresh and update my academic skills. As the initial training programme for entry to the profession changed to become a doctoral level programme, and the equivalent course was then made available to existing educational psychologists, it felt appropriate to take this opportunity and to enhance my professional practice by engaging with a research based programme.

The research papers within this thesis are linked by the theme of cognition and learning, and offer observations on the role of the Local Authority (LA) educational psychologist in supporting the learning development of children and young people in educational settings. Cognition and learning is my specialist area of work. The following three research papers have been completed over a timespan that has included my work as senior practitioner educational psychologist for cognition and learning and more latterly as specialist senior.

The role of specialist senior educational psychologist for cognition and learning is relatively new within the service in which I work and has evolved over time. The role encompasses a number of responsibilities within the Educational Psychology and Early Years Service (EP&EYS); the specialist subject role for cognition and learning; generic educational psychology work within a patch of local schools and a senior management role within the service which incorporates the supervision and line management of staff, including trainees. The specialist part of my work is carried out in conjunction with a senior practitioner colleague within the service. Between us, we have the dual responsibility to provide the educational psychology team with updates, information, professional development and opportunity for discussion etc. We also represent our service at the interface with other related LA support services and so contribute to the development and quality assurance of service provision.
Cognition and Learning covers a large area of need and encompasses a number of strands of support within the LA in which I work. These strands include provision for severe learning difficulties which is an outreach service provided by the special schools and provision for specific learning difficulties provided by Enhanced Mainstream Schools. My role has emerged to become closely associated with the LA specialist provision for specific learning difficulties and has involved working closely with the specialist teachers in this field. This has involved providing support to them as they initially established their outreach services within new school settings and then working with them on an ongoing basis with the aim of ensuring their schools adopt the dyslexia-friendly approaches and dyslexia quality mark award promoted and endorsed within the LA.

The research papers of this thesis should be considered within an organisational and administrative context, not only of the EP&EYS but also of the LA itself as the wider organisation of which the EP&EYS is a part. The complex and ever-changing LA structures and organisational rationale form the backdrop to the following research work, which is undertaken within different parts of the organisation.

The organisational structures of the LA are described below.

1.1.2 Local Authority organisational context and the Educational Psychology and Early Years Service

The three research papers collated in this thesis have been undertaken by myself as an educational psychologist working within a LA which is a very large, predominantly rural, northern County. The LA has accountability for 138,000 pupils through the provision of early years education and the education of children and young people in its 388 schools.

The EP&EYS of this LA is located within the Directorate of Children and Young People’s Service. This Directorate incorporates a number of support and improvement services for schools within its boundaries and jurisdiction. The EP&EYS is currently made up of three integrated teams of educational psychologists, early years advisory teachers and Portage home visitors, who are located in area bases across the County and organised into locality teams.
The EP&EYS is seen as a discrete service within the LA in terms of its funding and management, but is closely allied to all the other LA support services and works alongside them in a number of ways.

The EP&EYS was re-structured three years ago as part of a phased LA review and re-organisation of special educational needs and behaviour provision which included all the educational support services within the County. A number of specialist senior and senior practitioner educational psychologist posts were created at the time, to link and work directly with newly formed cross-County Networks for Cognition and Learning, Communication and Interaction and Behaviour, Emotional and Social Difficulties (BESD).

These Networks were established to each be made up of lead professionals from a range of disciplines within the LA services and to also include existing special schools related to the Network areas (e.g. special schools for cognition and learning). In addition, the Networks were set up to incorporate the main outreach support services which were intended to be provided to primary and secondary schools by area based Enhanced Mainstream Schools (for Specific Learning Difficulties, Communication and Interaction and BESD). These Enhanced Mainstream Schools were newly commissioned by the LA following the disestablishing of its formerly centrally managed Learning and Behaviour Support Services. The Enhanced Mainstream Schools are quality assured by LA centrally retained Network and school improvement staff. This was a significant strategic re-positioning of the core support services to be henceforth newly located both physically and operationally within a community group of schools. A new focus and philosophy was embedded in the new support services structure which was around whole school improvement rather than individual pupil support.

Alongside the Enhanced Mainstream Schools, a number of locality-based Hub Schools for Minority Ethnic Achievement (MEA) were also created following on from, as above, the disestablishing of the former central services. These Hub Schools for MEA were set up to provide additional language based support and other support services (such as Traveller services) to schools with non-English speaking pupils or pupils recently moved to Britain from other countries. The Hub Schools (MEA) adopt the same model of commissioning, quality assurance and management.
The three Networks and the Hub Schools (MEA) were established to encompass and account for the majority of the LA support services, although further LA services available to schools and early years settings retained at the time their organisational structures and strategic position within the two Business Units which make up the Children and Young People’s Service Directorate. These remaining outreach services are seen as an essential cross-phase part of the external LA support arrangements for schools (e.g. the Sensory, Physical, Medical Service, the Looked After Children’s Service).

Coinciding with this review of provision, the LA also established a number of Integrated Services areas upon which other services were then mapped and organised. These administrative areas (recently re-organised and so reduced from six to four) and the requirement to provide more integrated services to families within each locality using the Children’s Centres as hubs, initiated a new direction in the service delivery of the EP&EYS. Senior educational psychologists were linked to multi-agency teams within each locality to support the coordination of services being delivered, to identify gaps in service delivery and to raise awareness within the community of roles and responsibilities across a wide range of educational and non-educational services from both the maintained and the private, voluntary and independent sector.

More recently, the Networks have again been re-structured and rationalized; terminology has been updated and the central management of the Networks has been streamlined. The Networks have now been re-grouped and re-positioned within the LA and the Cognition and Learning Network and the Communication and Interaction Network have been re-named as a Special Educational Needs and Disability (SEND) Service. Of most significance in this re-structure, Disabled Children’s Services were also strategically re-positioned into the education stream of the Directorate to become part of the SEND Service, having formerly been part of Children’s Social Care. This relocation of the service has brought about the realisation of closer working relationships with the EP&EYS as many teams have been re-grouped within LA office bases and are now physically sited together. Whilst this may have already been the case for some local teams, the newly formed SEND Service has initiated different working patterns and understandings.
1.1.3 Organisational change for the Educational Psychology and Early Years Service

Three years on from the initial re-organisation, the EP&EYS is to be re-structured again over the forthcoming year in the next phase of LA re-organisation. Proposals have just been published for a period of formal staff consultation. The re-structure is taking place as a result of the essential efficiency savings that must take place across the LA as a consequence of the national economic climate. These savings have been identified and agreed through a number of named projects as part of the LA Medium Term Financial Strategy that are being concurrently carried out on a four year timeline to ensure overall targeted and specific amounts of savings are made from within the LA budget.

The initial discussions which informed the final outcomes of the re-structure proposals were held by senior EP&EYS staff and were based on, and informed by, the Association of Educational Psychologists’ (AEP) publication ‘The Delivery of Educational Psychology Services’ (AEP, 2011) and circular ‘Principles for the Delivery of Educational Psychology Services’ (AEP, 2010). These guidance documents were produced by the AEP in response to the educational and political climate which evolved following the change of government in May 2010, to a newly formed Coalition Government.

To date, whilst efficiency savings have already been made within the EP&EYS and are ongoing, no job losses have yet occurred and the new proposals for the service re-structure aim to protect the current number of posts and to offer a model of service delivery which will continue to retain existing staff and to attract new staff, including trainees. The proposed re-structure aims to reduce the number of senior management posts, including specialist senior posts, re-organise staff into three larger areas (from six) and to give all staff a remunerated specialist area of interest linked to the key areas of early years, parenting, SEND and Behaviour, Discipline and Attendance, Health and Well Being (BDA-HWB). The original three integrated teams of educational psychologists, early years teachers and Portage home visitors all remain as part of the EP&EYS.
Whilst the re-structure is primarily about efficiency savings, driven by the need to reduce LA expenditure, another perspective for change is presented. The non-financial rationale for the re-structuring of the EP&EYS seeks to update the service structure so it can more readily meet the expectations and requirements of both local policy change and innovation and national legislative change and direction. This takes account of the continued motivation and desire within the service to work as a service with a wide ranging and expanding brief that is not exclusively about the provision of SEND services, despite now falling within this renamed Business Unit and the proposal to map the EP&EYS with the three Social Care geographical boundaries within the County. Consideration is also given to the likely possibility of future change and re-structuring either within the EP&EYS itself or the wider Directorate.

1.1.4 Key local policy and national legislation underpinning the re-structure

Key local policy underpinning the re-structure of the EP&EYS and the wider review of services within the LA includes a number of Strategy documents being produced in anticipation of the legislative outcomes of the SEN and Disability Green Paper, ‘Support and Aspiration’ (DfE, 2011a). These Strategy documents are either recently published or about to go out to public consultation and are written to inform the general public of the LA Local Offer as described in the Green Paper. These documents define the local provision of services for a range of need and detail the LA stance and response to a number of identified conditions. There is an overarching SEND Strategy, a Parenting Strategy, an Autism Strategy, a Strategy for Specific Learning Difficulties (SpLD) and a Strategy for Speech, Language and Communication (SLCN). The production of these documents represents significant development within the LA of its coordinated and resourced response to need. Over the forthcoming year, there will also be the publication of the Children and Young People’s Mental Health Strategy which will involve partnership working with health services.
1.2 Contemporary challenges for educational psychology services and the role of research

Educational Psychology Services in the UK currently face a number of significant challenges which arise predominantly as a result of a changed political and economic climate and the anticipated change in SEND legislation.

1.2.1 SEN and Disability Green Paper and draft legislation

As within the service in which I work, many educational psychology service restructurings are likely to be modelled around the key changes which are anticipated through recent legislative developments. Most importantly, government proposals to reform the current system of provision for children and young people with special educational needs and disabilities have now been presented to Parliament (September 2012). The ‘Draft Legislation on Reform of provision for children and young people with Special Educational Needs’ (DfE, 2012a) follows the publication of the SEN and disability consultation Green Paper ‘Support and aspiration: A new approach to special educational needs and disability’ (DfE, 2011a) and subsequent response document ‘Support and aspiration: a new approach to special educational needs and disability – Progress and next steps’ (DfE, 2012b).

The draft proposals aim to increase and improve the life chances of those children and young people considered to be the most vulnerable. The reforms are intended to support the families of those children with the most complex and lifelong needs. The proposals aim to reduce bureaucracy around existing statutory processes by promoting early intervention and providing for a new single assessment by 2014; the ‘Education, Health and Care Plan’, which will incorporate collaborative agency involvement in the assessment of education, health and social care need. Personalised budgets are proposed, to increase parental control over resources and plans are included to strengthen parental choice regarding schools and provision. These reforms, which will require joint commissioning of services in the future, are being trialled over a two year period by new LA and Health partnerships in the Department for Education SEND Pathfinder project.
The legislation will bring challenges to educational psychology services who will be newly required to work with young people with special educational needs and disabilities up to the age of 25 and to be subsequently more involved in proposals and outcomes for adulthood. This has implications for the assessment work typically undertaken by educational psychologists and its suitably and applicability for an older population. There is an increased likelihood of legal challenge within the proposed statutory processes due to the emphasis on parental choice and control and for the first time in this special needs and disability field, the legislation will allow for the young people themselves to formally appeal against decisions. This will necessitate educational psychologists to focus on rigorous, evidence based assessments as detailed in the draft legislation.

1.2.2 Economic pressures for Educational Psychology Services

National financial pressures within LAs throughout the UK have resulted in educational psychology service staff losses or reductions, changes to previously established service structures and strategic re-positioning within LAs (AEP, 2011). The AEP responded to this national picture by providing guidance for educational psychology services in the face of an announced national reduction in public spending which was likely to directly and adversely affect educational psychology services. Centrally funded educational psychology services therefore faced the challenge of the possibility of reduced numbers of staff, alongside the expectation to continue to fulfil LA statutory and other responsibilities. Research undertaken by the AEP at the time (AEP, 2011), cites the national loss of approximately 200 LA educational psychologists’ posts in the immediate aftermath of the new government’s financial proposals and reports that many educational psychology services experienced significant changes to either staffing and/or previously established structures.

Changes in the financial underpinning of services have resulted in some educational psychology services becoming wholly or partly traded i.e. meaning that services can charge for their input with schools, settings etc and so generate income in order to be wholly or partly self-financing. This has implications for services for the production and promotion of a range of high quality products and services, such as the delivery of training packages. This work benefits from educational psychologists being able to provide up to date and well researched input into courses and materials etc and then to tailor the work for a specified audience.
Increasingly however, LA educational psychology services are now in competition with private providers of psychology based services or training, either from independent educational psychology services or more generic services from the private and voluntary sector (such as Barnardo’s). Training for schools, settings, Children’s Centres and other stakeholders is being offered by such organisations for example, in subjects commonly and traditionally offered by LA educational psychology services; such as attachment theory, solution focussed approaches, behaviour management etc. Motivated and well qualified educational psychologists are in a good position, if supported by their LA, to compete with this and to produce credible, research based and commercial standard materials, sometimes in partnership with other services, which can generate income for their service and at the same time, promote the work and contribution of the profession. (Successful examples include Northamptonshire Baby Room Project and the Emotional Literacy Support Assistant (ELSA) initiative, which originated in Hampshire).

The trend for private organisations to provide training and or support to schools is only likely to grow as a profitable commercial industry as an increasing number of schools continue to convert to Academy status i.e. become publicly funded independent schools (Academies Act, 2010). As more schools across the country choose to become Academies, and so increase their independence, financial control and autonomy, their prior relationship of support, intervention and accountability within the LA is significantly altered. LAs are therefore challenged to replace the income that would have formerly automatically come from these schools, in order to sustain its own support and improvement services at a viable level. There is therefore, the need to offer quality, competitive services and products that financially discerning Academies will continue to buy in in the face of increased competition.

Financial constraints have also resulted in many LAs no longer being able to financially support long term training courses for its staff, such as the part time doctoral programme. In the service in which I work, funding for attending courses and professional development activities external to the LA is now severely restricted. Staff can be funded for courses deemed essential or mandatory to their post and overall, attendance at courses and conferences is now significantly reduced. This financial pressure will inevitably have an impact on existing educational psychologists interested in pursuing the doctoral programme for example, as this would now have to be entirely self-funded, thereby possibly reducing the number of staff able to take up the course.
1.2.3 Other challenges faced by Educational Psychology Services

The combination of the above changes to structures and funding mechanisms places both services and individuals under potential strain in coping with the transformation of services. Educational psychology services will need to consider how this significant level of change is managed at a local and national level in a way that retains the core functions and identity of the profession. It is probable that services will have to provide support and professional development to staff in order to ensure psychological well-being in the face of change, uncertainty and financial restraint.

The training of new educational psychologists continues to be an area of debate and discussion and is currently under government review once more (DfE, 2011b). The review has considered the changing role of the educational psychologist in light of the financial and legislative factors discussed above and has made recommendations to develop and sustain an entry programme to the profession which will have greater financial certainty and more co-ordination with regard to the placement opportunities for years two and three. The role of the educational psychologist is acknowledged as being important across a number of areas and the proposals for training continue to be based on the current three year full time integrated doctoral programme.

The restructured initial doctoral level training for entry into the profession of educational psychology, along with the provision of the part time equivalent doctoral course for already qualified educational psychologists, has raised the academic standing of the profession. As a result of the introduction of the trainee programme, a culture of research has increased within the profession and the expectation to be involved in research based work is now considered to be more integral to the educational psychology role. This has become more necessary over time as the brief of the educational psychologist has expanded and the need to provide a different range of services and evidence based products has increased.
1.3 Research training undertaken

1.3.1 Programme of research skills undertaken

Over the course of the doctorate in educational psychology programme, I have undertaken a programme of study aimed at developing my knowledge and understanding of contemporary research practices and how these relate to the applied work of the practitioner educational psychologist. I attended the monthly sessions at the University in order to fulfil the requirements of the programme. The overall initial two year programme was accessed in a number of ways, including attending workshops, lectures and tutorials and was additionally supported by the opportunity to attend presentations by students on the programme and by visiting outside speakers. I also attended two of the conferences that were run through the period I attended the programme (e.g. on community psychology).

The programme elements that I undertook may be summarised as follows:

- research paradigms, hypotheses and research questions
- research ethics (including participant recruitment)
- critical reading and analysis of articles
- writing a literature review
- introduction to qualitative methodologies
- textual data analysis (e.g. thematic analysis, grounded theory)
- introduction to quantitative methodologies and data analysis
- role of the researcher
- introduction to inferential statistics
- Q sort methodology workshop
- case study designs
- questionnaire/survey and interview design
- focus groups

These sessions and workshops were supported by detailed handouts and suggestions for further reading which I followed up for the research undertaken in this thesis. A list of suggested initial reading was also provided and I read a number of core texts.
In addition, general skills of academic writing and presentation have been developed, including for example, referencing protocols and styles (e.g. APA 5th).

Alongside the research methods input, I also attended a number of workshops which were available to develop the technical ICT skills that are now required for modern-day research practice which has evolved in line with innovations in information technology. The ICT based workshops I attended were:

- accessing electronic library databases and electronic journals etc
- using the university electronic student portal (e.g. Blackboard)
- introduction to EndNote
- introduction to SPSS
- introduction to CAQDAS: NVivo

Personal study time was also used to improve my general word processing skills which were required in the presentation of the research papers etc. I have updated my word processing software and computer operating systems over time and kept up to date with new ways to format documents etc (e.g. using headings, making tables, page numbering etc).

I have been a distance learner on the programme but have had access to the University resources and library through internet based support via the use of the University Virtual Private Network (VPN).

The skills learnt in the above programme have been used to inform the research that was undertaken in the completion of the following three research papers.
1.4 Introduction to the research papers

1.4.1 Introduction and background to the research papers

The research papers of this thesis reflect varying aspects of my role as an educational psychologist within the LA. They represent only a very small sample of the range of issues and questions that arise in the course of every day working as an educational psychologist. Routine working in schools and settings and within the service itself inevitably raises queries and often initiates the need to consider and research an issue further. The opportunity was taken in the following research papers therefore to explore in some depth areas that had arisen that would benefit from further enquiry. The papers are linked by the theme of cognition and learning in children and young people as this is my area of specialist interest and I sought to take the research opportunities to enhance my skills in this area. One research paper is set within the EP&EYS, one paper is a literature review and the third is set within a junior school and was based on some of the research findings in the literature review.

The first research paper is set within the EP&EYS and concerns the views of educational psychologists with regard to dyslexia. This historically contentious subject had become high profile within the national educational world at the time due to a number of government led initiatives (e.g. Rose, 2009) and the publication of the Inclusion Development Programme (IDP) for schools (DCSF, 2008 and updated DfE, 2010). It was also ten years since the publication of the British Psychological Society (BPS) working party publication and definition of dyslexia (BPS, 1999) so it felt timely to consider how relevant this remained for educational psychologists working in the field.

This national context brought the subject of dyslexia to the forefront once again within the EP&EYS in which I work and then coincided with the review of special educational needs provision that took place in the LA at the time. In this review, as described above, Enhanced Mainstream Schools were established to provide outreach services for children and young people with specific learning difficulties. This was a very significant change in the provision within the LA, as previously the former centrally managed Learning Support Service had met need in school with regard to a range of learning difficulties. The specific learning difficulties label potentially narrowed the services that would henceforth be provided.
Alongside this, at the time of the inception of the Enhanced Mainstream Schools, the LA intention was that educational psychologists would consult with staff in referring schools as to the suitability and appropriateness of the referral for outreach support. This proposal caused much consternation and debate within the EP&EYS and in the event, very quickly became unpopular with all parties concerned, educational psychologists included. The protocols were abandoned shortly after their introduction.

It was within this climate, that I undertook to find out how educational psychologists within the service conceptualised dyslexia. I was interested to know that if we had a potential gatekeeping role in accessing the support services, would there be consistency of approach and opinion across the service and so parity of access to services. As the senior practitioner at the time, this was of importance to my role as I would be working at the interface of the two services concerned.

These factors were the motivation which led to the research paper which was undertaken to address a real world issue.

The remaining two papers were undertaken out of an interest in Assessment for Learning which had gained popularity at the time both nationally and locally, as a new initiative and approach to teaching and learning. I had had the opportunity in the couple of years or so before the commencement of this research paper, to be part of a LA funded project with regard to implementing Assessment for Learning approaches in local primary and secondary schools. This project ran over two years and was led in the LA by Shirley Clarke, a national lead practitioner and researcher/author in the field. Teachers involved in the project enthused at the success of the approaches and were keen to embed these across their individual schools. My interest in this subject arose as teachers involved in the project reported positive outcomes for childrens' learning and educational progress. The whole school and whole class approach to providing young people with more explicit information and feedback about their learning appeared to be very powerful. These reports from the project motivated me to research further the evidence base for the Assessment for Learning movement and its implications for educational psychologists.
As part of the literature review, I researched the role of teacher feedback and its impact on pupil learning. This is a core part of the Assessment for Learning initiative, referred to as ‘formative assessment’ i.e. information that is used as feedback to modify the teaching and learning process. This area of the research resonated with the work of the educational psychologist supporting teachers to improve learning outcomes for children and young people.

In the third research paper, I was able to explore the role of pupil feedback with a teacher in a junior school classroom using a collaborative action research methodology. The research took place in a school in which I work, where Assessment for Learning practices were considered to be embedded and pupil feedback was seen to be integral to this approach. This presented a good platform from which to explore the processes in more detail. The collaborative working with the teacher was an opportunity to build on and extend current consultation practices to use an action research model. Encouraging teachers to reflect on their practice and to work with them on this process is central to the work of the educational psychologist and this was a research opportunity to formally consider how working together might improve outcomes for young learners.
Section 2: Research Papers
2.1 Research Paper 1: How dyslexia is conceptualised within the North Yorkshire educational psychology service

2.1.1 Introduction

2.1.1.1 Organisational context of the study

This study takes place within a large, predominantly rural County with accountability for 388 schools and 138,000 pupils. Integrated service areas have recently been formed across the County with the creation of new administrative boundaries. In line with these localities, special educational provision has been extensively reviewed and restructured and new networks of provision for different areas of need have been established. Within each network, there will be locality based enhanced mainstream schools. Teaching staff from these enhanced schools will be responsible for the outreach functions formerly carried out by centrally employed staff. With regard to dyslexia, the secondary based enhanced mainstream school for specific learning difficulties will provide support for both the primary and the secondary schools in their locality. Over time, it is planned that these enhanced secondary schools will also provide full time, in-reach support for a small number of pupils who would have a Statement of Special Educational Needs with a primary need of specific learning difficulties.

The educational psychology service has likewise been restructured to provide a number of specialist and practitioner posts directly linked with the areas of need served by the networks. Alongside this, a changing role has emerged for the educational psychologist, as it has been agreed that school staff wishing to access support for a young person from the enhanced mainstream school, must consult with and secure agreement from, their designated school educational psychologist.
2.1.1.2  **Dyslexia – local reference points and guidance**

Within this Local Authority (LA), the educational psychology service has contributed to the development of LA policy with regard to dyslexia and so currently takes this authority document as its main reference point when working with children and young people experiencing literacy difficulties and/or the staff who support them. Specific guidance for or from the educational psychology service has not been devised and working practices, understandings and protocols have been shared with LA learning support staff, based on the LA guidance available.

This document, the Dyslexia Handbook (2007), (currently being re-written) which incorporates the LA Dyslexia Quality Mark, subscribes to the British Psychological Society (BPS) definition from the working party report of 1999, that is, in its shortened form and out of context; ‘**dyslexia is evident when accurate and fluent word reading and/or spelling develops very incompletely or with great difficulty**’ (BPS, 1999, p.18).

2.1.1.3  **Dyslexia – the national educational context**

Within the academic and popular literature available, and the private organisations dedicated to dyslexia, differing definitions are used and various perspectives adopted. Dyslexia is an area of learning need however, that has increasingly entered mainstream educational language and culture and has become a central part of national educational policy. Preparing for specialist provision for pupils with dyslexia was a key area for development recognised in The Children’s Plan (DCSF, 2007a), the government’s long term strategy for improving outcomes for children and young people. Government funding has since materialised for two major initiatives; firstly for the commissioning of Sir Jim Rose to make recommendations on the identification and teaching of children with dyslexia (Rose, 2009) and secondly for the financial provision to establish the ‘Dyslexia-Specific Learning Difficulties Trust’ which is a joint forum for leading dyslexia organisations. This forum has likewise published a major report about literacy, ‘No to Failure’ (2009), a campaign which promotes specialist teaching support for children and young people with dyslexia or specific learning difficulties.
Alongside the publication of these two key reports, the National Strategies have produced new teaching materials aimed at Quality First Teaching, i.e. Wave One provision for all children and young people, with regard to dyslexia (and speech, language and communication needs). The Inclusion Development Programme (IDP) (DCSF, 2008a) is a new style interactive e-learning resource for teachers which considers definitions, barriers to learning and dyslexia-friendly teaching approaches.

These national and governmental initiatives provide an influential context within which Local Authorities will determine their provision and policies.

2.1.1.4 The research issue

Within this local and national context, what are the views and opinions of educational psychologists? How do they conceptualise dyslexia and is there commonality in their views across the service? It is accepted within the NYCC service that most educational psychologists subscribe to the BPS definition of dyslexia and that over the past decade, practice and thinking will have been influenced by its prevalent use within the profession as well as in some educational and legal (e.g. tribunal) contexts. In the service there has been no shared CPD around the subject and assumptions are made about shared understandings. The relevance of this lies in the new role regarding access to additional provision. Without an agreed understanding of what is meant or intended by the term dyslexia, equal access and equality of opportunity for young people with literacy difficulties is at risk of being undermined. This study aims to explore the attitudes of staff and ascertain what they think about dyslexia.

2.1.1.5 Research questions

This study seeks to address the following research questions:

Research question 1: What views and perspectives about dyslexia are held by educational psychologists in NYCC?

Research question 2: Is there a collective/organisational view about dyslexia evident within the NYCC educational psychology service?
2.1.2 Literature Review

2.1.2.1 The Rose Report (2009) – a new definition?

Rose (2009, p.9) begins his commissioned report with the assertion that it is ‘now widely accepted that dyslexia exists’ as an ‘identifiable developmental difficulty of language learning and cognition’ and that long standing debates around its existence should be set aside in order to focus on developing expertise in identifying dyslexia and ways to support learners. The report details a new working definition of dyslexia and an associated set of descriptors. The definition is similar to that of the BPS but is perhaps more straightforward. The descriptors describe that dyslexia occurs across the range of intellectual abilities, so is synonymous with the BPS definition which has ‘no exclusionary criteria’ (BPS, 1999, p.19). The Rose report recommends regarding dyslexia as a ‘continuum, not a distinct category, and there are no clear cut off points’ (Rose, 2009, p.30). The Rose (2009) recommendation to consider how the individual has responded to ‘well-founded intervention’ which will be an indication of ‘severity and persistence of dyslexic difficulty’ (Rose, 2009, p.30), correlates to the latter half of the BPS working definition about appropriate learning opportunities. The Rose (2009) definition does not appear to be in essence vastly different from the BPS (1999) definition but is perhaps written in a more contemporary, straightforward style and will be accessible to a wider audience.

2.1.2.2 The construct of dyslexia

The conceptualisation of dyslexia is considered by Elliott and Gibbs (2008) in their exploration of the usefulness of the term. They challenge the viewpoint of dyslexia as an identifiable and discrete condition, adopting a more inclusive stance and questioning whether the term has educational validity. Their argument is linked to the adequate provision of resources for all children and young people with literacy difficulties and the potential barriers and exclusions that may arise from adopting the term dyslexia.
2.1.2.3 Attitudes about dyslexia – the case for Q methodology

There are many potential ways to explore the views held by people about a subject such as dyslexia; interviews, questionnaires, a Likert Scale, Personal Construct Theory for example. Cross (2005a) presents a convincing case for the use of Q methodology above these other approaches, to explore subjective opinion. Cross (2005a) believes that techniques such as the Likert Scale and the Semantic Differential scale and other self report measures have many advantages but are subject to high levels of responder bias; that participants’ responses may be influenced by affective factors and the processes involved are less robust and less systematic than those of Q methodology.

In considering the nature of attitudes, Bohner (cited in Cross, 2005a, p.208) refers to them as ‘context dependent, temporary constructions’. Simmons (cited in Cross (2005a, p.207) notes that ‘attitudes imply evaluation and are concerned with how people feel about an issue’. This is pertinent to the area of dyslexia which often evokes quite strong opinions and views.

Q methodology is applied over many academic disciplines, but has its roots within psychology, originating in the 1930s from the work of William Stephenson whose aim was to examine subjectivity in participants by their active engagement with the task of rating a set of items. Q methodology focuses on viewpoints or constructions that are made by participants and not the participants or ‘constructors’ themselves (Stainton Rogers as cited in Cross, 2005a, p.209) – in this regard it differs from other methodologies. It is this correlation of people which indicates the existence of similar viewpoints within a given group of respondents.
2.1.3 Method

2.1.3.1 Rationale for methodology

This study seeks to address the 2 research questions identified above by the use of a Q methodology. The choice of a Q methodology was based on the key principles inherent within the approach described in the previous section. This methodology was felt to be the most effective means by which to investigate the research questions which are exploratory in nature.

2.1.3.2 Project details

2.1.3.2.1 Participants, settings and timescales

The participants in this project were the educational psychologists of the North Yorkshire County Council Educational Psychology Service. North Yorkshire is a large, rural Local Authority. The research work was carried out in office settings across the County during the timescale December 2008 – June 2009.

No financial costs were incurred other than the time of the researcher and the use of paper for writing letters and providing the Q-sort materials. Participation in the research task was organised to ensure the efficient use of time for both the researcher and the participants, that is appointments were made to fit alongside existing and mutual diary arrangements.

2.1.3.2.2 Ethical considerations

Permission to carry out the research project in the North Yorkshire educational psychology service was sought from the Principal Educational Psychologist. The rationale for the project was detailed and an outline of the methodology given. No formal research ethics committee existed in the Local Authority at the time that the project was undertaken, but the project proposal (appendix i) had been written in agreement with the University course requirements, integral to which are professional and research based ethical standards.

The project was undertaken with regard to the ethical considerations and responsibilities recommended by the British Psychological Society (BPS) for psychologists engaged in research studies (BPS, 2004). Researchers are reminded of their obligations towards participants in terms of informed consent, anonymity, confidentiality, the right to withdraw etc. The Code of Ethics and Conduct (BPS, 2006)
reflects the core values of respect, competence, responsibility and integrity which should underpin the work of any practicing psychologist. The researcher has taken account of both sets of guidelines in administering the research activities, and in the handling and storage of the data and associated documents.

A personalised, initial letter of introduction and explanation was sent to all the service psychologists (*appendix ii*) inviting them to participate in the study. Informed consent was used throughout the duration of the project. Although participation in the study was voluntary and no incentives were offered, it was hoped that all educational psychologists would agree to participate, as the study was of interest and relevance to our professional role and taking part in the research also offered a potential opportunity to discuss issues around the topic.

Additional information was provided in written format to participants in the study at the time of their interview (*appendix iii*) which further explained that responses within the study would be kept confidential and that individual participants would not be identifiable from the report of the study. Permission was also sought to record any discussion about the project that might take place.

All the service psychologists willingly agreed to participate and no participants expressed any reservations about the study.

Given the size of North Yorkshire and the geographical spread of office bases and teams, every effort was made to include a representative sample of staff in the Q sort interviews that were recorded.

Colleagues who took part in the pilot study were then not included in the main project.

All participants received an individualised letter of thanks following their participation in the project (*appendix iv*).

It was agreed that a summary report of the study would be produced for colleagues to inform them of outcomes and implications of the project; this is accepted practice within the NYCC educational psychology service as much action research is undertaken within existing Research and Development Groups.
2.1.3.2.1.3 Development of the Q-sort statements (the Q-set)

A focus group was held as the first stage in generating the statements required for the Q-set – this is the collection of 'heterogeneous items' which the participants will sort (Watts & Stenner, 2005). The focus group was held with 6 educational psychologists from the north/east of the County, using a scheduled professional development session. The discussion was facilitated by the researcher around the open ended question ‘What do you think about dyslexia?’ The discussion focussed on definitions and conceptualisations of dyslexia rather than on assessment and subsequent intervention. The focus group discussion lasted for 40 minutes and was tape recorded with permission.

A transcript of the focus group was produced and an analysis of the words and sentences used in the discussion was carried out independently by both the researcher and an educational psychologist colleague from another Local Authority. Key words and phrases were highlighted that were thought to directly address the question ‘what do you think about dyslexia’ (see appendix v for a highlighted sample from the transcript). These analyses were compared by the researcher and inter-rater reliability, the measure of agreement between the codings, was high. This was not statistically compared using a software programme which assess the codings made by specialists of open-ended qualitative data such as that of a focus group transcript (Howitt & Cramer, 1999) but was completed in a manual exercise. 14 statements from the focus group dialogue were then produced for use in the Q-set (i.e. the set of statements used in the Q-sort), sometimes referred to as a Q-sample (McKeown & Thomas, 1988).

Some editing and adaptation took place, but as little alteration as possible was made to the actual words used so as to capture the articulations of educational psychologists as precisely as possible. A further 11 statements were then identified from the academic literature concerned with definitions of dyslexia and from general discussion and professional experience and involvement around the subject.
A distinction is made in the Q literature (e.g. McKeown & Thomas, 1988) between the sourcing of different types of statements; those from the focus group would be considered to be ‘naturalistic’ or from the ‘real world’ of the participant group and those from the literature review as ‘ready-made’. It is possible to combine statements from both sources in a ‘hybrid Q-sample’, as was the case in this study. In total, an initial 25 statements were identified for use in the Q-set for the pilot study.

The focus group provided a forum in which to explore a dimension of the ‘concourse’ around the conceptualisation of dyslexia. Concourse is a technical term used in Q methodology to refer to the collective dialogue that exists around any subject from which the Q researcher selects a sample of statements. Brown (as cited in Van Exel & de Graaf, 2005, p 4) refers to this as ‘the flow of communicability surrounding any topic in the ordinary conversation, commentary and discourse of everyday life’.

2.1.3.2.4 Pilot study

A pilot study was carried out with 5 educational psychologists (3 from North Yorkshire and 2 from other Local Authorities). Participants in the pilot study were asked to complete the Q-sort and provide feedback about the number of statements, any duplication, ambiguity etc and to consider any statements that might be considered to be missing. After completion of the activity, a discussion was held as to how the statements had been placed within the grid provided and any difficulties experienced. This feedback was recorded and transcribed in order to aid further modification of the research task.

As a consequence of the pilot study, a number of alterations were made to the Q-sort materials for use in the research project. The language on the grid was altered to be more positive and less misleading i.e. the word 'neutral' was removed from the centre of the grid and the continuum renamed as ‘least agree’ to ‘most agree’. The numbers above each column were also removed as these are not necessary for the participants to take account of and are potentially misleading or distracting. They are only useful for the purposes of the researcher.

In addition, the number of statements was altered from 25 to 24 and the wording of 2 statements was changed; one to be less ambiguous and one to include a dimension that was thought not to have been covered in the previous set of statements. A table of the statements and the source from which they were selected or generated is included in appendix vi.
2.1.3.2.5 The Q-Sort materials and procedure

After sending out initial letters of introduction to the study, each educational psychologist in the service was then contacted by telephone by the researcher, as indicated in the letter. An appointment was made to meet on an individual basis in the local office base of the participant in order to carry out the Q-sort task. A quiet workspace or separate room was found. Those colleagues who were unable to meet face to face carried out the activity by themselves after further explanation on the telephone and returned the Q-sort by post. A stamped addressed envelope was provided.

In order to complete the research task, each participant was presented with the materials for the Q-sort. These were as follows: a further letter of explanation (appendix iii – see above), a set of 24 numbered statements cut up into squares the right size to fit the grid (appendix vii), a response grid of 24 boxes on a sheet of white A4 (landscape) paper in a normal distribution shape (appendix viii) and the conditions of instruction on a laminated card (appendix ix) which were a reminder of the verbal instruction given by the researcher.

The ‘condition of instruction’ was given to sort the Q-set items (McKeown & Thomas, 1988) according to the question ‘what do you think about dyslexia?’ The condition of instruction is a guide for the participants, which in this study was very simple and straightforward. The participants were asked to consider the question and to rank the statements from most to least agree, assigning each statement a ranking position in the fixed quasi-normal distribution shape of the response grid (Watts & Stenner, 2005) using a forced distribution method. It was explained that the task involved the relative positioning of the statements and that disagreement was not necessarily inferred by placing statements at the ‘least agree’ end of the spectrum; this had seemed to be an important observation from those who took part in the pilot study.

No time limit was imposed and participants were left alone to complete the task.

Following completion, the statements were then secured to the grid with sellotape or the number assigned to each statement was written in the boxes of the grid.
Participants were then asked to describe how they had approached the task and their views about both the process of doing the Q-sort and the content of the Q-set were sought. This was an open-ended and informal interview as it is recommended that additional qualitative information can be useful to aid interpretation of Q-sort data results (van Exel, 2005). Participants were invited to reflect on their point of view and in particular the extremes of their Q-sort.

All discussions were tape recorded with permission and later transcribed.

**2.1.3.2.6 Data collection**

The Q-sort was administered with 21 educational psychologists, including the researcher. 11 of the Q Sorts were administered on an individual, face to face basis with a follow-up interview and 10 were completed by the participants alone and returned by post to the researcher. It was felt by the researcher that this mixed method of data collection was valid, as in either case, the participant completed the Q-sort independently as it is a 'self-directed' process (Cross, 2005a); there was no interaction with participants who completed the Q-sort with the researcher present whilst they were engaged in the task. (Further comment on this matter is given in section 2.1.5.2.3).

This response rate represents 100% of the North Yorkshire educational psychology service available for work at the time of the study (one member of staff was absent on maternity leave).

**2.1.3.2.7 Data analysis**

Each Q-sort was coded P1 – P21 to represent the 21 participants in the study. The grids were then coded 1-9 along the 9 columns (1 at the 'least agree' end of the spectrum, 9 at 'most agree'). A data set was then generated in the computer software programme Statistical Package for the Social Sciences (SPSS version 16.0), entering for each participant the 1-9 value that they had given to each of the 24 statements. The data was then factor analysed using SPSS. Specific dedicated software packages exist to process data from Q-method studies (e.g. PQ method) but the core procedure of factor analysis remains the same.
A factor analysis was carried out in order to reduce this set of data into a smaller, more manageable, number of identifiable ‘factors’ or components. Factor analysis seeks to detect the relationships (i.e. the factors) that may be found within a set of variables, in this case the Q-sorts or viewpoints of the participants. In Q-method, the variables ‘are the people performing the Q-sorts, not the Q-sample statements’ (McKeown & Thomas, 1988, p. 17) and the statistical technique used within the methodology i.e. a by-person factor analysis seeks to ‘correlate people not items’ (Squires, 2007). Factor analysis will reduce data by exploring its underlying structures ‘by looking at which variables seem to cluster together in a meaningful way’ (Field, 2005, p 621). As no two Q-sorts/variables are likely to be the same, (it would be highly improbable that participants would place their statements in exactly the same position) there will usually be in fact as many components or factors as there are variables (Squires, 2006) (i.e. 21 Q-sorts or viewpoints in this study). Factor analysis however, aims to extract factors which represent the significant and cohesive grouping of variables i.e. the grouping of those participants who share similar viewpoints on the topic (van Excel, 2005), who ranked their statements into similar patterns of preference.

The specific way in which the data is analysed can vary. The computations within the programme seek to extract factors which take account of the variance, or dispersion of the variables. Q-methodology by convention uses a Varimax rotation of the data (e.g. Cross, 2005; Hymans, 2006) ‘as this automatically seeks mathematically superior solutions to the amount of variance explained by the extracted factors’ (Hymans, 2006).

Field (2006, p 637) recommends Varimax as a ‘good general approach that simplifies the interpretation of factors’ and suggests its use when the extracted factors are expected to be independent rather than correlated, (although points out that all data from humans must in some way be related or correlated!). In the present study, it was anticipated that a number of distinct or discrete viewpoints would emerge, although obviously related to the same subject. Field also explains that a Varimax rotation seeks to identify interpretable clusters of factors by loading a smaller number of variables more highly on to each factor. A Varimax rotation was therefore carried out on the data from this study (see section 2.1.5.2.6 for further discussion of this issue).
From this statistical process a number of significant factors or components emerge. SPSS graphically represents all these extracted factors in a scree plot diagram (appendix x). This simple graph illustrates the eigenvalues of each factor in an accessible format; the visual picture it portrays indicates clearly the most important factors to emerge from the factoring and rotation of the data (Squires, 2006). The eigenvalue is the amount of variance (dispersion) accounted for by each factor.

Hymans (2006) reports that for the factor to be interpretable, in addition to it having an eigenvalue in excess of 1.00, it must also have at least 2 Q-sorts that load significantly on to it alone. These criteria are met for all 3 factors in this study.

Given the scope of this research project, it was decided to focus only on the 3 dominant factors that were extracted from the Varimax rotational procedure.

A table of values is produced within the SPSS programme which illustrates how each participant correlates with or loads onto the specified factors, using a scale of +1 to -1 (appendix xi). The SPSS programme does not set a level of significance for this loading (to aid selection of participants) as is illustrated in some studies (e.g. Cross, 2005b) but manual reorganisation of the tables to show the figures in descending order for each component or factor, clearly indicates those participants who are most strongly loaded onto the factor (appendix xii).

It was then possible to manually select, for each of the three factors, the 5 participants most highly loaded on to the factor, all of whom had a factor rating of above 0.5 (i.e. a higher level of significance than most commonly used).

From these 5 participant Q-sorts, their pattern of responses was examined and the 6 statements that they had most agreed with were collated and their frequency tallied. From this procedure, taken alongside any open ended interview data that was available, it was possible to identify the statements that were most representative of each factor, and hence to ‘name’ the factor.
Further analysis was carried out to identify which participant or Q-sort might be most representative of each factor – a ‘factor exemplar’ or best estimate of the factor as it is referred to the Q literature. Convention within Q-method suggests that a Q-sort which loads significantly onto one factor alone can be highlighted as a factor exemplar (Stenner & Stainton Rogers, 2004). Using a significance level of 0.5 as above, exemplars were so identified for each factor in the study; those that correlated with the factor at the highest level. It is sometimes the case that a participant loads significantly on to more than one factor, known as a ‘split loader’; these participants would be excluded from these criteria.
2.1.4 Results

2.1.4.1 Findings from the study: The 3 Factors

Following the above data analysis, the findings of the study were focussed on the identification of the three main factors which emerged and the statements which were most strongly associated with each factor. Figure 1 below represents the study findings in a visual format.

It can be seen that the researcher has selected the 5 or 6 most significant and representative statements for each factor and has highlighted those statements which are common to more than one factor. This representation shows that 2 of the statements (18. Dyslexia is not related to intelligence, race or social background and 14. We should not waste time trying to define dyslexia but focus instead on what needs to be done to support pupils.) were common to all 3 factors and so represent the most positively expressed viewpoints.

Attributing a ‘name’ or a label to the factor may seem arbitrary as it is difficult to combine a number of statements containing different elements, but an attempt is made to encapsulate the viewpoints as follows:

Factor 1: (18, 14, 9, 24, 16, 2) a viewpoint embracing the importance of social justice and equality with regard to a complex learning difficulty, with the BPS definition as a point of reference;

Factor 2: (18, 14, 9, 12, 7) a viewpoint again reflecting the social equality point of view and use of the BPS definition, but characterised by some confusion and hence lack of reference to the word;

Factor 3: (18, 14, 12, 7, 13) a viewpoint with the same reference to equality, and confusion as in factor 2, but a pragmatic approach is adopted using the word to help raise teacher expectation.

Common to all 3 factors: A view of dyslexia reflecting equality and diversity and a focus on the need for support and intervention rather than on further theorising about the definition.
Using the word dyslexia can help to raise teacher expectation.

We should not waste time trying to define dyslexia but focus instead on what needs to be done to support pupils.

Dyslexia is not related to intelligence, race or social background.

I rarely use the word dyslexia in my reports.

The range of definitions makes dyslexia a confusing concept.

Factor 1

It is important to me that the BPS definition of dyslexia is non-discriminatory.

I think that dyslexia is a complex learning difficulty.

Pupils with moderate learning difficulties can also be described as dyslexic.

Factor 2

I favour the BPS definition of dyslexia above any others – it is a 'best fit' for me.

Factor 3

Using the word dyslexia can help to raise teacher expectation.

Dyslexia is not related to intelligence, race or social background.

We should not waste time trying to define dyslexia but focus instead on what needs to be done to support pupils.

I rarely use the word dyslexia in my reports.

The range of definitions makes dyslexia a confusing concept.

Figure 1. Venn diagram presentation of the statements most representative of the 3 factors (presentation adapted from Cross, 2005b)
Figure 2 below lists the 3 Q sorts identified as factor exemplars, those Q sorts most representative of the factor

**Factor exemplars:**

Factor 1  P4  
Factor 2  P21  
Factor 3  P6  

**Table 1. Exemplars for each factor**

Additional interview data was available from the 3 participants who completed the Q-sort 'exemplars'. This qualitative data provides supplementary viewpoints or articulations that reinforce or reflect the ranking decisions that were made in the Q-sort. Some examples are given below which can be seen to substantiate the different factor labels;

**Factor 1/ P4** discussed a belief that for educational psychologists to work with young people with dyslexia a confident viewpoint should be held and that it was not beneficial to feel confused by the definitions. Recognition was given to dyslexia as a 'complex term' but a strong opinion was expressed about not wasting time on this issue.

**Factor 2/ P21** talked about her view that agreement in the service would be helpful as she did not know what other colleagues thought about the subject. The action around dyslexia was important, rather than the definition and a view was expressed that labels in general were not used.

**Factor 3 / P6** expressed his view that the BPS definition was not especially helpful, that it was too broad (statement 9 about the BPS definition as 'best fit' does not appear in Factor 3) and that he experienced confusion with the terms dyslexia and specific learning difficulties and that in general labels were not helpful, except that they can raise teacher expectation in the case of dyslexia. Dyslexia was seen as a difficulty found across the range of ability.
2.1.4.2 **Analysis of study findings**

It is the researcher’s view that the research questions upon which the study is based are addressed by the factors that emerged and are described as above. The statements common to all three factors are consistent with the non-exclusionary foundation of the BPS definition (although the original statement is taken from the Dyslexia Action definition) and are reflective of the Rose (2009) sentiment to leave aside the debate about the definition and focus on support and intervention instead. Perhaps the debate has exhausted itself and become meaningless over time. In answer to research question 2, *Is there a collective view of dyslexia within the educational psychology service?*, these overlapping elements of the factors indicate that there are some shared beliefs and viewpoints among members of the service.

2.1.5 **Discussion and evaluation of the study**

2.1.5.1 **Professional relevance of the study**

This study is of interest and relevance to the North Yorkshire educational psychology service. It is the first study of its kind to seek the views of the psychologists in the service about a subject which is a routine part of professional practice in working with children and young people.

The research process in itself has raised the topic for discussion within the service which has been useful in the preparation for the new role regarding the enhanced mainstream schools. This has highlighted the need for clarity and direction and for colleagues to have an increased awareness of accepted or developing service protocols.

The findings will also provide background contextual information for the development of local policy with regard to the new special needs provision.
2.1.5.2 Critique and evaluation of study

Various aspects of this study may be considered for scrutiny in terms of validity and reliability. The areas identified below are key points in a critical review of the research practice and decision making reflected in the study.

2.1.5.2.1 Generation of the Q-set

This is clearly a most crucial part of using a Q methodology. The generation of the statements can be done in a variety of ways but is most commonly achieved through discussion, focus groups, interviews and reviews of both academic and popular literature (Watts & Stenner, 2005). The statements are fundamental to the administration of a Q methodology and are at the core of its ability to explore research hypotheses. Various steps were taken in this study to improve the face validity of the statements; the statements were carefully selected from focus group dialogue, moderated with another colleague and were altered as a result of the pilot study.

Despite this, as the study progressed and familiarity with the statements increased, the researcher was able to identify statements that were not in essence opinions, and were of a more factual nature (e.g. statement 12 ‘I rarely use the word dyslexia in my reports’). In addition, some of the statements were not directly relevant to the question being answered by the participants (e.g. statement 23 ‘I am familiar with the content of the BPS working party on dyslexia from 10 years ago’). The unstructured sampling technique (McKeown & Thomas, 1988) used in this study to identify the statements for the Q-set may not have been robust enough to ensure the appropriate selection of statements in terms of their relevance, terms of reference and also comprehensive coverage of the range of dimensions within the topic of discussion i.e. the conceptualisation of dyslexia, in this case. This issue may be addressed using the strategy illustrated by Hymans (2006) whereby, having generated statements solely from a literature review, he ‘loosely’ grouped them into 9 broad themes to ensure adequate coverage of a range of perspectives within the topic under exploration.

This study used a comparatively small 24 item Q-set than is usual in Q methodology. Figures of Q set items between 40 and 80 are commonly quoted (e.g. Watts & Stenner, 2005). The ratio of items to participants was statistically valid as there needs to be more items than participants to factor analyse. The study could have incorporated more items which may have led to the extracting of different factors.
2.1.5.2.2 Running a focus group

The running of a focus group in order to generate statements for the Q-set, makes this study a multi-method project as the focus group in itself is characterised by methodological protocols.

Willig (2001) notes the increasing popularity of focus groups as an alternative to semi-structured interviewing. The focus group serves as a ‘group interview that uses the interaction among participants as a source of data’ (Willig 2001, p.29). Willig (2001) describes the role of the researcher to be one of moderator; the person who will not only set the boundaries for the discussion, but who will facilitate and re-direct the discussion if necessary and encourage the participation of all group members. It is hoped that the interaction of group members will act as a stimulus and encourage a rich and varied dialogue, although depending on the subject matter, this may not always be the case and perhaps a focus group may not be appropriate (e.g. for sensitive or personal issues).

Willig (2001) notes that focus groups compare well to interviews as they are likely to have higher ecological validity; the focus group provides a setting that is more real and natural than that of an interview which can be potentially more inhibiting for participants. In this study, it was felt that the focus group was in effect a more formal situation of what commonly takes place in the service when colleagues meet together and hence was ecologically valid. In addition, the focus group was held in a familiar office location and was opportunistic in that a regular professional development session was used, therefore no recruitment was involved. Participation was obviously voluntary after an explanation of the purpose of the group was given and ethical considerations explained.

In the present study, the focus group was made up of 6 educational psychologist participants who knew each other well as they were members of the same team within the service i.e. what is referred to a ‘pre-existing’ focus group. Willig (2001) recommends focus groups should contain no more than 6 members in order to optimise participation, although some sources suggest a figure higher than this (e.g. Gibbs, A., 1997).
A critique of the focus group in this study would include the role of the researcher in the group and the high level of skill required to facilitate a discussion and manage the process without unduly directing or influencing the dialogue. Central to this, is the importance of ensuring that no one participant dominates the discussion; an analysis of the transcript following the focus group discussion in this study, showed that one participant had in fact said significantly more than the others, but this was not perceptible to the researcher as the discussion was taking place. Irrelevant, tangential discussion also required re-focus to the main topic under discussion in the group. Facilitation was required to ensure that all views were valued and explored and that participants did not feel pressurised to agree with what might emerge as a dominant or seemingly more acceptable viewpoint.

After focus group participants had completed their Q-sorts, some months after the focus group discussion, they were asked out of interest whether they recognised any of the statements from the focus group, but recall for this was poor.

For the purposes of future Q studies of this kind, the researcher would recommend the convening of a ‘homogenous’ rather than ‘pre-existing’ focus group (Willig, 2001) where members of the focus group share key interests and concerns but are not already an established group of some kind. In the context of the present study, for example, the make-up of the group might have included alongside educational psychologists, personnel from schools (e.g. teachers, SENCos) and the educational support services (e.g. learning support teachers), all of whom would hold a view about the subject of dyslexia. A more disparate group may have generated a broader, more varied discourse from which to generate statements.

2.1.5.2.3 **Self versus interview administration of the Q-sort**

The present study does encompass a mixed methodology in terms of the data collection. It was noted in section 3.2.6 that this was felt to be justified as the researcher was not involved in the process of completing the Q-sort. In addition to this, Van Tubergen and Olins (1979) report from their comparative studies (as cited in van Exel, 2005), that results from Q-sort self-administration are highly congruent with those from personal interview administration, so that it is valid to conduct Q-sort research remotely.
In response to this finding, van Excel and de Graaf (2005) state that face to face interviews have the advantage of providing more qualitative information which will aid the interpretation of results. Clearly not in favour of mail based Q sorts, van Excel and de Graaf recommend that their use be considered only where there is no alternative, such as when there is a wide geographical distribution. This was certainly the case in the present study as the distances involved and the time implied in attempting to interview all staff would have been prohibitive.

2.1.5.2.4 The condition of instruction
The condition of instruction in Q method i.e. the actual instruction to the participant and the question being addressed can vary in complexity. Whilst the core task remains the same, the language and the process involved for completion may differ. By convention, participants are asked to sort the statements in stages, by selecting them into different categories before placing them on the response grid. In this study, a simplified instruction was given as the number of statements used was smaller than is typical in Q-method so the task of sorting along the dimension of agreement was less overwhelming. The condition of instruction was consistent throughout the study.

2.1.5.2.5 Statistical analysis – choice of software
The choice of software in this study was a pragmatic one. SPSS was chosen to factor analyse the data rather than specific Q software, due to its availability, reliability and access to programme support and guidance from literature, handouts and colleagues. As a first attempt at a Q-study, it felt that SPSS was a more conventional software package to use that was able to factor analyse the data in the required way.

2.1.5.2.6 Statistical analysis - Varimax versus Equamax Rotation
Although the findings of the above study are based on the output of a Varimax rotation, a further rotation of the data was trialled using Equamax within the SPSS programme. Equamax is one of three possible methods of orthogonal rotation, Varimax and Quartimax being the others. In orthogonal rotation, the axes along which variables are plotted, are rotated to pass through clusters of data but remain perpendicular (Field, 2005) and so can alter how variables are loaded onto each factor. The different methods of rotation offer different ‘views’ of the data, as the data is treated differently by each method of rotation.
In the present study, both the Equamax and the Varimax rotation produced 3 distinct factors. The loadings for each factor were very similar for factors one and two but differed significantly for factor three (tables are available from the researcher). Varimax and Equamax produced almost opposite loadings for factor three. Field (2005) reports other findings that results from Equamax can be unreliable and erratic; therefore, alongside the more common use of Varimax in this type of study (as described above) the decision to use a Varimax rotation was justified. In addition, the 3 factors from the Varimax rotation accounted for more variance than the Equamax rotation, using the process of discounting any participant who does not load significantly onto only one factor (thereby including 16 of 21 participants in this study).

2.1.5.2.7 The restrictions inherent in a Q-set and the role of the Q researcher

Related to the issue of generating the Q-set and ensuring relevance and breadth etc, is the concern around whether the participant is fully able to express their viewpoint from the given materials. The role of the researcher in Q, is one of editor, selecting or devising the statements from which a ranking distribution is then made by a participant. This is a hugely influential position which determines the parameters of the whole study. The choice of statements from the concourse is therefore inevitably determined by the researcher’s own understandings, knowledge and constructs and is filtered through this stance. Even though steps can be taken to draw the statements from the real world, the Q-researcher is still placed in a highly subjective and interpretive role. This is level of subjectivity could potentially limit or restrict the breadth or nature of the Q-set.

Whilst opportunity was offered in this study for informal interview about completion of the Q-sort, it was noted by the researcher that no participants generated their own statements when asked if they felt that they had been given opportunity to express their viewpoint. Perhaps this is difficult to do when asked without preparation, although having been immersed in the sorting task and thinking about conceptual priorities, it was surprising that more suggestions were not forthcoming. This may indicate that in fact an adequate selection of statements was made.
Whilst the ‘forced’ distribution technique was used in this study, as in many Q-studies, it may be too that this was a limiting factor in the process. As a novice Q-researcher, it felt reasonable to use the standard forced distribution format in this initial Q study. It is acceptable however within Q methodology, to use a ‘free distribution’, a more random placing of the statements in the grid, where participants are allowed to assign any number of items to any of the available ranking positions (Watts & Stenner, 2005). This would overcome potential conflict felt by participants in the forced method as participants may want to agree or disagree with more statements than is possible by the distribution shape. In the present study, the researcher focussed on the relative positioning of the statements and used the wording ‘least to most agree’ along the continuum rather than ‘most agree to most disagree’ which is technically more in keeping with Q technique (McKeown & Thomas, 1988). It was felt also that this language was less ambiguous as it avoids possible problems with double negatives which can cause confusion for participants, as was highlighted in the pilot study.

2.1.5.2.8 Participating in a Q-sort within an identified group and response bias
Researcher observations from this study include some consideration of the implications of taking part in a Q-sort project where the participant, settings and organisation are well known to the researcher. This is also likely to be the case in other methodologies, such as undertaking researcher interviews within one’s workplace for example. Whilst assurance is given to participants about the final study not containing any identifying information, the actual responses of the participant are known at the time of interview and/or Q-sort completion, which may be of concern to some participants. It is common research practice for responses to be coded in some way so that participant data can be traced or referred back to (e.g. for the purposes of recording gender, age, experience, etc) and so individuals are potentially ‘recognisable’ to the researcher. It is possible that participation as it was in this study may have resulted in colleagues feeling that their viewpoint would be identified at least to the researcher and so this may have restricted or confined their ranking of the statements, feeling it was not acceptable or diplomatic to express their own judgments or certain points of view; what is referred to as response bias (Waters et al 1985, cited in Squires, 2007). The only way to overcome this would be to complete the study entirely by mail and ensure response sheets were in no way coded and so were entirely anonymous (but see section 2.1.5.2.3 above).
2.1.5.2.9 **Researcher reflexivity and researcher bias**

The face to face nature of the Q interview methodology (as recommended) requires the researcher to be insightful about power positions, hierarchy, status, values etc that are inherent in the researcher-participant relationship. In this study, the researcher was aware that responsibility and interest in the area of dyslexia as a formal part of the researcher’s job description, could act as a potential barrier for the participant. Robson (2002) notes that such issues will always be present in research studies involving humans and that steps should be taken to ensure that researcher reflexivity will result in less researcher bias. Although bias may be minimised and steps taken towards apparent impartiality and objectivity, Willig (2001, p.7) observes from historical research perspectives that this ‘may obscure the fact that the researcher’s identity and standpoint do fundamentally shape the research process and the findings’. It is important therefore for researchers to adopt a reflexive stance at all times throughout the research process.

2.1.5.2.10 **Methodology – qualitative or quantitative?**

Q methodology deals with data at both a qualitative and quantitative level and involves processes from both paradigms. The core material it is dealing with is qualitative data (i.e. sets of statements and how they have been sorted) but this is handled using quantitative (statistical) methods (e.g. factor analysis). The statistical output is then in turn subject to qualitative analysis and is in fact highly interpretive. Q protocols recommend that interviews are given with participants to explore their Q-sort decision making. This is to aid interpretation and is another qualitative aspect of the methodology.

Watts and Stenner’s (2005) introductory paper on Q methodology seeks to offer practical guidance to qualitative researchers and to encourage the use of the methodology within a qualitative context. They describe (Watts & Stenner, 2005 p.85) Q methodology as a methodology where ‘subjective input produces objective structures’ and note that, in comparison to other qualitative methodologies, ecological validity may be considered to be compromised due to the processes involved. Conversely, they describe the demands of the ‘interpreting researcher’ within the methodology. Watts and Stenner (2005) refer to Q methodology as being unusual in qualitative research methods as it has many quantitative aspects central to its application.
Q methodology is regarded by most researchers as neither purely qualitative nor quantitative. It is a method that integrates practice from both approaches, forming in the process a methodology that is distinctive and discrete. Stenner and Stainton Rogers (2004) refer to this with a newly devised term; qualiquantological, which embraces the ‘hybridity’ of the methodology.

2.1.5.2.11 Limitations of the study
This study may have benefited from further statistical analysis on the data which may have led to more enriched findings, for example, considering the negative views expressed. Given the scope of the project, the researcher chose to focus on the positive views expressed and the 3 dominant factors. It is possible that more findings could be extracted from the data. Use of a q-specific software package also would be of interest to consider the factor profiles that emerge.

As this study is set within one LA and seeks the views of only the educational psychologists within that LA, its findings cannot be generalisable to other LAs or other educational psychology services. Its findings are only of relevance, interest and significance to NYCC.

The use of a Q methodology to explore views in this context can be used by other colleagues however, and perhaps this illustration may encourage them to do so.

2.1.5.2.12 Positives about the study
Although the above section highlights the many aspects of this study which could be improved, there were several elements of the project which worked well and had positive outcomes.

The participation and interest of colleagues was to be commended and the project seemed generally to be well received. In the course of introducing and carrying out the research work, positive attitudes and approaches were encountered at all times and as noted in the study, all colleagues took part without coercion, despite busy schedules, competing priorities and demanding workloads. Colleagues appeared genuinely interested in the Q methodology as it was unfamiliar to most service members, other than those engaged in doctoral studies. The novelty factor perhaps helped to capture interest and enquiry. Engagement in the task was apparent too, as some thinking was required in order to complete the activity.
The straightforward administration and clear nature of the task was appreciated as colleagues felt immediately comfortable with the research activity, perhaps assured by the knowledge there were no right or wrong answers, only opinions and viewpoints. Colleagues observed that the activity had also forced them to consider their viewpoint on dyslexia and to re-visit their thinking on the subject. Such an invitation to reflect on professional practice is usually welcomed. Meeting up with or speaking on the telephone with colleagues also provided a useful and valuable opportunity to discuss any pertinent issues and exchange views about the topic, once the research task had been completed.

It has been interesting to seek views within the service as this is rarely done in any formal way. Despite much discussion and debate over a range of issues, systematic collation of the views within the educational psychology service would not be commonplace.

2.1.6 Conclusions

2.1.6.1 Reflective evaluation as a novice researcher

This project has been interesting and challenging as a novice researcher. I have learnt much about Q methodology as this was my first experience of carrying out a Q study. I feel as if I have learnt more about the methodological issues than I have about the content matter of dyslexia. Q methodology has not been an easy subject to think and write about as, although its administration is straightforward, it requires some understanding of statistics to appreciate its findings. Unfamiliar with both the statistical processes involved and with the SPSS software, it has required much reading to understand the basics of Q methodology. This study has been carried out on the basis of a partial but increasing understanding of Q. I have attempted to learn the basic format, processes and principles of the methodology. At each step of the process, my knowledge and understanding has increased and I benefited from some exploratory dialogue with colleagues. It is evident however, that considered use of a Q methodology requires advanced understanding and knowledge of the complexities of the statistical techniques. Certainly, much Q literature assumes an understanding at this level.
I feel that from the choice of methods available to sample opinion or viewpoint, Q has been an interesting and effective choice. Patterns emerged from a rigorous process which elucidated the viewpoints held in the service.

I chose to write this report in the third person, the more traditional voice of research reports and assignments. The effect of this in the narrative, however, is to somehow distance the researcher from the decisions taken within the project and to deny the central role of the researcher in the research process. The researcher is very much a part of what is happening in the project, influencing events either consciously or subconsciously. The presence of the researcher at interview, their style and personal interactions, the decisions taken, all affect the research process and the relationships with participants. The first person narrative is therefore a more accurate and possibly more open and honest voice to adopt for research purposes.

2.1.6.2 Suggestions for further work

Further work is required within the educational psychology service to formally and more openly and explicitly agree on the definitions we will use as a service (but not to spend too much time on this matter as colleagues have indicated through the research project that they feel this will not be time well spent), the documents that will be our reference points and how new documentation and key finding will be incorporated in to current practice and thinking. Psychologists clearly do not want to spend time theorising about definitions so may prefer to focus on the assessment, support and intervention aspect of the work around dyslexia rather than its conceptualisation. This could be done through in house training sessions and promotional literature that is compatible with the wider LA view. With staffing changes and turnover, it is important that this work is regularly re-visited to ensure confidence and clarity within the service. This study has been helpful in illustrating that confusion is a concern for some staff which is an issue that should be addressed. The publication of the Rose report (2009) also needs to be incorporated into service knowledge and practice and may in turn influence viewpoints over time.
2.1.7 Appendices

Complete data sets, notes and transcripts of all interviews held can be made available from the researcher.

2.1.7.1 Appendix i - Action Research Project Proposal

Student: Sharon Coman
Course: Doctorate in Educational Psychology (DEdPsy)
Tutor: Dr Garry Squires

Provisional Title: Dyslexia: What do we really think?

Background:

Over the past five years in North Yorkshire County Council (NYCC) there has been an extensive review of the Local Authority provision for children and young people with special education needs. After widespread consultation with all interested parties, a new structure for this provision has been agreed. Its phased implementation began in 2008 and has included a restructure of the Educational Psychology Service to link more directly with the newly formed networks which will provide both inreach and outreach support to schools on a locality basis. Within each of the networks there will be designated enhanced mainstream schools. It has been agreed that as part of the new arrangements to access the support of the enhanced mainstream provisions, that schools will, in the first instance, consult with their school educational psychologist to discuss and agree that a referral for outreach or in-reach is indeed appropriate.

Placement in the enhanced provision (secondary) for Specific Learning Difficulties requires a Statement of special educational needs. NYCC Educational Psychologists will therefore be placed in the position of identifying and assessing specific learning difficulties and approving access to additional external support. As there are 7 enhanced provisions for SpLD proposed across the County, the practice that emerges and the protocols that evolve around assessment and access to support will be moderated. Preparations for this process have highlighted the ongoing issues and controversies associated with the conceptualisation of dyslexia.
**Research questions:**

**RQ1** What views and perspectives about dyslexia are held by EPs in NYCC?

**RQ2** Is there a collective/organisational view about dyslexia evident within the NYCC EPS?

**Methodology:**

To use a Q-sort methodology to obtain data indicating participant agreement around identified factors or viewpoints. This will entail each participant (i.e. all EPs in the service) ranking a Q-set of 25 statements generated both from relevant literature and from a focus group of service EPs.

**Search strategy:**

**Journals:** Educational Psychology in Practice/ Educational and Child Psychology

**Websites:** www.googlescholar.co.uk  www.qmethod.org/about

**Databases:** PsycINFO / BEI (British Education Index)

**Keywords:** Q methodology / dyslexia / attitudes

**Key references:**

Hymans, M. (2006) What needs to be put in place at an operational level to enable an integrated children’s service to produce desired outcomes? *Educational and Child Psychology* 23 (4)


Elliott, J. & Gibbs, S. (2008 in publication) Does Dyslexia Exist
Dear Stephen

After the Easter break, I will be getting in touch with you to arrange to come and visit you with regard to a research project that I am undertaking for my university work which is also of relevance to our service.

I will be asking you to take part in an activity which will take approximately 30 minutes of your time. It is a straightforward task, completed on an individual basis, involving the rank ordering of a set of statements about dyslexia.

I would also like to take the opportunity to talk to you about any thoughts you have regarding our proposed role in the networks/enhanced provisions (SpLD) and about the Inclusion Development Programme (IDP) for dyslexia which was introduced briefly on our service day at Burn Hall.

I hope to be able to meet with you in the first half of the summer term, assuming we are able to find a mutually convenient time!

Thanking you in advance,
Yours sincerely

Sharon J Coman
Educational Psychologist
2.1.7.3 Appendix iii – Letter given to participants at the time of the Q-sort

Your ref:  
Our ref: SJC

Tel: (01609)
Contact: Sharon Coman  
E-mail: Sharon.coman@northyorks.gov.uk

Date: May 14th 2009

Dear Steven

Thank you for agreeing to participate in this research activity which is connected to my university work and is also of interest to our everyday EP work. In light of the proposed role of the EP with regard to the new enhanced provisions for SpLD, I think this activity is especially relevant.

I would like to find out about your views and perspectives on dyslexia. I will ask you to sort and rank a set of 24 statements along the dimension ‘most to least agree*. (Please ignore the numbers on the statements as these are for my recording purposes only).

The activity will take approximately 30 minutes. I will give you further instruction and if you are agreeable, may record any discussion we have about the decisions you make.

You will not be identified within the research report. Your responses will be kept confidential and anonymous.

I hope to feedback to the service the findings of the research.

I do hope you find the activity enjoyable and thought provoking!

With thanks for your interest and participation.

Yours sincerely

Sharon Coman

Educational Psychologist
Your ref:

Our ref:

Tel: (01609)

Contact: Sharon Coman
E-mail: sharon.coman@northyorks.gov.uk

Date: June 3rd 2009

Dear Stephen

Thank you for taking the time to complete the Q sort activity about dyslexia. Given the busy schedule we all have, your participation in the study is very much appreciated.

I hope you found the task to be of some interest.

I hope to feed back to the service following analysis of the results.

Yours sincerely

Sharon J Coman
Based on your everyday experiences, your discussions with people, the work that you do, I would be really interested to know what kinds of thoughts you have generally about dyslexia, as an issue, as an area of our work – would anyone like to start …

One of the things that I find quite tricky is that different people are working to different definitions and schools, Dyslexia Action and parents are often working with different understandings of the term and therefore when you are having consultations and conversations, you have to really be mindful that actually we may actually be talking about quite different things.

Absolutely... When parents ask me 'do you think he might be dyslexic?' I have a standard answer 'I don’t want to be clever here but if you tell me what you understand by the term ‘dyslexia’, I can probably tell you whether he fits those criteria, that’s what I usually start with .. same with teachers really as well.

I often do it just slightly different to you EP2, and I say “This is my understanding of dyslexia …” … it’s the BPS definition, quite a broad definition, and I would feel that therefore they would fit this criteria, you know, as long as they had been taught well, you know, the BPS definition …

I’ve certainly put that into reports actually – I’ve put ... Well, I’m totally confused really by the definition ... where I used to work they used the discrepancy model, so it was fairly clear cut .. if you did the WISC and you did the WORD and there was a discrepancy worked out and then they could have a Statement or whatever and now the longer I work as an EP, the less I feel I know and the less clear I am .. and I resorted similarly to EP4 … I found a definition, I don’t even know if it is the BPS definition… I don’t know … it’s in a book by Gavin Reid... and I say, well if that’s the definition then this child does or doesn’t meet it ... but I feel very confused ….

And I think it is confusing for parents because the definition that is in our dyslexic handbook is different from the definition that Dyslexia Action use ...

North Yorkshire have adopted the BPS definition, it is not quoted in its entirety, but the first part of it is used.

One of the dangers of adopting that definition is that it would include some of the kids who in our special schools (yeah, yeah from others) who have got very significant learning difficulties... could be described as dyslexic ...

But I don’t think there is a problem with that .... really. Because lots of different difficulties... you know... people can be dyspraxic ... could be described as dyslexic, there are lots of overlaps, and therefore I wouldn’t have a problem myself about calling someone with moderate learning difficulties also having dyslexia. I don’t think it should be an exclusive thing. When I worked in another LA we had the discrepancy model... if they were at the 3rd centile they weren’t dyslexic, but if they were at the 2nd they were - that to me is just a nonsense – and it was such an uncomfortable position to be in – you know, parents were waiting to see which exact centile they were in ...

Like smoke going up...

Well exactly, and that I think is wrong. We should be looking at a spectrum of difficulties and try to support that, rather then ‘these ones are in and these ones are out’ and ‘they’re thick and they’re dyslexic’. I think that’s very wrong.

For me, it would be along the lines of ‘continuing to experience literacy difficulties despite appropriate strategies being put in place by the school’. Now, the question there is, you know, whether you would say they were appropriate strategies and someone else might say they were not ... it’s over the long term ...

.. and have they been done consistently ... I think that’s where it’s very difficult to know... they might say ‘we’ve tried this, we’ve tried that’ but actually they only did it for a couple of days or an hour or something
### Appendix vi – Table of statements used in final Q-set – sourced

<table>
<thead>
<tr>
<th>Statement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The BPS definition of dyslexia is too broad and too inclusive.</td>
<td>Focus group</td>
</tr>
<tr>
<td>2. Pupils with moderate learning difficulties can also be described as dyslexic.</td>
<td>Focus group</td>
</tr>
<tr>
<td>3. The longer I work as an EP, the less I feel I know about dyslexia.</td>
<td>Focus group</td>
</tr>
<tr>
<td>4. The BPS definition of dyslexia is in straightforward language that everyone can understand. This is helpful.</td>
<td>Focus group</td>
</tr>
<tr>
<td>5. The BPS definition is useful in demystifying dyslexia.</td>
<td>Focus group</td>
</tr>
<tr>
<td>6. I feel unsure about the definition of dyslexia that I am using.</td>
<td>Focus group</td>
</tr>
<tr>
<td>7. The range of definitions makes dyslexia a confusing concept.</td>
<td>Focus group</td>
</tr>
<tr>
<td>8. The term ‘specific learning difficulty’ is a more helpful descriptor than the term dyslexia.</td>
<td>Focus group</td>
</tr>
<tr>
<td>9. I favour the BPS definition of dyslexia above any others – it is a ‘best fit’ for me.</td>
<td>Focus group</td>
</tr>
<tr>
<td>10. The terms ‘dyslexia’ and ‘specific learning difficulties’ mean the same thing.</td>
<td>Focus group</td>
</tr>
<tr>
<td>11. I favour a discrepancy model of dyslexia</td>
<td>Focus group</td>
</tr>
<tr>
<td>12. I rarely use the word dyslexia in my reports</td>
<td>Focus group</td>
</tr>
<tr>
<td>13. Using the word dyslexia can help to raise teacher expectation.</td>
<td>Focus group</td>
</tr>
<tr>
<td>14. We should not waste time trying to define dyslexia but focus instead on what needs to be done to support pupils.</td>
<td>Focus group</td>
</tr>
<tr>
<td>15. I regard labels as unhelpful so would prefer not to use the term dyslexia.</td>
<td>General</td>
</tr>
<tr>
<td>16. I think that dyslexia is a complex learning difficulty</td>
<td>North Ayrshire, adapted</td>
</tr>
<tr>
<td>17. I favour the idea of regarding dyslexia as a ‘learning preference’</td>
<td>Neil MacKay, Removing Barriers</td>
</tr>
<tr>
<td>18. Dyslexia is not related to intelligence, race or social background.</td>
<td>From Dyslexia Action definition</td>
</tr>
<tr>
<td>19. When I talk about dyslexia, I am largely in agreement with my EP colleagues.</td>
<td>General</td>
</tr>
<tr>
<td>20. I think that any reading difficulty can be described as dyslexia.</td>
<td>General</td>
</tr>
<tr>
<td>21. Dyslexia does not exist.</td>
<td>General</td>
</tr>
<tr>
<td>22. I think it is important that EPs in our service agree on a definition of dyslexia.</td>
<td>General</td>
</tr>
<tr>
<td>23. I am familiar with the content of the BPS working party on dyslexia from 10 years ago.</td>
<td>General</td>
</tr>
<tr>
<td>24. It is important to me that the BPS definition of dyslexia is non-discriminatory.</td>
<td>General</td>
</tr>
</tbody>
</table>
### 2.1.7.7 Appendix vii - Statements as presented in the Q-sort

<table>
<thead>
<tr>
<th>Statement</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The BPS definition of dyslexia is too broad and too inclusive.</td>
<td>1</td>
</tr>
<tr>
<td>Pupils with moderate learning difficulties can also be described as dyslexic.</td>
<td>2</td>
</tr>
<tr>
<td>The longer I work as an EP, the less I feel I know about dyslexia.</td>
<td>3</td>
</tr>
<tr>
<td>The BPS definition of dyslexia is in straightforward language that everyone can understand. This is helpful.</td>
<td>4</td>
</tr>
<tr>
<td>I feel unsure about the definition of dyslexia that I am using.</td>
<td>5</td>
</tr>
<tr>
<td>The range of definitions makes dyslexia a confusing concept.</td>
<td>6</td>
</tr>
<tr>
<td>The term 'specific learning difficulty' is a more helpful descriptor than the term dyslexia.</td>
<td>7</td>
</tr>
<tr>
<td>I favour the BPS definition of dyslexia above any others – it is a 'best fit' for me.</td>
<td>8</td>
</tr>
<tr>
<td>The terms 'dyslexia' and 'specific learning difficulties' mean the same thing.</td>
<td>9</td>
</tr>
<tr>
<td>I favour a discrepancy model of dyslexia.</td>
<td>10</td>
</tr>
<tr>
<td>I rarely use the word dyslexia in my reports.</td>
<td>11</td>
</tr>
<tr>
<td>Using the word dyslexia can help to raise teacher expectation.</td>
<td>12</td>
</tr>
<tr>
<td>We should not waste time trying to define dyslexia but focus instead on what needs to be done to support pupils.</td>
<td>13</td>
</tr>
<tr>
<td>I regard labels as unhelpful so would prefer not to use the term dyslexia.</td>
<td>14</td>
</tr>
<tr>
<td>I think that dyslexia is a complex learning difficulty</td>
<td>15</td>
</tr>
<tr>
<td>Dyslexia does not exist</td>
<td>16</td>
</tr>
<tr>
<td>I favour the idea of regarding dyslexia as a 'learning preference'.</td>
<td>17</td>
</tr>
<tr>
<td>Dyslexia is not related to intelligence, race or social background.</td>
<td>18</td>
</tr>
<tr>
<td>When I talk about dyslexia, I am largely in agreement with my EP colleagues.</td>
<td>19</td>
</tr>
<tr>
<td>I think that any reading difficulty can be described as dyslexia.</td>
<td>20</td>
</tr>
<tr>
<td>I think it is important that EPs in our service agree on a definition of dyslexia.</td>
<td>21</td>
</tr>
<tr>
<td>I am familiar with the content of the BPS working party on dyslexia from 10 years ago.</td>
<td>22</td>
</tr>
<tr>
<td>It is important to me that the BPS definition of dyslexia is non-discriminatory</td>
<td>23</td>
</tr>
<tr>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>
### 2.1.7.8 Appendix viii – Response grid (showing values)

<table>
<thead>
<tr>
<th>Least agree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Most agree</th>
</tr>
</thead>
</table>

What do you think about dyslexia?

---

**EP**
2.1.7.9 Appendix ix – Conditions of instruction

I have given you a set of 24 statements about dyslexia. I would like you to sort them so that they fit into each of the boxes of the grid in front of you, along a continuum of most to least agree.

Place the statements that you most agree with towards the right hand side of the grid.

You are answering the question ‘What do you think about dyslexia?’

Each (downward) column is of equal value i.e. you will agree on an equal basis with those statements placed within the same column.

Please take your time.

Thank you.
2.1.7.10 Appendix x – Varimax rotation – scree plot

Scree Plot

![Scree Plot Image]
### 2.1.7.11 Appendix xi – Varimax rotation SPSS output table

<table>
<thead>
<tr>
<th>Component Matrix</th>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>.343</td>
<td>.482</td>
<td>.221</td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>.636</td>
<td>.056</td>
<td>-.010</td>
<td></td>
</tr>
<tr>
<td>P3</td>
<td>.532</td>
<td>.459</td>
<td>.204</td>
<td></td>
</tr>
<tr>
<td>P4</td>
<td>.858</td>
<td>-.046</td>
<td>.303</td>
<td></td>
</tr>
<tr>
<td>P5</td>
<td>.030</td>
<td>.529</td>
<td>.592</td>
<td></td>
</tr>
<tr>
<td>P6</td>
<td>.206</td>
<td>.090</td>
<td>.797</td>
<td></td>
</tr>
<tr>
<td>P7</td>
<td>.222</td>
<td>.671</td>
<td>.132</td>
<td></td>
</tr>
<tr>
<td>P8</td>
<td>-.031</td>
<td>.699</td>
<td>-.060</td>
<td></td>
</tr>
<tr>
<td>P9</td>
<td>.262</td>
<td>.425</td>
<td>.190</td>
<td></td>
</tr>
<tr>
<td>P10</td>
<td>.545</td>
<td>-.053</td>
<td>.564</td>
<td></td>
</tr>
<tr>
<td>P11</td>
<td>.011</td>
<td>.724</td>
<td>.441</td>
<td></td>
</tr>
<tr>
<td>P12</td>
<td>.291</td>
<td>.216</td>
<td>.591</td>
<td></td>
</tr>
<tr>
<td>P13</td>
<td>.655</td>
<td>.339</td>
<td>.284</td>
<td></td>
</tr>
<tr>
<td>P14</td>
<td>.296</td>
<td>.317</td>
<td>.795</td>
<td></td>
</tr>
<tr>
<td>P15</td>
<td>.563</td>
<td>.562</td>
<td>.021</td>
<td></td>
</tr>
<tr>
<td>P16</td>
<td>-.217</td>
<td>-.016</td>
<td>.461</td>
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<tr>
<td>P17</td>
<td>.283</td>
<td>.148</td>
<td>-.112</td>
<td></td>
</tr>
<tr>
<td>P18</td>
<td>.509</td>
<td>.600</td>
<td>.179</td>
<td></td>
</tr>
<tr>
<td>P19</td>
<td>.806</td>
<td>.380</td>
<td>.176</td>
<td></td>
</tr>
<tr>
<td>P20</td>
<td>.647</td>
<td>.262</td>
<td>.132</td>
<td></td>
</tr>
<tr>
<td>P21</td>
<td>.277</td>
<td>.729</td>
<td>.211</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 20 iterations.
2.1.7.12 Appendix xii – SPSS Varimax rotation – tables by single component

<table>
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<tr>
<th>Varimax</th>
<th>Component 1</th>
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</thead>
<tbody>
<tr>
<td>P4</td>
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<td>P19</td>
<td>0.806</td>
</tr>
<tr>
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<td>0.655</td>
</tr>
<tr>
<td>P20</td>
<td>0.647</td>
</tr>
<tr>
<td>P2</td>
<td>0.636</td>
</tr>
<tr>
<td>P15</td>
<td>0.563</td>
</tr>
<tr>
<td>P10</td>
<td>0.545</td>
</tr>
<tr>
<td>P3</td>
<td>0.532</td>
</tr>
<tr>
<td>P18</td>
<td>0.509</td>
</tr>
<tr>
<td>P1</td>
<td>0.343</td>
</tr>
<tr>
<td>P14</td>
<td>0.296</td>
</tr>
<tr>
<td>P12</td>
<td>0.291</td>
</tr>
<tr>
<td>P17</td>
<td>0.283</td>
</tr>
<tr>
<td>P21</td>
<td>0.277</td>
</tr>
<tr>
<td>P9</td>
<td>0.262</td>
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<tr>
<td>P7</td>
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<tr>
<td>P5</td>
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<tr>
<td>P11</td>
<td>0.011</td>
</tr>
<tr>
<td>P8</td>
<td>-0.031</td>
</tr>
<tr>
<td>P16</td>
<td>-0.217</td>
</tr>
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</table>

Table 1: Varimax component 1

<table>
<thead>
<tr>
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<tbody>
<tr>
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<tr>
<td>P11</td>
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</tr>
<tr>
<td>P8</td>
<td>0.699</td>
</tr>
<tr>
<td>P7</td>
<td>0.671</td>
</tr>
<tr>
<td>P18</td>
<td>0.6</td>
</tr>
<tr>
<td>P15</td>
<td>0.562</td>
</tr>
<tr>
<td>P5</td>
<td>0.529</td>
</tr>
<tr>
<td>P1</td>
<td>0.482</td>
</tr>
<tr>
<td>P3</td>
<td>0.459</td>
</tr>
<tr>
<td>P9</td>
<td>0.425</td>
</tr>
<tr>
<td>P19</td>
<td>0.38</td>
</tr>
<tr>
<td>P13</td>
<td>0.339</td>
</tr>
<tr>
<td>P14</td>
<td>0.317</td>
</tr>
<tr>
<td>P20</td>
<td>0.262</td>
</tr>
<tr>
<td>P12</td>
<td>0.216</td>
</tr>
<tr>
<td>P17</td>
<td>0.148</td>
</tr>
<tr>
<td>P6</td>
<td>0.09</td>
</tr>
<tr>
<td>P2</td>
<td>0.056</td>
</tr>
<tr>
<td>P16</td>
<td>-0.016</td>
</tr>
<tr>
<td>P4</td>
<td>-0.046</td>
</tr>
<tr>
<td>P10</td>
<td>-0.053</td>
</tr>
</tbody>
</table>

Table 2: Varimax component 2
Varimax component 3

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P6</td>
<td>0.797</td>
</tr>
<tr>
<td>P14</td>
<td>0.795</td>
</tr>
<tr>
<td>P5</td>
<td>0.592</td>
</tr>
<tr>
<td>P12</td>
<td>0.591</td>
</tr>
<tr>
<td>P10</td>
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</tr>
<tr>
<td>P16</td>
<td>0.461</td>
</tr>
<tr>
<td>P11</td>
<td>0.441</td>
</tr>
<tr>
<td>P4</td>
<td>0.303</td>
</tr>
<tr>
<td>P13</td>
<td>0.284</td>
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<tr>
<td>P1</td>
<td>0.221</td>
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<td>0.211</td>
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<tr>
<td>P3</td>
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</tr>
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<td>0.176</td>
</tr>
<tr>
<td>P7</td>
<td>0.132</td>
</tr>
<tr>
<td>P20</td>
<td>0.132</td>
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<td>-0.01</td>
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<tr>
<td>P8</td>
<td>-0.06</td>
</tr>
<tr>
<td>P17</td>
<td>-0.112</td>
</tr>
</tbody>
</table>

Table 3: Varimax component 3
Research Paper 1: Tutor Feedback Report

DOCTORATE IN EDUCATIONAL PSYCHOLOGY FEEDBACK

RESEARCH PAPER 1: ACTION RESEARCH PROJECTS (8000 TO 10 000 WORDS)

Student Sharon Coman

Assignment 1

Title How dyslexia is conceptualized within the NYCC EPS

Summary comment

This is an ambitious project involving having to learn both the use of Q methodology and the subtleties of factor analysis to successfully identify 3 distinct and overlapping views within the educational psychology service about the conceptualization of dyslexia. Generally the project is well written, though there are a couple of places where meaning can be interpreted in different ways – some editing would sort this out.

I thought the discussions around selection of rotation for the factor analysis and the subsequent Venn diagram of the 3 viewpoints were presented well. There was good use of the interview data to support your analysis.

In your e-mail you mentioned that the assignment was submitted ‘as is’ and not quite complete in order to get it in before the deadline. My guess is that the section that needs further work is 5.1 professional relevance of the 3 viewpoints needs to be discussed. More could also have been said about the following points:

- P4 the similarity of the Rose definition and the BPS definition – could this be because the advisory groups were the same core of people?
- P 7 How you made the interview sample representative

I wonder whether you would be prepared to share this work during the session on Q-sort methodology?

2

Examiner’s comments

There is much in this assignment that is of excellent quality and reflects an ambitious study. The methodology is described in detail; you have experimented with Q sort and undertaken a detailed analysis of the findings using SPSS. I really like the way you discuss and reflect upon various aspects of the research process. You have clearly learned a lot from this assignment which could be carried over to further work. Re the findings themselves: you down play their significance. But I think they are really interesting and
may well represent current EPs’ views about dyslexia.

The only substantial weakness is the literature review which is a little superficial and not reflective. However, in my view the remaining parts of the assignment are of such high quality, that they compensate for the weaker literature review. For these reasons think it should be awarded a pass grade.

<table>
<thead>
<tr>
<th>Doctoral Criteria</th>
<th>Insufficient evidence</th>
<th>Assessment evidence</th>
<th>Improvement suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity to pursue research and scholarship</td>
<td>Working towards Achieved</td>
<td>Throughout the project there must be evidence that you have accessed the literature, planned and carried out an investigation and have been able to make sense of information that you have collected.</td>
<td>There is plenty of reference to government policy and to methodological issues but the literature around EP practice in relation to key issues such as literacy development, inclusion or dyslexia is missing. Having said that, there is a clear story line running through as you critically evaluate the use of Q-sort for addressing your RQs.</td>
</tr>
<tr>
<td></td>
<td>Achieved</td>
<td>We will be looking for the following characteristics:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Overall approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Clear and logical story line</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Evidence of a critical approach to concepts and methodology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Evidence of analytical thinking</td>
<td></td>
</tr>
<tr>
<td>Produce an original contribution and substantial</td>
<td>Achieved</td>
<td>This might be evident in the way that the research is conducted (e.g. using a new approach to investigate a</td>
<td>More needs to be said about the core views and the 3 emergently distinct</td>
</tr>
<tr>
<td>additon to knowledge</td>
<td>problem); in the production of new understandings or knowledge; or in the application of the project's findings to professional practice.</td>
<td>views and how this will be dealt with in the service to provide a consistent approach within NYCC.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Demonstrate the relevance of the research to professional EP practice</td>
<td>Achieved</td>
<td>In the discussion or conclusion sections you address the “So what?” question: How does the research inform EP practice and develop or support the work that EPs do? What are the implications for Services or for service users? Reflective personal evaluation is included. A final section is added to the assignment that relates what you have done to your own learning and development as a psychologist.</td>
<td>See above</td>
</tr>
<tr>
<td>Communicate clearly, accurately and according to the conventions for presentation of academic work.</td>
<td>Achieved</td>
<td>The material is organised logically and coherently so that it tells a story. There are well defined sections to the report including: <strong>Abstract</strong> <strong>Introduction</strong> <strong>Literature review</strong> <strong>Methodology</strong> <strong>Results/discussion/conclusion</strong> (these may be separate sections or written as one – it depends on the type of study and which approach most effectively communicates what you have done. <strong>References</strong> The abstract is a brief statement (single spaced and no more than 250 words) of the area, why it is important and</td>
<td></td>
</tr>
</tbody>
</table>
| Rationale is justified | Achieved | specific issues addressed. There is an outline of the methodology, summary of key findings and a reference to the implications of the study (e.g. on policy, practice or theory)

The findings are presented clearly and in a way that is appropriate for the type of data collected (i.e. quantitative or qualitative or mixed methodologies).

The presentation matches academic requirements and the references are in an accepted and consistent format (e.g. APA 5th).

The introduction to the assignment should justify why this research project was being undertaken. This could be a theoretical rationale for undertaking the work or it could be related to local policy and practice.

The material is presented accurately without bias.

There is evidence of critique throughout the assignment with a critical approach taken when considering concepts, methodology and the impact of studies that have been done previously.

There should be evidence that you have thought critically about the work that you have undertaken and how this relates to the previous literature.

**Introduction section**
- Well justified focus supported by key references
- Clearly stated issue to be investigated and/or

The literature is a bit thin (see above) to allow this to be demonstrated effectively.

Demonstrate how the topic of the research is related to a wider field of knowledge and

Working towards

Demonstrate rigorous and critical thinking in regard to the literature and theory

Working towards
<table>
<thead>
<tr>
<th><strong>Demonstrate an understanding of the design and conduct of empirical research.</strong></th>
<th><strong>Achieved</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>research</strong></td>
<td><strong>research questions</strong></td>
</tr>
<tr>
<td><strong>Literature review section</strong></td>
<td></td>
</tr>
<tr>
<td>• Theoretical context/previous research justify present study</td>
<td></td>
</tr>
<tr>
<td>• Up-to-date references relevant to the study</td>
<td></td>
</tr>
<tr>
<td>• Consideration of how a study/reference contradicts or complements other work in the field</td>
<td></td>
</tr>
<tr>
<td><strong>Results/discussion/conclusion section</strong></td>
<td></td>
</tr>
<tr>
<td>• Consideration of how findings support, contradict or build on previous work</td>
<td></td>
</tr>
<tr>
<td><strong>In the Methodology section:</strong></td>
<td></td>
</tr>
<tr>
<td>• Reflection on the interrelationship between concepts, research questions, data collection methods</td>
<td></td>
</tr>
<tr>
<td>• Discussion of strengths and weaknesses of chosen methodology</td>
<td></td>
</tr>
<tr>
<td>• The projects must conform to the ethical guidelines set out by the British Psychological Society.</td>
<td></td>
</tr>
<tr>
<td>• Explicit account of</td>
<td></td>
</tr>
</tbody>
</table>
**procedure**

- Consideration of data analysis procedures

**In the Results/discussion/conclusion**

- Links between data collection and analysis of findings are clear and explicit
- Consideration of how findings support, contradict or build on previous work
- Evaluation/critique of study
- Discussion of implications, e.g. for the project, professional practice, further research, deeper understanding of theory, methodology

Any further recommendations for reading or skills training

Nil

Recommendation  Resubmit with sections completed

Examiner Dr Garry Squires  Date 9 August 2009
2.2.1 Introduction

2.2.1.1 Rationale of this literature review

The focus of this literature review is to examine the research evidence that underpins formative assessment practices such as those recommended in the Assessment for Learning National Strategy (DCSF, 2008a). In particular, the review will focus on the role of teacher feedback in formative assessment, how this might be effectively used to enhance learning outcomes for children and young people and how teacher feedback is experienced or perceived by the young people themselves.

2.2.1.2 Research questions addressed in the literature review

A critique of the literature on formative assessment and teacher feedback will be set within the parameters of addressing the following principal research question:

What is the role of teacher feedback within assessment for learning approaches for school aged children?

This research question will be addressed through:

- outlining the Assessment for Learning National Strategy and its historical context
- defining what is meant by assessment for learning and formative assessment
- examining the term ‘feedback’ and how it is defined in the literature
- relating teacher feedback to school aged pupil learning
- exploring the role of teacher feedback within formative assessment processes
- identifying studies which include pupil views and experiences of teacher feedback
- presenting a conceptual framework of learning theory through which to examine formative teacher feedback
2.2.1.3  Assessment for Learning: current educational context and policy

Now firmly embedded within the department for children, schools and families (DCSF) National Strategies programme, assessment for learning is seen by national educational policy makers as an effective and powerful, evidence-based approach to teaching and learning which can enhance pupil outcomes, improve rates of progression and support the development of personalised learning (DCSF, 2008). The approach is viewed as pivotal in improving the engagement of children with the learning process and the subsequent raising of standards. The Assessment for Learning Strategy (DCSF, 2008b), a joint project and publication between the DCSF, the National Strategies, the Qualifications and Curriculum Development Agency (QCDA) and the Chartered Institute of Educational Assessors, seeks to support and inform the work of teachers and school leaders in the improved and more integrated use of assessment information and processes. The Assessment for Learning Strategy (DCSF, 2008) is one of the key documents underpinning the wider educational agenda and vision set out in the Government’s overarching strategic document The Children’s Plan (DCSF, 2007a). The aim of overcoming barriers to learning and so raising attainments and outcomes for all children and young people and in particular vulnerable groups of underperforming pupils, is firmly and ambitiously stated throughout The Children’s Plan (DCSF, 2007a) and its two year progress update (DCSF, 2009).

2.2.1.4  Assessment for Learning: intended outcomes

The aim of the Assessment for Learning Strategy (DCSF, 2008b) is to embed assessment for learning approaches in all classrooms, to make assessment for learning integral to teaching and learning throughout the curriculum, and for the approach to be used strategically to become more ‘widespread, systematic and consistent’ (DCSF, 2008b, page 4) across all schools. The sharing of good practice and the widespread distribution of practical teacher resources has been promoted as well as the implementation of a national assessment for learning action research project (DCSF, 2007b). The Assessment for Learning Strategy (DCSF, 2008b) outlines the Government’s philosophical and significant financial commitment to the assessment for learning approach and principles stating that in order to achieve the goal of personalising learning by placing assessment for learning at the centre of the teaching and learning process, the continuing professional development of teachers will be supported through additional and designated funding (£150 million) for targeted training and resources over the three year period 2008-2011.
Intended outcomes of the strategy include that: ‘every child knows how they are doing, and understands what they need to do to improve and how to get there. They get the support they need to be motivated, independent learners on an ambitious trajectory of improvement’ (page 4). The Assessment for Learning Strategy (DCSF, 2008b) embraces three linked aspects of assessment practices, identified as; Day-to-day, Periodic (broader view of progress) and Transitional (formal, external, reported to others). It is the Day-to-day assessment which includes the immediate giving of feedback to pupils which will be the primary focus of this literature review.

2.2.1.5 Assessment for Learning: history, origins and evidence base

Pryor and Crossouard (2008) argue that formative assessment has historically always been a part of classroom practice, but that it was not until 1967 that the term ‘formative evaluation’ was used by Michael Scriven (as cited in Black & Wiliam, 2003, p. 623) with regard to teaching and learning and which was then later developed by other researchers such as Bloom et al (1971) (as cited in Black and Wiliam, 2003, p. 623) and Sadler (1989).

The Task Group on Assessment and Testing (TGAT), originated in the UK in 1988 as a policy task group set up by the British Educational Research Association (BERA) to promote and influence the use of research evidence in national assessment policy and to disseminate and publish research findings for the wider educational community. TGAT made recommendations about the use of formative assessment that were represented in the 1988 Education Reform Act. Despite this inclusion in a major piece of educational legislation, formative assessment was not fully embraced by UK schools and its principles were overshadowed by the introduction of a new National Curriculum and end of Key Stage national testing proposals.

The Assessment Reform Group (TGAT renamed) responded to this position by commissioning a review of the then existing research literature on formative assessment, known to be extensive at the time; ‘There was accumulating in the research literature on formative assessment practices a formidable body of evidence that could support claims for its importance’ (Black & Wiliam, 2006, p.10). The aim of the review would be to contribute further to the understanding of formative assessment practices in education and to provide an evidence base from which to promote its use.
In 1996, the commissioned research (funded by the Nuffield Foundation) was undertaken by Paul Black and Dylan Wiliam and published in 1998 (Black & Wiliam, 1998a). The findings arising from this review have gone on to be highly influential in much subsequent research work regarding formative assessment. The work is widely regarded as a determining contribution to the field and will be considered in some detail later in this paper (please see section 2.2.3.1). The literature review was published for both an academic and a practitioner audience; a 30,000 word journal article was also later published as a summary in pamphlet format; ‘Inside the black box’ (Black & Wiliam, 1998b), with the ‘black box’ representing the classroom and the internal processes within it including the essential teacher role in raising standards. This booklet, which has given rise to a number of ‘black box’ publications (e.g. Assessment Reform Group 1999), was launched at a special conference, was highly accessible for practitioners and widely distributed through mainstream publishers, guaranteeing it extensive circulation and readership.

Assessment for Learning as a National Strategy operationalises the body of research work which has evolved over the last 20 years around formative assessment practices i.e. those assessment practices which are used to directly inform the learning process – assessment for learning, rather than to simply evaluate it, as in summative assessment practices – assessment of learning.

2.2.1.6 Assessment for Learning: the role of teacher feedback

The role of teacher feedback is pivotal in formative assessment and can take a range of forms including, for example, oral, written and non-verbal feedback. It is this critical interaction between teacher and learner which is central to the learning process and is fully explored within formative assessment approaches. Distinctions are made within the literature as to the type and purpose of the feedback given (e.g. Sadler, 1989; Pryor & Crossouard, 2008; Tunstall & Gipps, 1996b) and the associated outcomes that might be expected from the learner. Black and Wiliam (2003) suggest that the assessment and feedback skills required from a teacher for summative or evaluative purposes are different from those skills then required to support and guide learning on a day to day basis with formative questioning and methods.
The authors note that this has many implications for the development and change of classroom practices and must address the tensions that arise for teachers and leadership teams from the pressures of developing formative assessment skills within a political climate that continues to demand classroom accountability, school league tables and the necessity of summative assessments.

Black and William (2003) speculate that enhanced teacher feedback skills in formative assessment could be beneficial to summative processes also. Pryor and Crossouard (2008) describe the complexities involved in classroom interactions between teacher and learner and the need for teachers to develop a continuum of feedback responses and to have an understanding of the theoretical frameworks in which they lie.

2.2.2 Methodology

2.2.2.1 Key concepts

2.2.2.1.1 Definitions: assessment for learning

Hargreaves (2005) conducted a survey with teachers and head teachers asking them about their understanding of the phrase ‘assessment for learning’. Hargreaves (2005) collates the definitions given and relates them to understandings of assessment. Definitions given fell into 6 categories which indicated a conception of the phrase which was then related to learning theory. This illustrates the inconsistencies and differences that exist within a relatively homogenous group of people.

Wiliam (2009) emphasises that assessment for learning is ‘any assessment for which the priority in its design and practice is to serve the purpose of promoting pupil’s learning’ (Wiliam, 2009, p.8). The most commonly used and referenced definition of assessment for learning now embedded in the educational literature and DCSF, QCDA and National Strategies policy documentation is taken from Assessment for Learning: 10 Principles:

‘Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.’ Assessment Reform Group, (2002).

Assessment for Learning is used within the National Strategy documentation and by the Assessment Reform Group and other authors to identify and ‘market’ the approach. Assessment for learning will denote a more general reference.
2.2.2.1.2 **Definitions: assessment for learning or formative assessment?**

Gardner (2006) considers whether there should be a distinction between the phrases ‘formative assessment’ and ‘assessment for learning’, noting that, whilst ‘formative assessment’ is sometimes used to inform summative assessments (by using frequent and numerous assessments over time), ‘assessment for learning’ is not likely to be used in this way. He concludes that as long as the end goal of the assessment process is to influence pupil learning, then the terms can be used interchangeably. ‘Assessment for learning’ is perceived however, as a less technical, more modern and accessible term (Gardner, 2006).

Wiliam (2009) places a different emphasis on the distinctions between the terms, noting that whilst ‘formative assessment’ and ‘assessment for learning’ are often used interchangeably, formative assessment is only present in assessment for learning when assessment information is ‘actually used to adapt the teaching work to meet learning needs’ (page 8). Wiliam (2009) stresses that the term ‘assessment for learning’ indicates ‘purpose’ and ‘formative assessment’ reflects more clearly ‘function’ and is closely related to feedback.

2.2.2.1.3 **Definitions: teacher feedback**

Implicit within formative assessment is the nature of the feedback system which is operating between teacher and pupil. Effective feedback should be used rather than simply delivered, should link back to the task criteria and should be shared with the intention of leading to change and improvement in learning.

Wiliam (2009) provides an illustrative example of a feedback system from engineering in which the existence of a regulatory feedback loop must include a mechanism to feed into and then *change* the system. Black and Wiliam (1998a) identify the necessary elements of a feedback system: data on the actual level of a measurable attribute, data on the reference level of the attribute, a mechanism to compare both levels and to generate information about the gap between the two levels and a mechanism by which the information is used to alter the gap.
Wiliam (2009) notes the dilution of the term feedback and its overuse; it is used to refer to many methods of reporting to/about students which in fact are not intended to change or improve their learning.

2.2.2.2 Search strategy

2.2.2.2.1 Search strategy: timescale and parameters
This literature search took place between January and April 2010, although some papers had been sourced at different stages over the last 2 years on an ad hoc basis.

The aim of the search was to source literature which was relevant to the study of assessment for learning and in particular the formative feedback practices inherent within that approach. Included in the search would be literature pertaining to the views and experiences of children and young people themselves with regard to feedback practices.

2.2.2.2.2 Search strategy: inclusion and exclusion criteria
The search for the literature took account of the following inclusion criteria:

- publications were restricted to those written in the English language
- publications were considered from the approximate timescale of 1995 to the current date, although a few papers pre-dated that timescale were selected due to their historical significance in the field
- studies were included which focussed on school aged children
- predominantly research work based in the UK was included as the literature was focussed on UK educational policy and practice; international studies were included however where relevant. The key articles included in the review which included literature reviews and meta-analyses had included international research studies.
- articles were sourced that focussed on learning and classroom practice
- articles that could be sourced in a full text format through the university electronic library

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The following exclusion criteria were applied:

- studies which focussed on further and higher education (although one of these was included due to its interest and potential relevance)
- research which centred on learning through ICT – elearning, distance learning, computer assisted learning etc as this was felt to be a different mode of learning and not relevant to the topic under review
- studies which focussed on social/emotional/ behavioural development as the review was focussed on learning and potential learning gains

2.2.2.2.3 Search strategy: key words used
The following key words and wild card prefixes were used in various combinations:

- children
- child*
- young people
- teacher*
- teach*
- formative
- assessment
- assess*
- feedback
- learning
- learn*
- marking
- school*
2.2.2.2.4 Search strategy: databases searched

The following databases were electronically searched via the University of Manchester’ John Rylands electronic library resources:

- PsychInfo
- Education Literature Datasets (ELD) which provides access in various combinations to the following three international databases:
  - British Education Index (BREI)
  - Education Resources Information Center (ERIC)
  - Australian Education Index (AEI)

2.2.2.2.5 Search strategy: websites searched and search engines used

The following search engines were used and found to be helpful:

- http://www.google.co.uk
- http://scholar.google.co.uk

The following websites were searched for relevant publications:

- www.nationalstrategies.standards.dcsf.gov.uk
- www.dcsf.gov.uk
- www.teachernet.gov.uk
- http://www.dcsf.gov.uk/rsgateway/
- http://whatworkswell.standards.dcsf.gov.uk/
2.2.2.6 Search strategy: journals of relevance and book search

Electronic searches were carried out in the following academic journals of relevance:

- Educational psychology in practice
- Assessment in Education: Policy, Principles and Practice

A key word search was also carried out in ‘swetwise’ an electronic journal management system which contains a database of many publications.

In addition, a number of book titles were sourced from a search through http://www.amazon.co.uk/.

Some articles were sourced through the ‘snowballing’ technique of sourcing articles and publications from the reading and references of an initial publication.

2.2.2.7 Search strategy: overall

In total, approximately 50 articles, publications and chapters were sourced. Of these, about 20 were of most relevance and used in this literature review.

Three articles are considered in detail in this review as they were thought to be of particular interest;

- Black and Williams (1998a)
- Hattie and Timperley (2007)
- Smith and Gorand (2005)

The literature review is placed within an overarching theme of learning theory which emerged from the literature sourced as a key conceptualisation in this field.
2.2.3 Review of literature

2.2.3.1 Assessment for learning: Black and Wiliam's 1998 literature review in detail

Black and Wiliam (1998a) undertook an extensive and ambitious literature review of research which examined the effect of formative assessment, encompassing predominantly research studies from the preceding decade. The authors identified previous work by Black in the field and two key articles by Crooks (1988) (as cited in Black & Wiliam, 1998a) and Natriello (1987) (as cited in Black & Wiliam, 1998a) the baseline for the review. Using a comprehensive search strategy, (e.g. checking through books, identifying issues of over 160 journals, citation search from baseline articles, key word search using ERIC (which was unsuccessful due to the lack of coherence in the terminology of key terms), identifying journals, 'snowballing') the authors identified approximately 680 research articles or chapters to consider. These incorporated the international body of literature. 250 were then read in full and coded by key focus and used as the basis for the review. Black and Wiliam (2006) report that the initial focus of the review was to identify empirical studies, both quantitative and qualitative, which explored the features and processes involved in on-going assessment and feedback between teachers and pupils. The review also encompassed research work related to an understanding of formative assessment practices.

The emerging themes which subsequently structured the six sections of the review include; evidence of improved learning through the use of formative assessment (at least 30 studies were identified which illustrated significant learning gains); assessment practices by teachers; student responses to formative assessment, the nature and role of feedback; self or peer assessment and strategies for teachers and systems. As the review expanded to incorporate related studies and features of relevance, Black and Wiliam’s (2006) later reflections, indicate their attempt to provide through the review, a unifying framework for such a large and wide field of research.
Black and Wiliam (1998a) define clearly the terms used in the review. This is an area of considerable focus within the review, the aim of which is partly to define what is encompassed by the term ‘formative assessment’, which, the authors state at the time of writing had no widely accepted meaning. The definition outlined in the review, and used as the criteria for the inclusion of research studies, is:

‘all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged’ (Black & Wiliam, 1998a, p7)

Black and Wiliam chose to include and stress studies with ecological validity, i.e. for their use of real classroom settings, using as far as possible, well-established classroom practices related to everyday curriculum work and involving the students’ regular teachers. The importance of this lies in the potential for the transferability of results to a wide range of contexts and the appeal to classroom practitioners of realistically achievable goals.

The first section of the review considers eight research based studies of classroom practice, including one which is a meta-analysis (of 21 studies). The works cited are central to the review as they each reflect and positively evidence the potential benefits of using formative assessment approaches to bring about significant learning gains.

The eight examples are varied in the range of ages, contexts, and cultures studied and in the methodologies used. The studies included all provide quantitative data with regard to student outcome measures in subject based performance (e.g. maths tests) and in some cases more affective factors such as student interest, attitude or motivation. The studies are presented as ‘holistic descriptions’ (Black and Wiliam 1998a, page 17) and are therefore distinct from the remainder of the review which focuses on more specific elements of learning or assessment which are considered to be intrinsic to formative assessment approaches.

The authors provide a critique of each study, noting methodological strengths and weaknesses and comparative features of the studies as well as the positive contribution made by each study to the understanding of the effective features of formative assessment. The authors clearly state the benefits evidenced in each study and claim, for example, that in the case of the nursery study, the ‘innovation changed the life chances of many children’.
In particular, the authors state their view that the meta-analysis example included in the review presents ‘such an accumulation of evidence’ (Black & Wiliam, 1998a, page 15) that in itself they feel it should have been more influential in promoting formative assessment.

The authors note that they did not come across any studies which reported negative effects following the implementation of formative assessment approaches.

The review goes on to consider in detail, through the themes identified above (e.g. self/peer assessment, nature of feedback etc), the research base which further explores the facets of formative assessment, the most central of which is the complexity involved in the way in which assessment or feedback messages are both received and then acted upon by students. Black and Wiliam (1998a) note the interaction of factors such as student self-efficacy, belief systems about learning, levels of motivation and commitment along with the context in which any actions may be realised. Their review provides an analysis of each of these areas.

The section on feedback includes the work of Kluger and DeNisi (1996 as cited in Black & Wiliam, 1998a) which is also included in the Hattie and Timperley (2007) meta-analysis below. Their methodology for inclusion in their analysis is detailed and resulted in a final 131 reports which provided 607 effect sizes involving 12,652 participants. Of note in their research is the presence of negative as well as positive effects of feedback interventions, as was found in the work of Hattie and Timperley (2007). Kluger and DeNisi (1996 as cited in Black & Wiliam, 1998a) go on to examine factors which moderate the feedback response.

The key message from the review was that assessment must be used in the right way to promote learning gains and that there was a strong evidence base to suggest that improving formative assessment was a way to raise standards.
2.2.3.2 The importance of formative feedback

Swaffield (2008) reminds the reader of the importance of feedback in everyday life; that is it happening in many guises all around us. It can have different effects, both positive and negative, and significant consequences. Its power is not to be underestimated. Values are conveyed by what we choose to give feedback on and in many non verbal actions and strategies.

Different types of feedback exist within the classroom setting, with different purposes. This is explored in several studies. Torrance and Pryor (1998) identify two assessment approaches evidenced from their empirical research; convergent and divergent. Convergent is more summative and judgemental assessment and divergent is formative and descriptive, aiming to uncover pupil understanding.

The Tunstall and Gipps (1996) study below, also identifies types and functions of assessment and feedback.

Although this review focuses on school aged children, it is of interest to note one research study, Vollmeyer and Rheinberg (2005) which took place with university students, where the researchers found that students performed better when they were expecting feedback. The anticipation of feedback meant they used more learning strategies from the beginning of the trial.

2.2.3.3 Hattie and Timperley (2007): The power of feedback

Hattie and Timperley (2007) provide an extensive research paper on the purposes, effects and types of feedback and identify both positive and negative gains from their work. Feedback is defined as ‘information provided by an agent regarding aspects of one’s performance or understanding’ and must take place in a learning context. To be instructional, feedback needs to be specifically related to the task and the learning gap (as in Sadler, 1989). Feedback might focus on affective factors, cognitive processes, meta-cognitive skills and is most powerful when it addresses ‘faulty interpretations, not a total lack of understanding’.

Hattie and Timperley (2007) detail the results from Hattie’s (1999) work (as cited in Hattie & Timperley, 2007) which involves a meta-analysis of studies regarding the effect of feedback. What is reported brings together 500 meta-analyses, 450,000 effect sizes from 180,000 studies which in total represents 20 to 30 million students.
The analysis incorporated factors influencing educational attainment and attributes. Hattie (1999) as cited in Hattie and Timperley (2007) reported the average effect of schooling (0.40) which was then taken as a baseline from which to judge influences such as feedback. 12 of the meta-analyses included feedback specifically. Within the 196 studies (6,972 effect sizes) the average effect size was 0.79 (almost twice the average). The analysis judged this to be one of highest influences on achievement. Different types of feedback were identified within the meta-analyses so variability was evident. Highest effect sizes were correlated to feedback about how to do tasks more effectively and the lowest were associated with praise, reward and sanctions. In particular, feedback was seen to be more effective when it is concerned with correct rather than incorrect responses, when it builds on previous input and when there are perceived low threats to self-esteem, ensuring attention is paid to the feedback.

The authors conclude that for feedback to be effective it must answer three questions: Where am I going? (i.e. what are my goals?) How am I going? (i.e. What progress am I making?) and Where to next? (i.e. What do I need to do?) which they re-phrase as ‘feed up, feed back and feed forward’. Hattie and Timperley (2007) note the importance of targeting feedback with students at the right level which should incorporate task performance, the process of understanding, meta-cognitive processes and personal processes. Their model of feedback includes the participation of both parties; this is critical to the process.

The paper goes on to explore feedback models and levels of feedback in greater depth and detail.

The findings of this paper make a significant contribution to understanding the role of feedback in the classroom and the model proposed is aligned to formative assessment processes. The complexities of the inter-actional processes are once again made very evident and the challenges for teacher practitioner implied. The numbers involved in this research study are truly staggering and appear convincing from the scale alone. The paper does not explain how the studies included in the statistics were identified or collated, nor give exclusion/inclusion criteria. The methodology of the meta-analysis is not explained in any detail. The paper gives only a few lines to the reporting of the meta-analyses and uses a breakdown of the information in the body of the report. It is possible that the original work provides more detail.
2.2.3. 4 Formative feedback: children’s belief systems

This section of the review will consider some examples of work in the research literature of studies carried out with children and young people themselves to explore how they experience or perceive the feedback they receive with regard to their learning in the classroom environment. Their belief systems about themselves as learners and the purposes of assessment practices are reflected in their responses.

Whilst the research in this field is not extensive, a number of studies were identified. One such UK based study, includes the views of pupils who participated in a project which changed the way they received feedback from teachers about their learning over a one year period. The study stands in contrast to much of the research in the field of formative assessment as the expected learning gains are not achieved. The paper is considered in a detailed critique below:

Smith and Gorard (2005) worked with a Welsh secondary school staff to introduce enhanced formative assessment approaches to a treatment group in Y7. Pupils in the group were given teacher comments only on their work and all grades and marks were withheld. The control group continued to receive grades and marks with minimal comments over the school year, which was the usual practice in the school. Overall, this study does not provide positive support for either the implementation of such an approach, nor for the experiences of the young pupils involved. The authors conclude that academic progress over the school year within the treatment group was significantly less than the progress measured in the control group. Smith and Gorard (2005) themselves express surprise at these results which seem to be in contradiction to what might have been the anticipated outcomes given the accumulated body of research which reports learning gains from such approaches (e.g. Black & Wiliam 1998; Clarke, 2003). The research project did not appear to focus on the enhancement of general classroom feedback, only on the evaluation and judgement/marking of work. Tunstall and Gipps (1996a) in an earlier study with much younger children, note however, that in their view, written teacher comments play only a small part in formative assessment (with infant pupils) and that the ‘written evaluative comment often represents the last stage in a number of teacher-child assessment procedures’.
The experience of the pupils was not the core focus of the Smith and Gorard (2005) study but was included in the project. Following their involvement with the research, discussions were held with the student participants in small groups. The pupils were asked in general about their school experiences, not explicitly about the feedback strategies used by teaching staff. The students initiated discussion about the marking policy however when they were asked about their general class experiences. The responses from the students were largely negative; expressing their preference for marks and grades rather than teacher-written comments. The authors surmise that the students felt they were unclear about their achievements and consequently how they should focus their efforts.

The methodology used in this research project adopted a rigorous approach to balancing the 4 mixed/mid-range ability groups (the full ability range was not represented) who took part in the project, in terms of prior attainment, familial differences, motivations and attitudes to learning etc and extensively reported the statistical analysis used to measure progress. This increased the validity and reliability of their results. What is unclear from the research paper however, is exactly how the project was introduced and promoted to the year group, the participant group and the wider school community. The participant group appear to have felt disadvantaged by the intervention, to have not understood its aims and purpose and to have felt in a minority within the year group, which had repercussions not only in terms of their self-perceptions but also in terms of peer group interactions across the year cohort.

Reference is also made to teachers receiving additional professional development, but this is not detailed and it is therefore difficult to evaluate whether this was adequate for the purposes of the intervention and whether participating staff had sufficient understanding of the feedback strategies used and how this related to general classroom practice. It might be argued that in fact the project was focussed on only a small part of formative practice and that the results therefore should not be generalised to formative assessment in its wider sense. The teacher sample was not described (e.g. years of teaching experience, etc) and teacher attitudes and experiences of the project were not reported.
The authors’ conclusion includes reference to the issues around transferring from an academic research base to real classroom practice where the project intervention is carried out by practitioners and not a research team. Their evaluation reflects somewhat their disappointment that the project was not only unsuccessful in terms of learning gains but was also unpopular with its target group.

In the Tunstall and Gipps (1996a) UK study referred to above, pupil perception of teacher feedback and what formative assessment means to young infant children was the primary focus of the research. The pupils were interviewed and asked directly about their teacher and their work and the kinds of improvement strategies they had learnt. From this study, Tunstall and Gipps created a typology (Tunstall and Gipps (1996b) which details different types of feedback on an evaluative/judgemental descriptive/competence related continuum and linked this to feedback that was about socialization or assessment. By mapping the children’s perceptions onto this grid, it was possible to show the different types of teacher feedback that were used by the teachers and illustrates the use of both mastery-oriented and constructivist approaches to formative assessment. The authors conclude that young children do recognise and act upon a wide range of teacher feedback strategies in the classroom.

2.2.3.5 Formative feedback and learning theory

Implicit within the use of feedback in the classroom is an assumption of the teacher’s understanding of learning theory. A belief in or view of how children learn will shape feedback practices and inform pedagogy. Much of the literature on formative feedback practices makes direct or indirect reference to learning theory which provides a conceptual framework in which to consider the research work. The constructivist model of learning is prevalent within the assessment for learning literature, whereby learners are assisted to construct meaning by integrating new learning to established understandings. Some authors (e.g. Pryor & Crossouard, 2008, below) favour a co-constructivist or socio-cultural model, where learning is seen to take place through interacting with others as opposed to being an individual process (Swaffield, 2008).

James (2006) notes that learning theorists rarely indicate how the learning outcomes within their models should be assessed. This may explain the lack of conceptual links sometimes observed between learning and assessment practices; that the processes are often not ‘aligned’, perhaps as thinking and understanding has changed over time. James (2006) considers that historical assessment practice is based on psychometric
models from psychology (measurement of innate traits) but that this model does not take account of the social processes involved in learning, now recognised to be so important. James (2006) believes that it is important for practitioners to understand the links and relationships between teaching, learning and assessment as learning outcomes are differentially affected by a range of interlinked practices. James (2006) considers assessment practice within 3 main groups of learning theories; behaviourist, cognitive/constructivist and socio-cultural. With the emphasis on ‘closing the gap’ between ‘current understanding and the new understandings sought’ James (2006) places formative assessment within the theoretical framework of cognitive/constructivist learning. The theory focuses on prior knowledge as a determinant of potential to learn new understandings and the need to scaffold understanding.

James (2006) categories Vygotsky as a socio-cultural theorist as, in his learning theory, learning occurs in the interactions between the individual and the social world in which cultural components are critical. Vygotsky (as cited in Jarvis et al 2003) identified two different types of developmental levels within his model of learning; the ‘actual’ developmental level and the ‘zone of proximal development’. The ‘actual’ level is learning processes that have already been consolidated and completed, the ‘zone of proximal development’ is the potential to learn which may be evident when the child is assisted by a more capable other – ‘the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers’ (as cited in Jarvis et al 2003, p. 37). This early recognition of the importance of collaborative learning can be closely linked with feedback and other formative processes used in assessment for learning such as; teacher promoting student dialogue with the teacher and with each other, encouraging higher level thinking, interaction between teacher and pupil to influence learning outcomes. Vygotsky viewed learning to originate in the social world. Development can occur as a result of supported interactions in the social context – a concept known as ‘scaffolding’.

Vygotsky’s theory of how learning is socially constructed is highly relevant therefore in exploring the role of teacher feedback in classrooms and falls within a constructivist paradigm even though its defining features are culturally based (socio-cultural). Vygotsky’s zone of proximal development locates precisely the teacher feedback process in formative assessment and provides a theoretical basis for its use and development.
2.2.3.5.1 Formative assessment and further theorisation

Black and Wiliam (2006b) seek to provide a theory of formative assessment which also incorporates Vygotsky’s *zone of proximal development*. They describe the theoretical basis of their formative assessment project work to include the view that prior knowledge of the learner is the starting point for learning. Whilst this was only one aspect of their theorisation, it accords with the constructivist theories above. The diversity of perspectives within classroom practice is acknowledged and the need for a wider, unifying framework sought to explain changes as a result of teachers using formative assessment. In a complex argument, Black and Wiliam (2006b) identify four components that they believe as a minimum should be the central to any theory of formative assessment; i) teachers, learners and subject discipline; ii) teacher role and the regulation of learning; iii) feedback and the student-teacher interaction; iv) the student role in learning.

Black and Wiliam (2006b) maintain within their proposals that the ‘crucial interaction’ between teacher and student is a central component within formative assessment. The authors refer to the seminal work of Sadler (1989) in this field. Sadler’s (1989) model promoted the use of pupil self-assessment and the need for pupils to develop evaluative skills so that they can recognise the standard to which they are working and develop strategies to modify their own performance. The teacher feedback role is therefore to communicate goals and promote self-assessment and engage in mutually beneficial interactions with students. Black and Wiliam (2006b) expand within their model on the notion of feedback and provide a detailed discussion of levels of feedback (the feedback loops within a teaching sequence); what they refer to as the ‘fine grain of feedback’ (the complexity around how messages are understood at an individual level) and the zone of proximal development.

Black and Wiliam (2006b) acknowledge that Sadler’s (1989) model emphasises the social and linguistic dimensions of learning and therefore this would appear to parallel closely with Vygotsky’s *zone of proximal development* as it is generally understood, along with the concepts of *scaffolding* (Wood et al. 1976, as cited in Black & Wiliam, 2006b) and *guided participation* (Rogoff, 1990, as cited in Black & Wiliam, 2006b). Black and Wiliam (2006b) caution that the zone of proximal development is a model of development and that what is being shared in interactions may only be the mature, embedded functions, which teachers need to identify to be able to develop learning.
The zone of proximal development is based on developmental ages of intellectual maturity and feedback mechanisms need to respond to this complexity which is possible oversimplified in the notion of a learning ‘gap’ that must be closed.

Pryor and Crossouard (2008) propose a theorisation of formative assessment which is based on the discursive social practice involved in the teaching and learning process and takes account of socio-cultural learning theories. Whilst this resonates with the Black and Wiliam (2006b), their conceptualisation also incorporates the importance of the construction of the identity of the learner and how this is influenced by ‘institutional discourses’; learning and identity are inherently linked. The Pryor and Crossouard (2008) paper builds on the work of an earlier paper by Pryor and Torrance (1998) in which they stated that a theoretical understanding of formative assessment involved a combination of psychological and sociological paradigms; emphasising that formative feedback should not just be seen in simplistic cognitive terms but that the social setting of the interactions within the classroom should be the defining characteristic of any conceptualisation. Torrance (1993) had begun the theoretical debate about formative feedback practices prior to the above work and before the publication of the Black and Wiliam review (1998a), placing formative feedback and the role of teacher-pupil interaction, within social constructivist theory and making reference to Vygotsky’s zone of proximal development.

### 2.2.4 Discussion and conclusions

#### 2.2.4.1 Summary discussion

The above review has sought to examine the literature pertaining to formative assessment practices within the educational context of current UK educational policy. The importance of feedback is evident in the literature and the complexities around the teacher-pupil relationship explored in some detail. The overarching theme of learning one is a relevant one for educational psychologists and applicable to all aspects of day to day practice. In the review, pupil experiences are reported but extensive examples of this were not sourced. This study has direct relevance for classroom practice and hopes to illustrate the relevance for educational psychology practise, both in terms of work with teachers in providing feedback to children and young people and in terms of supporting teacher professional development.
2.2.4.1.2 Gaps in the literature

This literature review details a sample of the literature pertaining to formative assessment and focuses on one aspect of the practice, that of teacher feedback. I have acknowledged the weaknesses in my search strategy and database searching skills, therefore a discussion of gaps in the literature can only be written with some hesitancy. The literature regarding assessment for learning falls largely within the educational rather than psychological body of research. Whilst I had sight of literature pertaining to projects and educational initiatives, I was unable to locate many empirical studies which focussed directly on the experiences and views of children and young people with regard to formative feedback. The international literature contains studies about teacher marking and assessment but my focus was to locate studies within an assessment for learning framework. The example of the Smith and Gorand (2005) study was one such study and interesting in that it reported negatively about the approach. I would be interested to read more papers in this area. Also, the positive effects of feedback and formative approaches are largely reported with regard to broad populations of students. Of greater professional relevance would be to consider studies which examine effects with vulnerable groups of learners, such as children and young people with additional learning needs. This client group were in fact excluded from the Smith and Gorand (2005) study.

It may be more accurate to say that my search strategy does not successfully locate literature in the following areas which would have been of relevance to educational psychology practice:

- the experiences and perceptions of children and young people with regard to formative feedback practices
- the impact of formative feedback practices on vulnerable groups of learners
2.2.4.2 Relevance of formative assessment and teacher feedback to professional educational psychology practice

The relevance of assessment for learning to educational psychology professional practice has been directly addressed in some detail by Gavine et al (2006). They propose that educational psychologists work within a formative assessment framework which is highly relevant for contemporary educational psychology practice. The language and approaches of formative assessment, its explicit links to learning theory, alongside its evidence base and conceptual framework, should resonate with psychologists who have historically sought to apply similar perspectives in their work. Gavine et al (2006) provide examples of and draw parallels between the significant contribution of educational psychology and the application of formative assessment to three key areas; children’s needs and effective schools, raising achievement and thinking skills.

Further consideration is given to a range of everyday educational psychology practices, such as dynamic assessment, precision teaching and solution focussed approaches; their comparative links with formative assessment are identified. The authors suggest that future directions and priorities for educational psychology might be led by focusing on the values and theoretical frameworks of formative assessment which recognise ‘the centrality of effective interactions’ in the classroom and are largely founded on constructivist theories. The role and participation of the young person in the learning process is at the core of formative assessment and personalised learning approaches and is also increasingly represented in the everyday practice and belief systems of educational psychologists. Gavine et al (2006) suggest that assessment for learning approaches could provide the profession of educational psychologists itself with a common and unifying terminology and understanding as well as provide a language with which to communicate with teachers and policy makers.

The role of feedback in the classroom is one not to be overlooked by educational psychologists. If psychologists view the teacher as the most valuable resource in the classroom, working with them to enhance how feedback is given in particular to vulnerable learners, could promote progress and learning for children and young people. A greater awareness of the essential feedback interaction and its potential influence on learning gains could support the work of both teachers and educational psychologists.
2.2.4.2.1 Formative assessment and teacher professional development including the role of the educational psychologist

Wiliam (2009) provides a convincing case for the professional development of teachers with regard to assessment for learning approaches. Given the substantial financial commitment already promised to the assessment for learning initiative by the Government, Wiliam’s recommendations are pragmatic. His extensive work both in the academic and research based fields of formative assessment and that of teacher training and education, provides credibility to his argument that financial and professional investment in formative assessment can be cost effective, raise standards and most significantly, be used in large scale application (for which costings and figures are provided). Wiliam (2009) outlines a model/mechanism of teacher professional development based on the process of supporting teachers to make greater use of assessment for learning through the school based creation of ‘Teacher Learning Communities’. Although this methodology is not directly referenced in the most recent Assessment for Learning National Strategy publication (DCSF, 2010), ‘collaborative working within a learning community’ is a research based recommendation to help schools to move towards the ‘establishment’ phase of embedding assessment for learning practice within a school.

Whilst educational psychologists are not referred to in Wiliam’s (2009) work, it is evident that educational psychologists could work with school staff to facilitate whole school collaborative learning as a model and way of working. Educational psychologists’ knowledge and experience in consultation, facilitation and systems/organisations would enable and enhance involvement with whole school professional teacher development using Wiliam’s (2009) ‘Teacher Learning Communities’ model or similar peer/buddy support or coaching models. The ‘Teacher Learning Communities’ model as detailed by Wiliam (2009) can be closely paralleled with the collaborative action research model (e.g. Howes et al, 2009) in which educational psychologists are already engaged. In collaborative action research methodology teachers are viewed as the ‘solution’ and collaborative working and learning from each other in a facilitated context is evidenced to encourage and develop collective and individual engagement with regard to a shared goal.
In working with teachers it is helpful to be aware of the practical strategies that can support the use of effective feedback in the classroom. Being more aware of the nature of the feedback process could enable an educational psychologist and a teacher working together to ensure a young person is receiving the right type and level of feedback. Authors such as Clarke (2001, 2003) and Shute (2007) provide helpful advice and strategies for the practitioner.

2.2.4.3 Personal reflection and development

2.2.4.3.1 Professional reflection

The writing of this literature review has enabled me to increase my knowledge and understanding of the complex processes involved in the teaching and learning process, in particular with regard to the teacher feedback role. As an educational psychologist, much time is spent working with teachers in an attempt to effect some measure of change for an individual or group of students. Knowledge of how to utilise the formative interactions that take place within the classroom could improve the learning experience for children and young people for whom progress feels elusive. It is a way of enhancing the resources that are already in the classroom rather than seeking to secure further external support.

Whilst educational psychologists are not ‘super-teachers’ and bring to the teacher-psychologist professional relationship a discrete skill set and perspectives, it is my view that an appreciation of the demands and challenges of the contemporary teaching role must be a pre-requisite of forming working relationships with teachers that are successful, effective and empathic. As my own teaching days become ever more distant, it has been a helpful personal process to focus on one aspect of classroom practice and expectation and to consider its implications for teachers as well as psychologists.

The new qualification route into the profession of educational psychology no longer has teaching experience as an essential criterion for course entry, so opportunities to develop knowledge of educational legislative frameworks and how they are then operationalised in classrooms should be sought not only through professional practice, working alongside teachers and within classrooms, but also reinforced and enhanced by an awareness and understanding of the academic research literature.
2.2.4.3.2  Personal development – academic skills

In order to complete this assignment, I have had opportunity to develop my academic research skills, but recognise the need to target in particular my on line database search skills. I have completed the on line OvidSp tutorials to increase my understanding of the on line library search engines and have completed a number of searches using the university library databases. I did not always find this a wholly successful or satisfactory process and the drawbacks of distance learning were sometimes felt. As I have had a number of false starts with this piece of work, my search strategy was not as systematic as it should have been. The methodical approach required for searching databases became quickly apparent as information/references appeared to be easily lost and sometimes never retrieved. Results of database searches sometimes seemed a little surprising and irrelevant and it was difficult to understand how this occurred. On the whole, most of my papers were sourced through references from book chapters and from wider, internet searches. I would like to do some further work on search strategies with the electronic databases by attending a university library course or tutorial in the near future.

As articles and books began to accumulate, the discipline of an organised and methodical approach to note taking and recording quickly became a necessity. It was easy to feel overwhelmed by the task of remembering the titles and authors of the papers that had been sourced and downloaded, to say nothing of their content.

I did encounter a few additional problems, now resolved, as a result of installing Windows 7 in my PC as it was some while before the university was able to release a new VPN compatible with the operating system and I came across document files whilst searching that would not open due to a compatibility problem. I have found, however, that Windows 7 offers greater accessibility of word processing documents (by being able to ‘pin’ a document to a list or the task bar, for example) and that it is possible to have several documents open at once and to be easily able to switch between them. This has been very useful in the writing of this assignment.

I have completed the list of references for this assignment following academic convention (using APA 5th) by word processing as I have worked throughout the assignment. My personal development note to self for further assignments is to learn how to use the electronic management system EndNote for referencing which is already installed in my PC.
Overall, I have found the reading matter of this literature review to be of professional interest and would like to consider using it as the basis for further research work.
2.2.6 Appendices

2.2.6.1 Appendix (i)

Example of a database search

Ovid: Search Form

Take a look at the new OvidSP

Search History (6 searches) (Click to close)

Search

PsycINFO 1806 to April Week 2 2010

Basic Search Find Citation Search Tools Search Fields Advanced Ovid Search

Multi-Field Search

Enter Keyword or phrase (use "" or "'" or "") for truncation):

Search

Limits (Click to close)

Publication Year

Additional Limits Edit Limits

Results Manager (Click to close)

http://ovidsp.uk.ovid.com/sp-2.3.1b/ovidweb.cgi

28/04/2010
Research Paper 2: Tutor Feedback Report

DOCTORATE IN EDUCATIONAL PSYCHOLOGY FEEDBACK

RESEARCH PAPER 1: LITERATURE REVIEW

Student Sharon Coman

Title Bridging the gap: the role of teacher feedback in assessment for learning

Summary comment

First Marker’s comments

AfL has been a government initiative that attempts to encourage teachers to match teaching to learners needs to ‘drive up standards’ through personalized learning. This research paper focuses on one aspect of this initiative, though the main thrust of explanation seems to be from an educational perspective rather than a psychological one (though the latter is present it is often left at a superficial level). There are good signposting paragraphs that help the reader to know what is coming up next. There is good coverage of the literature found from the databases and this is treated critically. Overall, the research paper does give a good overview of the topic.

The potential role for EPs comes at the end and with reference to learning theory (links here could be to behaviourist theory and goal setting) and then dynamic assessment (more explicit linkage here could be to Vygotskian approaches). You suggest a role for EPs in considering feedback but do not expand on this in a sufficiently focused way (e.g. with reference to systems theory or assessment skills/theory or theories of motivation).

Your personal reflections point to a number of challenges that you have learnt to overcome and to the development of research skills on the way (e.g. data base searching, using EndNote, cracking the VPN protocols with Windows 7 etc)

Second marker’s comments

There are many strengths to this research paper. On the positive side the it is well organized with each of the sections being appropriately signposted. You also provide a comprehensive account of the development and origins of the AfL approach with extensive reference to key authors, especially
Black and William. The search strategy is described in detail. For the most part your comments on the literature are detailed and reflect the depth of your reading and reflection. You also provide honest and insightful personal reflections on your own learning.

On the negative side I would have liked to have seen a more extensive rationale for undertaking the review – e.g. why is it important to look at the issue of teacher feedback in formative assessment? Do some people doubt its effectiveness? Is there evidence that teachers are not good at it? I also think that you have tried to cover too much ground. Section 3, the crux of the paper, is only 8 pages (out of 26). Perhaps other sections could have been reduced to allow more space for the in-depth review.

<table>
<thead>
<tr>
<th>Doctoral Criteria</th>
<th>Insufficient evidence</th>
<th>Assessment evidence</th>
<th>Improvement Suggestions</th>
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<tr>
<td><strong>Capacity to pursue research and scholarship</strong></td>
<td>Working towards</td>
<td>Achieved</td>
<td>Evidence of search strategy and skills used in systematic review (inclusion and exclusion criteria; snowballing; keywords and wild cards; date ranges)</td>
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<td><strong>Produce an original contribution and substantial addition to knowledge</strong></td>
<td>Achieved</td>
<td>This might involve bringing together and relating ideas from different areas of literature; or developing new insights from a body of literature; or producing new theoretical models or frameworks; or applying ideas to new ways of working in educational psychology practice.</td>
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<tr>
<td><strong>Demonstrate the relevance of the research to professional EP practice</strong></td>
<td>Achieved</td>
<td>In the discussion or conclusion sections you address the ‘So what?’ question: How does the research inform EP practice and develop or support the work that EPs do? What are the implications for Services or for service users?</td>
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<tr>
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<td>Achieved</td>
<td>In the discussion or conclusion sections you address the ‘So what?’ question: How does the research inform EP practice and develop or support the work that EPs do? What are the implications for Services or for service users?</td>
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The use of a theoretical framework (e.g. systems theory or Vygotskian social-cultural theory) could have helped with the overall structure and provided a theoretical lens for examining the different pieces of literature selected. Currently, different theories are referred to – however, these are left unconnected or compared.
<table>
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<th>Reflective personal evaluation is included. A final section is added to the assignment that relates what you have done to your own learning and development as a psychologist.</th>
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<td>Communicate clearly, accurately and according to the conventions for presentation of academic work.</td>
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<td>Feedback is a term from systems theory and it would have been useful to have some consideration of the underlying assumptions. This would have allowed more sense to be made of Hattie and Timperley’s comments (p 15).</td>
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<td>The distinction could also be made between formative and summative assessment.</td>
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<td>Try not to begin sentences with a number – e.g. 250 on page 12. Use Two hundred and fifty instead.</td>
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<td>The rationale section should give an indication as to why you are covering this area – I thought that this was implicit and left to the reader to understand why an EP would want to deal with this topic.</td>
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**Rationale is justified**

Working towards

The introduction to the assignment should justify why the literature review was being undertaken. This could be a theoretical rationale for undertaking the work or it could be related to local policy.
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<th>Demonstrate rigorous and critical thinking in regard to the literature and theory</th>
<th>Achieved</th>
<th>The material is presented accurately without bias</th>
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<td>Demonstrate how the topic of the research is related to a wider field of knowledge and research</td>
<td>Achieved</td>
<td>Sufficient breadth to provide good coverage of relevant information</td>
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<td>Either, a separate section discusses how the literature search was done or this is incorporated into the general story being told.</td>
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<tr>
<td>Demonstrate an understanding of the design and conduct of empirical research.</td>
<td>Achieved</td>
<td>A few key articles are explored in depth with consideration to theories, models, conceptual frameworks, methodologies or ideas central to the review’s research questions</td>
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Any further recommendations for reading or skills training

**RECOMMENDATION:**

(First Examiner to make recommendation, Second Examiner to contact First Examiner if they do not agree, or sign below to confirm the recommendation. Second Examiner to return the work and feedback sheets to First Examiner.)

| A. Pass | Please mark with an X |
(i) With no corrections

(ii) Subject to corrections being made to the satisfaction of the first Examiner (work to be achievable within one week for full-time students and two weeks for part-time students).

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<th>Signed First Examiner:</th>
<th>Garry Squires</th>
<th>Date:</th>
<th>13 June 10</th>
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<tr>
<td>Signed Second Examiner:</td>
<td>Peter Farrell</td>
<td>Date:</td>
<td>17th June 2010</td>
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| Yes/No | |
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| Do you wish the School Office to send the Research Paper to the External Examiner? | |

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The First and Second Examiners cannot agree a mark

The Research Paper is a resubmission (previously failed)

Part of the sample

**FIRST EXAMINER PLEASE ENSURE:** The original copy of the Examiners’ reports and one copy of the Research Paper is sent to Christine Chadwick, School Office Room B3.8. This will be sent out to the student and a copy of the feedback kept on student file.

**EXTERNAL EXAMINER’S RECOMMENDATION:**

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2.3 Research Paper 3: The use of formative feedback to enhance learning outcomes for pupils in a junior classroom – a collaborative action research approach
2.3.1 Introduction

2.3.1.1 Organisational context of the study

This study takes place within a large, predominantly rural Local Authority (LA) in England. The LA Children and Young People’s Service has overall accountability for a large number of primary and secondary schools and centres and is responsible for the education of 138,000 pupils overall. The LA school in which this study is located is in a coastal town, recognised as having the high levels of childhood poverty and deprivation. The school is a relatively large junior school, sited next to its feeder and associated infant school, and has approximately 450 pupils on roll across year groups 3 to 6.

The LA educational psychology service provides a range of services in support of its schools, centres and pupils. Such services include central or school based delivery of training for teachers and teaching assistants, consultation with school staff and parents and individual pupil based work.

2.3.1.2 The research project outline and rationale

This research study aims to explore an area of professional interest and relevance to educational psychologists; how learning outcomes for pupils can be improved by the feedback they receive in class with regard to their learning. As teachers, not psychologists, spend time with young people in learning situations, it is critical for both professional bodies to build an understanding of how these interactions can be maximised to impact on pupil learning. Whilst formative feedback is recognised to be a key component in pupil learning (Black & Wiliam, 1998) and underpins the Assessment for Learning Strategy (DCSF, 2008), research studies continue to indicate that such practices are complex, individualised and take time to fully establish and embed within classroom practice (e.g. Black, 2007; Wiliam, Lee, Harrison & Black, 2004).

The study adopts a collaborative action research design, the efficacy of which is also considered in the study. This is a well established and increasingly popular methodology used in the social sciences (e.g. Howes, Davies & Fox, 2009; Sagor, 2010) due to its ecological validity and practitioner involvement.
The research focus of this study is the experiences and reflections of one junior class teacher with regard to the feedback she gave to pupils about their learning. The methodology is adapted therefore to include myself working alongside one teacher rather than several. The teacher is placed as ‘researcher’ in this methodology as she was solely engaged in the observations she undertook and the changes she implemented. I met with the teacher for a series of interviews but was not involved at the classroom practice level. My role was one of facilitation, as I was removed from the setting of the research context.

The educational psychology service in the LA of this study does not typically offer action research work as part of its repertoire. This project methodology therefore provided an opportunity to critically explore collaborative action research feasibility and ways of extending partnership working with local teachers for the benefit of pupil learning. Such working practices have potential to expand or re-position the role of the educational psychologist from its commonly perceived special educational needs (SEN) focus to a wider involvement in the promotion of learning for all children and young people.

2.3.1.3 The research questions

This study seeks to address the following three research questions:

Research question 1: Can pupil learning outcomes be improved by the type of feedback they receive?

Research question 2: Do all children benefit equally from the feedback they receive?

Research question 3: Can using a collaborative action research approach effect change in the classroom?

Whilst the framework of the research questions was pre-determined in this study as the project was initiated by myself rather than naturally evolving, the research aims were compatible with the teacher aims as she sought to evaluate her practice to date in this field.
2.3.2 Literature Review

This literature review is presented in two parts to reflect the different aspects of interest contained within the research questions of the study. The first section focuses on the role of feedback in pupil learning and the second on collaborative working with teachers through action research models as a methodology.

2.3.2.1 Pupil feedback with regard to their learning

2.3.2.1.1 Assessment for Learning and pupil feedback

The body of research now established within the field of assessment for learning has arisen predominantly from the seminal work of Black and Wiliam (1998a). The extensive literature review they undertook and its subsequent suite of publications has gone on to inform UK educational policy (e.g. DCSF, 2008) and has revolutionised the assessment and learning agenda, placing formative and personalised learning in a central position in contemporary pedagogy (DfES, 2007). Black (2007) and Wiliam (2009), continue to emphasise and clarify that formative assessment is only present in assessment for learning when assessment information is ‘actually used to adapt the teaching work to meet learning needs’ (Wiliam, 2009, p. 8).

2.3.2.1.2 The role of teacher feedback

The complexity of feedback used within the classroom and its relationship to pupil learning is explored by many researchers (e.g. Haigh & Dixon, 2007; Swaffield, 2008; Webb & Jones, 2009). Originally based on engineering regulatory mechanisms, feedback describes the process of the functioning of one part of a system being regulated by information being fed back to it from another part (Swaffield, 2008; Wiliam, 2009). Along with Swaffield (2008), authors in the field (e.g. Ramaprasad, 1983; Wiliam, 2009) stress that in any context, information can only be considered to be feedback if it is intentionally to be used to close the gap between current and desired performance i.e. in education, between existing and future learning.

Swaffield (2008) and Russell and McGuigan (2007) note the identification of different types of feedback used in classrooms which are dependent on the teaching belief system and the consequent purpose of the feedback.
Swaffield (2008) reported that feedback can be one-way, based on the model of teaching as transmission of knowledge; feedback can develop thinking, based on an exploration of current understandings or feedback can be used to scaffold learning in a constructivist model of learning. Two types of feedback identified by Tunstall and Gipps (1996b) in their assessment typology are noted by Swaffield (2008) to be relevant within assessment for learning feedback approaches; the identification of success and looking at how work can be improved.

Teacher feedback in the learning process can take a variety of forms; oral, written, pictorial etc. and as the Strategy becomes more embedded in practice, the methods used to provide feedback to pupils have become more creative, embracing fellow pupils as well as adults (Clarke, 2001). Pryor and Crossouard (2008) describe the complexities involved in classroom interactions between teacher and learner and the need for teachers to develop a continuum of feedback responses and to have an understanding of the theoretical frameworks in which they lie.

It is the critical interaction ‘between and amongst teachers and learners’ (Shepard, 2000, cited in Pryor & Crossouard, 2008) which is fully explored and exploited within formative assessment practices and which has the aim of improving the teaching and learning process. Black and Wiliam (2003) suggest that the assessment and feedback skills required of a teacher for summative or evaluative purposes are different from those skills that are needed to support and guide learning on a day to day basis with formative questioning and methods. Black’s (2007) later review of formative practices indicates the significant demands that are placed on teachers in order to change their thinking and consequently their teaching to be able to successfully implement assessment for learning formative approaches. Even where schools were supported through University projects, Black (2007) cites two years as the timescale for change to be effectively embedded.

Using a collaborative research model, Haigh and Dixon (2007) explore the teacher researcher role within the framework of a formative assessment project in New Zealand. Teachers were asked to investigate by means of a variety of assessment tools, their student responses to teacher assessment and feedback. Participation in the project highlighted previously unrealised differential student need and response. An enhanced teacher awareness and understanding of the effectiveness of their feedback interactions led to reported changes in teacher practice.
Another New Zealand study (Williams, 2010) considered pupil perception of different types of feedback in the classroom inviting pupils to articulate what most supported their learning.

2.3.2.2 Collaborative working with teachers

2.3.2.2.1 The action research model – historical perspective

The contemporary emphasis on and promotion of the action research model within the social sciences has its roots in the post second world war period which was characterised by significant social change and upheaval. The work of American social psychologist, Lewin (as cited in Oja & Smulyan, 1989, p. 2 and Robson, 2002) focussed on the interactions and mutual investment of practitioner and social scientist to explore issues that were identified by the community in which they were experienced and so to effect social change.

The action research model was first adopted in the educational world in the 1950s (Corey, 1952, as cited in Oja & Smulyan, 1989) providing a new direction for researchers and practitioners which promoted improved practice through collective inquiry and immediate contextual practical application. The action research approach first recognised the role of the teacher as researcher or ‘experimenter’, encouraged to use the scientific model of hypothesis testing (Corey, 1952, as cited in Oja & Smulyan, 1989, p.5) rather than being the passive subject of research or experiments being imposed by external academic bodies. The influence of the collaborative group factor was integral to the work; cooperation between teachers was more likely to bring about change in practice, should it be necessary. The group provides a safe and dynamic context from which participants can critically examine their experiences, behaviours and belief systems.
2.3.2.2 Action research – a model for change?

The advancement of change as sought in the historical application of action research remains its core purpose and relevance in contemporary research methodology. This is the distinctive contribution and difference of this methodological approach compared with more established and recognised research aims such as description and understanding (Robson, 2002).

Robson (2002) notes the development and influence of the action research model within the applied field of the social sciences, describing action research and its associated approaches to regard ‘supporting and engineering change as an integral part of the research process’ (Robson, 2002, p. 7). The possibility of change is considered in these methodologies to be more likely using an ‘insider’ rather than an ‘outsider’ research model, despite the apparent contradictory positioning of the participant researcher i.e. the need to be able to apply critical objectivity from a position of subjective interest (Robson, 2002, p. 7).

The case for collaborative action research is promoted by Sagor (1992; 2010). In his manual of the methodology he emphasises and celebrates the critical role of the teacher in the student learning process and as do other authors (e.g. Howes, Davies & Fox (2009). It is Sagor’s view that teachers are not sufficiently or effectively involved in the development and exploration of the practice and knowledge that informs their profession.

Much policy change, Sagor (1992) notes, is imposed through a hierarchy of national legislation and governmental policy makers rather than generated from within the institutions affected by the proposals - i.e. the knowledge base for the profession is generated from the ‘outside’, not from ‘within’ the classroom. This research position has been acknowledged in Britain however and the action research model is now more typically incorporated into professional development (e.g. Howes et al 2009; Torrance & Pryor, 2001). A UK educational research community has emerged over the past few decades, typified by the Teaching and Learning Research Programme (e.g. TLRP, 2008) and the Collaborative Action Research Network (CARN) which aim to develop teacher knowledge and generate a research body to support those in education working with ‘the challenging processes of collaboration’ (Somekh, 2010).
Howes et al (2009) note in favour of the action research model that change within an organisation is more likely to be facilitated by a reflective and collaborative approach of the individuals concerned. Such individuals would have a shared understanding of goals and commitment to the project outcomes.

2.3.2.2.3 Collaborative action research – definitions

Collaborative action research is defined by (Sagor, 1992) who examines the meaning of the component words; ‘action’ to suggest that people undertake research for the purpose of examining what they themselves are doing in a professional context and how it might be changed and improved; ‘research’ to denote systematic and disciplined inquiry into an area of teaching and learning that is within the practitioner’s sphere of influence and ‘collaborative’ to mean groups of professionals with common goals who work and learn together in a community.

Coulter (2002) focuses on the word ‘action’ which he feels to be a neglected aspect in an understanding of the methodology. Coulter (2002) adopts a philosophical stance. He believes that, depending on how ‘action’ is understood, a different relationship is implied with theory, knowledge and research. Coulter (2002) bases his theory of action on a philosophical model involving three forms of human action; labour, work and action. Coulter’s review of the action research literature provides evidence he believes that the ‘action’ aspect of the methodology is less considered for example than the research or practice elements.

Howes et al (2009) define action research by its focus on ‘the goal of changes in action’ (Howes et al, 2009, p.45) in contrast to other methodologies which may have as their goal for example increased knowledge or understanding. Ferrance (2000) likewise notes the collaborative nature of action research and its possibility for change being within the sphere of influence of the research participants. Gordon (2008) also notes that action research can be done at an individual, small group or whole school level.
2.3.2.2.4 Teachers as researchers

Watkins (2006) notes that Hargreaves’ (1996, as cited in Watkins, 2006, p.12) critique of the role of research in education (i.e. in essence that the worlds of education and research were not sufficiently integrated) was one of the pivotal contributions in the research trend that then followed; that of practitioner teacher-researcher. Contrasting with more traditional forms of teacher professional development, many researchers (e.g. Frankham & Howes, 2006; Howes et al, 2009; Torrance & Pryor, 2001) position the teacher practitioner centrally in action research methodology and advocate their creative and collaborative involvement in the process as learners.

The views of such participant teacher researchers themselves have been studied to examine their perceptions of the researcher role. Many positive findings are reported, for example by Ponte (2002), Rathgen (2006) and Watkins (2006). Teachers note the value of learning through the research process which they feel contributes significantly to their professional development. Those teachers interviewed by Rathgen (2006) in her New Zealand small scale qualitative study, reported that the action research experience was reflective of the learning experience taking place in the classroom with students. The critical reflection involved in the research lead to increased awareness of the impact of their teaching on the students and provided opportunity to change practice.

Rathgen (2006) notes in her study, the requirement for a genuine collaborative partnership to develop between teachers and researchers for effective professional learning to occur. The credibility of the research findings is enhanced as they are directly relevant and applicable to the known context of the teacher’s classroom; teachers reported learning about phenomena in their classrooms of which they had not previously been aware. The importance of this ownership and discovery of the research context is also reported on by Haigh and Dixon (2007).

Haigh and Dixon (2007) and Ponte (2002) consider not only the new and considerable skill set that teachers must learn and master in order to be effective researchers but also the complexities and challenges inherent in participating in a research programme. Ponte (2002), reporting on a Dutch project, describes the concept of action research as a cyclical process of ‘the simultaneous development and application of knowledge by teachers’ (Ponte, 2002, p.401) and bases her theory on the model of ‘praxis’ i.e. reflective knowledge.
It is, however, the generation of this reflective knowledge and professional inquiry that can also be problematic for researchers and participants (e.g. Haigh & Dixon, 2007; Moore, 2004, as cited in Frankham & Howes, 2006, p.618) as unforeseen issues and tensions may arise from participation in the action research.

### 2.3.2.2.5 Teacher professional development - Learning Communities

The role of supported and sustained teacher learning as a pre-requisite for the successful implementation of assessment for learning approaches, and the potential role of a LA in this process is detailed by Black, Harrison, Lee, Marshall and Wiliam (2003). James and Pedder (2008) in their research with teachers also indicate that the new and transformational understandings required for successful teaching in this way, need commitment to continual learning and professional development in the context of the classroom and school using a ‘learning as participation’ model.

The principles of the action research methodology are embedded in the more recent development of Professional Learning Communities (PLCs) in educational settings (e.g. Gordon, 2008). Professional Learning Community is the terminology used in a school community to reflect a structured and ongoing commitment to the sharing of values and practice, to a collaborative focus on team work across all staff roles and to valuing reflective professional inquiry (DfES, 2005; DfES, 2006; DCSF, 2010). Handscomb (2009) refers to the professional development of teachers to have been revolutionised by the emphasis on school based and school focussed continuing professional development as promoted and reviewed at national government level (DfEE, 2001; HMI, 2006; HMI, 2010).

Different aspects of this new research culture have been explored. Ebbutt (2002) considers the characteristics of a school research culture which he feels have implications for this more recent introduction and development of research based approaches to professional development for teachers (e.g. DfEE, 2001). These cultural aspects of a setting provide the backdrop for any research ambitions and should be considered in setting up any research programme as schools, he maintains are at different stages of development in a research culture. Goodnough (2010) has examined the ‘modes of belonging’ that evolve as a result of teachers being part of research based learning communities, studying the formation of teacher identity from an ecological perspective.
2.3.2.2.6 Educational psychologists working collaboratively with teachers

For educational psychologists, collaborative action research can provide an opportunity to work with school staff at a systemic level, focusing on the education of all pupils. Stoker and Figg (1998) encourage the use and development of action research skills within the profession of educational psychology, perceived to be underdeveloped at the time of their writing, as a means of validating professional practice through the role of ‘scholarly practitioner’. Stoker and Figg (1998) suggest a cultural shift is needed within the profession to include at its core action research based work in the pursuit of new knowledge. Such an approach can be used at large scale project level but can also be feasible at a routine level in collaborative working with teachers to improve learning opportunities for all children and young people.

A number of examples can be found in the literature regarding educational psychologists working collaboratively with teacher colleagues in the action research process (e.g. Binnie, Allen & Beck, 2008; Howes et al, 2009). As contemporary educational psychology services have diversified their models of service delivery to include greater emphasis on systemic work (Stobie, 2002), so the scope for research based initiatives in schools has increased.

Howes et al (2009) provide a number of case studies to illustrate their work on educational inclusion. The studies were conducted as part of the Teaching and Learning Research Programme, a national educational research initiative. Educational psychologists were used in the project facilitation role, working within their usual schools. The project coordinators recognise the pivotal and complex role played by the facilitator and the skills required to effectively manage the process and to create the conditions necessary for the projects to succeed. Educational psychologists were selected for the role due to their existing knowledge base and skill set and their understanding of systemic work. Pragmatically, it was a way of utilising and maximising existing staff resources. It is not evident whether training was given to the educational psychologists as individuals or as a group and whether the role of facilitator was discussed and agreed within the team before undertaking the projects. Whilst a range of experiences are reflected in the case studies, the overall project provides examples of educational psychologists working effectively with teachers in action research projects.
Factors identified in these more successful cases were; adopting the role of critical friend, the impact of personal and particular factors, remaining collaborative and encouraging development and change at a systemic level.

Another example of educational psychologists working with teachers using an action research model is provided by Simm and Ingram (2008). In their research project, solution focused approaches are introduced to staff in a number of schools using a collaborative action research approach facilitated by the author educational psychologists. The project was in its second year at the time of writing and so involved a number of cycles and evaluation. The evaluative process of the action research is a strength within the project and is described in considerable detail. The project procedure does not provide an account in detail of the content of the approaches being introduced and the application of these to a school setting. Acknowledgement is given to the complexity of both the action research model and the implementation of solution focused work. The authors jointly conclude by integrating the two approaches, coming to regard them as complementary and philosophically compatible, and define ‘solution-focused action research’ as an effective methodology through which to promote change.

Binnie et al (2008), working in the Scottish context, seek to illustrate the capacity for educational psychology services to broaden their service delivery models to include research based work, which is recommended to be a core component of future service delivery models for educational psychology services (MacKay, 2002 as cited in Binnie et al, 2008). The skill set and knowledge base of the educational psychologist is recognised to lend itself to the further development of research practices within the community and should not be limited to or narrowed by individual case work and assessment which historically has been the core remit of the educational psychologist. Binnie et al (2008) report on the ‘action enquiry’ model of research used in the Local Authority of West Lothian. This methodology is collaborative and involves the participants centrally in the design, process and evaluation of the research, referred to as the 'organic development' of a methodology (Binnie et al, 2008, p.348). The action enquiry research was used to promote the improvement agenda in schools and its use was approved and encouraged by the Local Authority. The Educational Psychology Service supported the process at a service level, with agreement to focus with schools on the improvement agenda, and to provide a varied range of research support and information to the initiative.
Binnie et al (2008) stress the importance of school ownership of the research process in order for it to be effective, but promote the role of the educational psychologist as best placed to offer guidance and support.

2.3.3 Method

2.3.3.1 Rationale for methodology
A collaborative methodology was favoured for this study as it presented an opportunity to explore and extend an aspect of work now used and developed by many educational psychology services; that of consultation (Wagner, 2000). The methodology would enable an exploratory and non-directive approach to be adopted which I felt would place the teacher view centrally in the research and facilitate the professional reflection required of the teacher to provide insight into and evaluation of her feedback practices.

2.3.3.2 Project details

2.3.3.2.1 Ethical considerations
This research study was discussed with the Principal Educational Psychologist of the educational psychology service to inform him of the project rationale, aims and methodology and to seek his consent on behalf of the service and the LA. The LA does not have an ethics research committee, but it is an agreed protocol that the Principal would be aware of and give informed consent for research projects that are taking place within the LA as part of an accredited course of study.

Permission to carry out the research work was sought from the Headteacher of the school. The Head was supportive of the project as it was within a field of work currently of interest to the school. The methodology was explained to the Headteacher and potential outcomes and drawbacks of the project outlined.

The project was carried out within the ethical framework provided by The University of Manchester. The project methodology was initially agreed with the course academic supervisor and then submitted to the University of Manchester Committee on the Ethics of Research on Human Beings.
In summary, there were three main ethical concerns to address in the project; the project may highlight pupils with additional learning needs previously not identified, the participant teacher may feel she needed support at times other than when we had arranged to meet or the participant might wish to withdraw from the project due to her workload or to other issues that might potentially arise from being part of the project. These considerations were central to the informal discussions and formal interviews that were held throughout the period of the project, ensuring that the needs of individual pupils identified as a result of the research work were being addressed and taking a ‘reality check’ on each occasion with the participant teacher. Also given to the participant, were contact details for myself and the University, to contact in the event of any concerns. Built into the project proposal was the possibility of a joint meeting with the Head Teacher at any time should this be felt to be necessary. The right to withdraw from the project without question was made clear to the participant at the onset of the study and in the consent form.

The participant was given a Participant Information Sheet as part of the ethics process before the project began, which clearly outlined the project aims and rationale and detailed the anticipated expectations and commitment of the research participant (appendix i). Following an introductory meeting to discuss the project, the participant was asked to sign a consent form and was given two weeks in which to make a final decision about taking part in the study. The consent form confirmed that the participant agreed to the interviews being audio-recorded and to the use of anonymised quotes from the interviews. Assurance was given to anonymity in the transcribing of the interview texts.

The project was undertaken with overarching regard to the ethical considerations and responsibilities recommended by the British Psychological Society (BPS) for professional psychologists engaged in research studies (BPS, 2004). Researchers are reminded of their obligations towards participants in terms of informed consent, anonymity, confidentiality, the right to withdraw etc. The Code of Ethics and Conduct (BPS, 2006) reflects the core values of respect, competence, responsibility and integrity which should underpin the work of any practicing psychologist. The generic professional practice guidelines (BPS, 2008) are also relevant to this work, outlining the general principles which should underpin any work of a psychologist, in an applied or research capacity.
These guidelines were considered in the planning and administration of the research activities, and in the handling and storage of the hard copy and electronic data and associated documents.

No costs were incurred in this research study, other than the time of the researcher and the participant. It was made clear to the school staff that the time spent on the research project would be in addition to their normal allocated educational psychology service time. The audio-recording equipment required was already available within the educational psychology service. No incentives were offered to the school or the participant to take part in the project.

A letter of thanks was written to the Headteacher and to the teacher participant at the end of the project to acknowledge their participation and the project outcomes.

The teacher participant in the study was not known to me before the project began.

2.3.3.2.2 Participant selection, setting and timescales
There was one participant selected for this research project. The participant in this study was an experienced female teacher from the junior school (i.e. Years 3 to 6) described above. The study is located in her Year 3 class.

This participant was selected for the project following an approach made regarding the research to the Headteacher of the school. I was aware that the school were very committed to the development of Assessment for Learning approaches and it felt appropriate to seek their support for the study. The Headteacher went on to approach a member of staff to ask if she would like to participate in the project, given her interest and added responsibility in the Assessment for Learning Strategy.

The ethics section above describes the steps taken before the project began to ensure the participant, once identified, did not feel coerced and was willing and comfortable to commit to the requirements of the study.
2.3.3.2.3 The procedure of the study

The interviews involved in this study took place at the end of the school day in the classroom setting where the participant worked. This was a convenient time and place for the participant teacher and was arranged to suit her timetable commitments. The interview dates were scheduled and agreed in advance at the beginning of the project. It was agreed that the interviews would last for no longer than forty five minutes.

The five scheduled interviews took place over the summer term of 2010 at two to three weekly intervals. The five interviews were intended over the time period of the term to reflect a plan-do-review cycle.

The interviews followed an unstructured format (Robson, 2002), allowing for the participant to explore and reflect on her views and experiences. King (1994, as cited in Robson, 2002, p.271) refers to such interviews as qualitative research interviews. This style of interview, as opposed to fully structured or semi structured interview techniques, was an appropriate choice for the aims of the project as suggested by Robson (2002) i.e. the study was focussed on the meaning of a phenomenon relevant to the participant and the intention was to interview the participant over a series of interviews.

As the researcher interviewee, I adopted the reflective interviewing technique recommended by Sagor (1992) to be used in the ‘problem formulation’ (i.e. first) stage of his model. The interviewer asks questions to clarify thinking and promote personal reflection from the interviewee, allowing for and encouraging at the same time, flexibility and spontaneity. Active listening skills are required and the need for the interview to be challenging and thought provoking, without feeling uncomfortable. This describes the consultation model of problem solving and so was a familiar approach.

It was through the interview process that the teacher was encouraged to reflect on the effectiveness of her practice and to heighten her awareness of classroom feedback interactions through her observations between interviews. As the interviews progressed over the term, the teacher participant began to change her practice as a result of her thoughts and findings. This part of the research process was self directed on the part of the teacher.
2.3.3.2.4 Data collection and preparation

Each interview was audio-recorded with prior and written consent to ensure the data was collected accurately and notes were sometimes made by the participant and myself as the interview progressed.

Following each interview, an anonymised transcript of the audio recording was typed into text data to transfer it into a suitable format for analysis. This is the most typical method of data preparation used in qualitative data analysis (Taylor & Gibbs, 2005) and is considered necessary for the researcher to complete in order to form part of the familiarisation process of the text analysis (Braun & Clarke, 2006). A full transcription was made of the interviews so as to keep information in context and to allow for reflection over time, rather than producing a semi-transcript. Whilst every effort was made to be accurate, at times it was unclear what was said or both speakers spoke at the same time. The analysis to be used did not require detailed accuracy at the word and utterance level, but on the whole this was captured and a thorough transcript produced. The transcripts were then checked for accuracy against the original recordings.

The audio cassette tapes were recorded over once the transcriptions were made.

The text was then transferred into a grid in which the interviewee and interviewer were anonymous but distinguished; the speech segments were separated as in a drama ‘script’ style and each segment was numbered. A column was included to the right hand side to allow for later coding and any relevant notes. This format was then suitable both for analysis and for referencing quotes and for locating text within the interview scripts for reporting purposes.

The transcripts were stored electronically and in hard copy.
2.3.3.2.5 Data analysis

A thematic analysis was used to analyse the textual data. Braun and Clarke (2006) argue that thematic analysis is widely used in psychology and that it offers an accessible approach to qualitative data analysis. Although the process of thematic analysis is used within other thematic approaches, the authors suggest that it is a ‘foundational method’ that researchers in qualitative methods should learn. Thematic analysis is a ‘method for identifying, analysing and reporting patterns (themes) within data’. The process will minimise the data set into manageable chunks. Themes are identified to ‘capture something important about the data in relation to the research question’. Prevalence of themes is not quantified as in content analysis; a theme can exist with limited occurrences.

Thematic analysis was undertaken following the guidance given by Braun and Clarke (2006) which corresponds to the pattern of first, second and third order analysis referred to by some authors. The sequence of analysis was as follows:

(i) Familiarisation of the data – this was achieved through transcribing and reading the data set, highlighting areas of potential interest

(ii) Generating codes – systematically coding interesting features

(iii) Searching for themes (broader) – collating codes into themes

(iv) Reviewing themes – match themes to extracts

(v) Name themes – refine themes

(vi) Write a report – selection of extracts related to research question

My intention was to provide an overall analysis which was relevant to the research questions, rather than a very detailed analysis.
2.3.4 Results and discussion

2.3.4.1 Findings and discussion

2.3.4.1.1 The coding of the data

The hard copies of the coded transcripts can be made available from the author. Given the extent of the wordage it is not feasible to include them in their entirety with the appendices. A sample from the formatted and coded transcripts is included in this report (appendix ii).

The section below presents the results of the thematic analysis I manually completed on hard copies of the interview data.

(i) familiarisation with the data

Initial ideas and thoughts when re-reading the transcripts included observations of a sense of progression over time, of difference in content; the interviews became more focussed as the specific issues became clear and were addressed, the commitment and positivity of the teacher came through, plans are made and changes occur

(ii) generating initial codes

I adopted a ‘theory driven’ (Braun & Clarke, 2006) method of initial coding i.e. I approached the data with specific questions in mind which provided a framework for the data.

Coding references included for example; teacher work around assessment for learning, asking pupils about their learning, verbal feedback, written feedback, marking policy, time restraints, observation of pupil learning, differences between assessment of maths and literacy, target setting, working collaboratively with other staff, pupil progress, vulnerable learners, making children feel better about themselves.
(iii, iv and v) searching, refining and naming themes

The codes were sorted into themes and grouped to represent broader themes as illustrated below:

<table>
<thead>
<tr>
<th>Codes</th>
<th>Theme - descriptor</th>
<th>Name of theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher work around assessment</td>
<td>Defines context and position of teacher, her willingness to work with colleagues, her responsibility for AfL.</td>
<td>Teacher role and responsibilities</td>
</tr>
<tr>
<td>Introducing AfL</td>
<td></td>
<td></td>
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<tr>
<td>Working with others</td>
<td></td>
<td></td>
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<tr>
<td>Advice to others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole school approach</td>
<td>Reference to policy and whole school practice and expectation.</td>
<td>External authorisation</td>
</tr>
<tr>
<td>Whole school policy</td>
<td>Reference to external body.</td>
<td></td>
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<tr>
<td>Non negotiable policy</td>
<td></td>
<td></td>
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<tr>
<td>Ofsted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day to day feedback</td>
<td>Refers to all the feedback used in class</td>
<td>Feedback mechanisms</td>
</tr>
<tr>
<td>2 stars and a wish peer assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>teacher marking</td>
<td></td>
<td></td>
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<tr>
<td>pupil response to feedback</td>
<td></td>
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<tr>
<td>reflection prompts</td>
<td></td>
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<tr>
<td>verbal feedback</td>
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<tr>
<td>coded feedback</td>
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<tr>
<td>modelling</td>
<td></td>
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<tr>
<td>hands down</td>
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<tr>
<td>traffic light system</td>
<td></td>
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<tr>
<td>target setting photographs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time constraints</td>
<td>Restrictions on what it is possible to achieve, demands of job</td>
<td>Time factors</td>
</tr>
<tr>
<td>What is working well</td>
<td>Reflective of teacher attitude to her role</td>
<td>Professional integrity</td>
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<tr>
<td>Inclusive approach</td>
<td></td>
<td></td>
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<tr>
<td>Reflecting on practice</td>
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<tr>
<td>Teacher responsibility</td>
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<tr>
<td>Observation</td>
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<tr>
<td>Professional confidence</td>
<td></td>
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<tr>
<td>Positive approach</td>
<td></td>
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<tr>
<td>Professional judgement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of teacher focus group</td>
<td>Reference to how feedback would be used with vulnerable pupils</td>
<td>New approaches</td>
</tr>
<tr>
<td>Personalised feedback</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate feedback</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Vulnerable learners
Shared characteristics
Lacking in responsibility for learning

Identified need
Social deprivation
Pupil confidence
Improved behaviour
Coping strategies
Using praise
Value contribution

<table>
<thead>
<tr>
<th>Difference between maths and literacy</th>
<th>Assessment differences</th>
<th>Curriculum issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scribing for pupils</td>
<td>Alternative ways of working</td>
<td>Recognising and removing barriers to learning</td>
</tr>
<tr>
<td>Plans for September</td>
<td>Planning for the new term</td>
<td>Future planning</td>
</tr>
<tr>
<td>Change in practice</td>
<td>Recognition of change, reflections on project</td>
<td>Change</td>
</tr>
<tr>
<td>Pupil engagement</td>
<td></td>
<td></td>
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<tr>
<td>Reflection</td>
<td>Reflective practice</td>
<td></td>
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<tr>
<td>Evaluating process</td>
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<td></td>
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<tr>
<td>Observation</td>
<td></td>
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</tr>
</tbody>
</table>

**Table 2. Thematic analysis – coding and themes**

2.3.4.1.2 **Discussion of the research findings**

In this research study, the teacher participant adopted the role of the key researcher. My contact with the participant was limited to the research interviews and did not involve any time spent in the research context of the classroom with her. The data collection process therefore was solely dependent on the teacher participant reports. The teacher undertook observations, decisions and planning in order to complete a research plan-do-review cycle. The teacher-as-researcher role empowered the participant to take the opportunity to reflect on her practice in a way that she had perhaps not done before. In this instance, it is my view that this was a powerful experience for the teacher; observing herself and her pupils from a different and more critical stance. It did require confidence and self-belief on her behalf to be able to do this and a willingness to examine practice, take risks and experiment with change.
The experience of the teacher participant in this study supports previous research findings regarding the discovery of previously unrealised phenomenon occurring in the classroom (e.g. Haigh & Dixon, 2007; Rathgen, 2006). The teacher in this study took ownership of the research process and its impact in her classroom as highlighted by Haigh and Dixon, (2007). Haigh and Dixon, (2007) report that the foremost reason teachers gained new understandings in classroom based inquiry models, was because their ‘investigations …were grounded in their classrooms, in their discipline and involved their students’ (Haigh & Dixon, 2007, p.372). Through the research process, the classroom becomes a ‘powerful context for teacher learning’ (Borko, 2004, as cited in Haigh & Dixon, 2007, p.372). Torrance and Pryor (2001) note that this critical reflection on practice is an essential first step before being able to implement new approaches. This again supports the experience of the teacher participant who reflected this process.

The information below provides key extracts from the interview transcripts which relate to the research questions. The extracts are noted by themes as identified in Table 1. The reference refers to the location of the extract in the interview transcripts.

Research question 1: Can pupil learning outcomes be improved by the type of feedback they receive?

The teacher participant began her work in the study by reflecting on the class group in general and their response to feedback being given. The working practices of the teacher included a variety of well established and inclusive feedback mechanisms used routinely with pupils in her class. This practice was the result of additional training and development undergone by the teacher over time and was rooted in the principle that learning outcomes can be improved by the type of feedback pupils receive (Black & Wiliam, 1998a). The teacher showed an awareness of this early on in the first interview, illustrating a differentiated approach to giving feedback to pupils:

I think a lot of the time, children with additional needs respond better verbally, if you can work with them and talk with them … it depends what their difficulties are. Quite often, those children can have difficulties recording and you often find that if you talk to them they understand a lot more than if you are just relying on written feedback.

Transcript 1 segment 72 ‘feedback mechanisms’
As she began to explore with types of feedback, the teacher made some interesting initial observations once she introduced a more rigorous daily working group system in which feedback was used more intensively and on a more personal individualised level with the pupils she had noted to be resistant to more general feedback:

... but what I have done when I have been in the classroom, with the children I have noticed who just haven't got something, I have brought them together, to focus on those children and surprisingly enough I have noticed it is very often my vulnerable children. I seem to be working with the same children a lot and that is something that I have noticed.

Transcript 3 segment 4 ‘new approaches’

So what I have really been trying to do with her is really value her verbal contribution because she is again in line with her peers but you wouldn’t think so when you look at her written work. So I have been really trying to value her contributions but helping her to reread them sometimes so that she can put it into a sentence.

Transcript 4 segment 22 ‘new approaches’

... and one boy in particular has become more willing to share his ideas.

Transcript 5 segment 24 ‘new approaches’

The pupils identified through the observations began to show learning gains in a short time in response to different feedback approaches and the opportunity to work with the teacher in a different way.
Research question 2: Do all children benefit equally from the feedback they receive?

Within the school, there was the established practice of ‘Teacher Focus Groups’ which provided pupils with additional opportunity to learn with the teacher and receive feedback about their learning. This practice recognised that not all pupils will respond equally to feedback and some will require a different presentation of information:

So when children have done some work and I mark it, sometimes I discover that they have got completely the wrong end of the stick or they have not been able to achieve the learning outcome at all … what the teacher focus groups do is they do take what has happened the day before or the previous lesson in that subject area and then you pick out the children who need a little bit more support, who maybe need to come back to something … it would be more personalised feedback.

Transcript 2 segment 2 ‘feedback mechanisms’

Once the teacher started to carefully observe her class, she concluded however, that there were some children who were not making progress and who had not responded to the feedback mechanisms she generally used. She had previously assumed the feedback was effective but on reflection, noted a number of individuals who lacked confidence and independent learning skills.

The teacher shows surprise at her own discovery and observations:

there are still some children who don’t do it, don’t do it right, just don’t it and what amazes me is that I have not noticed that they are not doing it. How did I not notice what were they doing, they must have looked like they were doing it.

Transcript 3 segment 24 ‘Change’

one thing that really struck me over the last couple of weeks … we did this piece of writing and there is one girl in my class who is still unable to write in sentences, she will write and write and write but she doesn’t understand what a sentence is and I am thinking well we are near the end of Year 3, I really need to get on top of that.

Transcript 2 segment 2 ‘Feedback mechanisms’
I think that they maybe just need a bit more direction and a bit more training than the other children and the only way to achieve that is to work with them in a small group.

Transcript 2 segment 14 ‘Feedback mechanisms’

Research question 3: *Can using a collaborative action research approach effect change in the classroom?*

As noted in the literature review above, the potential for change is a key defining characteristic of the collaborative action research methodology (Robson, 2002) and is explored in the following analysis.

The interviews reflect considerable time spent on problem formulation (Haigh & Dixon, 2007; Sagor, 1992) which I feel resulted in a clearly defined focus and purpose for the teacher participant throughout the period of the project. Change became evident as the research progressed. Once she had made some critical observations and decided where she would like to see change, the teacher implemented new practices which began to have an effect on pupil performance and learning. This change in classroom practice resonates with the collaborative action research findings of Torrance and Pryor, (2001) who also explore formative assessment using this methodology and parallel it with the methodology itself as they liken formative assessment to a research activity.

There were many examples of change cited in the interviews. In the extract below, the teacher observes small but significant changes in a pupil:

There is one girl in particular who does have real self-esteem issues and I think it (changed practice) is impacting positively on her in another way because ... I think that she suffers from a really, really low self-esteem and some days she can come to school and you know that she has got out of bed at the wrong side and she is very uncooperative and you can have a really, really difficult day with her. I think that the fact that she has been working in these groups a bit more with me and it’s not a massive amount of time but when she has, she is smiling a little bit more with me.

Transcript 3 segment 52 ‘Change’
The teacher engagement with the action research process was very positive as she took the opportunity to evaluate and celebrate her practice and professional integrity:

All of this in a way has come from what I am doing with you.

Transcript 4 segment 18 ‘Change

It has reminded of this again and reminded me that I can, I am the professional and I can say ‘this is how I am going to do it’, because I feel this is the best way to do it actually.

Transcript 4 segment ‘Change

You have used questioning in a really good way to make me think about things which I probably wouldn’t have thought about before, but your questioning has enabled me to do that.

Transcript 5 segment 50 ‘Change’

The extracts above directly relate to the research questions and address the issues under exploration. The process revealed through the interviews indicted the complexity of feedback in the classroom and pupil response to these learning opportunities (Swaffield, 2008). The teacher in this study was highly committed to the assessment for learning approaches and experienced much success and enthusiasm as a practitioner with the implementation of the initiative. Her observations however, concluded that the feedback in place was not of equal benefit to all pupils and that changes were needed in the way that feedback was given for some pupils. The process of taking part in the research but maintaining ownership and control over what she did in class appeared to be a powerful methodology for her own professional practice.
The data gathered in this study has not focussed in specific terms on the range of feedback tools used in the classroom context and their intended purpose and impact and whether the feedback mechanisms described in the study would be recognised as formative or indeed as feedback i.e. that the information is being intentionally used to close the gap between current and desired learning (e.g. Wiliam, 2009). A more structured style of interviewing than the one used in this study would be required to gain more detailed and specific information.

2.3.5 Critique of the study

2.3.5.1 Critique and evaluation of the study

Various aspects of this study may be considered for scrutiny in terms of validity, reliability and methodological rigour. The areas identified below are key points in a critical review of the research practice and decision making reflected in the study.

2.3.5.1.1 Limitations of the study

There are a number of limitations evident in the design of this study, the parameters of which were set within one classroom and involved the participation of one teacher in an action research project. The primary limitation therefore of the study is its idiographic nature i.e. the presentation of an in-depth study of one case. Limitation may be implied from the inability to generalise from this one case, although single case methodology is commonly evidenced in the social sciences and can take different forms (Willig, 2001).

The time span of the research project may also be seen to be a limitation of the study. The project ran over one school term. This generated much data and effected change in practice for the teacher. It would have been more desirable however, to run the project for longer to enable further cycles of planning and review to take place and then to build in evaluation processes. A school year would have been a suitable timescale for the project.
2.3.5.1.2  Improvements to the study

A number of improvements could be made to improve the validity and reliability of this study. These are mainly focussed on the analysis and interpretation of the qualitative data. Steps could have been incorporated into the analysis stage to add rigour to the process. These might be to carry out the analysis with a colleague or perhaps two or three interested parties to compare inter-rater reliability (Robson, 2002). Another process might be to go back to the participant with the analysis and check her interpretation of the conclusions, known as ‘respondent reliability’.

Analysis of the data set might have benefited from the use of a software program now commonly used in qualitative data analysis. This would have provided a more objective and systematic analysis which would have overcome issues of researcher bias.

2.3.5.1.3  Researcher reflexivity and researcher bias

Researcher reflexivity refers to the contribution and influence of the researcher in the research process and project as a whole (Watt, 2007). Robson (2002) notes that this phenomenon will always be present in research studies to some degree and that measures should be adopted to minimise researcher bias throughout the stages of the study. Although it may be possible to reduce the influence of the researcher and so aim for greater impartiality, Willig (2001) too maintains that researcher influence cannot be entirely removed and so must be monitored and acknowledged as part of the process; ‘the researcher’s identity and standpoint do fundamentally shape the research process and the findings’ Willig (2001, p7). Researcher reflexivity demands therefore insight and critical self-awareness on the part of the researcher which needs to be maintained at all steps of any research project.

Watt (2007) reports this to be an essential part of the researcher role, integral to dealing with complex qualitative processes. Watt’s (2007) use of a research journal, used for reflective thinking and writing, is well illustrated in her convincing paper.

Researcher reflexivity is especially relevant to the collaborative action research process as the researcher is positioned centrally in the practices, procedures and decision making of any research project. The researcher is working from ‘inside’ the research context. Implicit in the collaborative action research model framework is the formulation of the research focus by the participant/s.
Elliott (1985, as cited in Oja, 1989, p. 14) notes that if other agencies are working with the participants, such as university researchers, then a research focus may be pre-determined or provided in addition to be explored alongside or in conjunction with the participant research issue. Elliott (1985, as cited in Oja, 1989, p. 14) observes that this may have a limiting effect on the research outcomes.

This observation is highly pertinent to the research study described above. As noted above, the research did not arise out of a naturally occurring issue identified by a school staff. I made an approach to a school to seek their involvement in a research project the overarching focus of which was pre-determined and provided a structure for the process in order to address a number of research questions. This imposed from the outset a researcher-led focus to the project and determined the nature of the interviews that then took place. Aware of this issue, I sought to encourage as much flexibility of thought from the teacher participant and to broaden the parameters of our work as much as possible. This occurred when sometimes the teacher participant checked with me that she was providing me with the information or data I required. I re-directed this enquiry to ensure she focussed on her own experiences and desired outcomes. The project focus did remain however within the mutually relevant theme of pupil-teacher feedback.

The issue of researcher reflexivity is clearly also pertinent to the coding procedure applied in the thematic analysis as this is potentially a highly subjective process.

2.3.5.1.4 Response bias

Responder bias (Robson, 2002) is another factor to consider in any research study and is of relevance in the present research project. This phenomenon examines the responses and reactions of the participant ‘responder’ and the impact of these on the research process and its findings. Participants may experience a range of emotions and responses when taking part in a research project which will inevitably impact on the outcomes of the research. A participant may be keen to please, may be obstructive, may feel threatened etc. Researcher insight is required regarding positions of power, status, experience and hierarchy etc. In the present study, the participant may have been affected by the knowledge that I routinely work in the school and may have felt it was important to maintain a positive working relationship with me, regardless of her thoughts about and experiences of the project. The intensity of the researcher-respondent relationship in this case was notable as the participant was
aware she was the sole focus of the project, which may have put her under some pressure. Working on a one to one basis over a period of time required a mutual and equal regard for each other as colleagues. Whilst I sought to establish this in order to minimise the potential effects of responder bias, the dynamics of the researcher-participant relationship present with a complexity which cannot be underestimated in the research process and outcomes.

2.3.6 Conclusions

2.3.6.1 Professional relevance

It is my view that the findings of this study are of relevance to the profession of educational psychology and its practice. The action research process itself is becoming more prevalent in educational communities as noted in the literature review and educational psychologists could take a central role to support this development. As illustrated in the literature (e.g. Howes et al, 2009, Stoker & Figg, 1998), educational psychologists are building on their skills and professional resources if they become involved in research based initiatives in collaboration with teachers. Educational psychologists are well placed to support schools in the development of a learning culture and community. My own experience would encourage me to promote action research as a way of working with teachers and school communities and to promote the school as a learning community for all its members. The model could be generally applicable for areas of professional interest other than pupil learning gains. The possibility for change seems evident and an effective way to arrive at new understandings in the classroom. It is also likely that the experience would encourage the teacher participant to take part in or initiate an action research project in the future and so use research more in the school setting (e.g. Simm & Ingram, 2008).
2.3.6.2 Suggestions for further work

I would like to develop the work in the above study to include working with a small team of teachers on a shared goal for change. The experiences gained from working with one teacher would encourage me to develop this style of working further and to promote it within the educational psychology service. This would be a shift in our local service delivery pattern but would build on the research and development focus already established in the service. Collaborative action research offers ways for psychologists to work at a wider, systemic level and to be involved with and make a difference for a greater numbers of pupils.

Working with children and young people to explore their feedback experiences would also be of relevance and interest. Examples of such studies are limited in the literature (e.g. Smith & Gorard, 2005; Tunstall & Gipps, 1996a; Williams, 2010) but reveal much insight on the part of the young people.

2.3.6.3 Personal reflection and evaluation: The researcher experience

My experience of this research process with regard to the positioning of myself as researcher, felt closely related to the work undertaken by educational psychologists using a consultation model (e.g. Wagner, 2000). The consultation model acknowledges the complexity inherent in school systems and has developed as a model of service delivery to ‘aid the functioning of a system and its inter-related systems’ (Wagner, 2000, p.11). In the consultation model, the psychologist remains at distance from the ‘problem’ or issue itself, vicariously experiencing the issue through active and collaborative engagement with the ‘problem holder’ in order to facilitate the problem holder’s understanding of what is happening and so arrive at solutions. This stance was replicated in my research role in the above study.

Personal reflection on the above study suggests a number of positive factors about the experience. I enjoyed the data collection process and found it to be genuinely interesting and engaging, despite having had some concerns at the outset. The anticipated outcomes of the research felt uncertain and I knew I would be very dependent on the responses of the teacher participant. Having not met before the project began, the working style, beliefs, value systems and communication style of the teacher participant were unknown. This meant the research process was not set within a known and accepted way of being and so it was possible to work without pre-conceptions with a newly introduced colleague. The research relationship and rapport
that was established was a positive of the study and I feel that the interested and committed approach and demeanour of the teacher participant was a significant and contributory factor to the project outcomes.

The success experienced in this study may not have been the case, however, and I was mindful throughout of the risks implicit in involving only one participant in a project. The project could not have gone ahead had the participant been off school or chosen to withdraw from the research. For future project designs where work is undertaken on a larger scale, it is unlikely that I would choose this approach again in the way it has been conducted above.

I felt the project gave a positive view of psychology and of research to the teacher participant as her evaluations indicated she had benefited from the process, that it had had an impact on her practice and that this was attributed to the nature of the questioning in the interviews. This evaluation gave me valuable feedback about the importance of process and engagement and encouraged my belief in a consultation model of service delivery.

The other positive I noted throughout, was the opportunity to develop or hone skills that I routinely use in my role as an educational psychologist. I was able to reflect on my communication skills, namely active listening skills and consultation questioning. Listening to the transcripts of the interviews and re-reading them was of course a rare opportunity to hear oneself using these skills. I was able to think of more effective questions after the event and noted at times on reflection, my inclination to give opinions and suggestions etc. Overall, the process of taking part in the five interviews as a interviewer provided me with an opportunity for continuing professional development which is of direct relevance to my role as an educational psychologist.

In terms of academic skills and their development, I continue to face the challenge inherent in academic research work but feel that more learning has taken place. I have more confidence with literature searches and have begun to learn the use of Endnote but did not use it for this assignment. I chose to write this assignment in the first person which I have not done before but wished to experiment with this style. It feels like a more immediate and honest presentation of events, although there is also the risk of becoming more casual in how information is conveyed.
I found the process of dealing with a large amount of qualitative data quite overwhelming and was unsure of the procedures I adopted in this novice situation. I felt overall that in presenting the data I did not sufficiently capture the positive and dynamic experience of the project.
2.3.7 Appendices

2.3.7.1 Appendix (i)

The use of formative feedback to enhance learning outcomes for pupils in a junior classroom – a collaborative action research project

Participant Information Sheet

You are being invited to take part in a student project research study which is part of the professional Doctorate in educational psychology course. Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information – my contact details are included. Take time to decide whether or not you wish to take part. Thank you for reading this.

Who will conduct the research?

Sharon Coman, Educational Psychologist, University of Manchester, School of Education

Title of the Research

The use of formative feedback to enhance learning outcomes for pupils in a junior classroom – a collaborative action research project.

What is the aim of the research?

To explore the different ways that feedback can be given to children in order to improve their learning.

The study uses a collaborative action research approach – this means we will work together to explore the research focus.
Why have I been chosen?

I have discussed the study with the head teacher to gain consent and support for the project. This school was chosen as I knew that Assessment for Learning approaches were used and promoted within the school. I have asked him/her to approach staff to see if anyone would be interested and willing to participate in the project.

What would I be asked to do if I took part?

If you agree to take part in this research, you will be the only participant. I would be asking you to do the following at your convenience:

- reflective thinking about the subject of the research focus i.e. feedback in the classroom (ongoing throughout)
- keep rough notes in a diary/jotter/log about classroom practice regarding feedback (periodic)
- provide examples of feedback, samples of work etc (periodic)
- take part in a maximum of 6 qualitative interviews with myself every 2-3 weeks over the summer term for 45 minutes duration which will be in a semi-structured format, allowing the participant to explore thoughts, ideas and possible actions regarding feedback in the classroom. A type of plan-do-review cycle will be used over the weeks of data collection. The interview will focus on current aspects of feedback practice, its impact on children’s learning and potential changes that might enhance/improve learning for children
- give some evaluative feedback about participating in the project

What happens to the data collected?

The data will be used to provide information about how practice can change to incorporate different ways of feeding back to young learners and how it can impact on their learning. The data will be presented in a report.
How is confidentiality maintained?

You will not be named in the write up of the report and all data gathered will be kept securely and confidentially in both electronic and hard copy. Files kept electronically will be password protected.

I would prefer to audio tape our interviews/discussions due to the practicalities of trying to take notes or remember all of what you say. I will transcribe the interviews and then destroy the tapes by wiping over them. The transcripts of the interviews will be kept securely for another 5 years approximately.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself.

Will I be paid for participating in the research?

No payment will be given for participating in this research.

What is the duration of the research?

The project will take place over the summer term 2010. I would hope that we could meet every 2-3 weeks throughout this period as described above. This would be approximately 5-6 meetings maximum.

Where will the research be conducted?

At your school in a setting chosen by you.

Will the outcomes of the research be published?

I have a requirement to write an assignment for the University and would also write a report for you and the school.
Criminal Records Check (if applicable)

I have the enhanced level CRB check as required by the Local Authority to work in your school as part of my role as an educational psychologist.

Contact for further information

Sharon Coman – contacts;

Sharon.coman@northyorks.gov.uk

Tel: 01609

Mobile;

What if something goes wrong?

Please contact me if you have any concerns. You might also want to discuss matters with the head teacher.

I will be working with regard to the ethical guidelines provided by both the British Psychological Society and the University of Manchester which seek to ensure your well-being as a participant. I can provide additional information if required.

If you wish to make a formal complaint about the conduct of the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.
2.3.7.2 Appendix (ii) Interview transcript – example of format

P 8 No they work on different tables – in Maths a couple of tables are of similar ability but there are a couple of children – one from each table who are the ones who I have to get them to work with me. They don’t all sit together at the start of the lesson in Maths they are placed differently.

EP 9 But it would seem that they are using similar coping strategies to get through the lesson and possibly are being ‘carried’ as it were, by other children?

P 10 What I have noticed is just how much they do do that because if you look in their books it can look like they are achieving but from working with these children in a small group and questioning them and finding out what they actually can do they can’t do a lot of the things that if you look in their books you would think they have got this.

EP 11 How do you monitor how they are doing in the activities that are shared activities or talking partner type activities is it possible as a teacher to work out who is contributing to that and how they have participated?

P 12 What you try to do is children don’t always have the same talk partner because sometimes one person will do all the work. So they change and it is just about observing them really and seeing who is engaging in the discussion. Quite often those children they are either very quiet and don’t say an awful lot or they can almost act over confident when they are working with their talk partner and can be quite loud and quite domineering in effect. But actually what they are saying is not they are not really saying anything it is just words that are coming out. They are not very good at listening to a partner and being able to respond.

EP 13 So the children that you have ended up pulling out to then work together, you would feel that in common they have a fairly low self-esteem, low view of themselves as a learner and do they have other characteristics – is they anything else that you might have noticed is a common variable or factor?

P 14 Well only that some of them their backgrounds, their home situations are quite challenging.

EP 15 So they are maybe not having the back up at home, the support from home, the kind of understanding that parents support their learning at home?

P 16 It is actually the same children who I have identified in Literacy as well as well as the ones who don’t take that ownership of their learning and think about – they just do things as they are told to do things but they are not really understanding how they are doing things and how it is going to help them and how it will help them to improve.

EP 17 They are not transferring the skills to other situations – so you are saying that they are vulnerable, self-esteem is perhaps an issue. It is interesting that you haven’t said that there are issues around their capacity to learn, they isn’t what you are identifying is it?

P 18 No, because they are not special needs children who have been identified as making very low progress there might be some sort of learning difficulty.
DOCTORATE IN EDUCATIONAL PSYCHOLOGY FEEDBACK

RESEARCH PAPERS 2 AND 3: RESEARCH PROJECTS

Student Sharon Coman

Title The use of formative feedback to enhance learning outcomes of pupils in a junior school classroom

Summary comment

First Marker’s comments

This is described as a collaborative action research project and as a single participant case study – the former is probably a more accurate description, though I am not clear as to the extent that the teacher contributed to the research questions or methods involved in effecting change in the classroom. The role of the teacher as a researcher is explained in the discussion section. None-the-less, this is an interesting piece of practitioner research.

The research questions are split between two aims

- Evaluating changes in the effectiveness of teacher feedback to pupils (RQ1 and RQ2)
- Evaluating the utility of action research as a methodology for producing change (RQ3)

The literature covers both aims and this leads into the collaborative action research design and subsequent thematic analyses of transcribed teacher interviews. The examples provided on p 22 were helpful to show how this analysis was undertaken. The discussion section and analysis is thin and under-developed (p24-26) and does not relate back to the literature. Further work is recommended to deal with this issue.

Corrections needed:

- The North East LA needs to be anonymised. Done
• Further analysis of the data to highlight emergent themes under each of the RQs and relate this back to the literature. Key literature is now linked to the emergent themes

• Consider using sections 5.1.2 to 5.1.4 as part of the discussion for RQ3 by re-organizing the material that you have written limited discussion is included in the section 4

• See additional improvement suggestions below

Second Marker’s comments

This is an interesting research paper. I particularly like the way you continually reflect on the methodology you adopted with reference to literature. I also think that your personal reflections on the process of carrying out the research add depth to the discussion.

I agree with the first marker’s comment that this is more a piece of collaborative action research than a case study. I thought the literature on teacher feedback could have been extended – at it stands this part is extremely superficial. I also felt you could have strengthened the rationale for the study (section 1.2). I agree with the improvement suggestions.

You have carried out the improvements that we suggested in relation to the literature review and discussion.

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<th>Doctoral Criteria</th>
<th>Assessment evidence</th>
<th>Improvement suggestions</th>
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<td>Produce an original and substantial contribution to knowledge which reflects your capacity to pursue research and scholarship</td>
<td>This might be evident in the way that the research is conducted (e.g. using a new approach to investigate a problem); in the production of new understandings or knowledge; or in the application of the project’s findings to professional practice. The standard expected is that it must be suitable for publication in a refereed journal. Some students decide to write specifically for a journal and submit the article for publication – this is catered for in our guidelines for writing research papers.</td>
<td>There is potential in this piece of work to create new understandings of how EPs might be able to support teachers in developing their classroom practice through collaborative action research. Currently this argument is under-developed. A limited discussion is present in section 6.1 and 6.2. With further development of this argument, the project could form the basis of a journal paper.</td>
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| Demonstrate an understanding of the design and conduct of empirical research that is relevant to professional EP practice | Introduction/ rationale section
  • Well justified focus supported by key references
  • Clearly stated issue to be investigated and/or research questions
  • This could be a theoretical rationale for undertaking the work or it could be | The points listed in the results/conclusions/discussion section need to be addressed |
related to local policy and practice.

**Literature review section**

- Theoretical context/previous research to justify present study
- Up-to-date references relevant to the study
- Critical reflection on how a study/reference contradicts or complements other work in the field

**In the Methodology section:**

- Reflection on the interrelationship between concepts, research questions, data collection methods, ontology and epistemology
- Discussion of strengths and weaknesses of chosen methodology
- The projects must conform to the ethical guidelines set out by the British Psychological Society, UREC and HPC.
- Explicit account of procedure
- Consideration of data analysis procedures

**In the Results/discussion/conclusion**

- Links between data collection and analysis of findings are clear and explicit
- Consideration of how findings support, contradict or build on previous work
- Evaluation/critique of study
- Discussion of implications, e.g. for the project, professional practice, further
- How does the research inform EP
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<th>Demonstrate rigorous and critical thinking in regard to theory, the literature and the discussion</th>
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<td>There should be evidence of critique throughout the research paper with a critical approach taken when considering concepts, methodology, the impact of previous studies reported in the literature and the findings from your study</td>
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<td>Communicate clearly, accurately and according to the conventions for presentation of academic work.</td>
<td>The material should be organised logically and coherently so that it tells a story.</td>
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<td>The abstract is a brief statement (single spaced and no more than 250 words) of the area, why it is important and specific issues addressed. There is an outline of the methodology, summary of key findings and a reference to the implications of the study (e.g. on policy, practice or theory)</td>
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- What are the implications for Services or for service users?
- Reflective personal evaluation that relates your research paper to your own learning and development as a psychologist.
Introduction

Literature review

Methodology

Results/discussion/conclusion - These may be separate sections or written as one. It depends on the type of study and which approach most effectively communicates what you have done.

The findings should be presented clearly and in a way that is appropriate for the type of data collected (i.e. quantitative or qualitative or mixed methodologies).

References

The presentation should match academic requirements and the references are in an accepted and consistent format (e.g. APA 5th).

Any further recommendations for reading or skills training

RECOMMENDATION:

(First Examiner to make recommendation, Second Examiner to contact First Examiner if they do not agree, or sign below to confirm the recommendation. Second Examiner to return the work and feedback sheets to First Examiner.)

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(ii) Subject to corrections being made to the satisfaction of the first Examiner (work to be achievable within one week for full-time students and two weeks for part-time students).

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The Research Paper is a resubmission (previously failed)

Part of the sample

**FIRST EXAMINER PLEASE ENSURE:** The original copy of the Examiners’ reports and one copy of the Research Paper is sent to Christine Chadwick, School Office Room B3.8. This will be sent out to the student and a copy of the feedback kept on student file.

**EXTERNAL EXAMINER’S RECOMMENDATION:**

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3 Discussion

3.1 Critical reflections on the research papers and contribution to professional practice

3.1.1 Contribution to theory and knowledge

3.1.1.1 Research Paper 1: How dyslexia is conceptualised

The research paper considering the views of educational psychologists within the LA in which I work with regard to dyslexia, used a Q sort methodology in what would be considered to be a relatively standard way. As this was my first experience of using Q sort, I followed recommended procedures to obtain the results (e.g. Cross, 2005a; van Excel & de Graaf, 2005).

The paper provides a good worked example of using this methodology in a real world setting, reflecting its ecological validity. The research paper makes a contribution to the knowledge base for Q methodology as it offers a detailed procedural account of using the method in an applied educational context and provides considered reflections on its success and limitations. Such real, worked examples are important and interesting for the purposes of understanding the workings, implications and reliability of the methodology itself, as well as for the outcomes that emerge.

Small scale research undertaken in the way illustrated in this paper, demands a robust and rigorous approach if the results and analysis are to be taken seriously by a targeted audience. This paper reviews the complexity of the Q methodology; the stages involved, the statistical analysis required and the time and resources needed in order to carry out research using this method. This information is helpful to researchers who are deciding upon not only the most effective methodology to adopt for their research intentions, but also the important pragmatic considerations of their projects such as timescales, size and scope. The use of the Q methodology demands a significant amount of in-depth work as can be seen in the above paper, suggesting its use within educational psychology services requires careful consideration with regard to knowledge of the processes involved and the implications for time and resources etc.
The generation of the Q-set itself may be completed in a variety of ways, using different sources, so this research example contributes to an understanding of the possibilities within the methodology. The Q-set generation entailed a large amount of work and planning, including the running of a focus group and the piloting of the hybrid Q-set statements. In my view, this was a critical part of the methodological process, as much rests on the selection of the final statements which should be representative of the collective dialogue around the subject. Thorough and appropriate methods were adopted and explained in the above paper in order to generate the unique Q-set. It could still, however, be considered a limitation of the project as more processes or steps could have been included, or as a limitation of the methodology due to the key role of the researcher in the determination and selection of the statements. This reflection and finding is echoed and reinforced by Cross (2005b), who notes that the sampling of the statements requires a ‘methodical review of the things people write and say about the topic’ in order for the Q study to be effective.

The above paper makes a contribution to the evidence base for the profession in its depiction of the views of a service group of educational psychologists about dyslexia. The data gathered encapsulated the unique profile of views held within the educational psychology service and how these were distinctively clustered and collectively shared. In this paper, the viewpoints were seen to be of significance as they were likely to have a direct influence on equity of service provision. The paper details the three dominant ‘factors’ (views) that emerged from the data and the associated statements. The BPS (1999) definition continues to have resonance and meaning for educational psychologists within the service.

The paper provides an interesting example of the representation of educational psychologists’ views, as these are somewhat under-represented in the general literature. Although educational psychologists are represented as authors, their collective views about matters of relevance and importance to the profession are not often sought. A general question arising from the research paper is whether it matters that there are shared understandings and agreement within the profession as a whole and indeed, for further research, what are the influential factors that inform these views and belief systems; psychological research, educational policy, legislation, medical models etc.
Dyslexia continues to be a subject of educational and psychological debate and the findings in this paper were an important step in reflecting on the current position within the educational psychology service with regard to its conceptualisation of dyslexia. The provision within the LA of additional resources for specific learning difficulties (i.e. the Enhanced Mainstream Schools) has not removed the ambiguity over the assessment and identification of dyslexia within the LA and the educational psychology service needs to hold a clear stance and agreement on its role and involvement. Knowing what educational psychologists think about the matter is helpful.

The study results are of relevance to the LA and educational psychology service in which the study takes place, but could be of interest to other services or compared with views expressed by other services.

3.1.1.2 Research Paper 2: Teacher feedback in assessment for learning

The second research paper in this thesis is a literature review which explores the evidence base underpinning formative assessment practices for school aged children and young people and the role of teacher feedback in particular. It is my view that this is a subject of professional relevance for educational psychologists and that knowledge in this field can contribute greatly to working with teachers in the support of pupil learning and pupil progress. There is an extensive body of research around formative assessment and sustained interest and engagement with the subject from educational professionals. The research and evidence base was formalised into government educational guidance (DCSF, 2008b) and is now embedded and integrated into the practice of many teachers and schools.

This research paper provides an overarching summary and review of this teaching approach which now has a comprehensive and convincing research and evidence base. This is intended to be helpful to educational psychologists unfamiliar with formative assessment practices and those in training who may be as yet unfamiliar with current educational policies and practices. Formative assessment practices continue to be of contemporary interest and significance. Providing children with feedback about their learning has recently been cited as an effective and low cost way of raising pupil attainment (Higgins, Kokotsaki & Coe, 2011).

The research paper includes a focus on the role of the educational psychologist in working with teachers and the relevance of the approach to the educational psychology
profession. The paper seeks to demonstrate the psychological perspectives underpinning what is seen as an educational practice. The paper aims to emphasise the critical role played by the teacher in the classroom and the interactions that support and influence pupil learning. Psychologists reading the paper will note the attention given to the importance of processes that bring about change and modify the learning of pupils. This is of central importance to educational psychologists as well as teachers. This stance supports the work of Gavine et al (2006) who note the unique status of formative assessment practices, which have achieved credibility and backing at many levels throughout the educational world. Gavine et al (2006) present the view that many practices within educational psychology could be absorbed within a formative assessment framework (consultation with pupils for example) and that this could provide commonality and an interface between the teaching and educational psychology professions which has potential to be sustained over time. The literature does not contain many examples of papers which note the significance of formative assessment practices to the profession of educational psychology; the above research paper attempts to provide such an example and reinforce the work of Gavine et al (2006).

The paper also aims to provide conceptual links between the assessment for learning approaches and aspects of learning theory, which is of direct relevance and interest to educational psychologists whose role is carried out within contemporary pedagogies. The role of learning theory provides common ground for teachers and psychologists and will influence the nature and basis of intervention in the classroom. The paper discusses Black and William’s (2006b) reference to Vygotsky’s constructivist theory of ‘the zone of proximal development’ and its relevance to the social context of teacher-pupil feedback.

The paper highlights within the literature review that pupil voice and participation is somewhat under-represented within what is a considerable research base for assessment for learning and teacher feedback. This is a surprising find, given the current climate for pupil representation and the role of pupil involvement and engagement in the formative assessment process itself. The literature likewise did not include any research base around identified groups of learners e.g. vulnerable learners, which would be an area of particular interest to educational psychologists. Both of these areas would be appropriate for future research projects for educational psychologists.
3.1.1.3 Research Paper 3: Use of formative feedback
The third research paper considers the use of formative feedback in a junior classroom setting. The paper sought to explore with a participant teacher the potential impact that providing feedback to pupils might have on their learning. Whilst the literature provided examples of the use of the collaborative action research methodology in school and group settings, this project used the approach with only one teacher, so was trialling and applying the methodology in an innovative way, using it in a different context to the examples in the literature. This extends the potential of the methodology, providing an example of its application with a single participant.

The research paper highlights the effectiveness of collaborating in joint working to explore an area of issue or interest in a school classroom and adds to the body of knowledge around educational psychologists’ collaborative working with teacher colleagues. The paper makes a contribution to the research field by providing a detailed illustration of such collaboration at work in a real world educational setting.

The action research methodology positions the classroom (or school) as the focus for contemporary educational professional development and uses the skills, knowledge and experience of teachers themselves to develop and promote the research base of the teaching profession. This research paper supports this trend in professional learning in schools (e.g. Handscomb, 2009; Sagor, 2010; Wiliam, 2009) and adds credibility to its effectiveness and potential outcomes. The use of the collaborative action research methodology would support the development of a learning and research culture in schools and a spirit of enquiry which educational psychologists are appropriately positioned to facilitate. This style of working is complementary to the approach involved in the Research Charter Mark requirements as discussed below (section 3.2.2.5), whereby teachers adopt a research-based approach to their own learning and teaching in order to improve learning outcomes for pupils. This paper provides an encouraging and positive research example of a participant teacher who shows high levels of interest, willingness and engagement. This demonstrates the possibilities for action research based approaches in the classroom. The paper offers a portrait of a teacher prepared to take responsibility for the research context and play an active role in the research process as discussed by Watkins (2006) in considering the role and contribution of the teacher-researcher.
As I have detailed above, (section 2.3.2.2.2), the purpose at the core of the action research methodology is the advancement and possibility of change (Robson, 2002). Robson (2002) notes this is more likely to occur using an ‘insider’ (e.g. the teacher) rather than an ‘outsider’ (e.g. the psychologist) research model, despite the apparent tensions and contradictions that are implied by the positioning of the teacher-researcher in the model i.e. being immersed in a setting and integral to it, at the same time as being required to be objective and critical about it. This research paper provides a positive illustration of the methodology achieving its aim of effecting change; section 2.3.4.1.2 above, describing the reflections of the teacher participant, offers examples of change that occurred throughout the research project at the initiation of the teacher concerned. This was one of the research aims being addressed in the paper.

This methodology presents educational psychologists with an opportunity to work with teachers at whole class or even whole school systemic level as opposed to individual child level, so supporting the development of a diversity of methods of educational psychology service delivery. The methodology builds on the consultation skill base of the educational psychologist and promotes active engagement with teacher colleagues.

The research context for this project was a school classroom where Assessment for Learning approaches were well established and feedback mechanisms embedded in the teaching and learning routine. The information gathered against the research questions of the project provided evidence which contributes to the field of knowledge in assessment for learning and formative feedback practices in particular. The evidence supports the extensive research base promoted originally by Black and Wiliam (1998) and recently more widely by others (e.g. Higgins et al., 2011; Ofsted, 2008; Wiliam, 2010). The research base also continues to be actively trialled and expanded by the Association for Achievement and Improvement through Assessment (AAIA). The teacher concerned in this research paper critically reviewed the approaches she was using and considered their effectiveness upon pupil outcomes. The teacher changed the way feedback was given to some of the pupils and noted improved pupil responses. The teacher analysis of what was happening for the pupils in her class with regard to the feedback they received, adds to an understanding of formative feedback processes.
3.1.2 Implications for further research

The three papers above suggest a number of areas of potential further research. The research all took place as small scale action research within the context of one LA. The dyslexia study was of interest within the service as it was noted that although we share many professional activities together, and often research the views or behaviours of others, our service itself has not undertaken any research about its own collective attitudes, views etc. Given the turnover of staff, the publication of new research materials and findings, etc, I think it would be helpful to consider the collective view within the service over a number of issues, dyslexia being one of them. The disparate and wide ranging views of the educational psychologists within the service are often light-heartedly referred to amongst staff, but this does have implications for styles of service delivery and provision. The Q sort methodology was a complex but interesting and effective way of sampling views and could be used within the service for other areas of topical interest and debate. The study also had potential to analyse the results in more depth, by studying for example, the negative views expressed. This may have enriched the findings further and offered a wider range of perspectives. The research methodology of the dyslexia paper could also be replicated in other services and LAs to obtain views of their staff, both within the psychology service and the support services.

The methodology used in the collaborative action research paper is one that I feel could be replicated in other schools and settings and would be effective to use with a small group of teachers engaged in a common research goal. This could be a year group staff working on a given topic of mutual interest, for example. This methodology built on the consultation process familiar to many psychologists and involved a revisiting and review of previous discussion. It would be interesting within further research to obtain teacher views about the effects and potential benefits of working with educational psychologists who maintain an involvement with them over time.

It is my view that this approach could also have direct applicability in our work with Children Centre staff as they are engaged with families over time and seek to bring about change or shifts in thinking. The methodology of collaborative action research could be used in this way to facilitate this work.

I note in the paper that further research is implicated with the young people themselves regarding their feedback experiences and interpretations.
3.1.3 Impact of the research and professional relevance

The work involved in the above papers had many positive benefits to my professional practice as an educational psychologist. The work was professionally relevant and had an impact at the time it was carried out.

The dyslexia research paper provoked much discussion in the service and was directly addressing a real and important issue. I presented the research findings to the whole service and we were able to consider as a group the conclusions I reached. This was a novel experience for the service and most staff found this interesting and helpful. The added interest in the methodology also had an impact as many staff were unaware as to the workings of Q sort and its outcomes. The project raised awareness of the methodology which has since been used by the service in another project.

Following the collation of viewpoints about dyslexia, the research experience highlighted the need to re-visit the subject at a whole service level on a regular basis and to provide opportunity for shared professional development work.

My involvement in the research project and the general reading around the subject of dyslexia was immensely beneficial to my role as specialist educational psychologist. The update of knowledge and awareness of initiatives greatly supported my work in schools, with specialist school staff and with the EP&EYS itself.

The Assessment for Learning research review was useful at the time but has gone on to have an impact on the work I am engaged in with regard to completing audits and assessments for the LA Dyslexia Quality Mark. Part of this assessment requires evidence that schools have embedded Assessment for Learning approaches in their practice. I feel able to discuss this aspect of their work from a background of some understanding and knowledge as a result of the research work undertaken. I have also found that in my general work with school staff, I draw upon the approaches and role of feedback in discussion with teachers.

Whilst I am unable to routinely carry out action research with teachers or colleagues in the same way as the methodology for the third research paper, the experience of that project encouraged me with the consultation work undertaken in the service. The EP&EYS has just re-launched its literature to school staff with regard to consultation and has an ongoing commitment to that process. It can be used to carry out very small scale projects of a similar nature to the research project above within regular work in
schools and settings. I noticed that undertaking the research work in the school also forged some strong working relationships which have been long lasting.

Whilst the above papers were of importance to work priorities and interests at the time they were undertaken and their impact has been considered in specific terms above, it is my view that participating in the research process and doctoral programme has had an ongoing impact within my professional role at a level that is more wide reaching and generic.

In the following section, I have provided some examples of the professional advantages that have been gained as a result of the programme undertaken.

### 3.2 General impact of the research on professional practice and development

#### 3.2.1 Continuing professional development and the Health and Care Professions Council (HCPC)

The action research undertaken for the purposes of this thesis and participation in the associated methodologies programme, has afforded a significant number of benefits at both a personal and professional level. The professional development opportunities offered by the doctoral programme have been extensive. Taking part in a programme over a period of years has ensured my engagement in a rigorous schedule of continuing professional development. My professional practice has developed and extended over the timescale of the course and the research projects in a number of ways. The work covered on the course has contributed significantly to my professional knowledge and research abilities, overall skill and confidence levels and most crucially, has enabled me to critically evaluate my professional understanding of the role, impact and contribution of the educational psychologist working within a broad range of local authority contexts.
Continuing professional development is regarded as an important aspect of the role of educational psychologists and the profession has always promoted participation in development activities as an intrinsic part of its professional identity. There has always been opportunity for psychologists to record and evaluate their engagement in professional development and this has historically been encouraged by The British Psychological Society, who then could link this record to accreditation and verification protocols for those members of the profession who choose to seek Chartered Psychologist status. Participating in continuing professional development however, is no longer optional or voluntary for educational psychologists as this expectation has recently been formalised and become mandatory for the profession due to its inclusion in the Health and Care Professions Council (HCPC).

Since March 2011, all members of the profession of educational psychologists have been required to register with the Health and Care Professions Council (HCPC as of August 2012), formally known as the Health Professions Council (HPC). The HCPC is a regulatory body, established in order to protect the general public service users by maintaining a register of health and care professionals who subscribe to a number of specified standards of training and professional skills and behaviours. The HCPC seeks to promote good professional practice within the professions it regulates and to ensure that high standards of profession-specific training and development are met so that professionals ‘keep their skills and knowledge up to date and are able to work safely, legally and effectively’ (HCPC, 2012a). Educational psychologists, as practitioner psychologists, are one of a considerably diverse group of health and care professions who are now publicly regulated in this way. The HCPC works with professionals throughout their careers and works alongside the other relevant professional associations, such as The British Psychological Society and The Association of Educational Psychologists to determine the professional and ethical standards which are made explicit to the general public and upheld and regulated by the HCPC.

An essential element of the HCPC registration requirement is the expectation that mandatory professional development will be regularly undertaken during the course of employment as a practitioner psychologist and that a formal record of such experiences will be maintained and will potentially be made available for scrutiny by the HCPC working on behalf of the general public. Educational psychologists are therefore required from now on to maintain a cumulative and up to date record of professional
development activity which indicates the undertaking of a range of professionally relevant activities which are envisioned to contribute to the quality of service delivery and are ultimately intended to be of benefit to service users.

A set of five continuing professional development Standards which are based on the above requirement are defined by the HCPC (HCPC, 2012a) who provide a framework for the record of professional activities undertaken in order to ensure consistency of approach and promotion of core principles across all professional registrants. As well as the five professional development Standards, further profession-specific guidance is provided for registrants, which identifies standards of proficiency expected in practice i.e. these are the minimum, ‘threshold standards’ of skill, knowledge and understanding which are required in this case for educational psychology practice (HCPC, 2012b). In addition, further generic ethical guidance is provided for all registrants with regard to the behavioural conduct, communication and general health expectations which are deemed obligatory for those in professional practice involving members of the public (HCPC, 2012c).

The pattern of working on the doctoral programme and the development of skills aimed at critical professional reflection, have resulted in my effective transition to the HCPC requirements outlined for the professional development record. CPD is noted by the HCPC to include a wide range of learning activities that should be relevant to current or future practice and is not described or perceived in a narrow sense of more formal or traditionally regarded professional development activity such as attending courses or conferences etc. HCPC suggested activities include work based learning, professional activity, formal and educational activity, self-directed learning and voluntary work or public service. Reflective practice is encouraged by the registrant who is asked to consider what has been learnt and how that learning has directly affected professional practice. Impact on service users and changes or improvements implemented as a result of the learning are to be recorded and evaluated. Reflections can be re-visited as ongoing professional development, and then inform future development activities in a cycle of appraisal and review.

This approach is reflected in the components of the research skills and outlook encouraged on the university doctoral programme and the reflective analysis which is essential to the action research methodology model.
Having taken part in the programme, I also feel that there has been more gain from self-initiated learning activities as my skills in such as critical appraisal of journal articles etc have improved and so enhance the learning and development experience. In the current economic climate, the participation in formal courses and conferences has decreased due to financial constraints. This places more importance therefore on the continuing professional development offered through collaborative working and self-initiated study or research, such as the reading of peer reviewed journal articles or books.

Within the service in which I work, CPD is very much promoted, not only as a requirement of the HCPC, but as a fundamental part of the educational psychologist’s role. The service allows for CPD time within its time allocation model and co-ordinates professional development of both the psychologists and the teachers and Portage home visitors within the service through a working group. A continuing professional development record template based on the HCPC standards has been developed by the service CPD group and all staff are given time and encouragement to complete these on service days, team meetings and at other times of professional development activities and then to discuss and reflect on them in supervision sessions.

3.2.2 Wider application and impact of research skills and knowledge within my EP role

The research programme undertaken has had a number of benefits which have been evident in several aspects of my work and role within the service. A few examples of the wider application and impact of the research skills, knowledge and experience I have gained are given below.

3.2.2.1 Research and Development Groups

In the Educational Psychology and Early Years Service in which I work, time is formally allocated to research and development. There is a service requirement for all teachers and psychologists to be a member of a service Research and Development Group and/or a Working Group depending on hours worked. This practice is now well established over a number of years within the service and is built in to the yearly action planning cycle. Each group is made up of a mix of teachers and psychologists from across the County who work together on clearly identified aims and anticipated outcomes. A proposal for a research project is submitted to senior management within the directorate and agreement reached about the focus of the work to be undertaken.
The work must be directly relevant to the current aims of the service as laid out in the yearly Action Plan. This in turn is based on the objectives within the County Children and Young People’s Plan. Members of the service chose a group to be part of and commit to it for the duration of a year. The expectation is that there will be evidence of outcomes from the groups which will have an impact on our work with our service users in schools, settings, Childrens Centres etc. This might take the form of producing training packages or materials, writing guidance for colleagues, collating information for the service, trialling new ways of working etc. A showcasing day is held at the end of the year to celebrate and share the achievements of the various groups. A wide range of subject areas have been addressed, such as, for example, eating disorders, therapeutic working in schools, developing literacy skills, service evaluation, executive functioning etc.

The skills learnt and the research experiences of the doctoral programme have been hugely relevant to this area of my work, both as a Lead member of a Research and Development Group and as a line manager of staff members engaged in the research work associated with the groups. The nature of the work undertaken by each group has been varied depending on the research area being addressed; a number of methodologies have been used across the service, for example, Q-sort, questionnaires, case studies, focus groups etc. As an example of the impact of developing research skills, I have been able to advise staff and discuss with them the use of questionnaires and surveys, the ethics around involving children in research, the recruitment of participants etc.

Within the Research and Development Groups of which I have been or am currently a member, as is typical of the groups as a whole, we have undertaken to research the area concerned to update our knowledge, thinking and understanding. As part of this process, we have critically evaluated journal articles for example which address the role of the educational psychologist involved in the research and development related work (e.g. for therapeutic approaches in school we read Squires, 2010, for mindfulness in schools we read Davis, 2012) and discussed our reflections as a group. The skills learnt of critical reading and analysis of articles have been directly applied to the reflection on the research base of a given topic i.e. consideration of the ethics within the research, the research question being addressed, the methodology used, the number and nature of the participants, the steps taken to improve reliability and validity, the links to other work and the implications for educational psychology practice etc.
3.2.2.2 Children’s Centre work

An increased focus of the work undertaken by the EP&EYS has been our direct working with Children Centres. This practice follows strategic agreement three years ago to top slice an amount of educational psychology time which would be formally allocated by the service to support the delivery of Children Centre services. Working in a new way, with newly formed local services still evolving, has been particularly challenging. The Children’s Centres with which myself and the local educational psychologists work, have chosen to designate what is a significant amount of educational psychology time to support the work of the Children Centre Parent Support Advisor (PSA) team. This has involved the running of a training programme (on topics such as attachment, self-concept, early development etc) and the provision of ongoing support to the team using a Solution Circle model which has been agreed at a County strategic level and is seen as an important part of the support offered to PSA staff. All aspects of this Children Centre work have involved research and the preparation of training and information materials. An exploration of the development and research base of Solution Circle models (e.g. Brown & Henderson, 2012) has also been undertaken using the research skills noted above.

More recently, I have been asked to support Children Centre management staff to consider how they might evaluate the impact of our work with the PSAs; to go beyond the training or support sessions and to evaluate the application it has had in their casework and approach to their work. The impetus for the request is the Ofsted agenda seeking impact evidence of staff training or intervention. I have begun initial discussions with staff to explore the use of simple rating techniques (e.g. Likert Scale) to measure staff opinion and attitude about the educational psychology input which could also be replicated with management staff.

3.2.2.3 Support of Trainee Educational Psychologists and other colleagues undertaking research

One of my initial key motivations to undertake the doctoral programme was in order to feel confident in the support I would be asked to provide for Trainee educational psychologists as part of my role. The entry level integrated Doctorate qualification programme for new entrants to the profession of educational psychology is designed to be equally vocational practice and research based. The three year initial training programme incorporates working within an educational psychology service, alongside
participating in the university research programme which results in a doctoral level thesis. Whilst trainees are supported by their universities for the research element of their work, it is important in my view for service staff to have an understanding of the trainee’s research intentions and possible implications as the research will take place in the local educational psychology service and community of schools. Knowledge and experience of the locality can be a helpful contribution to discussions of research proposals (in term of logistics, school ethos, working environments, anticipated response etc) to complement the university input.

I have found it hugely beneficial to be able to discuss with trainees the research work they plan to undertake and to support them as it evolves, from a background of some training in research methods. This obviously also applies to other colleagues who are undertaking doctoral programmes within the service. Trainee educational psychologists are also given opportunity if they wish, as are other colleagues, to present their research (either at its conclusion or any other point) in the one hour CPD session which follows monthly team meetings. This is an informal opportunity with a sympathetic but informed audience to share research findings and reflections. I have enjoyed and greatly appreciated these sessions as a result of my own research experience and endeavours as described above, and felt able to participate and feel included in the resulting discussions. Two recent examples of colleagues presenting completed doctorate research include a study of the language devices used in multi-agency meetings which influence decision making (using a linguistic ethnography method) and a study of parent views of short breaks for children with disabilities (using a Q Sort methodology).

Experience within our local community of schools, settings and Children’s Centres would also suggest that an increasing number of colleagues are engaged in further post graduate study and research; many colleagues are working towards or have gained Masters level and some at Doctoral level qualifications, as the academic goal posts have shifted over time and a culture of research and study within educational settings has evolved. This is potentially challenging for educational psychologists as the providers of support and training to such colleagues and underlines the need for the profession to maintain its academic standing and credibility within the wider educational community.
3.2.2.4 Report writing and the SEND Tribunal

Over the past year, I have been part of the EP&EY Working Group which sought to look at the report writing practices within the service, particularly for Psychological Advices. The Working Group made a number of recommendations to the service regarding the format and content for Advice writing which was part of a larger piece of work taking place within the County, aimed at bringing about greater consistency across the range of Advices requested within the statutory assessment process. To support this work, training has been provided to the EP&EYS along with all the other LA support services, with regard to report writing for the statutory process and the SEND Tribunal. This training was given by a solicitor now providing legal services to the LA and was largely focussed on the evidence base and up to date specialist knowledge that should be included alongside all recommendations within a report. This work has significant implications for how reports are currently written within the EP&EYS as evidence based recommendations and research references are not typically included in educational psychologist’s reports. I am now part of an Assessment Working Group which has the brief to develop this work and to consider the research base for the recommendations that might typically be included in a Psychological Advice. Within my field of interest some of this work is already available (e.g. Brooks, 2007, Dowker, 2004) but given the ongoing production and commercial promotion of new interventions for literacy and numeracy development in particular, further research work using critical analysis skills to explore and understand the evidence base of recommended interventions, strategies and approaches will be required.

3.2.2.5 Specialist Senior Educational Psychologist role

Within my specialist senior role, I am expected to take on a variety of work within the field of cognition and learning. In much of this work, I have been able to directly apply my learning and experiences from the research methods programme. As an example of this, I am currently involved in producing County guidelines for pupils experiencing difficulty in mathematics. This extensive piece of work is predominantly an editing role of the work contributed to the project by specialist teachers who work in the Enhanced Mainstream Schools (SpLD). The work has included the need to critically review the recommended approaches being suggested and to research for example, the development of mathematical skills, knowledge and understanding in young children.
Whilst the ultimate presentation of this work is not intended to be academic, and is to be accessible and user friendly to all school staff, the nature of the task is very much in keeping with the approaches of the university research programme, particularly with regard to searching for and reviewing the available literature on the subject. In a further example, I was asked to undertake a pupil voice project regarding pupil experiences of outreach support. Given the research experiences I had had, I was careful to consider the scale and scope of the project, how the sample of pupils would be chosen, the methodology (semi-structured pupil interview) and the ethics involved in working with this client group.

A number of special schools within the County are now interested in using research methods and approaches within their work in school. Following participation in a County project regarding Complex Learning Difficulties and Disabilities (CLDD), some schools have now applied for the Research Charter Mark awarded by the Specialist Schools and Academies Trust (SSAT). This award seeks to develop and promote an inquiry-based approach to teaching in schools where staff are challenged by the learning needs and patterns of learning of students with complex needs. SSAT promote practitioner-based and evidenced based research approaches in school, provide on-line support and materials and outline levels of accreditation and progress for schools against which they can self-evaluate. These levels of progression culminate over time in a research ethos becoming successfully embedded at a whole school community level. This research work can be applied to different aspects of school based teaching and learning, but is largely focussed around the SSAT development of the Engagement Profile which is evolving and research-led. The Engagement Profile seeks to explore possibilities for increased levels of pupil engagement in those students with CLDD. The ‘Accessible Research Cycle’ endorsed by the SSAT Charter Mark Award (Jones, Whitehurst and Egerton, 2012) is presented in a very user friendly, mind map visual format style and asks the practitioner to identify research questions such as how to involve people in the research in an ethical way, what do they want to know and find out and how will it apply to practice, how can they investigate what they want to know, how will they make sense of the information gathered etc and share their discoveries?
The special school in which I work is committed to this inquiry based model and gaining the Charter Mark. It has a strong ethos of professional development amongst the staff, who are all encouraged at various levels to engage in further study and research. I have found it helpful in my role in the school to be able to confidently discuss the research process with staff using the inquiry based research cycle and to have an understanding of the questions to be addressed and the issues likely to arise.

3.3 Research skills and knowledge; what have I learnt as a researcher?

Over the course of the study period of the research programme I have developed skills and gained knowledge, self-awareness and some confidence as a novice practitioner researcher. Throughout the course of the three research papers undertaken, I have learnt in detail a number of specific research skills in relation to the methodologies within the papers, such as the Q sort methodology, running a focus group and the thematic analysis of textual data. Above all though, I have learnt more about the process of engaging in research as a whole and what the potential difficulties may be, particularly with regard to the scale and scope of a research project.

In the papers above, I particularly enjoyed the data collection part of the research process. I really enjoyed working with the teacher in the third paper and appreciated her openness and willingness to engage as we worked together. Working with colleagues on the dyslexia research was likewise very interesting as it prompted lots of comment and question, not only about dyslexia but also about the methodology. It seems that people like to be part of research projects!

Within the research papers, I used two contrasting methods of data analysis; one quantitative and requiring considerable statistical understanding and the other qualitative, requiring the textual analysis of a number of hours of discussion. It has been an interesting process having experience of the two very different data analysis methods of Q sort/factor analysis and thematic analysis. Whilst I did need guidance with the statistics involved in the Q sort methodology, in retrospect, I was pleased to have been able to complete the analysis of the data and bring about some meaning to it. This was indeed a challenging process, but equally so was the overwhelming nature of manually analysing textual data. Were I to engage in future research, I would choose to use a software programme which would assist with the analysis (such as NVivo).
I found some topics to be of particular interest within the programme; namely the research ethics and the role of the researcher in different methodologies. Both of these aspects of research work have resonance within routine educational psychology work. Related to the role of the researcher, is the decision about how to present the findings from research and whether the writing of findings should be in the first or the third person. I chose to write the first research paper in the third person, a style which was more traditional, comfortable and familiar to me, then wrote at my tutor’s suggestion, the third research paper in the first person, as I have sections one and three of this thesis. This more contemporary style of writing in the first person still feels a little uncomfortable, although I appreciate that it has the effect of placing the researcher more subjectively and transparently in the research process.

Overall, I have found the research programme very challenging on a personal level. To be engaged in research requires high levels of commitment and self-discipline. When the research is undertaken on a part time basis and on top of a full time work commitment, this can be demanding. In the course of long term study as well, life events happen and circumstances change. In my case, I found the requirements for research study very difficult to sustain. I also developed some affective factors around the process which became prohibitive to being able to fully engage as was needed and required.

In undertaking the research programme however, I feel that I have developed research skills which will enable me to keep my professional knowledge updated on an ongoing basis so as to be able to apply the skills I have learnt across many aspects of my role.
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