Doctorate in Applied educational psychology
Understanding and creating CDD for and with teachers: the
Understanding and creating CPD for and with teachers; the
development and implementation of a model for CPD.
A doctorate thesis
A doctorate thesis
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Declaration
Decidration
I hereby declare that the work I am submitting for the Doctorate in Applied Educational Psychology is
my own work and is work that has not previously been submitted or been assessed for any other

qualification.

Acknowledgements

To Owen who begun this journey with me as my flatmate, supported me as my best friend and carried out edits as my husband. Thank you I would never have completed this thesis or retained my sanity without you!

To my parents, who have always supported and believed in me throughout my copious degrees, deadlines and edits! Thank you, this is the last one I promise!

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Thank you to the teachers involved in this research that trusted me and invited me to be part of their professional world. They gave up their precious time to make this research possible and I am very grateful to each of them.

Overarching Abstract

This document consists of a Systematic Review, a Bridging Document and an Empirical Research

report.

The Systematic Review explores continuing professional development available to teachers, in

particular considering what supports teachers to continually develop their practice. Taking a meta-

ethnography approach the review examined seven studies. Synthesis and consequent mapping

indicated three third order constructs necessary for teachers' professional learning to occur;

intersubjectivity, reflection and common goal. The review led to the development of a model with

three overlapping constructs, needed for such professional learning to occur.

The Bridging Document links the Systematic Review findings to the Empirical Research, giving critical

justification for how and why decisions were made. It includes exploration of research foci,

theoretical paradigm, methodology and analysis. A discussion of how ethics, reflexivity, ontology

and epistemology are embedded throughout helps the reader further understand the research.

In chapter three the Systematic Review model was used to plan an intervention for teachers. Action

Research was carried out with four Heads of House. Semi-structured interviews were used before

and after the Action Research cycles to explore the Heads of House experience. This intervention led

to transformative learning for the group and analysis suggests that although the Systematic Review

model is valid it is a dynamic interaction rather than a static model. Also it includes two additional

themes – trust and otherness. The main findings were the change in talk from pre to post interview

which highlighted a difference in agentic resources individually and collectively. Implications include

highlighting the unique contribution educational psychologists can make and how teachers' sense of

agency can increase through collaborative problem solving. Possible future research is also explored.

Word count: Overall: 13,868; Systematic Review: 5,457 Bridging Document: 3,270

Empirical Research: 5,370

3

Glossary of abbreviations

AR	Action Research
CPD	Continuing Professional Development
EP	Educational Psychologist
ER	Empirical Research
НоН	Heads of House
SENCo	Special Educational Needs Co-ordinator
SLT	Senior Leadership Team
SR	Systematic Review
TA	Thematic Analysis
TEP	Trainee Educational Psychologist

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Chapter one - Systematic Review: Teachers' CPD

Abstract

The current socio-political climate is one in which there is an increased performance management culture in schools. Evidence suggests continuing professional development should improve teachers' practice so that pupils' learning is enhanced.

This Systematic Review focuses on exploring the range of continuing professional development available to teachers, in particular considering what helps support teachers to continually develop their practice. A meta-ethnography approach was used to systematically analyse seven studies which met the pre-determined criteria to be included in this paper. Adopting Noblit and Hare's (1988) seven step approach synthesis, and consequent mapping of these studies, indicated three third order constructs; intersubjectivity, reflection, and common goal. Synthesis suggests these are necessary for professional learning to occur for teachers. The review led to the development of a model with three overlapping constructs needed for such professional learning to occur. It was concluded that in order to explore these three constructs and the link to professional learning, further empirical research was needed. Implications for applied educational psychologists include application of this model to explore and develop effective professional learning with teachers.

Introduction

This paper systematically reviews the literature on professional development for teacher learning.

Teachers have two aspects in their role: teaching subject content; and aiding pupils in understanding ideas and practices of learning. It is argued for this to occur teachers need to learn new knowledge and skills, in a school which is a supportive learning organisation (James & McCormick, 2009). This area of research is important for Educational Psychologists because continual professional development (CPD) should improve practice so that pupils' learning is enhanced (Bubb & Earley, 2006).

This paper introduces CPD and why research in this area is important. It looks at types of CPD and how adults learn. The methods used to answer the Systematic Review question: what helps to support teachers continually develop their practice, are explored followed by the findings. The findings are discussed and conclusions drawn about possible future research.

Continuing Professional Development

This section explores the history, definition and context of CPD.

The James report (1972) on teacher education and training recognised the need for teacher inservice training. The report proposed a cycle of teacher training whereby all teachers should have inservice training for at least one term every seven years.

As in-service training can take place during school hours, be in teachers' own time or a combination of both, in-service training can be a misleading term. Thus, the report proposed a co-ordinated programme of in-service education and training to enable growth and development of the teaching profession. This report lead to further professional development becoming a national issue (Bubb & Earley, 2007).

CPD has been described as: adding to professional knowledge, improving skills, clarifying professional values and enabling pupils' learning to be more effective (Bolam, 1993). I am interested

in the use of the word effective in the literature on CPD. In this context I think it refers to producing measurable improvements for pupils. CPD encompasses all formal and informal learning which allows individuals to improve their practice (Bubb & Earley, 2007).

CPD should be embedded in practice and involve organised and sustained activities according to the Teaching Development Agency for Schools (TDA)¹ (2008). The TDA stated CPD should have reflective elements to improve knowledge, understanding and skills of teachers. CPD can come from a range of sources including: external expertise, school networks, and within school. CPD has been described as serving multiple purposes including enabling teachers to continually enhance their skills and knowledge base. This, it is argued, will improve teaching quality and provide support for teachers personal and professional development (Bolam & Weindling, 2006).

What characterises good CPD

The TDA states CPD should be broad rather than short or one off and tailored to meet teachers' needs (2008). These needs may be pragmatic, about learning to do the job of teaching; or about individual needs of self, developing capabilities and attributes (Deci, Vallerand, Pelletier, & Ryan, 1991). The TDA continues that professional learning communities should be developed so that staff can learn alongside each another. Senior management have an important role in making CPD successful, by promoting and supporting, as well as developing a school culture which values professional learning (The General Teaching Council for Scotland, 2013).

Effective professional learning promotes teacher learning, impacting upon their practice and students' outcomes, according to Timperley, Wilson, Barrar, and Fung (2008). These authors explored a theoretical framework which they used to analyse professional learning. This explored the wider social context, the professional learning context and content of the professional development; all of which are important in exploring good CPD.

¹ The TDA was the national agency responsible for the training and development of teachers until 2012.

There are ten characteristics reported to be needed for effective CPD; that is CPD which enables participants to develop skills, knowledge and understanding, according to the TDA funded report 'state of the Nation' (Pedder, Storey, & Opfer, 2008). This report argues current CPD is mostly ineffective with little indication of impact on pupils' achievements. It concludes that CPD needs to support teachers to develop collaborative and research informed approaches to their CPD.

Types of CPD

CPD currently available in England includes: mentoring, coaching, collaboration, peer observation, supervision, University and College modules, and INSET. Within these types of CPD there is also wide variation. For example coaching can involve an experienced and knowledgeable expert transferring their skills and expertise to a novice teacher (Berliner, 2004; Nash & Collins, 2006). It can also be collegial, technical or challenge type coaching² (Garmston, 1987; Hargreaves & Dawe, 1990). Mentoring builds capacity by providing assistance and social support (Fraser, Kennedy, Reid, & McKinney, 2007). Collaboration can be informal and involve working with colleagues or being part of a structured learning community (Clark et al., 1996); though it involves learning through working with others.

Importance of researching CPD

For educators to facilitate others' learning they must first attend to their own learning(Clark, 1992). It is argued few teachers in their day-to-day work refer to learning received during their initial training, with dissociation between education theory and practice occurring (Hargreaves, Goodson, Goodson, & Hargreaves, 1996). Practice alone, according to Doecke (2003)will not provide teachers with the knowledge needed.

The Department for Education and Employment (DfEE) 2001 CPD strategy, entitled Learning and Teaching, stated ambitions of the education system rely upon teachers performing well in the

-

² Technical- builds on existing knowledge through learning and transferring new skills and strategies. Collegial – improving practice with context of teaching and through self-reflection and dialogue. Challenge – focus on specific and persistent issues which need attention.

classroom. CPD, the report continues should be the collective responsibility of teachers and the schools they are in. Additionally CPD needs to be at the core of school development, meaning investment in human resources is key (Bubb & Earley, 2006).

Although investment in CPD is high (TDA, 2011), how it is evaluated in terms of effectiveness is varied (Fraser et al., 2007). The term effectiveness here links to the measurable improvements for pupil outcomes. However for me it should also be about evaluating teachers' learning, and their professional identity. The improvement of training and development of teaching staff takes priority on political agendas (Bubb & Earley, 2007). This is reinforced by the continuing devolvement of budgets into schools resulting in autonomous and self-managed organisations.

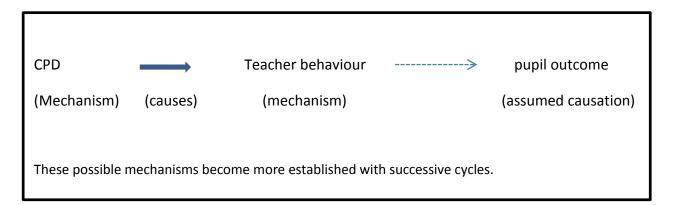
The then Chief Executive of the TDA, Ralph Tabberer, expressed concerns about CPD in schools during an interview for Professional Development Today. He thought the standards of training and development in schools were not consistent and the best value was not necessarily being gained from the investment being made (Earley & Handscomb, 2005). This view is supported by findings from research on teachers' professional development (Bolam & Weindling, 2006).

James and McCormick (2009) suggest leadership needs to develop a climate which encourages reflection and sharing of practice. Without this initiatives and training will not be sustained.

Link between CPD and pupils' learning

Training and development of school workforce is linked to effective teaching, inspiring pupils and raising pupils' achievement (Ellis, 2006; The General Teaching Council for Scotland, 2013). I draw on this to make my realist assumption; that CPD may improve teacher outcome if the context of CPD is right (Pawson & Tilley, 1997). My assumption continues that improved outcomes may positively affect pupils' learning. Also that this positive impact on teachers' learning will directly change outcomes for pupils. This is how I conceptualise effective CPD; CPD which leads to positive impacts on teacher learning.

Figure 1: Realist assumption of impact of CPD (adapted from: Robson, 2011)



Wellbeing

Stress can be caused by an imbalance between demands teachers are dealing with (physical, social, psychological and or organisational) and resources teachers have at their disposal (Hakanen, Bakker, & Schaufeli, 2006). These authors identified three job demands: disruptive pupil behaviour; work overload; and poor physical work environment which cause teachers psychological strain. Teaching has been referred to as a stressful profession (Schwarzer & Hallum, 2008; Treasury, 2000).

Psychological strain maybe linked to sick leave rates within the profession, reported as over half the teaching work force taking sick leave in 2009 (Department for Education, 2009).

Another aspect which makes this area of research important is teacher retention. High quality CPD is linked with motivating staff, creating a positive ethos and making teachers more effective (outcome based); helping with teacher retention (Bolam & Weindling, 2006; Webster & Beveridge, 1997).

Through self-efficacy and personal goals, motivation and performance can be enhanced (Bandura & Locke, 2003). If teachers are resilient at work they have been reported to participate more in their job and make the pupils' work more appropriate to their needs (Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008).

How professionals learn

Hawkins and Shohet (2006) view effective workers as those who are constantly learning. The authors believe love of learning and viewing work as core to personal development helps workers to

continue learning and developing. They argue to stop learning is to stop being effective (2006, p. 6), acknowledging how I have defined this term earlier.

There are five main theories of adult learning, andragogy: cognitivist, behaviourist, humanist, social learning theory and constructivist (Marquardt & Waddill, 2004). Cognitivists believe learning occurs through transformation of experience, making sense of the environment. Learners need to understand and learn how they learn, meta-cognition, with reflection and dialogue being key to learning (Bruner, 1961; Schön, 1987).

Behaviourists focus on learning through controlling the external environment. Their focus on external performance is linked to skill development and behavioural change (Skinner, 1976). Humanists in contrast believe all adults have potential to learn, placing emphasis on the whole person, particularly the affective domain (Rogers & Freiberg, 1994).

Social learning theory focuses on the social context of learning (Lave & Wenger, 1991). Finally, constructivism believes knowledge is bound in context and each person makes meaning from their learning experiences and sense of reality; with deep learning occurring through reflection (Mezirow, 1991). (These theories of adult learning are referred again to in Learning theory and dialogue, p. 59) Hawkins and Shohet (2006) suggest three zones of learning. The first, the comfort zone, is automatic. In this zone each learner is viewed as homogenous rather than unique. The second zone, the learning zone, is the boundary between what is already known and what one is waiting to learn. This zone involves a readiness to being a beginner, and to not having all the answers. Adopting a learning zone attitude increases chances of learning and decreases stress attached to having to know it all. The third zone is panic. Individuals in this zone perceive they do not have required skills or knowledge so panic sets in; resulting in withdrawal to safety. Some people have a small gap between comfort zone and panic zone therefore a small space to learn. The right support can widen this gap allowing more comfort in feeling incompetent, out of control and uncomfortable (Hawkins

& Shohet, 2006). This resonates with Vygotskian theory on the Zone of proximal Development (ZPD) and scaffolding. Through providing appropriate mediation and scaffolding, teachers' ZPD (learning zone) will widen (Vygotsky, Veer, & Valsiner, 1994).

Models exploring how rich learning occurs, include Kolb's (1984) cycle of action learning adapted by Hawkins and Shohet (2006). This cycle is not a straight forward path and each learner may start at a different point, experiencing difficulties with different stages. This model I think can be mapped onto Argyris (1992) model of single and double loop learning (see Figure 2 and see Figure 6&7, p.38).

This links with two aspects needed for learning - action and reflection (reviewing, governing variables and thinking) often being parallel processes (Watkins & Marsick, 1992). When teachers reflect they become consciously aware of their learning, which involves intentionality (Schugurensky, 2000).

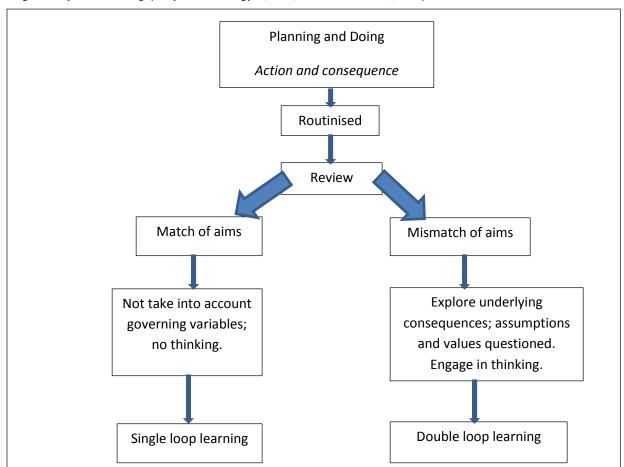


Figure 2: Cycle of Learning (Adapted from: Argyris, 1992; Hawkins & Shohet, 2006)

Learning can be informal, which is an encompassing term for learning from experience that includes networking, coaching and mentoring. Under this umbrella is incidental learning which involves learning through making mistakes, internalising meaning from others' actions and learning through interpersonal experiences. This type of learning is collective, and there is a belief that group and organisational learning differs from individual learning (Watkins & Marsick, 1992).

There seems to be common themes on what is needed for successful teacher development. This includes a balance between expert input and the context within which the teacher is situated (Bubb & Earley, 2007). Also apparent is the importance of reflection, collaboration, action and observing (Kervin & Turbill, 2003).

Teacher development is important because literature suggests practice in isolation does not provide teachers with what is needed (Doecke, 2003; Hargreaves & Dawe, 1990). Through teachers attending to their own learning and development their own practice may improve, thus enhancing learning experiences for pupils in their classroom.

Current review

I systematically reviewed the literature on the range of CPD available to teachers. The question considered was:

What helps to support teachers continually develop their practice?

The working definition of CPD used encompasses all formal and informal learning which allows teachers to improve their practice (Bubb & Earley, 2007).

Methods

To systematically review some of the literature in this area I adopted a meta-ethnography approach.

This was because I wished to respect the studies original meanings and explore the experiences of participants involved in the studies. Meta-ethnography is an interpretive approach to combining

research, founded by Noblit and Hare (1988). I was aware of some of the challenges of evaluating and synthesising qualitative reviews including the differing philosophical assumptions which underpin studies. Also there is the possibility of losing some explanatory content through combining studies (Atkins et al., 2008).

Meta-ethnography highlights the need for constructing interpretations not analysis (Noblit & Hare, 1988). Through these interpretations there is potential for a higher level of analysis. This, I hoped would generate new research questions rather than replicate existing research (Atkins et al., 2008).

A meta-ethnography is a type of systematic comparison involving the translation and mapping of studies onto each other. I have adopted Noblit and Hare's (1988) approach and this review is laid out according to their seven phases. These are not prescriptive stages rather they can overlap and be repeated as the review evolves (Noblit & Hare, 1988).

Phase 1: Getting started

This phase involved finding an area of interest worthy of synthesis. I am interested in teachers and their professional development, so I aimed to review literature on CPD available to teachers in England.

It is hoped by engaging in this, there will be a better understanding of what professional development works for teachers which may positively affect their practice; and have an impact on improving pupils' learning. The question being considered is what helps support teachers continually develop their practice?

Phase 2: Deciding what is relevant to the initial interest

To begin I carried out a broad search like that of Cole (2008) to gain an overarching picture of the general literature available.

Finding relevant studies

Searches were conducted between September and December 2012, in 3 databases: WOK, BEI and Scopus. The search terms are a combination of the terms shown in Table 1. These search terms

arose from reading the literature explored in the introduction and from using the thesauruses in the databases.

Table 1: Search terms

Target Population terms	Teacher* ³ , school			
Target intervention terms	CPD*, Contin* professional development, teacher development,			
	Professional support, Professional dev*, Staff dev*, teacher			
	training, peer supervision, collaborative problem solving,			
	capacity building, coaching.			
Target outcome terms	professional development, CPD collaboration, Evaluation,			
	Impact, Effectiveness, intervention.			

After searching using these initial search terms I realised this was too wide a search and I was adversely narrowing my search (Table 1). Therefore I chose the broadest terms shown in Table 2.

Table 2: Revised search terms

Target population:	Teach*
Population intervention:	CPD, Contin* Profess*dev*, Collaboration

What to include

The inclusion criteria, a set of conditions the studies must adhere to, to be included in the review, were based upon the research question. The initial criteria were articles:

- Published in the last ten years (2002 2012)
- Based on schools in England

After using these inclusion criteria in 3 databases (WOK, BEI and Scopus), a number of articles were generated from each database (see Table 3). In-depth reading of these articles resulted in some articles being deemed irrelevant, so not used. As I was interested in the experience of teachers who were employed in primary or secondary schools I excluded studies that were about:

- Newly Qualified Teachers
- ➤ Initial Teacher Training (ITT)
- > Teachers engaged in Postgraduate training

³ *wildcard used in a search to represent unknown characters, words, or phrases

- > Other professions
- Other stages of education
- Quantitative research

In addition: previous reports and conceptual papers which were not interventions or empirical studies were excluded.

I wished to explore experiences of teachers engaged in CPD using meta-ethnography as my tool, thus I used qualitative papers to gain an in depth focus. One paper reported mixed methods and I drew upon only the qualitative findings for this review (Varga-Atkins, O'Brien, Burton, Campbell, & Qualter, 2010). After the article search 7 papers remained.

As part of this process the studies remaining were judged on quality using the EPPI- Centre Weight of Evidence (WoE) tool for qualitative papers (EPPI-Centre, 2007; see Appendix A). Table 4 shows the results of this in order of highest to lowest judged quality.

Phase 3- Phase 5: Reading, Relating and Translating the studies

To become familiar with the studies I continually re-read, each time making a record of the main interpretive themes and concepts emerging. I also recorded details of participants, setting, type of CPD, and the theoretical framework of the study (Table 5). This was to enable me to develop a context for the subsequent explanations and interpretations.

Looking at these themes and concepts I began to look at the relationship between studies, and look for recurring and common themes. To be transparent in how I achieved this I have created a grid onto which I placed the emerging themes and the comparisons across each study (Table 5&6).

I adopted Schutz's (1962) term to refer to my initial themes and concepts as my first order constructs (Table 7). By engaging in this synthesis and translation, I could compare and preserve main concepts and themes of the articles (Britten et al., 2002).

To do this I initially identified the actual theme or concept used in the papers being described (Table 5). I then aimed for this to be described by the overarching construct I used in the first order constructs (Table 7). I then moved onto more analysis of the initial concepts (see Table 7).

Throughout this translation I was conscious I might translate studies in light of my own world view, and another reviewer may translate studies in a different way. However, I attempted, by using a systematic framework, to reduce the effect of my fallibility. By being aware of and paying attention to my assumptions I hoped to minimise the impact of my prejudices on the synthesis (Noblit & Hare, 1988). I and what I am researching (the articles) is fallible but I do want to ensure rigour. To do this I followed guidelines of good qualitative research (Elliott, Fischer, & Rennie, 1999; Henwood & Pidgeon, 1992; Yardley, 2000a). I also triangulated constructs by working with tutors as coresearchers. My tutors independently looked at the studies and engaged in Phase 3-5 of the metaethnography process. We then explored the constructs and how these related. This fed into the synthesising phase.

Phase 6: Synthesising the translations

I found the synthesising process was not clearly defined with a set of mechanical processes. Rather, from following other meta-ethnographers (Atkins et al., 2008; Britten et al., 2002), I developed a method of synthesises to translate the themes.

Through analysing my grid I was able to begin a second level of synthesis. It became apparent many themes emerging were recurrent amongst the research papers, which formed my second order constructs (Table 7). Everyday understandings are depicted in the first order constructs and explanations given by the papers for these constructs are depicted in the second order constructs.

I discovered my third order interpretations from exploring how the concepts relate. By looking at links between first and second order concepts my line of argument developed leading to my third order constructs (Table 7).

Table 3: Article search

Search	Date	Search terms	Number	Number	Number	Number	Relevant articles
Engine			of articles	after	after title	after	
				exclusion	search	abstract	
				criteria		search	
WOK	19.11.12	Professional	10,645	325	14	4	a: Baumfield, Hall, Higgins, and Wall (2009)
		development OR CPD					b: Hennessy and Deaney (2009)
		AND teach*					c: Watson and Manning (2008)
							d: Warwick, Hennessy, and Mercer (2011)
Scopus	19.11.12	"Professional	14,790	35	16	4	a: as above
		development" OR					b: Lawes and Santos (2007)
		"CPD" OR/AND					c: D. Leat, R. Lofthouse, and A. Wilcock (2006)
		collaboration AND					d: Varga-Atkins et al. (2010)
		teach*					
BEI	19.11.12	"professional	6,023	42	2	0	N/A
		development" OR					
		"CPD" OR collaboration					
		AND teach*					

Total number of articles:

7

^{*}wildcard used in a search to represent unknown characters, words, or phrases

Table 4: Weight of evidence

	A: Taking account of all	B : Appropriateness of	C: Relevance of primary	D : Over all weight of
	quality assessment issues,	research design and analysis	focus of the study for	evidence, taking into
	can the findings be trusted in	for addressing the question	addressing the question of	account A, B and C.
	answering the study's	of this systematic review.	this systematic review.	
	questions?			
Watson and Manning (2008)	High	High	High	High
Varga-Atkins et al. (2010)	Medium	High	High	Medium-high
Lawes and Santos (2007)	High	Medium-high	High	Medium-high
Leat, Lofthouse, and Wilcock	High	Medium-high	High	Medium-high
(2006)				
Warwick et al. (2011)	Medium	Medium-high	Medium	Medium
Baumfield et al. (2009)	Medium	Medium-low	High	Medium
Hennessy and Deaney	Medium	Medium	Medium	Medium
(2009)				

(EPPI-Centre, 2007)

Table 5: Context of studies

Methods	Baumfield et al. (2009)	Hennessy and Deaney (2009)	Lawes and Santos (2007)	Leat, Lofthouse, and Wilcock (2006)	Varga-Atkins et al. (2010)	Warwick et al. (2011)	Watson and Manning (2008)
Sample	10 primary and infant school (3-11 years old) small suburban and rural 2, medium suburban and rural 4, large inner city 4	Uni. researchers and 4 pairs of UK teachers – (8) from 3 non-selective schools mixed 11-16. All T's had experience of mentoring.	9 teachers of Yr12 French students.	3 researchers (unclear how many teachers and schools)	5 Professionals based in a school setting	1 with dialogic pedagogical approaches.	10 science teachers
Data collection	Case studies Interviews Questionnaires Cross project analysis	Analysing video recordings of classroom activity. Semi-structured interview Unstructured diaryplanning and reflections	Semi-structured interviews	Case study Analysis of dairies	Mixed methods Large scale survey Interviews 5 case studies	Case study, Teacher diaries, lesson plans, Pre and post: lesson reflections, planning and interviews. Video of teaching. Hyper Research TM. 2.6 Software -data analysis.	Field notes Portfolio materials Interviews School visits
Type of CPD/ research	Pupil view templates (pvt)– metacognitive visual method.	T-MEDIA project – projection technologies to support learning.	Classroom based collaborative research project between researchers and T's of French to improve students Listening and writing strategies.	Coaching for teachers	Exploring professionals experience of Learning Network	Explore development of IWB use in classrooms with dialogic pedagogy. Workshops – CPD and data collection	How teacher's needs addressed within CPD; how teacher's interactions with colleagues in school affect CPD implementation. Used workshops.
Theoretical framework	Tools of catalytic change; positive dissonance. Learning through dialogue and feedback -	Sociocultural f/work. Vygotksy	Vygotksy Learning through dialogue and feedback. Conscious awareness	How knowledge can and should be transformed in the boundaries between research and practice	Turbill's model of professional learning. Grounded theory	Dialogic. Collaboration Co-construction Co-enquiry	Co-construction and collaboration

Table 6: First order constructs

Constructs	Baumfield et al.	Hennessy and	Lawes and Santos	Leat, Lofthouse, and	Varga-Atkins et al.	Warwick et al. (2011)	Watson and
	(2009)	Deaney (2009)	(2007)	Wilcock (2006)	(2010)		Manning (2008)
Senior	Two schools in	Involved one	_	lack of direct	Positive experience	Level of involvement	It was necessary to
management	particular	teaching member of		involvement from	of CPD:	had impact on teacher	obtain the support of
	exemplify the	senior management.		senior management	Two teachers in	learning: when school	senior management
	catalytic properties	- I (.) .)		one of the reasons	nurturing and	strong support for	to allow teachers to
	of the PVTs, both	Each of the three		for failure. Revised	supportive school	teachers it was more	attend CPD.
	schools had senior	schools had a		coaching modules	environments	successful.	
	managements who	supportive		acknowledge	which enabled	Constant of the standard	In 3 schools events
	supported	leadership team and		importance of senior	them to participate	Support of senior	occurred which
	experimentation	conductive ethos for		management	in CPD and carry	management absolute	prevented teachers
	and learner	research and			out innovations	priority.	from attending.
	focused change.	professional			and modify their		
	Extent to which	development.			practice. These		In 1 case senior
	teachers' identified				teachers attributed		management did not
	with role of				their success to		support and this
	'teacher				their head teachers		person dropped out.
	researcher'				close involvement		
	dependant on level				in setting CPD		
	of support from				priorities for the		
	senior				network.		
_ , ,	management		D (1) 1 1 1	.,		D 1:	0 116 1
Teacher's	Two teachers	Issues: Teacher	Benefits linked to	Variation in extent	_	Practical issues were	Crucial factor in
immediate	(exemplified	mobility, time, lack	participants	teachers developed		important: time to	success of CPD:
context	creative	of IWB access,	specific	depended on factors		gather resources and to	How course
	engagement) had	technical issues.	circumstance:	factors of failure:		plan.	interacted with
	'social capital', and	6.16.	knowledge held;	-lack of focus from			perceived needs
	personal career	Successful factor:	immediate goals	teachers			T
	goals of engaging in	Subject colleagues	D. C. 11.	-amount of time it			Teachers who were
	careers in a	were chosen by the	Difficulties:	took			focused on own
	research	teachers – pairs had	technical aspects of	-teachers reluctance			learning: adopted a

	environment. Teachers identified their own area of interest and own intervention methods – locus of control was in teachers domain	personal relationships, similar pedagogical beliefs, motivated to improve teaching and learning in their classroom.	resources; organisational re lesson; motivation of students; attitudinal – teachers feeling lack of authorship in development of activities.	to be observed and unclear about purpose of coaching,			more reflective approach -deeper level of engagement
school context	-	_	_	Coaching relies on quality time	Issues: Teachers access to meetings; funding Successful when positive school culture with range of opportunities to develop and embed skills. Success when shared purpose and match of aims with CPD	_	Crucial factor in success of CPD: Interaction between teachers and school circumstances
Use of 'other'	By using the tool teachers were able to stand back and reflect on processes occurring in the classroom Tool had influence on teachers not	Use of theory helped teachers identify and make sense of and articulate Unique role of teacher colleagues was key element	Teachers commented on convenience of having extra materials to work with.	_	Facilitator – when enthusiastic and had expertise was motivating.	Synergised relationship exists – enabling an effective pedagogic approach to be implemented using IWB as a tool – tools themselves have no agency	Expert input was important for challenging teachers by probing understanding and reacting to individual needs. Expert input was

	directly involved: lead to teacher- teacher feedback loop					Teachers need chance to benefit from more skilled colleague.	seen by teachers as helping clarify needs, also 'school based discussion'. This was important in providing concrete support needed in order to apply learning.
Dissemination	lead to teacher- teacher feedback loop	Collegial interaction extended beyond learning at individual level	Most teachers shared their experience and new knowledge to depts./colleagues	_	-	Teacher wanted to use CPD to support cpd of other staff.	_
CPD unexpected	Evidence of mirror effect: intervention designed to have impact on student learning had similar impact on teacher.	Unanticipated impact on evolution of participants pedagogical thinking and practicing.	Teacher development was unexpected outcome of the CPD	_	_	_	_
Collaboration	_	Original project focus has led to co- learning	_	_	Social aspect of networking – essential for the learning networks Importance of having an in-house colleague who attends CPD so can work jointly in school Success when	Shared enterprise in a community of educators -central to pedagogical development	Quality of support and interaction between teacher and school important for effectiveness

					members valued and respected. Lack of interplay as network formed on artificial basis not out of common need		
Feedback	Quality and immediacy of student feedback powerful motivation for teachers to continue Teachers gained access to feedback that stimulated own professional learning and enabled reflection.	_	High scaffolding group were very positive about feedback received.	_	_	_	_
Dialogue	Dialogue between teachers lead to further exploration by teachers. PVTs became effective vehicle for teacher-to-teacher dialogue	Teachers commentary shifted to more analytical – through academic discourse with University researchers	_	In the rewriting of modules focus on generating analytical conversation as a means to deconstruct lessons	Dialogue enabled tacit knowledge to be brought out.	Disagreement in the group offered stimulus for learning. Groups conception of notion of dialogue widened to include use of other modes of communication as well as language.	Discussions provided teachers with ideas for approach and practical advice

Reflection	This feedback also enabled teachers to become reflective practitioners	Intervention gave teachers the opportunity to reflect Gave opportunity to step back and view practice as observers	Project made teachers reflect more.	_	Able to reflect on own practice because of interpreting if from a different point.	_	Teachers focused on own learning: adopted a more reflective approach therefore a deeper level of engagement and tended to adapt the tasks to make them fit in with what already is being done.
Cognitive change	Overarching focus on learning processes and metacognition.	Implications for teachers professional learning and metacognitive development	Teachers displayed attitudinal and functional development. Half of the teachers reported – 'profound impact' of collaborative video analysis on development and broadening of their own thinking.	-	-	_	Teacher's perception of own needs were modified by the programme.

Phase seven: Expressing the synthesis

The findings suggest that the three elements of successful CPD are when:

- Knowledge and aims of the school and teacher link with CPD, change occurs at different levels.
- Professional learning takes place through the inter-related process of collaboration promoted by use of the 'other'.
- Conscious awareness of pedagogy through dialogue and feedback enable reflection and access to tacit knowledge.

In this phase I needed to assess my intended audience; teacher practitioners, policy makers, and my academic marker. This influenced how I presented my concepts which I wished to be accessible and visual. The third order constructs which emerged as important for successful CPD lent themselves to a Venn diagram model, with the constructs overlapping (Figure 3). I displayed the model in line with the realist assumption about the impact of CPD.

Discussion

This review has taken a systematic approach to identifying studies. One mixed method and six qualitative studies which consider possible elements needed to enhance the impact of CPD on teachers' learning were analysed.

This section explores findings in light of other research and theory. I discuss unexpected findings, the third order constructs and how this links to the realist assumption. This discussion ends by exploring the impact and implications of my findings for future research.

A meta-ethnography can illuminate areas which differ from what the researcher expected (Noblit & Hare, 1988). This meta-ethnography highlighted a difference between process directed and product directed CPD. The type of learning which occurred in three of the seven research papers was incidental learning (Baumfield et al., 2009; Hennessy & Deaney, 2009; Lawes & Santos, 2007),

whereby teacher learning occurred as a consequence of another activity (Marsick & Watkins, 2001).

This incidental learning was not necessarily initially apparent to the researchers or teachers.

In the remaining four papers learning was informal, intentional but not highly structured, such as networking and coaching. Informal learning usually involves conscious awareness that learning is happening (Watkins & Marsick, 1992). This draws parallels with self-directed learning, reflection in action, critical reflection and transformative learning, whereby learning begins with a trigger, internal or external (Garrison, 1997). In this review these triggers were coaching, networking, or use of a pedagogical tool.

Below I explore the constructs which emerged from the meta-ethnography.

Third order constructs

This Review suggests several constructs which affect CPD; these are not separate entities rather they are presented as interrelated. Intersubjectivity and dialogism (Marková, 2003; Trevarthen, 2006) are common threads through the constructs although explicitly explored in the second construct. I discuss each construct below.

Common goal

The term 'common goal' was used to summarise the third order interpretation: the knowledge and aims of the school and individual teacher need to link with CPD for change to occur at different levels. This construct was derived from the first and second order constructs which found the context of the school and of the teachers important. Also relevant was the knowledge held by teachers. Learning is enhanced when the learner can take a proactive stance in the process (Watkins & Marsick, 1992).

Table 7: First, second and third order constructs

First order	Second order	Third order
Senior management	(a) Professional learning occurs best when there is positive interplay between school, senior management and school context, and external CPD.	(d) Common goal The knowledge and aims of the school and
School context		individual teacher need to link with CPD for change to occur at different levels.
Teacher's immediate	(b) Benefits linked to participants knowledge held and how CPD	1
context	linked to their immediate goals	
Dissemination	(c) Change needs to work through ecology of the education system.	
Collaboration	(e) Collaboration process had unintended significant impact on participants pedagogical thinking and practices.	(g) Intersubjectivity
	A sense of shared enterprise in a community of educators	Professional learning takes place through the inter-
	central to pedagogical development.	related process of collaboration promoted by use of
Use of 'other'	(f) Professional learning took place through inter-related processes:	the 'other'.
	• People	
	• Theory	
	• Resources	
	• things	
Feedback	(h) Student feedback is important for teachers' professional learning.	(I) Reflection
	Learning through dialogue and feedback leads to conscious	
Dialogue	awareness of own practice.	Conscious awareness of pedagogy through dialogue
	Dialogue enables tacit knowledge to be gained.	and feedback enables reflection and access to tacit
Reflection	There needs to be time to review and reflect.	knowledge.
CPD unexpected	(i) Teachers' perception of own needs modified by intervention	
Cognitive change		

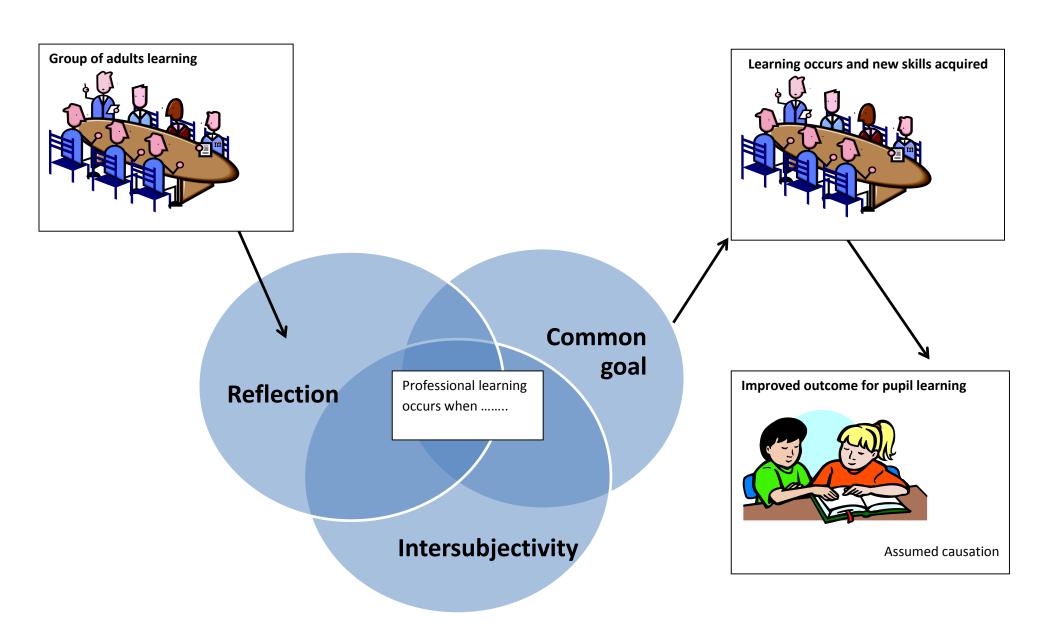


Figure 3: A model of third order interpretations, successful CPD elements

Learning takes place through an interaction of individual and social processes (Illeris, 2003). Illeris (2003) explored workplace learning as including cognitive, emotional and social-societal, interrelated dimensions. This sits alongside personal knowledge; which is both private and professional knowledge one holds – the cognitive and emotional. Personal knowledge can affect the ability to learn and be open to codified knowledge. Codified knowledge is gained through courses and training and is externally verified; this type of knowledge includes skills and procedures. How codified knowledge is acquired is affected by the learning context (Eraut, 2000). This interplay between learner and learning environment, school and management system, will affect how workplace learning occurs. The individual acquires skills in cognitive and emotional learning which will interact with the social-societal (Eraut, 2007; Illeris, 2003). This two way process of learning can be influenced by the norms, beliefs and practices of the individual and of the school (Watkins & Marsick, 1992).

This review's findings suggest a need for a whole school approach to CPD and learning, which must include senior management from the outset. This will also lead to change. For change to occur it needs to work through the ecology of the education system (Bronfenbrenner, 1976). For CPD to lead to change in schools, all staff must be involved as it must occur at every level.

Professional learning is directly impacted by situational factors, which links to informal and incidental learning. Marsick and Watkins (2001) argue when people have opportunity, need and motivation these forms of learning occur. In the review papers learning occurred when senior management support, matching of aims, and personal goals were being met.

Being a learner in context can change our identity within that context. Wenger (1998), in his social theory of learning, views learning as a way of becoming. He argues by learning who we are, our identity changes and our history evolves. By providing teachers with the opportunity to disseminate their learning they are provided with the social recognition of their CPD; which, it is argued will

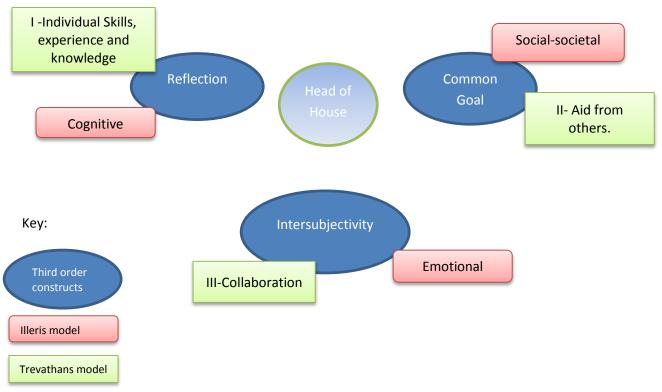
mean their ego is treated with dignity and their learning acknowledged (Marková, 2003). This may result in their identity being deepened as a learner.

Intersubjectivity

This term encompassed the inter-related process of collaboration promoted by use of the other, through which professional learning takes place. Other describes people, theory, resources and things.

Primary subjectivity is about reciprocation; secondary about objects; and tertiary about negotiating and having shared representation (Trevarthen, 2006). This construct involved collaboration and use of other, linking it to all three types of intersubjectivity. Trevarthen and Aitken (2001) developed a model exploring infant development and intersubjectivity. This model could be adapted to look at other human interactions and mapped onto my third order constructs (see Figure 4). This can also be linked with Illeris (2003) model on workplace learning which describes three integrated dimensions to learning in the workplace – social-societal, cognitive and emotional.

Figure 4: Intersubjectivity in learning



Mezirow (1991) argued the main purpose of adult education is reflective and transformative learning. This review found collaboration with others led to teachers developing an awareness of their own and others assumptions. The notion of critical discourse was apparent in many of the research papers findings, although the term was not used (Baumfield et al., 2009; Hennessy & Deaney, 2009; Varga-Atkins et al., 2010; Warwick et al., 2011). Through using critical reflection and dialogue, meaning arose for many teachers involved. This review appears to highlight a dialogic approach, the participants involved recognise the otherness (through use of 'tool', dialogue, collaboration) and this adds to their consensus making and mutuality (Grabove, 1997). This intersubjectivity underpins collaborative learning (op cit).

Intersubjectivity involves understanding others viewpoints, and by experiencing 'otherness' through dialogue changes can occur (Gillespie & Cornish, 2010). This dialogue can create understandings of common meaning. Intersubjectivity is argued to be the basis of collaborative learning (Grabove, 1997).

The use of expert other as a tool can promote change. This review found that through teachers having the opportunity to engage in discussions with knowledgeable others learning occurred. This links with claims that by combining theory with practice teachers are more inclined to remember and apply their learning (Darling-Hammond, 1997).

Cordingley's (2003) Systematic Review of collaborative CPD found links between collaborative CPD and improvements in teaching and learning. Teachers reported a greater confidence and self-efficacy in relation to making a difference to pupils' learning (Cordingley, 2003). Related is the notion of self-image emerging by seeing oneself through another's eyes, which Gillespie and Cornish (2010) argues leads to deeper learning. This overlaps with the next third order construct, dialogue and feedback.

Reflection

This construct was the conscious awareness of pedagogy through dialogue and feedback which enabled reflection and access to tacit knowledge. Tacit knowledge is knowledge which is difficult to articulate, knowing but not being able to tell how you know it (Polanyi, 1966). Professional knowledge is argued to have a significant and large tacit element (Eraut, 2000).

Tactic knowledge, which is fallible, creates misconceptions that can determine behaviour; thus a deeper self-awareness is needed (Eraut, 2000). Tacit knowledge can be routinised so that action becomes automatic without the need to think about what is being done, as it has been done many times before. Drawing on Argyris' model of learning (1992; see Figure 2), this is routinised action and will result in single loop learning.

Making routinised actions, tacit knowledge, explicit means further learning is more likely. By gaining access to tacit knowledge and receiving feedback improvement in performance will occur (Eraut, 2000). This feedback should be specific about improvements needed and be based on building confidence; this is most successful when there are good working relationships (Eraut, 2007). This links to Figure 4 and the importance Illeris (2003) placed on workplace learning needing to take account of the emotional and social-societal.

Watkins and Marsick (1992) state to learn from experience a dialectic interaction of action and reflection is needed. By reflecting on experience one becomes consciously aware of learning and intentionality occurs. Without reflection incidental learning occurs, whereby learning is embedded in actions (see Figure 5).

Figure 5: Action and reflection in learning adopted from (Watkins & Marsick, 1992)

	Presence of reflection	Absence of reflection
Presence of action	Informal learning	Incidental learning
Absence of action	Formal learning	Non-learning

This model can link to the cycle of learning (Figure 2, p. 16), with absence of reflection (thinking) leading to single loop learning (Argyris, 1992; Hawkins & Shohet, 2006). Thinking is generated through the dialogic experience of the other; therefore perhaps through seeing oneself as a social thinker double loop learning could occur. If learning takes place without this dialogic experience perhaps single loop learning may occur (see models below).

Figure 6: Single loop learning

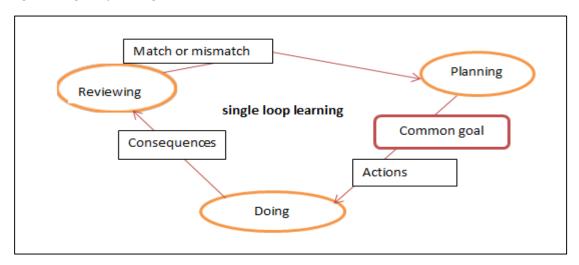
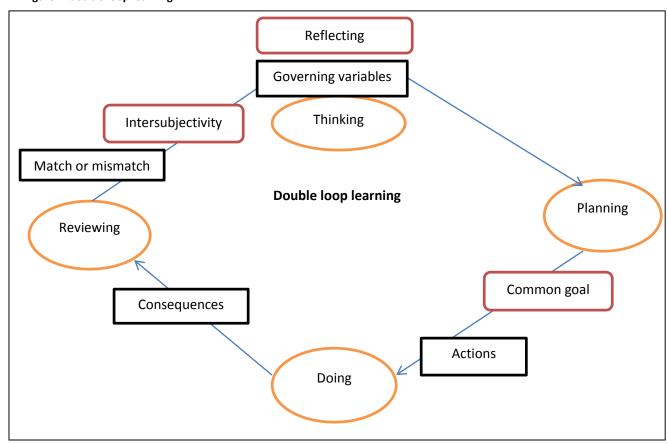


Figure 7: double loop learning



Looking at Figure 7 by using the other for dialogue and reflective thinking, the match mismatch of aims is brought to attention, and governing variables impact upon the outcome thought about. This might not happen without reflection with others. The process of double loop learning leads to assumptions and values being questioned. Through double loop learning, understanding and learning of underlying causes of actions or consequences can be explored. By engaging in this alternative actions can be chosen rather than merely repeating previous routinised action. Through this, tacit knowledge becomes explicit and critical reflection and subjectivity lead to change.

Realist assumption

By carrying out this Review I have gained a better understanding of what needs to be present for professional development to result in learning for teachers. As represented in the model (Figure 3) I have made the realist assumption that if the third order constructs which have emerged from this Review are present then there will be a positive affect on teachers' practice leading to an improvement for pupils' learning.

My review method

Engaging in a meta-ethnography I was aware that what I extrapolated from the research and how I constructed my third order constructs was fallible. My initial interest resulted in researching this area, my own professional experience and my world view will have impacted upon my translation and synthesise. I used the seven phases from Noblit and Hare (1988) as a framework to systematically review the literature, the WOE tool to assess the quality of papers, and my coresearchers (tutors) to discuss justifications for labels and constructs. By doing so, I hope to have become aware of how my world view may have impacted on my interpretations and been able to acknowledge and take account of, in my interpretation, other possible meanings and constructs. However, each account to be synthesised, in a meta-ethnography is already an interpretation of interpretations (Noblit & Hare, 1988). This translation raises this interpretation to another level. In

each level these interpretations will have been subjective. The implications of engaging in a metaethnography are explored further in Chapter 2.

Implications of findings for Educational Psychology

The model developed can be used in practice as an evidence base to develop CPD for teachers and schools. Through working with schools to develop learning communities this model can provide the evidence base to highlight the importance of: a whole school approach, collaboration; and of giving time and space for reflection and feedback.

This model can be used to help schools look at making CPD a more effective, in terms of teacher learning, and efficient use of resources, time and money. The educational psychologist (EP) can be utilised as the 'other' to provide or facilitate critical feedback and reflection. EPs can facilitate schools and staff to have awareness of their knowledge, aims and goals. Also of how to devise policy and practice based on this model to find a common goal. By using this model in practice the EPs can help to facilitate schools to engage in 'double loop' learning to get the best from their learning organisation, which may positively affect pupils' learning.

The double loop model can be applied cautiously to EPs own learning and development in the workplace. I think the findings from this paper are transferable in terms of EPs development and common goal. The future of EP services and role of the EP is changing, this model may help understand this change.

Conclusion

This Review has led to the development of a model with three overlapping constructs, needed for professional learning to occur. This paper has made the realist assumption that professional learning will result in improved outcomes for pupils.

The constructs arose from synthesising and translating the seven studies found through a systematic search of literature available. The three constructs to emerge from this meta-ethnography are:

- The knowledge and aims of the school and individual teacher need to link with CPD for change to occur at different levels (Common goal).
- Professional learning takes place through the inter-related process of collaboration promoted by use of the 'other' (intersubjectivity).
- Conscious awareness of pedagogy through dialogue and feedback enable reflection and access to tacit knowledge (dialogue and feedback lead to reflection).

The model devised from this review extends previous research on factors of professional development needed for teacher learning. This model is in its early stages of development and needs to be further researched to enable a better understanding of how the constructs overlap and of how it may need to be altered in order to enhance professional learning.

Chapter two - Bridging Document

Introduction

This Chapter provides an opportunity to share the links between my Systematic Review (SR) and Empirical Research (ER), whilst exploring ethical and quality issues. I begin with an explanation of my research focus and then explicitly outline my ontological and epistemological position, focusing on how this influenced decisions made in the research. The methodology section explains and justifies methods deployed and my data analysis. Before concluding I discuss the role of reflexivity and ethics in my work.

Ethical considerations and reflections are embedded throughout this chapter. This is to highlight the importance ethics and reflexive practice played in my thinking and action.

Research focus

I am interested in teachers and their experiences within school. I engaged in this research due to my own biography; that of a primary school teacher and a Trainee Educational Psychologist (TEP). As a teacher I engaged in CPD which I did not feel I could embed into my practice. I was curious as to why this was the case and why I did not feel enabled to do this. I often worked in isolation without the opportunity to engage in collaborative reflection with my colleagues. As a TEP I am aware of the need to support teachers in their practice; often my role is one of being the reflective other to enable teachers' to find their own solutions to move problems forward. To engage in this work as a TEP, I have used the skills I developed from teaching, in modelling, scaffolding and active listening. I also draw upon the skills and insights I have developed from training on the Doctoral programme. These include: Video Interactive Guidance focusing on attunement, solution orientated principles, consultation and types of questioning.

Having been a primary school teacher, and engaging in systems work with teachers as a Trainee Educational Psychologist (TEP), I believe teachers need to be supported to do their job of ensuring positive teaching and learning experiences for young people. In this way I am making a realist assumption that working with teachers will affect the experiences of the young people they teach (Pawson & Tilley, 1997 : See Figure 1; Tschannen-Moran, Hoy, & Hoy, 1998).

This led me to choose the area of CPD and teachers' learning for my SR. I wanted to focus on qualitative studies looking at peoples' experiences of CPD. Important for me was to honour the original meaning of the studies so I took a meta-ethnography approach in my SR (following: Noblit & Hare, 1988). This allowed me to explore the underlying concepts of the studies in order to gain a deeper level of analysis (Britten et al., 2002).

I discovered that collaboration, reflection through dialogue and having a common goal were important factors when designing and carrying out CPD. I used these themes to form a model (p. 33) which I then used as the basis for an intervention to explore collaborative problem solving with a group of four Heads of House (HoH).

Purpose of research

The type of knowledge I hope to gain from this research is 'knowledge for action' (Wallace & Wray, 2011, p. 102): knowledge which will inform policy makers' efforts in improving teachers' practice and knowledge for teachers themselves to change their practice. My focus is on what already happens (SR), and, how I can use this to build and improve practice. I then focus on how things can be improved (ER) and informed by theory.

By engaging in this type of research, I had a clear intention to instigate change for the teachers and in the educational experience of the young people they teach. I am drawn to this type of research ethically, a form of 'committed action' (Aristotle cited in: Elliott, 1987). My reasoning is derived from how I understand a situation, the realist assumptions I make about teaching and learning. I

continued working with the HoH after data collection was complete, as I had not begun my work with this group simply for research sake rather I had a belief I was doing something for the right reason (Elliott, 1987).

In the next section I reflect upon my theoretical paradigm in more depth; illustrating my ontological and epistemological stances in my research.

World views

Theoretical paradigm is the belief system that guided my research. It is important that I explore this and the philosophical assumptions which have guided this research from inception to completion (Scott, 2005). This will help the reader to understand how and why this research was carried out (Krauss, 2005).

Ontology is the view we have of the world (Willig, 2013); epistemology is how we can know about this world (Trochim, 2000). Methodology identifies ways to attain knowledge of this world (Krauss, 2005).

I believe there are many realities constructed by humans; realism acknowledges multiple perceptions humans have about a single reality and that reality is not completely knowable or discoverable. Critical realism is conscious of the values the researcher has with there being differences between reality and people's perceptions of reality (Krauss, 2005).

Ontology & epistemology

My SR was a meta-ethnography which has its roots in social constructionism, though I also believe it can fit into a critical realist view of the world. According to a social constructionist rooted meta-ethnography there is no theory-neutral language. This matches my belief that all language is derived from theory. However, I also believe that there is a social and natural reality which exists prior to human cognition (Coghlan & Brannick, 2009).

Although I hold a realist ontology I believe we can know about the world through subjective means (see Figure 8). My approach is adopted from the Kantian position which sees a difference between noumenal, a thing in itself, and phenomenon, a fact. I believe there is a reality which is external and independent of human thought (Johnson & Duberley, 2003). It is argued critical realism allows for the socially constructed and the existence of the material world (Scott, 2005). Although I believe that an independent reality exists, thus adopting a critical realist perspective, I do not believe one can have absolute knowledge of the way in which it works. I believe that any interpretation or construct I, or others, have of the world is fallible; this is why critical realism is critical; interpretations of the world are open to be critiqued and replaced by another interpretation (Scott, 2007).

My basis for engaging in this research is the belief that by working with teachers it may have an impact on teaching and learning for children and young people, a realist assumption. This critical realist stance also is apparent in the Action Research cycles I chose to carry out. Applying Thematic Analysis to my data is a flexible approach not linked to a particular ontology or epistemology. I have acknowledged throughout that the themes which developed from my SR and ER are subjective.

These values and how my belief system will have affected my decisions are further explored in the Reflexivity section (p. 49).

Figure 8: My theoretical paradigm (adapted from: Johnson & Duberley, 2003)

Objective way of knowing

EPISTEMOLOGY

Subjective way of knowing

Gráinne – Critical realist

45

Methodology

Action Research (AR) was the framework within which my research was grounded (Robson, 1997); this process links social change with psychology (Kagan, Burton, & Siddiquee, 2008). AR allowed me to be flexible and for co-learning and collaboration to occur whilst reflecting on problem solving (Kagan et al., 2008). This approach allowed me to engage in research which would lead to change for policy makers and the teachers themselves (Coghlan & Brannick, 2009) and knowledge for action (Wallace & Wray, 2011).

Direct participation by the Heads of House (HoH) and my intention to initiate change were important when deciding on the type of research I wished to embark upon. I engaged in practical AR, which was directed by me as researcher though the HoH had a clear voice in the process (Kemmis, 2009). This action agenda was central to my research as I was drawn to the emancipatory purpose of research; to drive for positive social change (Kagan et al., 2008).

I did not wish to make the HoH conform to my theory of how practice should be; rather I wanted the HoH to be their own researchers and theorists with control over their own practice. The self-reflective process of AR can lead to self-transformation; AR is a practice which changes practices - a meta-practice (Kemmis, 2009).

This also involved meta-learning, according to Zuber-Skerritt (2001) who proposes there are two parallel cycles in AR. The core AR cycle is the plan, take action, and evaluate cycle; the other is the reflection cycle, a cycle reflecting on the core AR cycle. This reflection on reflection, meta-learning, was part of the learning process with which the HoH and I engaged (Coghlan & Brannick, 2009).

As the researcher I was engaging in reflection upon the core AR cycles; to do this I carried out three forms of critical reflection (taken from: Mezirow, 1991). By carrying out these reflections this allowed me to adapt the frameworks for the intervention each week.

- Content reflection: upon the issues of the group, what was happening individually and collectively and how the content could better suit their needs.
- 2) Process reflection: on the frameworks, prompts and structure of the sessions.
- 3) Premise reflection: upon the underlying assumptions and perspectives of the process.

Once I completed my AR cycles and final interviews, I used the following questions to inform my reflection upon the research process.

Table 8: Reflection on Action Research (adapted from:Baumfield, Hall, & Wall, 2008)

What went to plan?	•	The group meeting every week (with one week's exception).
What was easier?	•	Agreeing with the group a suitable time to meet.
	•	The group engaging in using the frameworks and being a reflective team
		from the outset.
 What was more 	•	Using the language prompts and deciding if, or when, to intervene when
difficult?		the coach was offering solutions from the outset.
	•	Ensuring everyone had an equal voice, one HoH appeared less involved
		and his solutions seemed less acknowledged.
	•	My role as researcher vs TEP (as the discussions were based on
		professional issues often involving individual unnamed cases). I wonder if I
		had carried out this research in a school in which I was not the TEP, how
		different it would have been. I may have been seen merely as the
		researcher and have developed the relationship in that way. However,
		already being known to the group and to the school was an advantage.
	•	Managing the time within the sessions; particularly ensuring the group
		discussion didn't extend so that there was no time for the necessary
		reflection on the process at the end.
What had you	•	I predicted the group would find the process useful and they would see
predicted?		the power of the group in helping find solutions to problems. I also hoped
		the skills would be useful in the HoH day-to-day practice with young
		people, they referred to this in interview B talk (Appendix K – Supporting
		exerts from interviews).
	•	I predicted there maybe difficulty with maintaining the group post my
		research, and my direct involvement.
What surprised	•	The sense of agency – I did not think about their feelings of agency and
you?		how a collective and individual voice may develop through the process,
		with less need for a powerful other.
	•	The HoH trained other members of the school staff in the process, which I
		deduced meant they found this useful.
What else is	•	It is important to ensure research with teachers is carried out at their
relevant?		convenience, with a clear amount of time expected from the outset.

Through this process of reflection I have been able to communicate my experience of the AR process which it is argued is as vital for rigour as the results in regards to replicability (Baumfield et al., 2008)

To learn from this experience I have referred back to my writing in the SR about action and reflection being in a dialectic process with one another (see How professionals learn: p. 14). Through reflecting upon the research, I too have experienced informal learning; drawing a strong parallel between myself and the HoH. This informal learning will also have occurred for the HoH, as reflection was built into the process of the AR cycles (Watkins & Marsick, 1992). My transformative learning has had direct impact on my work as a TEP. Now when delivering CPD I am very conscious of interpersonal processes previously I was solely content driven. I now look closely at the process of CPD from inception to delivery in collaboration with the key players involved.

Method

Semi-structured interviews were used once at the start of the AR cycles and once at the end with each HoH. I was aware throughout that this choice of method leads to issues of power. I set the agenda (although a flexible one) to serve my own research interests; and I interpreted what was said (Brinkmann & Kvale, 2011).

Limits of chosen methods

I was aware that the research involved a time commitment for the HoH, and as the group chose the time of 7.30am it meant their working day was extended. I wonder if I could have negotiated with senior management for the group to meet me during the day as I was aware throughout that the group had pressures and time played an important role in their school day. I also could have chosen to video the sessions, with the HoH approval. However, this may have been a different research perhaps with a focus on the attunement and interaction of the group.

Reflexivity

Reflexivity is the awareness of my role in how meaning in my research has been constructed (Willig, 2013). The belief system I have is the basis of how I analyse, challenge my assumptions and think about theory (Johnson & Duberley, 2003). I engaged in three types of reflexivity:

Personal reflexivity, involving reflection upon how my own values, attitudes, beliefs and experiences have shaped the research, the choices made and the themes which I have discovered. I am aware that my own reactions within the research context can and will have resulted in particular insights and understandings (Willig, 2013). I also think it is important to be reflexive about how the research has changed me and my view on the subject of teacher learning. I had always believed in the power of reflecting with others and of supervision's importance. I used the frameworks as a medium for this, as secondary intersubjectivity, and to teach skills and knowledge. However, I now think the aspect of collaboratively problem solving (through the frameworks) has led to a greater sense of individual and collective agency. The power of working with teachers has led me to strongly believe in the power of research by applied psychologists.

Another aspect of this personal reflectivity is about the role I had in the group, and how this affected the success of the intervention. To explore this I asked the HoH what they perceived to be the qualities I had, which impacted upon the intervention and group. Below is a summary of the main qualities they believed I held, which helped make the intervention successful. It is important to recognise oneself and how we are perceived in order to understand what we bring to professional contexts.

Table 9: Qualities of the researcher as facilitator

Qualities of researcher in facilitating the group

- o Genuinely interested
- o Empathic
- o Positive and solution focused
- Open body language
- o Thoughtful and considerate
- Embraced silence before responding

Epistemological reflexivity: This focuses on how the choice of research question, and the choice of method defined and limited what I found (Willig, 2013). I am aware the method chosen would have made a difference to what was discovered. If I had engaged in conversational analysis in the group sessions, looking at how the conversations emerged and intersubjectivity was created I wonder if the themes might have been different.

I accept the fallibility of my own view on how I named the codes and themes discovered (Willig, 2013). I am aware that the themes which I discovered, in both the SR and ER, are intertwined with my own view of the world and as a result there will be other valid ways of interpreting my findings (Clegg, 2005; Johnson & Duberley, 2003).

Insider outsider researcher reflexivity: As a member of a professional external service, I worked as a TEP in the school and had developed working relationships with the staff, in particular the SENCo and HoH. In this way I may be seen as an insider and or an outsider to the school staff.

As I wished for this research to take action, using AR as an insider outsider researcher was fundamental, according to Bartunek and Louis (1996).

Key to this research was having successful working relationships with the HoH, which is also important in my role as the school TEP. I was aware of the power dynamic reflecting upon who would have ownership over the group and the voices of that group (Bartunek & Louis, 1996). This is why I wanted the research to be with the teachers and not something done to them. I began the

research clearly stating my aims and objectives, I then negotiated times for the interview and AR cycles with the group. I also explained to the group that they would have the opportunity to read their transcripts and amend; and to explore the collective themes which were discovered. I attempted to give the group shared ownership of the process: they chose the time, date, venue, what they would like the framework (see Figure 10 p. 67) to look like, and who would adopt which role in the group. However throughout I was aware that I was the researcher who was bringing the frameworks, making notes and subjective interpretations (Brinkmann & Kvale, 2011)upon their voices (albeit reflecting these back).

By engaging in AR cycles and semi-structured interviews with the HoH I was building upon our professional relationship. This could perhaps have resulted in a perceived friendship, one which is unethical or fake (Brinkmann & Kvale, 2011), though as I already had a professional relationship I think this research was seen as a continuation of this relationship rather than a friendship.

As a TEP I engaged in problem solving consultations with the HoH, and wondered if, during the AR cycles, they looked to me to approve of their practices, ideas, and solutions and assumed I agreed with suggestions made. Also as a TEP my role was to see positives and help the situation move forward though in this group I was the researcher not the TEP. I realised through reflecting on this insider/outsider dichotomy that perhaps the distinction between TEP and research was not useful or possible.

Rather I think I adopted the role of facilitator, again something I also do as a TEP in consultations.

Another aspect of my role was when group members showed distress and or appeared to need TEP intervention outside of what the group was providing. I dealt with this by asking the HoH to stay if possible after the session and clearly stating that we would be meeting as TEP and HoH. Also when the concern was about HoH wellbeing, I would email later in the day informing when I would be back in school and if they would like to meet to explore what was discussed.

I have been conscious of the dilemmas of becoming more of an insider through this process. I have used my research supervision sessions to help explore this and continue to reflect upon how this may affect my research, my role as a TEP and my personal views.

Ethical considerations

Through considering ethical implications prior to beginning this research I was aware that often the writing on ethical methods view participants as having the research done to them rather than the participants being part of the research; this might not always be appropriate in AR cycles (Eikeland, 2006), neither I think is it appropriate for educational psychology (EP) research or practice.

Aristotle wrote of virtue ethics. This takes a contextualised view on how and when rules should be applied (Eikeland, 2006). This does not mean I should abandon policies of the HCPC, BPS and University, rather as Dewey suggests view these policies as tools to think about the research. If I merely adhere to ethical guidelines I will ignore my moral compass as to how to apply these policies to the particular research context I am working within, and of how to address ethical dilemmas which exist in real life research (Brinkmann & Kvale, 2011). Aristotle refers to this capacity to determine how to act and on which rules apply as Phronesis (Elliott, 2009); this guided my ethical thinking through my research. Phronesis is also about carrying out research with a practical intention, to change a situation and make it educationally more worthwhile which again matches the view of research I hold.

I wanted to consider why it was valuable to engage in this research and who could gain or lose as a result. This links to the Applied Psychology Association's earlier view on ethics, about the psychologists' optimum contribution (Brinkmann & Kvale, 2011).

I don't see ethical considerations as needing to be solved but, like Brinkmann and Kvale (2011), they should be continually readdressed and reflected upon. To do this I developed an ethical protocol prompt.

Table 10: Ethical protocol (adapted from: Brinkmann & Kvale, 2011; British Psychological Society, 2009; Health and Care Professions Council, 2012)

What are the possible beneficial outcomes of the research? Are the best interests of service users being met? How can informed consent of those involved be gained?	 Possible outcomes for those directly involved: HoH – skills, competencies and knowledge developed. Also possible outcome for the group in collective problem solving. Possible positive outcomes for the young people they come into contact with in the school. At the beginning through exploring the aims, objectives and how the research would be used, I made clear the expectations of the HoH. I then gave each a consent form
	 (see Appendix B). Throughout I also gained consent at each Action Research cycle and at the start of each interview.
How can confidentiality of those involved be protected and respected? How important is anonymity? How can identity be disguised? Who will have access to the interview and other data?	 The data I collected was stored in a locked drawer and will be appropriately disposed of upon completion of my Doctorate (I will keep my data and record of analysis for 5 years, before destroying it). Apart from me, no one has access to the full transcripts. The excerpts used in the thesis are anonymised. Neither the school nor the teachers are named in this research; though I did not guarantee complete anonymity and explored with the group that as a TEP in the area it could be plausible for people to ascertain in which school I carried out my research and identify the group.
Debriefing	Debriefing sheet can be found in Appendix C
What are the consequences of the research for those involved? Any potential harm? Can this be outweighed by potential consequences? What precautions can be taken when developing relationship?	 The HoH were not exposed to risks above those of day to day life. I am aware that through having the opportunity to reflect upon practice and explore thoughts about current practice may have led to emotional risk. I attempted to acknowledge this through my initial and subsequent meetings and at every meeting reminded the HoH of my email address so they could contact me if they wished to meet with me and discuss anything which had arisen.
How will my role as researcher affect the study? How can I counteract identifying with HoH and risk losing critical perspective? Am I ensuring high standards of professional conduct?	 I reflected with the group about the professional boundarie within the group (Akkerman & Bakker, 2011). This included whether I was part of the group during the Action Research cycles; taking initially a facilitating role then a reflecting role I was researching the group so had my own agenda and I was aware I did not want to influence the discussions, yet my presence would have had impact on the group.

Quality issues

assumptions, methods and

Relating to the research

objectives and intention

4) Impact and importance

analysis.

According to Yardley (2000b), as this research's purpose was an interpretation of phenomena, reliability and replicability may not be relevant. Yardley (2000) suggests aspects of good qualitative research which I used to guide my thinking (explored in Table 11).

Table 11: How my research matches Yardley's (2000b, pp. 219-223) characteristics of good research .

1) Sensitivity to context: I explored relevant literature through my SR and ER. Context of theory Throughout the research I was aware of the social Awareness of the socio-cultural cultural context within which the teachers worked. This setting of the school and the context and the role I had in the school played a part in research the social context of our relationship. Social context of the I was aware of the power I held as I was initiating, relationship between myself and planning, interpreting and benefiting from the research. Through being reflective and reflexive on this throughout HoH (see p. 49), I attempted to ensure I was engaging in Influence of power in research research with the teachers and not on them. (ethical dimension) Adhering to the aforementioned BPS, HCPC ethical guidelines helped me to highlight issues. 2) Commitment and rigour When researching teacher's professional development, Commitment – prolonged Action Research, reflective teams and collaborative engagement with the topic, problem solving I consulted books, journal articles and websites. Part of my understanding from what I was through the methods used competence and skills reading was exploring the societal, cultural and political developed, immersed in context of teachers' professional learning in England. relevant data Action Research led me to semi-structured interviews Rigour – depth and breadth of and Action Research cycles. This allowed a breadth and depth of analysis, with the proviso that word limits of this analysis. thesis meant I could analyse one set of findings in depth. 3) Transparency and coherence Throughout the three chapters I have attempted to Clarity and coherence of clearly set out my rationale and intentions for the argument and description research. I have also stated my ontology and epistemology. This directly links to my methodology and Transparency of data and link subsequent method choices. between theory and method My appendices give the reader the data set from whence Reflexivity I discovered my themes and developed my argument. Coherence of link between This are displayed clearly in my findings section. research question, philosophical

Reflexivity has played an important role in this research

purpose both for Applied educational psychologists and

and I hope to have embedded this throughout.

for teachers, as was the intent of the research.

I hope the implications of this research will serve a

Concluding comments

This chapter's aim was to link the SR and the ER. Through exploring decisions made and links between chapters in light of my ontological and epistemological stance I aimed to provide a transparent critical reflection and justification of decisions made.

This research helped me in my evolving identity as an EP and in moving towards the EP I think I would like to be. That is one who works with teachers, to empower them to solve their own problems and support each other to do the same.

Chapter three – Empirical Research: Teacher's experience of a model of CPD

Abstract

The culture of performance management and teacher accountability can leave little opportunity for teachers to engage in reflection and professional dialogue (Lofthouse, Leat, & Towler, 2011). Often when teachers have the opportunity to analyse their own or others practice another agenda is attached. It is important to support teachers where the prime agenda is their skill development as professionals. By working with teachers and improving their practice and wellbeing this paper argues the learning experiences of pupils may improve.

In doing this research I aimed to develop the field of Continuing Professional Development (CPD) and collaborative professional learning through exploring teacher's experiences of collaborative problem solving. By adapting a model produced from a Systematic Review on CPD for teachers' learning, Action Research was carried out with four secondary school Heads of House. Data was gathered via interviews before and after the intervention and from the Action Research cycles. This data was then analysed using latent theory driven Thematic Analysis. The key findings were that: the process lead to a change in individual and collective agency; and trust and relationality were additional factors needed for successful CPD.

This research provides a model of how professionals can be supported in their learning. The implications for practice are explored including how Educational Psychologists can help school staff develop collaborative problem solving practices between schools.

Introduction

My Systematic Review (SR) examined the impact of collaborative continual professional development (CPD) on teaching and learning. Collaborative CPD was defined as programmes where specific plans to encourage and enable shared learning and support between at least two teacher colleagues occurred on a sustained basis (Hargreaves & Dawe, 1990). One finding was that when CPD was individually orientated there was weak evidence of CPD's capacity to influence teacher or pupil change. The SR also found all the studies initially involved the use of specialist expertise to set up CPD, with peer support being a feature of successful CPD. Findings from the SR were analysed using a meta-ethnography and I created a model from the emerging themes (See Figure 3, p. 33).

This model formed the basis for this research, I wished to explore if the themes were discovered when supporting a group to develop a form of CPD. Using the findings on the importance of involving peer support, reflection and collaboration in CPD, I decided to base the CPD on collaborative problem solving with an already formed group of Heads of House (HoH) in a large

Rationale

comprehensive secondary school.

I decided to engage in research linked to teacher learning. This is because I believe working with teachers and improving their practice and wellbeing will improve the learning experiences of those in their care; my realist assumption (Pawson & Tilley, 1997). I also believe, as research suggests, teachers rarely have the opportunity to analyse their own or others' practice without another agenda being attached. This agenda is often linked with power and control and not about benefitting teachers' own practice (Henwood & Pidgeon, 1992; Leat, Lofthouse, & Wilcock, 2006).

The performance management culture in schools, based on teacher accountability, often leaves no space outside of administrative duties to engage in joint reflection and professional dialogue (Lofthouse et al., 2011). Opfer and Pedder (2010) in their study on CPD reported that teachers often had a passive rather than collaborative role, and that their professional development is not based on

research. This study aims to explore CPD development through engaging in research with teachers, using an intervention which is informed by research and based on collaboration.

Peer supervision is the CPD this research is focused on. Although supervision is available to many people working in what is called the helping professions, such as social workers, it is not generally accessible for teachers (Gibbs & Miller, 2013; Hawkins & Shohet, 2006). Yet, supervision is described as key to maintaining staff well-being (Hawkins & Shohet, 2006). Having professional development forums for teachers to share discourses they may have about pupils and behaviour, can lead to change according to Hanko (2002). Through the process of shared dialogue, hearing otherness, a shift in perspective can occur (Gibbs & Miller, 2013); possibly leading to transformative learning. As a result I aimed for the HoH to become open to and reflective upon ways of change (Mezirow, 2003).

SRs into sustained effects of CPD report collaborative CPD is effective in changing teaching and learning (Cordingley, 2003; Cordingley, Bell, Thomason, & Firth, 2005). Also that peer support was an important feature in effective collaborative CPD. The authors reported that CPD without collaboration may lead to CPD not having a lasting affect.

I aim for others to take and adapt the research to use in their specific settings. I want this research to affect practice and research with the outcome of knowledge for action (Wallace & Wray, 2011). Knowledge for action is about making improvements within existing current systems; the secondary school and wider socio-cultural and political English Education system. To think about how to affect practice I explored change theory.

Change theory

Fullan (2007) proposes seven core premises needed for change⁴. I drew upon five of these adopting a flexible approach to his theory (see Figure 9). In this model motivation, flexibility and persistence are central themes, as I believe without these the other aspects would not work.

Figure 9: Premises of change theory; adapted from Fullan (2007)

Learning in context:

Can lead to the HoH changing the context they work in; thus, the research is based in HoH school.

Motivation: Needed from the HoH to improve outcomes.

Flexible and

persistent: weekly reflections to evolve intervention allowing for self-correction and refinement.

Capacity building:

I hope the collective effectiveness of HoH group needs will develop and increase, improving pupils' teaching and learning experiences (realist assumption). This research, develops the resources, knowledge and competencies of the HoH.

Learning theory and dialogue

This section explores the main learning theories used in my research: cognitivist, constructivist and social learning theory (Marquardt & Waddill, 2004).

Cognitivist approach argues learning occurs through transformation of experience. My intervention was based on the hope teachers would experience meta-cognition, thinking about their individual and collective thinking and learning (Cole, Cole, & Lightfoot, 2005). The main stages in meta-cognition are planning, monitoring and evaluating/reviewing; similar to Action Research (AR) cycles (Kuhn, 2000; Zuber-Skerritt, 2001) and to the learning cycles in Figure 2 (p. 14).

Meta-cognition is intertwined in the reflection section of the AR cycles (see Figure 10, p. 67) and in the final interview (Flavell, 1971). According to transformative learning theory, critical reflection can

⁴ These are motivation, capacity building, learning in context, changing context, bias for reflective action, trilevel engagement, persistence and flexibility.

be developed by me, through helping the group to develop skills, insights and self-reflection (Mezirow, 2003). According to cognitivist and constructivist theorists and my SR findings, reflection and dialogue support learning (Bruner, 1961; Mezirow, 1991; Schön, 1987); in turn these underpin my research. Taking a constructivist approach, HoH knowledge is seen as bound in their school context with each HoH taking meaning from being involved in the intervention. I believe social context of learning is important, thereby HoH will learn from interaction with the group as individuals and as a collective, which is why I also drew upon social learning theory (Lave & Wenger, 1991; Vygotsky et al., 1994).

Social learning is linked to double loop learning which sees dialogue as important to the process of learning (Argyris, 1992: See Figure 7 p. 38). Through using language to articulate thoughts, the developing script can create meaning and learning. For double loop learning to occur, for underlying assumptions to be reflected upon and learning to happen, there is a need to move past the defensive reasoning stage. This dialogue will require that the group have mutual respect and an openness to experience change (Gillespie & Cornish, 2010). Openness may move learning past defensive reasoning, towards exploring underlying assumptions and then action.

Wenger views learning as social participation, his theory has four elements (Wenger, 1998, p. 5):

Table 12: Wenger's social learning theory

Meaning	A way of talking about our (changing) ability- individually and collectively – to experience
	our life and the world as having meaning: referred to as learning as experience.
Practice	A way of talking about the shared historical and social resources, frameworks, and
	perspectives that can sustain mutual engagement in action: referred to as learning as doing.
Community	A way of talking about the social configurations in which our enterprises are defined as
	worth pursuing and our participation is recognisable as competence: referred to as learning
	as belonging.
Identity	A way of talking about how learning changes who we are and creates personal histories of
	becoming in the context of our communities: learning as becoming.

Each element involves learning through dialogue and with others, resonating with writing on dialogicality and the dialogic principle (Marková, 2003). According to dialogical principle the relationship between I and other (s) allows people to communicate their life experiences, emotions, concerns and sense of social reality (Marková, 2003).

Buber explored receptivity in his writing on dialogue(Gillespie & Cornish, 2010). The purpose of the group was to provide otherness, to use otherness to get past defensive reasoning experienced in single loop learning (Argyris, 1992). Part of this will involve the group bringing problems for collaborative problem solving. I aimed for the HoH to learn to communicate their meaning, practice, community and identity, which I hoped would result in double loop, transformative, learning.

The current study

I aimed to collaboratively develop frameworks with HoH to explore how they could problem solve.

These frameworks also focused on skills of active listening and types of language that could enable reframing of problems and finding ways forward. The question explored was:

- * What can HoH talk tell us about their experience of collaborative problem solving?
 - > Does HoH talk differ as a result of the intervention?
 - > Do HoH perceive the intervention as affecting their work?
 - ➤ How does the model from the SR relate to the findings?
 - What themes are relevant to the findings?

The aims of objectives I had in working with the HoH are explored in table 13.

Table 13: Research aims of working with Heads of House

Through research to:	Explore the process and the learning that has taken place.
	 Focus on processes, changes and relationships, and how
	particular tools question and disturb normal communication;
	that is the taken for granted practices, the underlying
	assumptions, so that double loop learning can occur.
	 Gain knowledge about teachers' development as professionals
	and the impact of that through this intervention.
Through intervention to:	 Explore how using reflective teams can enhance teachers'
	collaborative problem solving (Hornstrup, 2008)
	 Develop a community, between Heads of House (HoH) in a
	secondary school, to support the development of a group in
	which HoH can collaborate through dialogue.

Method

I have devised a grid illustrating how I planned my research linking this to research I drew upon at each stage (see Table 14).

Participants and ethicality

I carried out the study in a large comprehensive Secondary School in North East England, with four HoH. In addition to being a subject teacher the HoH had responsibility for welfare, behaviour and appearance of the pupils in school. There were two female and two male HoH, with varying levels of experience.

I already worked in the school as a Trainee Educational Psychologist (TEP). In this role I applied a range of Psychology working with young people, staff and parents. Being already known in school had advantages and disadvantages in regards to my research (explored in Chapter 2, p. 49).

The HoH may have perceived pressure to consent to this research: I was a LA outsider and the Head Teacher had given me permission to engage in this research (See Chapter 2, Ethical considerations, p.52). Throughout this research I paid attention to the ethical principles of the HCPC, BPS and Brinkman and Kvale (2011: see Table 10, p.53). As I had already worked with the HoH as a TEP and each HoH had come to me about a confidential issue the trust as a group appeared to form quickly.

Table 14: Empirical research plan

Dates	Intervention	Research drew upon/embedded in
February 2013		Ontology, epistemology and ethics
		2. Insider/outsider researcher dilemma. HCPC, BPS and University
		ethical guidelines.
		3. Problem solving frameworks, reflective teams and supervision.
March 2013		4. Researching methods, semi-structured interviews and Action
		Research cycles.
		5. Planning interview A based on research and SR model
		(Appendix D).
		6. Devise prompt sheet for interview (Appendix E).
		7. Planning intervention based on research and SR model.
		8. Devising consent for HoH.
April 2013	1. Gained consent from Gatekeepers; PEP and Head Teacher.	9. Piloted interview with two teachers (Appendix E).
	2. Arranged dates to meet with HoH to explain research and	10. Made amendments.
	gain consent.	11. Devised timetable of intervention.
	3. Meet with HoH to explain research, answer questions, give	12. Devised Pseudonyms for each participant.
	information sheet and consent form (Appendix B & C).	
	4. Via email, organised timetable to collect in person consent	
	forms and answer individual questions and to carry out	
	individual interviews.	
	5. Organised with HoH via email dates and times for weekly	
	Action Research cycle sessions.	
May 2013	6. Carried out individual interviews over 2 week period; each	13. Devised language prompt sheets for intervention and reflective
	lasting between 20 minutes and 1 hour.	team sheet (Appendix F & G).
	7. Finalised weekly sessions and duration of involvement (6	14. Finalised timetable of intervention.
	weeks).	
June 2013	8. Began weekly action research cycles, audio record and	15. Each week reflecting upon the process, listened back to audio

	make pertinent notes.	and written recordings. Subsequently I made amendments to
	9. Brought amended framework each week.	the framework for the following week.
		16. Planned interview B for end of intervention (Appendix H).
July 2013	10. Continued Action Research cycles – 5 in total (6 weeks in	17. Sent off interviews for transcription.
	total, one due to school issues was cancelled).	18. Researched the topic of Thematic Analysis.
	11. Carried out individual interviews at end of intervention.	
	12. Provided individual debrief and debrief sheet (Appendix C).	
August 2013		19. Began latent Thematic Analysis.
		20. Developed analytic framework based on SR model to guide
		initial coding (Appendix I).
September 2013	13. Met group and explored emerging themes from initial	21. Continued Thematic Analysis.
	coding; offered copies of transcripts.	22. Prepared initial basic themes to share.
	14. Explored how group could be maintained.	
	15. Engaged in a 'refresher' reflective team session.	
	16. Introduced other problem solving frameworks.	
	17. On HoH request arranged time to come back each half term	
	to 'check in'.	
October 2013	18. Met with group to reflect on last half terms meet ups and	23. Continued Thematic Analysis.
	how to further support.	24. Researched maintenance of group without outside other.
	19. Engaged in reflective team problem solving session.	25. Explored other problem solving frameworks - prepared user friendly prompt sheets.
November 2013	20. As 18.	26. Explored global themes links to research and SR model.
	21. As 19.	
December 2013	22. As 18.	27. Reflected upon how group is being maintained.
	23. As 19.	28. Began to write up findings.
February 2014	24. Last meeting as group to explore how group has evolved.	29. Continued write up of findings.
	25. Shared themes and gained consensus on findings.	30. Prepared to share initial findings and links to research.
April 2014	26. Met HoH feedback research, explore impact (Appendix L).	

The role I may have been perceived to hold within the group and the Action Research cycles was complicated. I was part of the group as the process was collaborative, but as the researcher I was aware I did not want to steer the group to my own agenda (Bartunek & Louis, 1996: explored further in p. 47).

Semi-structured interviews

Pre intervention semi-structured interviews were used to explore HoH styles of practice, experience of teaching, management, and collaborative problem solving (Bryman, 2012). Interviews were also carried out with each HoH at the end of the five AR cycles. This was for a timely write up although the group sessions continued after this date. These interviews centred on HoH reflections, perceptions and experiences of the process.

Each HoH chose a time slot with interviews lasting between 30 minutes and an hour. Both sets of interviews were transcribed by a transcription agency and a copy offered to the HoH, to ensure a true reflection of their voice (See Appendix J example transcript).

I chose semi-structured interviews as they allow for talk to be, in part, free. Devising a guide gave an element of consistency across sets of interviews in regards to areas I set out to explore (see Appendix D,E &F: justification for questions and interview guides). These areas were based on my research questions and aims. Through adopting a semi-structured style I could alter questions and follow up on comments. This allowed for rich and enlightening data (Cohen, Manion, & Morrison, 2013).

Action Research cycles

In negotiation with HoH, we identified 6 weeks in June and July to meet weekly for 30 minutes. The HoH established a day and time, wishing to choose a time that would not be rescheduled due to other things in school occurring.

I used AR as it was important my research was collaborative and involved self-reflection (Altrichter, Kemmis, McTaggart, & Zuber-Skerritt, 2002). AR appears to be understood in many ways with no unified definition. It is argued that having too pure a definition can be alienating (Holly, 1996). I have adopted the following understanding of AR taken from Altrichter et al. (2002, p. 130). It involves:

- o people reflecting upon and improving their practice
- o close interlink between this reflection and the action
- o people making their experiences public to those in the group
- collaboration among the group as a critical community

I adopted the five spirals of AR cycles, involving: planning, acting, observing and reflecting (taken from: Zuber-Skerritt, 2001). I initially planned the sessions based on reflective teams (Hornstrup, 2008) incorporating an underpinning of solution focused language (de Shazer & Berg, 1997; Appendix F&G).

These plans were flexible with the focus on collaboration with shared ownership. In the first session I brought the framework and explored the structure, including timeframe, with the group. Each session ended with a reflection on the framework and process, not the content. This allowed for a collaborative dialogue about what did and did not work and how the framework could be adapted for the following week.

At the start of each cycle I brought the amended framework and the cycle begun again. Although the process was collaborative, I introduced a focus each week, for example in session 4 we focused on the language being used and how questions were framed whilst using the framework we codesigned (Figure 10). The focus was led by me and the adaptations by the HoH.

In the final AR cycle the group explored a desire to use different frameworks so I introduced a problem solving framework, the Integrated Factors Framework (Woolfson, Whaling, Stewart, & Monsen, 2003). I used this framework to scaffold the group's dialogues adopting an intersubjective

Figure 10: Action research cycles adapted from (Zuber-Skerritt, 2001)

Week 1 Plan: Introduce framework, concepts and theory. Negotiate group and role expectations of all. Practice with small problem.

Key:

GR – Group reflected

IR - I reflected

PB - Problem bringer

<u>Week 1: reflections:</u> GR: drawn to concept; found language difficult. *IR:* group 'bought in', but talked over one another.

Week 1: Outcome: Focus on structure, timing and listening.

Week 2 Plan: use framework focus on structure, timing and listening. I will act as coach and group can focus on phrases I am using and how I might be facilitating.

<u>Week 2 reflections:</u> GR: time structure helped focus dialogue, meant more opportunity to listen without interruption. Thought language not as important as structure. Liked 'Problem the problem not the person'; process meant situation could move forward. *IR*: Shift to active listening, current focus of group is solutions and the process structure.

<u>Week 2: Outcome:</u> Focus on other members being coach and team to support.

<u>Week 3 Plan:</u> Member of the group was a PB, another the coach. Focus on listening and ways to move the situation forward.

<u>Week 3 reflections:</u> GR: Coach wasn't sure of purpose of bringing back the solutions to the PB. *IR: 1/2 group are using the language framework to guide their questioning. Due to lateness of group members session cut short – difficult to safeguard reflection time at end.*

<u>Week 3: Outcome:</u> alter the feedback section from coach to PB including scaling and choosing way forward, also the time and who could support.

<u>Week 4 Plan:</u> focus on what change will look like and actions. Focus on use of language. Build in reflection on last week's process at the start.

<u>Week 4 reflections</u>: GR: not being able to interrupt means PB more open to solutions; 2 of 4 find using language difficult; enjoy the structure of framework. *IR: My role now-time keeper. PB, so far, bringing individual pupils as 'problem'*.

Week 4: Outcome: bring new problem solving frameworks to extend.

Week 5 Plan: Bring new problem solving frameworks.

<u>Week 5 reflections:</u> GR: able to look at issue from multiple perspectives, helped to depersonalise *IR:* initially reluctant about bringing a professional issue but through open dialogue a problem was raised.

approach (drawing from my SR model). This was used so the group could consider different levels of the issue; individual, school and community. We used this framework to guide thinking on what was going on and for whom, and to guide thinking away from the individual to an organisational focus.

At the HoH request, the sessions continued into the next academic year, where I took a reduced role. The group meet weekly and along with the audio and written recordings of the AR cycles, rich data was provided. Due to this papers scale only the findings from the five AR cycles and the interviews are explored.

Analysis

I analysed my data using latent theory driven Thematic Analysis (TA), adopting Braun and Clarke's guidelines (2006) as a framework (Table 15).

Table 15: Phases of Thematic Analysis adapted from Braun and Clarke (2006)

Phase	Description of process
1 Familiarising myself with the data	Transcribing data, reading and re-reading the
	data, noting down initial ideas
2 Generating initial codes	Coding interesting features in a systematic
	fashion across the whole data set
3 Searching for themes	Collating into potential themes gathering all
	relevant data
4 Reviewing themes	Checking if themes work in relation to the coded
	extracts and the entire data set. Generating a
	thematic 'map' of analysis
5 Defining and naming themes	On-going analysis to refine specifics of each
	theme generating clear definitions and names
	for each theme

TA is a method that identifies, analyses and reports on patterns/themes within data collected. It organises and describes data aiming to interpret various aspects of the data. It involves searching across data sets to find repeated patterns of meaning (Braun & Clarke, 2013).

I wished in the interview transcripts, to go beyond the surface, to identify underlying ideas, assumptions and conceptualisations (Attride-Stirling, 2001). Through this I aimed to explore a deeper level of individual and collective understanding.

I developed an analytical framework to guide my initial coding which I derived from my third order construct model (Figure 3, p. 33). I used this as a flexible guide so other themes could be discovered. This tool enabled me to identify and analyse patterns flexibly in my interview data by revisiting phases and concepts throughout analysis.

After initial analyses, I made a diagram of each AR cycle (Figure 10). I then went back to look at the interviews to see if I viewed them in a different light.

Themes

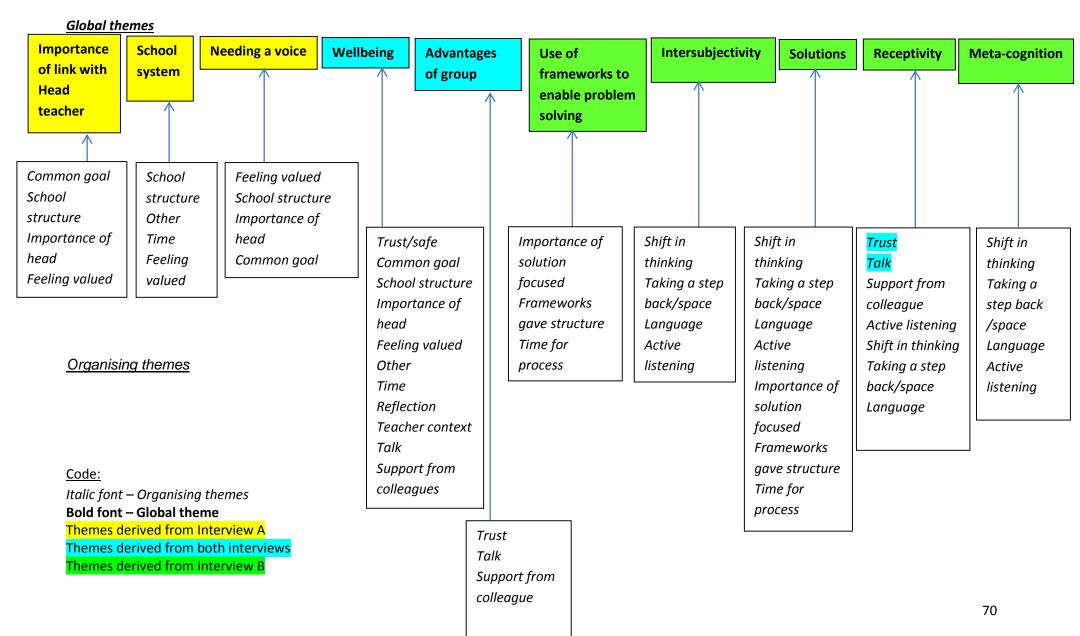
Themes, according to Braun and Clarke (2006) "capture something important about the data in relation to the research questions, representing some level of patterned response or meaning" (p. 82).

I adapted a thematic network approach to organise my themes, in table format (Attride-Stirling, 2001: see Appendix I). This allowed me to structure the themes discovered, in a way that mirrors that of a meta-ethnography approach (see Table 7, p. 32). There were three stages to this organisation (Attride-Stirling, 2001):

- 1. Basic theme
- 2. Organising theme
- 3. Global theme

Some basic and organising themes overlapped meaning some basic themes appeared in various organisational themes and some organisational themes appeared in different global themes (see Appendix I & Figure 11). This signalled the complexity of theming and various interpretations that could exist. Throughout analysis I was aware of the subjective nature of theming; overlapping the themes was an attempt to explore alternative ways of theming.

Figure 11: Global themes



Findings

In this section I discuss:

- The main finding; thematically different talk from interview A to B.
- Main themes from interview B.
- Overlapping and novel themes in interview A and B.
- Link with Systematic Review model.

In this section the term group refers to the collective (four HoH) involved in the AR cycles, which I refer to as cycles. I also use the term HoH when referring to individual HoH talk in interviews.

Interview A is the first set of interviews prior to the cycles, interview B is the post interview. All quotes used in text are in Appendix K.

Thematically different talk

The dichotomy between the HoH talk in interviews A and B, between passive and agentic talk, formed the main division in my findings. Being an agent is about intentionally influencing your functioning and circumstances (Bandura, 2006). In interview A HoH talk appeared to suggest they were merely onlookers of their behaviour. However, in interview B their talk appeared to suggest a more proactive, self-reflecting and self-regulating stance with less need for regulation by a powerful other; the Head Teacher.

Interview A	That is my decision don't question ithas been the attitudeI can't then be allowed to make those sorts of decisions or at least be part ofmaking those decisions (A2 16 523-526)
Interview B	Having some solidarity amongst us so we can go towards the managementso we have given them a problem and we are giving them a solution (B1 4 109-111).

The global theme of the importance of a link with the Head Teacher was apparent in interview A. In interview A there was discussion of the importance of being heard and valued by, and having regular links, with the Head Teacher. Although the SR found the need for a common goal between the

teacher and senior leadership team (SLT) prevalent, it was not specific to the Head Teacher as in interview A talk:

But I just want to be heard (A2 17 542-543). (Senior management)...just tell us what to do (A4 12 374-375).

In interview A it appeared the HoH did not perceive they had influence in their school community. For this to happen it is argued reciprocity is required, where both the HoH and the school community influence one another (McMillan & Chavis, 1986). Having a sense of being capable, of having influence, is linked to a sense of agency. This sense of agency was not apparent in interview A talk. In interview B talk was about having influence within the school community which could lead to change, and the HoH could gain influence through membership of a group. The talk appeared to suggest a sense of agency amongst the HoH:

Working together as a group to find out ...what other ideas ...it's given me hope (B3 1 14-22).

However, in interview B there was talk about need for external pressure for the group to meet once my involvement lessened so time would be safeguarded:

We need something to make it like a compulsory meeting... (B2 16 504-507)

This draws parallels with centralist ecological perspective; that agency depends on interactions and wider ecological conditions such as time and external pressure (Biesta & Tedder, 2007).

In interview B, talk of the importance of a link with the Head Teacher, the school system and needing a voice was not present as it was in interview A. This could be linked to the group developing its own voice through the intervention, supported by giving form to the experience of the group, reification, through use of the evolving frameworks (Wenger, 1998).

This can also be linked to participation, an active process which needs mutual recognition of participation in a piece of work (Wenger, 1998). This recognition can lead to the meaning of the

situation being altered for all involved. Participation is linked to HoH individual and collective identity, which appears to have evolved during the intervention.

In interview B talk linked to Wenger's learning theory (Wenger, 1998, p. 5; see table 14), experienced as:

Table 16: Interview B talk linked to Wenger's (1999) Learning theory

Doing – the practice of using the frameworks sustained mutual engagement.	 You need an action plan at the end of itI think it will stick with me more than anything (B3 2 39-44). Having that framework, I think, really helped to look at things in a different wayin a better, more constructive way (B4 2 50-52).
Belonging – membership and participation in the community was apparent in the talk.	• Come up with a solution together or say 'what do you think?' (B4 3 87).
Becoming – there was talk about the process of the intervention and the HoH's individual and collective identity which seemed to have evolved from interview A.	 Normally wouldtrying to come up with solutions and not really perhaps listening to what the issue isuseful to do that and develop ways of doing thatcoming up with solutions (B4 2 33-38).
Experience –talk of a change in being able to deal with problems and to find solutions both individually and collectively in interview B.	 As a process, has helped to be more reflective in a situationif a child comes to ustake a step back and thinkbefore jumping in (B4 15 486-490).

This relates to the talk in interview B and a sense of agency (Bandura, 1989). In interview A, talk did not suggest HoH believed they could exercise control over events in school which affected their professional lives. However, personal agency and efficacy in their ability as a group was visible in interview B talk. Self-efficacy was also apparent in the talk in the intervention. The group decided to approach the SLT with a plan for possible ways forward:

Having some solidarity amongst us so we can go towards the management...so we have given them a problem and we are giving them a solution (B1 4 109-111).

Taking an ecological perspective of agency, this group achieved agency through active engagement as a group in the school system (Biesta & Tedder, 2007).

I now explore Bandura's (2006) properties and modes of agency in relation to emerging themes.

Properties of agency

The first property is intentionality; forming action plans and strategies to realise intentions.

Intentionality needs interdependent commitment, and cannot be pursued individually. The group made the commitment to intentionally develop a critical community meeting regularly. This required motivation, a principle of change (Fullan, 2005: see Figure 1).

In interview B HoH shared how they might move their collective endeavours forward through providing support after the cycle:

I think the follow up needs to be done...have those action points been carried out (B2 7 213-226)

... sort of check in maybe two days or three days later (B2 9 280).

This collective intentionality, to have a check in person, is a sign of an effective group; one which is productive and successful (Bandura, 1989). This intentionality resulted from reflective action by the HoH in the cycles and interview B. By reflecting upon what was working and what needed alteration capacity building occurred. Both collective effectiveness and reflective action are principles for change in knowledge to occur (Fullan, 2005). This intentionality also illustrated another property: self-reactiveness.

This means the group constructs appropriate courses of action, with motivation to carry these out.

The group displayed self-reactiveness throughout the cycles; discussing as a collective then deciding as individuals how to proceed. This link between thoughts and actions is explored in interview B talk example above.

Forethought, another property of Agency, explores how people set goals and targets based on anticipated outcomes. Forethought developed through this process, individually and collectively. Collectively the group developed the frameworks based on reflective action. Forethought was apparent in suggestions of how the problem bringer could move forward, after the session, and put goals into action to achieve anticipated outcomes. This forethought was shown through the process both in the group and through what was being learnt from the group. Solutions and meta-cognition talk appeared in interview B:

Professional, rather than child based problems ... problems that affect us as professional... that was really useful...then you can come up with ways to resolve it or to make it seem less of a problem (B4 17 525-536).

This meta-cognition, regarding possible ways forward and solutions illustrates forethought.

The final property of agency, self-reflectiveness, explores the group becoming self-aware by reflecting on their personal skills and abilities; needing to listen more and not interrupt. The HoH also talked in interview B of making adjustments to practice as a result of being self-aware:

(Language prompt sheets) at first was the most difficult thing for me...I have found myself using them even when I am talking to pupils now (B2 2 40-50).

According to Bandura, meta-cognition - reflecting upon oneself and adequacy of thoughts and actions, is core to human agency (1989).

Agency theory suggests those who develop intentionality, forethought, self-reactiveness and self-reflectiveness will be more successful in realising potential futures than those with less developed agentic resources. In interview A HoH appeared to have few agentic resources whilst in interview B the talk focused on these resources and the possibilities which could arise.

Modes of agency

Agency theory explores three modes of agency: individual, proxy and collective; arguing that successful everyday functioning requires a blend of the three. Proxy mode is about agency through

the social, utilising others resources, knowledge and skills. Interview B talk explored using each other's knowledge and resources to problem solve

She really comes up with some good ideas...I have blinkers on (B1 2 52-54).

Also in interview B there was talk about how working together made things achievable which were not so on their own - the collective mode. From an ecological agency perspective this is a relational effect (Biesta & Tedder, 2007); according to Gergen (2009) the individual is a result of the relational process. The group's ability to engage in the school world was improved by being in the group, linked to relational agency. By the group aligning their actions and thoughts together they could interpret practice based issues and find ways forward (Edwards, 2005).

This is linked to Fullan's change theory (2005), which asserts that an effective collective is one in which the group's needs are being developed. There appeared to be, in interview B talk, a perceived collective efficacy. This efficacy seemed to give the group a perception of capability that was not apparent in interview A talk. This perceived collective efficacy is also linked to successful group functioning.

Functional aspects of consciousness involve purposeful processing of information and deliberate actions. Interview B talk was about how HoH stopped and thought about actions when meeting staff and pupils. They were consciously thinking about the language frameworks, SO principles and active listening, whereas in interview A they had appeared to adopt a taken for granted approach to practice (Bandura, 2006). This change in mind set and taken for granted approach shows transformative learning may have occurred (Mezirow, 1991).

Themes in interview B

Intersubjectivity vs relationality

Use of frameworks to enable secondary intersubjectivity (Trevarthen, 2006) within the group was referred to in interview B talk, allowing the group to take a step back, have space to think together about, and reflect upon the problem. This process, according to the talk, allowed for a shift in thinking. Also HoH talked about how the frameworks encouraged the group to actively listen and not interrupt:

...that framework... really helped to look at things in a different way...in better, more constructive way (B4 2 50-52)

There is not one person telling the story, one person listening...there has always been three coaches and one problem bringer (before the intervention)...the new method...is a better process (B1 3 73-80).

Intersubjectivity was a theme from my SR (see p. 35); this finding reinforces intersubjectivity as an important element of successful CPD for teachers.

In my SR the theme of intersubjectivity included the inter-related process of collaboration promoted by use of the 'other'. The theme suggests that learning occurs for teachers through an inter-related process. However, this research illustrates that it is the relationship and trust between teachers that promotes learning, and without these relationships CPD may not be successful.

Receptivity

Table 17 shows the organising themes discovered in interview A and B talk. I have also shown the themes novel to interview B. These formed the global theme of receptivity (Figure 11).

Table 17: Receptivity Theme

	Trust	Talk	Support from	Active	Shift in	Taking a step	Language
			colleague	listening	thinking	back, space	
Interview A	х	х	Х				
Interview B	Х	х	Х	Х	х	х	Х

Dialogic theory refers to receptivity as deriving from experiences of otherness and being open to change (Emirbayer & Mische, 1998). This theme appeared to highlight a change in thinking for the group. The willingness to share oneself, to trust, was mentioned in both interviews; but after possibly experiencing expressivity, talk in interview B demonstrated a willingness to share all and develop co-explication to find solutions (Gillespie & Cornish, 2010). This relates to Wenger's (1998) theory, the group learning as doing, being, belonging, becoming and experience.

Four of the novel themes⁵ link to what Goleman (2006) describes as emotional intelligence, and skills needed for critical-dialectical discourse (Mezirow, 2003). These skills were part of the cycle's focus and may confirm research suggesting critical-dialectical discourse can lead to learning, critical reflection and self-reflections (Mezirow, 2003).

Meta-coanition

Self-regulation, according to social cognitive theory, is having an influence over the external environment through engaging in functions of self – observation, judgement and reaction (Bandura, 2006). Through the process of using the cycles to explore active listening and reflecting back, language and meta-cognitive skills were explicitly explored and made transparent. Through this, HoH talk indicated increased self-awareness of thinking and actions: meta-cognition. By engaging in meta-cognition they may have been enhancing control over their professional thinking (Taylor, 1983); leading to a greater sense of agency and self-regulation (Bandura, 2006; Flavell, 1971; Lajoie, 2008). Through the meta-cognition process of questioning practice and underlying assumptions double loop learning should occur (Argyris, 1992: see Figure 7).

Overlap themes from interview A and B

Wellbeing and Collaboration with trusted others

Trust was not a factor in my SR, though when linked to relationality and the importance of intersubjectivity, trust seems a core factor. Lytle and Fecho (1991) argue true collaboration needs trust. Social capital theory suggests the more people connect with others (relationality) the more

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⁵ Active Listening, Shift in thinking, Taking a step back, Language.

they trust and want to connect with others (Adler & Kwon, 2002; Putnam, 1995). Relational trust has been defined in a school community as the interpersonal social exchanges which take place (Bryk & Schneider, 2003). Trust is reported to be needed for improvement to be embedded into schools, with relational trust being at the core of teacher change (Bryk & Schneider, 2003; Louis, 2007). Two aspects of relational trust⁶, competence and integrity, were discovered in interview B. Competence involved the ability to achieve outcomes, and integrity was the consistency between saying and doing. Before change, which involves risk, can occur there needs to be trust (Timperley et al., 2008). A realist assumption, would view having trust between teachers as resulting in better teaching and learning opportunities for young people (Bryk & Schneider, 2003).

Link to the Systematic Review model

The SR model themes; reflection, common goal, and intersubjectivity, were discovered in this study as being linked to successful learning for teachers. However, the themes are in a dynamic interplay as opposed to static as in my SR. Certain elements, it appeared, are sometimes more powerful than others. I have represented this through two models; one showing the dynamic interaction of interview A talk and one interview B talk (Figure 12 & Figure 13). I conclude with a summative model showing the interplay of the five themes from this research found to be important for teacher learning (Figure 14).

Implications

Throughout the intervention the group considered including other members of staff, particularly the SLT. A common theme, from this dialogue, was possible tension around trust. By involving the SLT, the group perceived it may become part of the managerial culture, part of a possible performance and auditing culture which existed in school (Henwood & Pidgeon, 1992; Opfer & Pedder, 2010). By including the SLT the distrust the group referred to may limit their potential to share and tackle personal concerns and queries related to practice, which Lofthouse et al. (2011) link to trust within a group. I wonder how this group could be developed to have wider implications and how trust could

⁶ The four aspects of relational trust as respect, competence, regard for one another and integrity (Louis, 2007)

be fostered. The group have carried out training with other staff on problem solving frameworks and reflective teams. This early dissemination of practice may lead to wider transformative learning to other staff. This learning as doing (Wenger, 1998), through using frameworks and resources sustains mutual engagement, change and learning.

In this research I have developed relationships with the HoH which I think affected how I was viewed in school and what type of work I could be involved in. This school traditionally used the LA EP service for individual assessment and statutory work. I am now used increasingly for teacher drop in sessions, staff and parent training sessions and for problem solving consultations. With LA EP services moving towards traded services there is an increasing need to highlight the range of skills we hold and to show how we can be a good use of resources.

It is important to explore the implications for teachers of this research. One is the strength of working in a group to problem solve collaboratively. This research has shown teachers' sense of agency can be built through working collaboratively in a group, that collaborative problem solving can lead to transformative learning for teachers and may positively affect teaching and learning experiences for pupils.

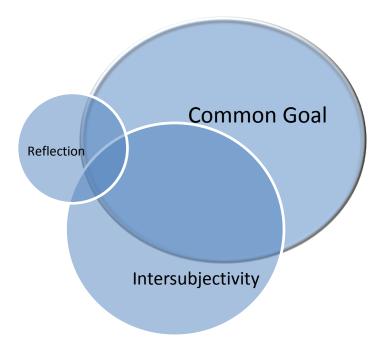
This research has indicated the need for teachers to be able to problem solve collaboratively as part of their CPD. This form of CPD, as the research has shown, can provide teachers with a sense of agency and control over their own practice and enable them to embed learning outcomes into their own work.

Limitations and further research opportunities

For the group process in this study to be successful and for true learning to occur all HoH needed to sign up to change and be prepared to challenge underlying assumptions (de Shazer & Berg, 1997).

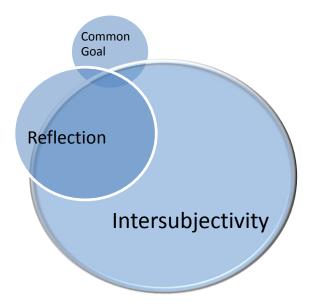
Due to outside pressures only three of the four HoH believed they could fully commit to the process,

Figure 12: Empirical Research dynamic model stage 1

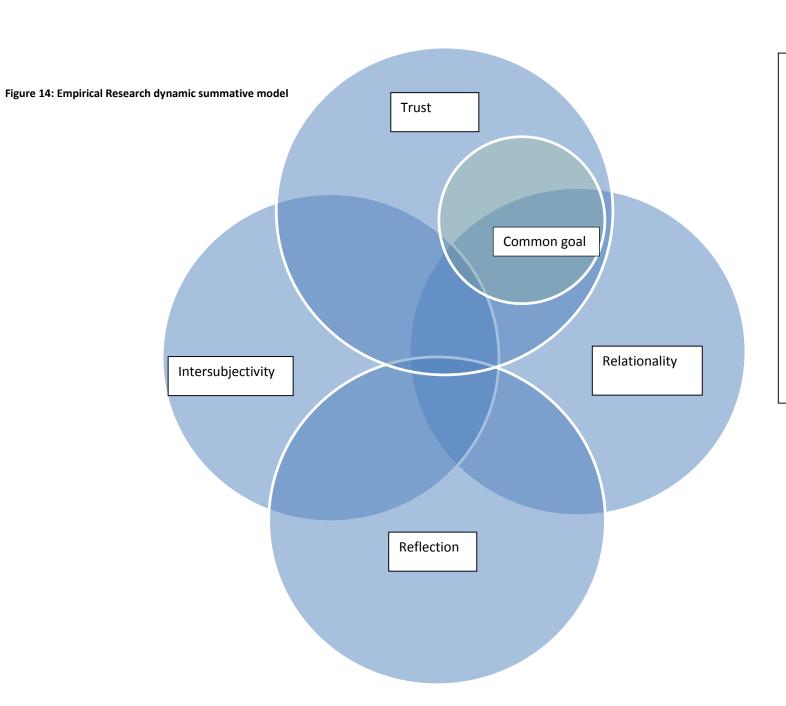


Interview A's talk was mainly about a need for a common goal; the importance of a link with the head teacher, the school system and needing a voice.

Figure 13: Empirical Research dynamic model stage 2



The need for a connection to the school community, to be a valued member and be heard by a powerful other (the Head Teacher) was reduced in the interplay of themes in interview B. Interview B talk had intersubjectivity as the largest theme. This was about meta-cognition through collective dialogue, leading to a shift in thinking; active listening and use of language. The use of the framework and of others in the group led to this shift; through otherness, relationality. The talk was less dependent on powerful others and more agentic and intersubjective.



Relationality and trust are new themes discovered in this research. Common Goal is the smallest factor as it was not prevalent in interview B talk. The other four factors: trust, relationality, intersubjectivity, and reflection in the study were all of equal importance for successful teacher learning to occur. I think this model is dynamic and at different stages of teacher learning different factors will have greater or lesser importance.

These themes need to be explored through further research.

which could impact findings. This research was specific and only generalisable to this group.

However, the findings and processes could be adapted for other teachers in schools.

A limitation of this research is linked to TA. As a critical realist I am aware that a different researcher may interpret these findings differently discovering a different set of themes. However, I aimed through the process of triangulation with a co-researcher (my supervisor) to minimise some of the possible bias I may have brought to analysis (see Chapter 2).

I wanted this research to affect practice. Interview B talk showed the process of being involved in the AR cycles had led to change in the groups' practice. Future research would be needed to explore if this impact lasted post my involvement; and if this practice did result in the realist assumption I made at the start of this research - that improving teachers' learning would improve the teaching and learning experiences of young people.

Conclusions

The research aim was to use dialogue in a transformative way to affect practice. I think HoH practice has been affected by this research with staff having the opportunity to take and adapt the research to suit their needs. This transformative communication has resulted in reflection upon practice and assumptions; leading to action, change and learning for the HoH (Gillespie & Cornish, 2010).

This research was based upon emerging themes from my SR which I used to create a model. I conclude that these themes did emerge as important for successful CPD and learning for teachers. However, the model was dynamic rather than static, and novel themes of trust and relationality were discovered. These five themes appear to be needed for successful CPD for teachers and resulted in the group developing a collective voice, becoming more agentic within their school community and less reliant upon needing powerful others to give them a voice.

This research has highlighted the importance of EPs engaging in research within school systems and with others, namely teachers, to enable and empower change within schools.

This CPD led to increased agency, trust and a feeling of being listened to for those involved. Rhetoric on CPD does not always include these aspects or view them as important (Pedder et al., 2008).

However for this group of HoH it led to transformative professional learning which I view as being effective CPD.

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Appendices

Appendix A – EPPI Centre Weight of evidence judgements

Appendix B– Consent form

Appendix C- Debriefing sheet

Appendix D- Plan of interview A

Appendix E– Prompt sheet for interview A

Appendix F – Language prompt

Appendix G – Reflective team guide

Appendix H– Interview B prompt

Appendix I– Initial coding grid

Appendix J – Example page of transcript

Appendix K – Supporting exerts from transcripts

Appendix L – Final feedback for and from Heads of House

Appendix A- Weight of Evidence Judgements

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Study	Watson and Manning (2008)	Varga-Atkins et al. (2010)	Lawes and Santos (2007)	Leat, Lofthouse, and Wilcock (2006)	Warwick et al. (2011)
N.1: Are there ethical concerns?	Some - Teachers volunteered, funding source assumed, confidentiality assumed.	No – explored anonymity, unsure about consent, transparent funding from LA	Yes, consent not explored.	Unsure about consent and whether it was the teachers choice to be involved – not mentioned as based on other research.	No – explored anonymity and funding; didn't explore consent.
N.2: Where teacher and pupils appropriately involved in design and or conduct of study?	Non applicable –	No – but unsure why parents not involved, be interesting to explore if they notice change – but not focus of paper.	Not applicable – focus was on strategy training from the perspective of teacher development.	Students' views and parents' views would have been interesting re: their experiences.	No – but could've explored students experience of dialogue.
N.3: Is there sufficient justification for how the study was conducted?	Yes - aims and purpose explicit. Ten teachers involved in workshop.	Yes – clear about constraints, clear about themes which emerged from survey so wanted to qualitatively explore using 5 vignettes to illustrate.	Yes – interviews with teachers involved. Explicitly stated why study done and link to theory and research – ESRC 2 year project	Yes -aims and purpose explicit as is context.	No – just one case example unsure why the three teachers were not involved.
N.4: Is choice of research design appropriate?	Yes – combination of action research, survey and case study approaches.	Yes, research design was five case studies and survey data	Yes – interviews about professional development for teachers	Yes- narrative case study. Two researchers were participant observers.	Yes – about dialogic teaching, so in-depth case study about one teacher.
N.5: Have attempts been made to ensure repeatability/reliability of data collection methods?	Yes – lots of details on methods and data collection. Teachers part of the data collection.	Yes, good; data collection clear	Yes - clear about participants time of interview and interview schedule included.	No – does not explore how themes emerged or how these were analysed. Data collected from diary, view from teachers	Not referred to.
N.6: Have attempts been made to ensure validity/trustworthiness of data collection methods?	Yes –details about how and what data was collected	Yes; transparent	Yes – some, interviews transcribed length of interview; but not how recorded. Given some interview script.	No – as methods not transparent. Not sure of the data interpretation was checked back with those involved to ensure accurate reflection.	Yes some, done in co- construction with teacher throughout o not their interpretation rather a shared one.
N.7: Have attempts been made to ensure repeatability/reliability of data analysis methods?	Yes – Thematic analysis of each teacher's engagement and response to the CPD.	No not explored.	Yes – analysed by two researchers. Explained themes which emerged and gave alternative explanations. Doesn't say what theory was used to base themes on.	Not sure -methods not transparent. Data analysed focus on sense making by those involved in coaching materials; and problems encountered. A Narrative thread throughout.	Yes – reliable as co- constructed, clear data methods and used software tool for data analysis.

Study	Watson and Manning (2008)	Varga-Atkins et al. (2010)	Lawes and Santos (2007)	Leat, Lofthouse, and Wilcock (2006)	Warwick et al. (2011)
N.8: Have attempts been made to ensure validity of data analysis methods?	Yes – outcomes in form of narrative accounts from data reduction by two researchers based on explored criteria.	Some attempt	Some attempts as research analysed by two researchers, with alternative explanations given.	No – as data analysis not transparent.	Yes , some attempt data from each case, individually coded.
N.9: Have attempts been made to overcome error/bias?	A little – bias as volunteers perhaps may have been open to CPD and have support.	A little; explored how sample was chosen, didn't explore other factors.	A little; had two reading to transcribe and theme. But didn't triangulate with someone not directly involved in research.	Two other researchers as participant observation who stood back and reflected.	A little – still unsure why only one of the three teachers reported in depth was this bias?
N.10: How generalisable are the results?	A little- as above	Study wasn't claiming to	Specific to this study	Specific to this case study.	Specific about one case.
N.12 Are conclusions about study justified, and if so trustworthy?	Yes, somewhat	Yes somewhat	Yes – as gave alternative views and gave difficulties.	Yes, but specific to this case, conclusions about future research warranted.	Yes somewhat
N.13: Weight of Evidence A	High	Medium	High	High	Medium
N.14: Weight of Evidence B	High	High	Medium-high	Medium-high	Medium-high
N.15: Weight of Evidence C	High	High	High	High	Medium-high
N.16: Weight of Evidence D	High	Medium-high	Medium-high	Medium	Medium

Study	Baumfield et al. (2009)	Hennessy and Deaney (2009)
N.1: Are there ethical concerns?	Some – funding clear, teachers' informed; although consent not mentioned.	Yes some – consent not referred to; principles supported the project. Schools and teachers anonymised. Unsure how staff wellbeing protected/supported during reflections.
N.2: Where teacher and pupils appropriately involved in design and or conduct of study?	Students yes but not in the analysis or input.	Not applicable to students as teachers. Unsure how much teachers involved.
N.3: Is there sufficient justification for how the study was conducted?	Yes – explores through case study interviews	Yes – year follow up to assess lasting impact of previous project.
N.4: Is choice of research design appropriate?	Yes – use of PVT's, practitioner enquiry project with more than 30 schools	Yes – semi-structured interviews to assess impact. However, could have interviews pupils to ask their views.
N.5: Have attempts been made to ensure repeatability/reliability of data collection methods?	Some - types of schools explored; no exploration of interview schedule or how questions were designed. Used case studies, interviews, questionnaires and cross-project analysis. Accounts self-reported by teachers.	Yes some attempt but unsure of what codes where. Explored and explained how systematic coding through Hyper Research tool.
N.6: Have attempts been made to ensure validity/trustworthiness of data collection methods?	Some – but schedule of interview questions not given or justification. Accounts self reported by teachers, although needed supporting evidence.	Yes some attempt – no exploration of alternatives or why method chosen. Transcripts validated by interviewees but themes not.
N.7: Have attempts been made to ensure repeatability/reliability of data analysis methods?	No mention	No – explained use of hyper research but limited elsewhere.
N.8: Have attempts been made to ensure validity of data analysis methods?	Some: no triangulation; did mentioned sharing preliminary findings with teachers for critique and validation.	Yes some attempt, data from each case individually coded.
N.9: Have attempts been made to overcome error/bias?	A little	Not at all; but not claiming to as exploration of private life factors.
N.10: How generalisable are the results?	Large scale research; range of locations and range of schools.	No, but not attempting to be.
N. 12: Are conclusions about study justified, and if so trustworthy?	Yes somewhat.	Yes somewhat.
N.13: Weight of Evidence A	Medium	Medium
N.14: Weight of Evidence B	Medium-low	Medium
N.15: Weight of Evidence C	High	Medium
N.16: Weight of Evidence D	Medium	Medium

Appendix B - Consent form



Researching how supervision can be used to increase problem solving skills

Informed Consent Form



I, the undersigned, confirm that (please tick box as appropriate):

1.	I have read and understood the information about the project, as provided in the Information Sheet dated May 2013			
2.	I have been given the opportunity to ask questions about the project and my participation.			
3.	I voluntarily agree to part	cicipate in the project.		
4.	I understand I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing nor will I be questioned on why I have withdrawn.			
5.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymisation of data, etc.) to me.			
6.	If applicable, separate terms of consent for interviews, audio, video or other forms of data collection have been explained and provided to me.			
7.	The use of the data in research, publications, sharing and archiving has been explained to me.			
8.	I, along with the Researcher, agree to sign and date this informed consent form.			
Parti	cipant:			
Nam	e of Participant	Signature	Date	
Rese	archer:			
 Nam	e of Researcher	Signature		

Appendix C - Debriefing sheet



Researching how supervision can be used to increase problem solving skills

Dear (named potential participant),

I am a trainee Educational Psychologist in X Local Authority. As part of my Doctoral training I am carrying out a piece of empirical research.

The aim of the research is to find out how supervision amongst Pastoral Heads can be used to increase problem solving skills. To do this there will be five parts to involvement:

- 1. A semi structured interview to explore your experiences of your job and of problem solving
- 2. Group supervision/collaborative problem sharing sessions
- 3. Reflections on the supervision sessions and feedback on how to improve these
- 4. A semi structured interview to explore your experiences of your job and of problem solving once the researcher's involvement has ceased.
- A joint feedback session a term after completion of the researcher's involvement, to discuss findings and to ensure findings and analysis are a true reflection of your experience

The research will be carried out during your normal school day and at times which are most convenient to you and your colleagues.

All data collected will be confidential and anonymised, the raw data will only be seen by myself and my supervisors Dr. Richard Parker and Dr. Liz Todd. Pseudonyms will be used when writing up the data. You can withdraw consent and involvement at any time.

At the end of the data analysis process, there will be a feedback session explaining what has been found and tentative analysis of this. These findings will not be concrete; rather the aim is to explore if this appears to be a true reflection of what you think has occurred and a representation of what you have experienced. After this stage the formal writing process will begin and various submissions of the research and annoymised data will be submitted to the University. My aim is for the research to be disseminated to a wider audience as I hope some of the research and its findings may be transferable to other schools and other teaching and management teams.

I would like to take this opportunity to thank you for your time and effort to be a part of this research. If you have any queries or would like further information please contact:

I, the researcher, Gráinne Bradley g.m.bradley@ncl.ac.uk
Or my research supervisor Dr. Richard Parker richard.parker@newcastle.ac.uk

Thank you.

Grainne Bradley g.m.bradley@ncl.ac.uk

Appendix D - Justification of interview A guide

Explanation of interview guide

I wish to use the guide to guide the interview not to restrict it. My aim is to develop something of a rapport with the interviewee; having flexibility within the schedule to order the questions depending upon this rapport and the conversations which develop. By doing the interview in this manner I hope to gain an understanding or insight into how the interviewee experiences their world.

My rationale for having the guide is to aid my thinking of what I hope the interview will cover; thinking through how I may word the questions and how they may best be ordered. By doing this and having a written guide it allows me to focus on the interview and what the interviewee is saying and not the questions. I will know the questions and prompts prior to the interview so that I do not need to refer to it which may break the natural flow of conversation (Smith, 2007).

The guide questions are based on the three constructs which emerged from the Systematic review: intersubjectivity, common goal, and reflection.

Focus of this interview is on how formal CPD can be effective and how teachers learn. Therefore all questions needed to support this. I kept the prompt of third order constructs visible for myself during the interview.

The six main questions are designed to enable the interviewee to speak openly and freely around the topic. In this way I am attempting to get as close as possible to what the interviewee may think about the topic. The six questions also have prompts, which are more explicit than the main question. This is a more specific question in case the general main question is not understood or does not lead to illuminating responses. However, I am aware that if I need to use many of the prompt questions then perhaps this may signal the interviewee is reluctant or that my questions are not appropriate (Smith, 2007). This is why I have piloted the interview with teachers not connected with the research.

I aimed for my questions to be neutral, to avoid jargon or assumptions of language meaning and to be open ended (Robson, 2011).

All of the questions used in the interview guide arose from the Systematic Review and the six main questions have been drawn from the third order constructs. Below is an explanation of the reasons for each of my questions.

Question 1 -is used as a warm up to get to know interviewee. Also to explore and find out about their role – personal and professional context linked to construct of 'common goal'. The prompts of home, work and meetings link with Illeris' (2003) Model of workplace learning.

This question focuses on personal biography of the teacher which links to the first order construct arising from the Systematic review on teacher's immediate context. It also delves into school support and senior management linking to the first order construct of the importance of senior management and support structures. Looking at who supports the pastoral heads is drawn from the

need for collaboration and dialogue in practice and this question aims to explore if the pastoral heads engage in this as a means of support.

Q2-Q5: Exploration of experiences in role; good and bad. Focus on what has been learnt and what supports exist in school. Linked to focus of research Teacher's learning and to the construct of reflecting and common goal. These are designed to be open ended questions with prompts about use of others and dialogue and the interrelatedness of relationships.

Question 6: is about the interrelateness and sociality of the job – linked to construct of intersubjecvitiy.

Q7 – Q9: cool down – Q7 links to teachers preconceptions, also to their prior thinking and knowledge; Q8 gives opportunity for anything missed, or thought about during process of dialogue; Q9 is related to teachers learning – what have they learnt through the interview – this also links to the third order construct of intersubjectivity – through the process of the interviewer being the 'other' and engaging in this dialogue, has learning has occurred?

Appendix E -Interview A guide

i) Pilot guide

Interview questions to pilot:

Main questions:

- Could you tell me about how you came to be a teacher?
 - How long have you been teaching?
- Tell me about your current role?
 - What subject area do you teach
 - What other commitments do you have
 - What does it entail?
 - ➤ How did you get this role?
 - How long have you been pastoral head?
 - ➤ Is it what you imagined?
 - ➤ What supports you in this role?
 - o How do you relax?
 - Mechanisms which help you unwind/offload
 - What would support you in this role
- What kind of challenges do you face?
 - ➤ How do you deal with problems?
 - ➤ What or who supports this?
 - ➤ How could you be further supported?
- What type of dialogue do you engage in in a daily basis with your colleagues?
 - What form does this take/what does it look like?
 - With your team of pastoral heads
 - > Any benefits to this?
 - > Is it the amount you would like?
 - ➤ Why and how could this improve/lessen?
- Can you tell me about the Pastoral head team meetings?
 - What is the pastoral head meetings aims
 - What is the typical layout of the meeting/what is discussed?
 - What is typically explored?
 - How do these meetings help you fulfil your role
 - Do these meetings help with the challenges you face in your role?
- Can you tell me about your experiences of professional development (CPD)
 - ➤ What CPD have had
 - What CPD works
 - ➤ What helps you learn?
 - ➤ Have you experience of supervision (expand)

ii) Final guide

Interview guide:

Introduction:

Grainne Bradley, carrying out this questionnaire as part of my research into pastoral heads and problem solving. I want to understand your role and your experiences in school.

I will not use your name when I am writing up this interview and only myself and my tutor will hear the tape recording. After the interview I will write up the tape recording and send you a copy to see if there is anything you would like to add or remove.

If there any questions which seem hard to answer or irrelevant, do not worry just try your best to answer them I just want opinion or personal experience so there is not right or wrong answer. Please feel free to interrupt or seek clarification throughout.

Do you mind if I record the interview so that I can concentrate on our conversation. Sometimes I may also write a few words down is that ok?

Main questions:

1 Tell me about your role (Warm up)

- How does your school support you in your current role?
- O What do you think about your role?
- O What supports you in your current role?
 - At home
 - At work
 - In team meetings

2 Tell me about a good day you have had in your role?

- O What made this a good day?
- o What helped?
- O What achieved it?
- O What did you learn?

3 Tell me about a not so good day you have had in your role?

- O What did you deal with?
- o What helped?
- o What hindered?
- O What did you learn?

4 Can you tell me the similarities and differences between those two days

- o What made the difference?
- o What helped?
- o What hindered?
- What is there in the structure/management of the school to help/hinder?
- O What did you learn?

5 What do you do after these events?

- O What have you learnt about how to deal with things like this?
- o If answer think what does that look like and how do you support that?
- o If not do you have the space to think about this?

6 What systems do you have to support you?

- O How does work with staff support you?
- o How does work with pupils support you?
- O How does resources support you?
- 7 Is there anything you thought we might have talked about which we haven't?
- 8 Whilst talking was there anything else that occurred to?
- 9 Has anything occurred to you about your work during our conversation? (Cool-off)

Thank you for taking the time to talk to me. I will see you next week during your team meeting.

Appendix F - Language prompt

Language to try ...

- That sounds interesting...
- This made me think...
- Might it be worthwhile to...
- I noticed that.....
- I was impressed by the fact......
- I didn't realise that.....
- I am curious about......
- I wonder if s/he has considered.....
- It may be that.....
- It might be worthwhile to....
- What might happen if you were to....

Appendix G - Reflective team guide

Intervention

Using solution orientated theory

Idea a combination of reflection team and solution orientated circle. Using SO principles and questions to guide the reflection team and coaching.

Solution orientated core principles:

- Cooperation enhances change
- The problem is the problem, not the person
- Possibilities are infinite
- People have unique ways of solving their problems
- Keep one foot in pain and one in possibility

Reflection team

Ethics: 6 elements in the group: explore this in the first session

- 1. Focus on the job/task: organisational point of view only relate to private sphere if vital remain professional. Can you separate the private and the personal by ignoring the key parts of persons life may be missing solutions
- 2. Confidentiality
- 3. Appreciation reflecting team must validate and appreciate statements of others.
- 4. Commitment obligation to engage actively in task
- 5. A time to speak and a time to listen –Establish restrictions on speaking and listening time. Clearly define when team is supposed to take the floor. The team should know when it is appropriate to take the floor./share reflections *perhaps have a time frame*
- 6. Reflections are offers: do not have to take up

Phrases for the reflection team

- 'That sounds interesting'
- 'This made me think' express appreciative and challenging questions and hypothesis in relation to what is said
- Typically the one receiving the coaching defines the task, possibly in cooperation with the coach *think about* this who will want to bring a problem? Same person each time? Me initially?

Reflective team - Session 2 & 3 - Support team for the coach:

- Team focuses on actions and behaviours of the coach
- Support team offers questions which might help coach create a more in-depth exchange
- Reflect with the coach
- Advice not given directly to the problem bringer; rather via coach
 - Phrases such as:
 - 'Might it be worthwhile to....'
 - 'What might happen if she were to.....'

Framework

Step 1: The story – 8 minutes

Reflective Team listen for:

- Core message
- Used and unused opportunities
- Competencies
 - > Skills: things person can do, is learning, enjoys
 - > Strengths: e.g. patient, persistent, caring, thoughtful
- Exceptions:
 - > Times when problem does not happen
 - > Times when problem is not so intense
 - > Times when problem affects less
 - Better days
- Goals
- Ideas

Make notes below if you wish				

Step 2: The reflection - 8 minutes

i) Reflective Team retell the Story with the coach – 3	3 minutes
--	-----------

- ii) Then express curiosity about with the coach: 5 min
 - Used and unused opportunities
 - Competencies
 - Goals
 - Ideas

Use phrases such as:

- I noticed that.....
- I was impressed by the fact.....
- I didn't realise that.....
- I am curious about......
- I wonder if he has considered.....
- It may be that.....
- It might be worthwhile to....
- What might happen if you were to....

NOT

- I think you ought to...
- If I were in your place I would.....

Step 3: The change – 8 minutes

- 1) The coach brings back the ideas to the problem bringer 4 minutes
- 2) The reflective team then 4 minutes:
 - feedback on changes they have seen happening through the use of the coach
- > Outline what you have learnt in terms of strengths, skills and resources, with evidence from the story.
- > Look at how strengths and resources will help the person achieve their goal.

Ν	Make notes below if you wish		

Step 4: The process reflection – 6 minutes

- What went well?
- What questions were effective?
- What would you change?

Coaching framework

Use to support coaching, could also use as a framework in which to develop types of questioning for the coach and the reflective team.

Statement of problem	Listen & Acknowledge
Past, related experiences	What worked, helped? Re-try, re-package.
Current strategies	What works, who helps? How could you do more of this?
Exceptions	When better? Times when problem does not happen Times when problem is not so intense Times when problem affects less Better days How could you do more of this?
Goaling	What do differently next? If over the next few weeks things got little better for you, what do you think you may/might be doing differently, maybe/perhaps/possibly? Who would notice? Who would support you?
Skills and strengths and resources	Skills Things the person: can do, is learning, enjoys Strengths Unique strengths and attributes which enable them to develop skill e.g. patient, persistent, thoughtful Resources Other people who know of the skills and/or strengths you have
End point & Support	When over/good enough? Clear picture of finish line
Summary	Feedback of main points

Appendix H - Interview B guide

Interview guide:

Introduction:

- I've sent you a letter already explain the research and the interviews, but I want to check that you're happy and if there is anything you would like to clarify?
- Interview will be recorded & Interview will be transcribed I will send you a copy if there is anything you would like to remove
- 1 Tell me about the group sessions?
 - o The process/the group itself
- 2 What was useful in these sessions?
 - O What did you learn?
 - About yourself
 - o About the group
 - O Did anything evolve as the process went on?
- 3 When was the group we had at its best?
 - O What was going on?
 - O What was happening?
 - O What was being contributed?
- 4 Are there any times it was different to that?
 - O What was going on?
 - o What made it different?
- 5 Is there anything in all of this that's a challenge?
 - O What has helped you cope?
 - O What did you do to cope?
 - O What about group/process?
- 6 Doing all of this what will you take away?
 - o What would help?
 - o What might hinder?
 - O Who could support?
 - O Who would notice?
 - o Have you begun?
- 7 Haven't talked about this, but when else have you worked as a group?
- 8 What are your general thoughts on the power of a group?
- 9 Are there things which differ now?
 - o More helpful?
 - o More helpful?
 - o More powerful?
- 10 (BACK UP QUESTION) Remind me did you ever disagree in the group?
 - o What happened?
- 11 Is there anything you thought we might have talked about which we haven't?
- 12 Has anything occurred to you about your involvement in this through our conversation?

Appendix I - Coding framework

L	Learning
T	Time
NTP	No time for pastoral role
S	Space Space
SCH	School structure
SUP	School support
SUP C	• • • • • • • • • • • • • • • • • • • •
	Support form colleagues
CG	Common goal – aims link with school
HIS	Importance of head sharing aims
PP	Performance pressure
XCG	Aims not linking
SM	School management
HS	Need for head support
NHS	No head support
IRCH	Need for regular contact with head
BHH	Need to be heard by head
TC	Teacher Context
IH	Impact at home
RHN	Mismatch between role and own needs wellbeing
0	People, theory, resources, things
E/R/TB	Environment having a room, Teaching base
RS	Reflection with self
RW	Reflection with colleague
NTR	No time to reflect
IR	Opportunity for informal reflection with colleague
D	Dialogue – exploring with colleague (Intersubjectivity)
F	Feedback from colleague/others
С	Collaboration – working with others
Team	Use of team
Talk	Importance of communication with others
PS	Problem solving
CPD	Used in practice/adapted practice/shift in practice
Cha	Challenges in practice/ in changing practice
NU	Not useful part of intervention/process
U	Useful part of process
FW	Reference to use of frameworks in practice/process
AL	Listening to others – team/Young people/ colleagues
LA	Reference to language used in dialogue.
CTP	Comfortable in talking to parents
Rna	Role not appreciated by colleagues
UE	Role underestimated
DHS	Don't have say
WPD	Want to be part of decisions made
OFF	Need something official to prove
Evi	Justifying, need evidence
WL	Workload too much
Waste	Wasting time on other things
vvasie	wasting time on other things

Admi	Doing too much admin	
US	Unskilled tasks others should do	
ME	E Mismatch of epistemology	
R/SHIPS P	Relationships with pupils imp	
R/SHIPS Relationships with parents imp		
PA		
Trust	Trust with colleagues	

Themes emerging also:

- Other aspects of teachers job admin, nonessential taking time away from role
- Clear difference between communication with Senior Management and Head Head appears to be the one they want direct communication with.
- Communication being heard and part of decisions being made.

• Basic themes into organising themes pre and post interviews

Basic theme	Organising theme
Reflection with self	Reflection
Reflection with colleague	
No time to reflect	
Space	
·	
Time	Time
No time for pastoral role	
No time to reflect	
Wasting time on other things	
Cemented group (the intervention)	Support from collaboration
Commonality of sharing problem with	
team	
Commonality of problem	
Use of team	
Collaboration, working with others	
Support from colleagues	
Priorities	School structure
Need something official to prove	_
Justifying, need evidence	_
Workload too much	_
Wasting time on other things	_
Doing too much admin Unskilled tasks others should do	_
	_
No time for pastoral role	
Role not appreciated by colleagues	Feeling valued, heard
Too much admin	
Role underestimated	
Don't have say	
Want to be part of decisions	
Waste time on other things	
No head support	
Justifying	
Unskilled tasks others should do	
Want to be part of decisions	
Want regular contact with head	
Trust	Trust /feeling "safe"/ok
	Trast/recining sale / OK
Feeling comfortable with colleagues	
Need for head support	Importance of Head
I	I

No head support	
Need for regular contact with head	
Need to be heard by head	
Importance of head sharing aims	
Don't have say	
Want to be part of decisions made	
Need something official to prove	
Justifying, need evidence	
Don't have say	Common goal
Want to be part of decisions made	
Need something official to prove	
Justifying, need evidence	
Common goal – aims link with school	
Importance of head sharing aims	
Performance pressure	
Aims not linking	
Mismatch between role and own needs	
wellbeing	
Wasting time on other things	
Doing too much admin	
Commonality of team	
Mismatch of epistemology	
Teacher Context	Teacher context
Impact at home	
Mismatch between role and own needs	
wellbeing	
Impact of commonality with others	Talk (communication and dialogue with colleagues)
Dialogue with colleague	
O	Other
Own room	Other
Teaching base	
HoH office	
Relationships with parents	
Relationships with pupils	

- Some overlap in codes have colour coded these to show where duplication
- Code for intervention talk (not referred to in initial interview, hence separate coding to highlight).

Basic theme	Organising theme
Hearing back own language	Language
Use of language framework	
Listening to others	Use in everyday practice
Normally trying to think of answer not	
listen	

Normally trying to think of answer not	Active listening
listen	
Solution focused now	Importance of solution focused
Framework gave solutions	
Framework gave solutions	Frameworks give structure (language frameworks
Use of language framework	included).
Framework process – structure	
Framework depersonalised	
Time structure within framework	Time for process
important	
Time needs safeguarding	
Framework depersonalised	Intersubjectivity (shift in thinking)
Shift in thinking about answers-problems	
Importance of problem solving as a team	
Normally trying to think of answer not	
listen	
Hearing back own language	

Appendix J - Example transcript

A4 11 350

A4 11 360

A4 12 370

A4 12 380

departmental and pastoral, and if I, someone said to me, "Well, you've not done this" and I said, "Well, the reason why I've not done it is because I was seeing this child for an hour and this happened" and they went, "Oh, right, okay. Yeah, I understand, well, can you do it as soon as possible", then I think everything, it would be fine. You wouldn't get to that sort of level of stress where you can't come down so easily. It's the fact that you meet a brick wall, quite often it's, you know, "Well, you should have done it", "Yes, but I only work from, you know, these hours, I then go home and work, when should I have done that, if I then, during my day, have to deal with these children?" or, you know, these situations, it's kind of you just meet this brick wall of, "No, that's what you have to do. That's when you have to do it by". If you haven't done it then, you know, you're in trouble, basically, it's that kind of feeling, I think, that if you were met with understanding of, "Right, okay, yeah. So this week, you know, six out of your eight hours were spent dealing with this situation, then, oh, I understand now why you haven't been able to do that" that would, it would make you feel better and I think, sometimes, there is that sort of lack of understanding because everybody's got, you know, whoever's in charge of, for example, monitoring your books or, I don't know, monitoring your attendance, that you've done it, you know, whoever's in charge of that they are then answering to somebody, aren't they, who's then, do you know what I mean, and it's that, but it does feel like sometimes, in this job, that there is, although everybody who is our line, you know, in our line of management, are pastoral, so they know, they've been in this situation, they know that you get things thrown at you that you weren't expecting, there's still that lack of understanding that you can't, you know, you're not a robot, you can't not eat or sleep (laughs), you know, it's that kind of thing that I think is really difficult in this job, and if you've got a suggestion about something then often you're met with the same sort of, "No", point blank no, rather than, "Oh, well, let's think about this. What can we do?" it's that kind of, "No, it's not happening" or, you know, if a problem's been found elsewhere by, like senior management, then they might not necessarily come to us and talk about it, they'll just tell us what to do and it's kind of, "Well, you know, surely we could come up with a solution to it and work together as a team to find our how we go about it rather than you just telling us what to do", it would be a better way of doing things but, so it's quite frustrating at times. So I don't know what makes a difference between a, you know, a good day and a bad day, or a good situation and a bad situation, in terms of how, is it just because, how I'm feeling on that day, more positive, or is it, I don't know, I don't really know what the... Whether it's how you're feeling that day or whether it's the external

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Appendix K - Supporting exerts from interviews Supporting exerts Interview A

Code:

- A1 interview and participant number
- Proceeding number page number
- Last numbers line numbers

Merely onlookers and	A1 13 413-414
need for powerful other.	Never have a vision of what we would like, you might have your voice but you are not always heard.
	A2 7 227-229
	Very little understandingyou feel like the direction they are trying to push the job is not the direction that I want to go with it. A2 16 523-526
	That is my decision don't question ithas been that attitudeI can't then be allowed to make those sorts of decisions or at least be part of making those decisions
	A2 17 542-543
	But I just want to be heard A2 19 623-625
	If I was to meet the head more regularly I would understand why he was makingthat decision
	A4 6 171
	Lack of understanding
	A4 7 222-223
	Feeling of having to evidence everything A4 8 234-5
	Everything's to cover your own back A4 11 331-332
	I think if there was somebody who understoodit would be fine.
	A4 11 349-350
	If you haven't done it then, you know, you're in trouble (referring to paperwork)
	A4 12 374-375
	(Senior management) they'll just tell us what to do
Monitoring and	A1 1 24-25
attendance	Monitoringacademic achievementsattendance and punctuality. A3 1 7-9
	It's everything that happens with the childmonitoring attendance, tracking attendancepunctuality, uniform.
Admin role	A2 7 212
7 dillilli i ole	Now its an admin job
	A2 7 221
	Some of the admin that we are given to do frustrates me.
You're in trouble	A2 15 488- 493
Not a robot	Are we importantor are we just robots being told to do thiscould be
Not heard	done by somebody who hasn't got a degree, who hasn't trained. A4 6 168
	You don't get away with that
	A4 11 349-350

	If you haven't done it then, you know, you're in trouble (referring to
	paperwork).
	A4 12 368
	You're not a robot
Link with HT and common	A1 3 76-77
goal	Not really appreciated fully in school
Regular links	A2 8 236
Need to be heard	What you're doing isn't appreciated.
Need to be valued	A2 8 249-252
iveed to be valued	Good friendsI can trust themwhereas my line managers in the pastoral
	rolethey've almost a duty to pass that on
	A2 15 473-477
	I wish I was brave enough to go in and see the head and say what
	direction are you wantingI worry that he perhaps doesn't know what is
	happening and that if he did know things might be different.
	A2 16 501-503; 511-512
	Nice if we had regular meetings with the head so that we knew what his
	focus was and understood why
	You would know what he wants and you know why he wants it and he
	would take time to listen
	A2 18 573-579
	It should have been the head at that (meeting with the HoH)I think that
	would help.
	A2 19 623-625
	If I was to meet the head more regularly I would understand why he was
	makingthat decision
	A4 7 205
	Pressures from your departmental sidealso the pressures from your
	pastoral sidebattle between the two
	A4 11 331-332
	I think if there was somebody who understoodit would be fine.
	A4 12 374-375
	(Senior management) they'll just tell us what to do
No influence in school	A2 7 229-230
	Very little understandingyou feel like the direction they are trying to
	push the job is not the direction that I want to go with it.
	A2 15 464 - 471
	Very responsible role and yet we don't have any say in the decisiondon't
	get consulted on quite big decisions we are just told the outcome.
	A2 16 523-526
	That is my decision don't question ithas been that attitudeI can't then
	be allowed to make those sorts of decisions or at least be part of
Turret	making those decisions.
Trust	A2 8 248—251
	Good friendsI can trust themwhereas my line managers in the pastoral
	rolethey've almost a duty to pass that on
	A3 14 435
	With trustand trusting themto have honesty to say

Supporting exerts from interview B

Proactive self-reflecting	B2 2 40-46
(Linked to merely onlookers intA)	(the language prompt sheets) at first was the most difficult thing for meI have found myself using them even when I am talking to pupils now and they are coming to me with a problem and I am using some of those phrases. B2 7 207-209 I definitely want us as a team to get together and meet once a weeka timetabled thing B2 13 398- 402
	There is a little of that I need to learn for myself(another HoH approach)going in with that approach rather than you have landed me is a right messthat change is easy
Need for common goal and HT not as prevalent (Linked to the need intA)	B2 1 09-12 It was really really usefulit was valuablewe need to make sure we keep going with it
Having influence to change (Linked to having influence intA)	B1 4 109-111 Having some solidarity amongst us so we can go towards the managementso we have given them a problem and we are giving them a solution. B1 8 251-258 As a group you tend to have more powermore suggestions and maybe more powerful B2 1 20-26 Listeningjust made things a lot clearer in my headjust the structureit wasn't a whinging sessioncoming up with possible ways forward. B2 13 398- 402 There is a little of that I need to learn for myself(another HoH approach)going in with that approach rather than you have landed me is a right messthat change is easy
External pressure to meet at a group	B2 15 494- B2 16 495 I am really worried it won't (run; the group post my involvement)because it was hard enough with you being herebut because we knew you were giving up your time B2 16 504-507 We need something to make it like a compulsory meetingon a timetable
support each other outside sessions to fulfil plan check in person	B2 7 213 - 226 Even though at that moment in time that is the most important thing and you leave and say right I am going to do thisit is not always donebut I think the follow up needs to be done as well tohave those action points been carried out B2 9 280- 291 Even a sort of check in maybe two days or three days laterit could be decided that whoever was like the coach would do the check inFriday morning quick ten minute check in. B2 15 466-469
	Whether you go away then and it's the big priority it was before the meeting because you feel like it's been address so that is why I was

	district on the second
	thinking maybea follow up.
	B4 7 210
	We'd like toone morning a weekI think it will be harder to do it on our
	ownwe'll have to be very strict with how we do thatwe will have to
	keep it quite structured.
Solutions and meta-	B1 2 52-57
cognition; talk of	She really comes up with some good ideassometimes I think I have
possible ways forward.	blinkers on(she) thinking how to get around this obstacle rather than get
	through it.
	B4 87
	Come up with a solution together or say'what do you think?' B4 17 525- 536
	Professional, rather than child based problems, you know, problems that
	affect us as professionals, I think that was really usefulthen you can come
	up with ways to resolve it or to make it seem less of a problem.
Self-aware and making	B1 3 73-80
changes to practice.	There is not one person telling the story, one person listening there has
changes to practice.	always been three coaches and one problem bringer (before the
	intervention)the new methodis a better process. B2 2 40-54
	(the language prompt sheets) at first was the most difficult thing for me!
	have found myself using them even when I am talking to pupils now and
	they are coming to me with a problem and I am using some of those
	phraseswhat would a good day look like for you and then just listening. B2 3 77-82
	Learnt a lotthe language you use can make all the differencei can use it
	as a prompt sheet
	B2 3 88
	I have learnt I don't always listen
	B3 2 39-44
	You need an action plan at the end of itI think it will stick with me more
	than anything.
	B3 3 83
	I have learned a lot in terms of just listening.
	B3 3 97
	I think sometimes you do come up with these wonderful ideas snapshot
	when you sit back and listen and really reflect on what you are doing
	B4 3 68-70
	Learning to listen before jumping ingive each other time.
	B4 15 486-490
	As a process, has helped to be more reflective in a situationif a child
	comes to ustake a step back and thinkbefore jumping in
Using each other's	B1 2 52-57
knowledge and	She really comes up with some good ideassometimes I think I have
resources to solve	blinkers on
problems.	B2 12 364- 370
F. 30.0	Everybody's problempeople hear things differentlygetting other
	people's opinions we came up with solutions as a group that we wouldn't
	have come up with either on your own or just talking to one other person.
	B2 13 398- 402
	There is a little of that I need to learn for myself(another HoH
	There is a nation of that theed to learn joi myselffahother from

	approach)going in with that approach rather than you have landed me
	is a right messthat change is easy
	B4 3 97
NA o which a to anothe a w	Everybody brings something different B1 4 109-111
Working together	
makes achievable.	Having some solidarity amongst us so we can go towards the management
	so we have given them a problem and we are giving them a solution.
	B1 8 251-258
	As a group you tend to have more powermore suggestions and maybe
	more powerful
	B2 12 373-374
	Because you are in a groupdifferent perspectivesyou can be a bit
	narrow minded in your thinking
	B2 12 386
	learning different strategies and different approaches to things
	B3 1 14-22
	Working together as a group to find out what else people arewhat other
	ideastalked within the group and I have found a lot more avenuesit's
	given me hope.
	B4 3 105
	Its really useful having the four different types of people
Perceived collective	B1 4 109-111
efficacy.	Having some solidarity amongst us so we can go towards the management
	so we have given them a problem and we are giving them a solution.
Stopped and thought	B1 1 20-22
about actions when	Some of the words to usemade you think about how to fit it into the
meeting with staff and	sentence.
pupils.	B1 1 26
SO language, Active	I think just listening that was usefulsometimes you do miss things when
listening.	you are listening to the story and trying to think of what you are going to
	say next
	B2 1 20-26
	Listeningjust made things a lot clearer in my headjust the structureit
	wasn't a whinging sessioncoming up with possible ways forward
	B2 2 40-54
	(the language prompt sheets) at first was the most difficult thing for meI
	have found myself using them even when I am talking to pupils now and
	they are coming to me with a problem and I am using some of those
	phraseswhat would a good day look like for you and then just listening.
	B2 3 77-82
	Learnt a lotthe language you use can make all the differenceI can use it
	as a prompt sheet.
	B2 3 88
	I have learnt I don't always listen.
	B3 1 6-8
	Actually listen to a problem in its entirety.
	B3 2 39-44
	You need an action plan at the end of itI think it will stick with me more
	than anything.
	B3 3 74-77 Listening taking out key points, the different phrases that we used were
	Listeningtaking out key pointsthe different phrases that we used were

	good ways to go that little bit deeper.
	B4 2 33-38
	Normally wouldtrying to come up with solution and not really perhaps
	listening to what the issue isuseful to do that and develop ways of doing
	thatcoming up with solutions
	tracimeering up with serations
	B4 2 50-52
	Having that framework, I think, really helped to look at things in a different
	wayin a better, more constructive way.
	B4 6 184
	I think it was useful to listen more
	B4 14 436
	People got more used tothe vocab that they wanted to use
	B4 14 452
	It was really useful, hearing back, because you thing 'did I say that?' B4 14 461
	(about reflecting back) 'Gosh! That's how I feel about that'
	B4 15 469-477
	Having the prompts you gave us (language), I think that was really
	usefulI think it helps reflective thoughtbut I think we need to keep using
	those to practise that, to sort of embed it.
Trust and willingness to	B3 7 203-5
share and co-develop	Slightly out of my comfort zone but I didn't mind, I enjoyed it and it was
solutions.	good because you felt the trust was there
	B3 7 211-213
	(trust in the group) cos there is now conversations that go on where they
	didn't before both professionally and outside of work.
	B3 9 278-283 I think they would get a lot out of it and I would ask (SLT) to come in on the
	sessions and watch how they progressinteresting to see how we can talk
	as a group if they were involvedI would like to have that total trust with
	them being there as well and talk as a total team.
	B4 7 227-229
	It would have an impactwe even mentioned it to (SLT) about comingI
	do feel it would be better if everyone was here
	B4 111 346
	We feel comfortable with each other
One HoH not fully part	B1 7 211
of process	Its been useful don't get me wrong but I just couldn't put my full attention
	on it
	B4 4 136
	Some of use not being able to commit to that time, I think that was a
	shameit wasn't as effective or as good as it could have been.

Appendix L - Final feedback for and from Heads of House

I met the HoH on 28 April 2014 to feed back and discuss interpretations I had made and whether the group agreed. We explored the following:

- The themes which emerged from the interviews
- The main points of the findings linking to research and giving examples of talk as evidence
- The excerpts of talk used as evidence
- The HoH views on the feedback and if they had any different interpretations on the coding
- If there was any lasting impact of the research on the HoH practice.

Found: Three Heads of House came (one is no longer in school). All agreed with findings and were interested in how their voices had changed through the process. They discussed how they had felt more powerful as a group and more positive about moving things forward. We then explored the lasting impact of the intervention.

Lasting impact

The HoH made the following points:

- One HoH had made the group meeting weekly (post my involvement) their Performance
 Management target. However due to other pressures within school had not achieved this.
 This HoH discussed how they would like to get the group started again and that they miss having the opportunity to come together to explore problems. The HoH explained they had a new team member and they would like this person to be part of this process.
- Two HoH said they gained confidence from the intervention in terms of holding meetings
 with professionals and with parents to make it solution focused and focused on outcomes.
 They said prior to this, meetings sometimes focused on the problem and little moved
 forward.

- The HoH said they listened more and some of the language prompts had become embedded.
- However the HoH said it was hard to think of the language prompts and they had not yet internalised these.
- The HoH said they now reflect back to pupils and colleagues what they have said to seek clarification and accuracy; they said this has been powerful.
- The HoH explored how they had given training to other staff members which they thought had been well received and seen as valuable.
- The HoH shared that they would like the whole school to adopt a solution orientated
 reflective team approach to meetings –giving an example of having departmental meetings
 run in the manner of reflective teams. They explored the issue of trust and the impact of
 having different levels of power within one meeting.
- One HoH explored meeting again as a group next week and video recording the session to share with other teams (this was decided by the group as more safe than inviting people to join as if there was something on the video they didn't wish to share they could erase this).