

# A systematic review of school based mentoring interventions and an exploratory study of using Video Interaction Guidance to support peer reading mentors

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## **Disclaimer**

This work is being submitted for the award of Doctorate of Applied Educational Psychology. This piece contains no material that has been accepted for the award of any other university module or degree. To the best of my knowledge this work contains no material previously published or written by another person except where due reference is made.

## **Overarching Abstract**

This piece of work consists of three parts; a systematic literature review, bridging document and research article. The systematic literature review investigates the effectiveness of school based peer mentoring initiatives on the academic, social/emotional and behavioural outcomes of mentees. The review explored nine studies with the majority demonstrating significant short term effects for mentees related to at least one outcome. One of the studies explored long term effects for mentees but gave no evidence of significant gains for long term outcomes. The results of the review highlighted the need for further exploration of peer mentoring interventions in UK schools and specifically revealed a gap relating to the benefits and experiences of peer mentors.

The bridging document explains the rationale for the research focus, methodology, method and data analysis. Ontological, epistemological and methodological perspectives are discussed and ethical principles explored. The research explores how peer reading mentors can be supported in their role using Video Interaction Guidance. A case study method was used to explore how VIG could support two peer mentors work with their mentees over six peer mentoring sessions. Three films of each peer mentor were taken and three shared review sessions were transcribed. Pupil view templates were used to further explore the reflective dialogue of the peer mentors after video shared review sessions. The themes that emerged from the data were reflecting and evaluating self, attunement and body language, video as a learning tool, mentor skills and collaborating. The findings suggest that VIG was valued by the peer reading mentors and the types of learning they experienced are discussed with reference to future research recommendations.

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# **Chapter 1: What are the effects of school based mentoring interventions on the academic, social/emotional and behavioural outcomes of school pupils?**

## **Abstract**

School based mentoring interventions have been a common approach in supporting children and young people develop academically, socially, emotionally and behaviourally in the United States. In the UK school based mentoring interventions have increased and emerged as potentially a useful and cost effective approach to support children and young people. Though there is some evidence of effectiveness within the literature, there is a lack of research in the UK, and there is still debate within the field regarding a school based mentoring approach, and their specific benefits. This review looked at the effectiveness of school based mentoring interventions on the outcomes of primary and secondary school pupils. In this review, the majority of studies (N=9) found evidence of significant gains relating to educational, social/emotional and behavioural outcomes. Where effect sizes were provided they were mainly in the medium range. However, all the studies were reviewed with caution due to variability in the quality of the studies and methodological inconsistencies. Recommendations for further research are discussed such as methodological concerns, strengthening experimental rigour and theoretical developments. The effects of different types of mentoring and the comparative effectiveness of school based mentoring interventions of different lengths are reflected on. Further consideration should also be given to the longer-term effects of peer mentoring interventions.

## **1.1 Introduction**

Mentoring is an approach that exists in many forms and is complex to define. It can be partly defined by the origin, purpose, nature and site of the mentoring relationship (Hall, 2003). Roberts (2000) attempts to define it by asserting that the essential components of mentoring are,

“a supportive relationship; a helping process; a teaching-learning process; a reflective process; a career development process; a formalised process; and a role constructed by and for a mentor.” (p.145)

The majority of evidence regarding the benefits of mentoring come from large impact studies in the United States (US) which suggest that mentoring may have some impact on problem or high-risk behaviours, academic/educational outcomes and career/employment outcomes (Hall, 2003). There is a weak evidence base in the United Kingdom (UK) where claims are made for the impact of mentoring but there is as yet little evidence to substantiate them (Hall, 2003). Philip and Hendry (1996) produced a typology of mentoring drawn from interviews with 150 young people aged between 13 and 18 years old. They identified five different styles of mentoring, which they described as ‘classic’ mentoring, individual-team mentoring, friend-to-friend mentoring, peer-group mentoring and long-term relationship mentoring with ‘risk-taking’ adults. However, these classifications do not highlight the contextual factors in a mentoring relationship. In the UK, Ford (1998) summarised the findings of Mentoring Action Project where different types of mentoring were identified. These were classified as the ‘good parent’, the ‘learning facilitator’, the ‘career guidance provider’ and the ‘social worker.’ In practice, Ford (1998) argued that all four styles tended to inter-relate and overlap in a mentoring relationship.

Mentoring programmes have often differed in their basic goals and philosophy (Dubois, Holloway, Valentine, & Cooper, 2002). Most research on the mentoring of adolescents has come from the “risk and resilience” tradition in developmental psychology, yet few have examined its impact on education (Erickson, McDonald, & Elder, 2009). The majority of previous research has focused on the mentoring relationships developed in the community. However, there is an increasing trend where schools are adopting mentoring interventions (Wheeler, Keller, & Dubois, 2010). The purpose of this review is to explore the effects of school based mentoring related to outcomes classified as educational, social/emotional and behavioural to evaluate the effectiveness of such programs for school pupils.

### **1.1.1 Mentoring Relationship**

Rhodes, Contreras & Mangelsdorf (1994) propose that mentors are non-parental adults in the lives of young people, typically several years older and may come from different relationships: older siblings and friends, teachers, coaches, clergy, employers, or co-workers. Running parallel to this is the view that there are different types of peer mentoring; those where the mentees targeted are children or young people and those where the mentors and mentees are both children and young people. Jekielek, Moore, Hair & Scarupa (2002) reviewed ten youth mentoring schemes with quantitative experimental designs using experimental and control groups. They could reach no conclusion as to whether mentoring improved academic performance but most of the mentoring schemes examined were community based rather than school based. The purpose of this review is to explore the effectiveness of school based mentoring specifically to examine if there is evidence that such interventions improve educational, social/emotional or behavioural outcomes for school pupils.

### **1.1.2 School Based Mentoring**

School-based mentoring programmes have become a popular choice for several reasons. Herrera, Baldwin Grossman, Kauh & McMaken (2011) propose that school based mentoring is the fastest growing form of mentoring in America today and has been catalysed in part by the success of community based mentoring programmes. Similarly, this trend is evident in UK schools (Knowles & Parsons, 2009). Given the large number of students involved in different types of school based mentoring it is crucial to understand more about both the effectiveness of the programs and how they operate.

School based mentoring programs are varied in their structure and focus. Unlike community based mentoring schemes, school based mentoring programmes typically have some degree of structure and frequently, although not exclusively, engage in some form of academic activity. In the United States, Sipe & Roder (1999) have proposed a classification of school based mentoring schemes. The schemes are classified according to their position on three dimensions: whether

they are based on group or one-to one mentoring; whether they are school based or community based; and whether they aim to promote personal development or academic behaviour or performance. The complex nature of intervention studies, especially those relating to the influence of mentoring on academic achievement, have generally been performed on a smaller scale and used standardized measures of achievement (Choi & Lemberger, 2010). Furthermore, a limitation of existing research is the focus on short term gains and a lack of follow up research. Further exploration is needed to examine what the long term gains are of peer mentoring schemes rather than only focusing on immediate attainment gains (Dubois, et al., 2002; Wheeler, et al., 2010).

### **1.1.3 The Focus of This Review**

There is an increasing body of literature on school based peer mentoring interventions but there is still a gap of research in the UK and contentious areas that require further exploration. Mentoring is an ill-defined concept which is deeply contested by some critics who see some manifestations of it as built upon a questionable 'deficit' model (Hall, 2003). Firstly, reviews are needed that focus on the effectiveness of school based mentoring that promote educational, social/emotional and behavioural outcomes. Though mentoring studies have been identified by previous meta-analysis as having benefits these have not solely focused on programmes based in schools. Secondly, reviews that isolate school based mentoring interventions that aim to promote gains are required as many look at specific groups perceived to have difficulties or at particular outcomes; they measure different factors. Thirdly, there has been a focus on mentoring interventions in general, for example, community based, that have not isolated gains for school based mentoring specifically. Reviews of the value of school based mentoring are needed to synthesise what significant gains do exist. Although evidence exists that school based mentoring is a positive intervention and that there are educational and personal gains for children and young people that are mentored, some argue that the gains are small and that evidence is weak (Wheeler, et al., 2010). Therefore, the present review will focus on school pupils, asking the question: What are the effects of school based mentoring interventions on the

academic, social/emotional and behavioural outcomes of school pupils? In addition to looking at short term gains, it will also consider what is known about maintenance factors, where such data is provided.

## 1.2 Method

This review employs the systematic method described by Petticrew and Roberts (2006), and involves a number of stages, summarised in Table 1. These stages are further detailed below.

**Table 1 The systematic review stages (from Petticrew and Roberts (2006))**

1. Clearly define the review question in consultation with anticipated users.
2. Determine the types of studies needed to answer the question.
3. Carry out a comprehensive literature search to locate these studies.
4. Screen the studies found using inclusion criteria to identify studies for the in-depth review.
5. Describe the included studies to 'map' the field, and critically appraise them for quality and relevance.
6. Synthesise studies' findings.
7. Communicate outcomes of the review.

### **1.2.1 Identifying and describing studies: The initial search**

To locate relevant studies, electronic databases were searched using the combination of search terms shown in Table 2. Consultation of previous studies and database thesauri (where available) ensured that all relevant synonyms were included in the intervention, outcome and target population search term categories.

**Table 2 Terms used for the literature review**

<i>Target Population Terms</i> School/pupil/primary school*/secondary school*/elementary school*/high school/child*/young people/adolescen*
<i>Outcome Terms</i> Educational outcomes/ social outcomes/emotional outcomes/behavioural outcomes
<i>Intervention Terms</i> Mentoring/School based mentoring/Mentoring intervention/School Mentoring

The following electronic databases were searched: Ovid, Scopus, British Education Index and ERIC. All searches were conducted between October 2011 and January 2012.

The inclusion criteria are a set of agreed conditions that studies must meet in order to be included in different stages of the review, based on the research question. The following were used for the initial screening of the studies identified from the literature search:

- **PARTICIPANTS:** School pupils.
- **SETTINGS:** Elementary/Primary/Middle/High or Secondary school.
- **INTERVENTION:** Described a school based mentoring programme that was short or long-term and educational, social/emotional or behavioural gains were the focus of the study. For the purposes of the study, school based mentoring interventions were distinguished from other mentoring interventions in that the meetings between mentors and their mentees took place in a school setting (Portwood & Ayers, 2005). Interventions that were delivered to school aged children or young people not in school were not included. Those that sought to alter educational, social/emotional and behavioural outcomes were included.
- **STUDY DESIGN:** Intervention targets were explicitly stated and included at least one of the following: educational gains, social/emotional gains and behavioural gains.

- **TIME, PLACE AND LANGUAGE:** Studies were reported in English, and completed between 2000 and 2011. This was because studies conducted pre-2000 were included in DuBois et al.'s meta-analysis (2002). This process identified 23 studies which met the initial set of inclusion criteria.

### **1.2.2 Identifying and describing the studies: The in-depth review**

At the next stage of the search, the following additional criteria were applied to the 23 studies in the systematic map to identify the studies for inclusion in the in-depth review:

- **PARTICIPANTS:** Single-case studies and meta-analysis were excluded. Studies incorporating a mix of ages whether it was same age mentoring, cross age peer mentoring or college student mentoring were included.
- **SETTINGS:** No additional criteria.
- **INTERVENTION:** Studies comparing school based mentoring with other interventions were included. However, school based mentoring interventions that worked in conjunction with other interventions were excluded, as it was decided that it would be impossible to isolate the factor causing noted effects.
- **STUDY DESIGN:** Included studies were empirical examinations of the relationship between educational, social/emotional and behavioural mentee outcomes and school based mentoring interventions in schools. They collected their own data so reviews and meta-analyses were excluded.
- **TIME, PLACE and LANGUAGE:** Studies were published in peer-reviewed journals (books and unpublished dissertations and non-peer reviewed articles were excluded).

There were two stages to the process of identifying studies for inclusion in the in-depth review. Firstly, titles, abstracts and keywords of identified records were screened to exclude ineligible studies (if specified in sufficient detail). This identified 14 eligible studies. Full texts of remaining reports were reviewed and additional ineligible studies excluded. This left 9 studies for inclusion in the in-depth review.



### **1.2.3 Detailed description of studies in the in-depth review**

Studies identified as meeting the in-depth inclusion criteria were analysed according to study aims and research question(s), study design, methods of analysis and data collection, and outcomes. This information was then summarised in a tabular form (please see Table 3). This provided a description of each study's methods, and included information about the following:

- Participants: numbers, ages and gender.
- Study Context: type of context (primary or secondary school) and the geographical location in which the study was conducted.
- Focus: whether the intervention focused on group or individual work, and programme duration (number of sessions and length of each session).
- Design: whether or not a control group was used, and, if so, what kind of intervention the control group received (no intervention, or another kind or peer support). Details about steps taken to ensure experimental rigour (such as random allocation to groups) were also included.
- Methods/sources of evidence: details about who contributed to evaluation of the interventions, and what kinds of measures were used.
- Follow-Up: if and when follow-up measures were administered.

Table 3 also provided a summary of each study's outcomes, including outcomes measured, gains made and effect sizes. Some studies provided their own measure of effect sizes. It should be noted that some studies did not provide enough detail to enable accurate effect size calculation.

**Table 3 Description of studies' methods and outcomes**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size(d)
	N	Age							
Karcher (2008)	525	10 – 18	19 elementary, middle and high schools (US)	1 hour a week School Based Mentoring for 8 weeks as part of a program of social and academic enrichment services.	Participants referred by parents, teachers or self. Stratified random sampling by gender and grade within each school by researchers. Comparison of Standard Services condition (educational enhancement activities, supportive guidance, enrichment activities) with Standard Services Plus Mentoring. Pre & Post Tests	Measure of adolescent connectedness to school, to teachers, to peers, to culturally different peers, to self-in-the-present and self-in-the-future (Self Report Checklists) Self Esteem Questionnaire (SEQ) (Self Report Checklists) Perceived Social Support Scale (Self Report Checklist) Social Skills Rating System (Self Report Survey) Children’s Hope Scale (Self Report Scale) Perceived Mattering Survey (Self Report Checklist) Grades (Collected from report cards) Additional Data (Teacher & Parent checklists) Conners’ child rating scale: global index (CGI) (Parent complete checklist)	None	*Connectedness to peers *Global Self Esteem *Self-in-the-present *Perceived Support from friends	0.25 0.16 0.25 0.18
Choi & Lemberger (2010)	834	9 - 17	Low income elementary and secondary school students (South Korea)	10 month mentoring intervention No of 1 hour weekly meetings varied – approximately 2 hours per week.	Treatment versus control. Pre/Post test data collected. High Attrition	Standardised Academic Achievement Test	None	*Reading Comprehension *Maths	0.29 0.33

**Table 3: Description of Studies' Methods and Outcomes continued**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size( <i>d</i> )
	N	Age							
Herrera, Grossman, Kauh & McMaken (2011)	1139	9 - 16	71 schools (US)	Mentoring intervention for 1 hour per week approximately.	Random assignment to treatment versus control. Pre/Post test data collected.	Overall Academic Performance Rating (Teacher reported scale) Classroom Effort (Teacher reported checklist) Self-Perceptions of Academic Abilities (Self Report Checklist) Unexcused absences (School data) Substance Use ( Self Report Checklist) Misconduct Out of School (Self Report Checklist) Social Acceptance (Teacher Reported Checklist) Teacher relationship quality (Teacher Report Checklist) Parent Relationship Quality (Parent Relationship Quality) Global Self Worth ( Self Report Checklist) Presence of a special adult (Self Report Measure) Stressful Life Events (Self Report Checklist) Extracurricular involvement (Self Report Checklist)	15 month	* Overall Academic performance  *Self-perceptions of academic abilities  *Presence of a special adult  Effects not sustained at follow up.	0.09  0.11  0.18

**Table 3: Description of Studies' Methods and Outcomes continued**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size(d)
	N	Age							
Dennison (2000)	25	8 - 9	Elementary schools (US)	Mentoring Intervention twice a week for 45 minutes.	One group design, pre and post-test. Control group planned but not implemented due to admin issues.	Self Esteem Piers-Harris Self Concept Scales (Self Report Checklist) Attitudes towards school (Self Report Checklist) Classroom behaviour (Teacher Reported Observations) Academic Performance (Teacher Reported Grade Levels)	None	No statistical analysis but improvements noted in the majority of students had made improvements in their academic area being focused on in the mentoring and enjoy school more. Big buddies increased levels of self-esteem.	None given

**Table 3: Description of Studies' Methods and Outcomes continued**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size( <i>d</i> )
	N	Age							
Elledge, Cavell, Ogle & Newgent (2010)	36	9-10	4 Elementary school (US)	Lunch buddy mentoring program where children paired with a college student. Twice weekly visits for spring semester (Jan until May).	Treatment versus 'same' control and 'different' control (12 from 'same' school and 12 from 'different' school) Specific population sample of 'peer victims' of bullying selected.	Peer Victimization (Children self-report checklist, teacher checklist and parent checklist) Mentor Alliance Scale (Children (mentors and mentees) Self Report Checklist) Lunch Buddy Satisfaction Questionnaire ( Parent & Teacher Self Report Checklist) Lunch Buddy Harm Scale (Mentored children self-report checklist) Lunch Buddy Logs (Mentors Self Report Qualitative Log Sheet)	None	*Peers reports of victimisation	1.09

**Table 3: Description of Studies' Methods and Outcomes continued**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size( <i>d</i> )
	N	Age							
Karcher, Davidson, Rhodes & Herrera (2010)	205	9-16	41 Schools affiliated with Big Brothers Big Sisters Program (BBBS) (US)	Mentoring intervention. Duration varied in terms of time, location and interaction focus. Majority met once a week for 1 hour.	Treatment versus control group. Random allocation.	Mentors Attitudes Towards Schools (Mentors Self Report Rating Scale) School Connectedness (Children (mentees) self-report checklist) Overall Academic Achievement (Teacher Report Scale) Social Acceptance (Teacher Report Scale) Negative Contribution to the Classroom (Teacher Report Scale) Youth Emotional Engagement (Children (mentees self-report checklist) Match Length (Duration of days record tally) Teacher Student Relationship Quality (Teacher Reported Checklist) Prosocial Behaviour (Teacher Reported Checklist) Truancy (Single Teacher Reported Item)	None	*Disconnected mentees /positive mentors teacher relationship quality	0.36

**Table 3: Description of Studies' Methods and Outcomes continued**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size(d)
	N	Age							
Converse & Lignugaris/Kraft (2009)	45	13 -15	Middle School (US)	Mentoring intervention – one session a week.	Mixed methods – experimental design & qualitative analysis. Pre and post control group design to evaluate the effects of mentoring on experimental group participants.	Mentor Logs (Self Report Logs) Mentor Interviews (Semi-structured interviews) School Connectedness (Children Self Report Scale) Office disciplinary referrals (School Office Records) School absences (School Office Records)	None	*School connectedness  *Office Referrals	2.43  1.03
McQuillan, Smith & Strait (2011)	120	11	Middle School (US)	Mentoring program to ease transition to middle school.  Mentors – university based.	Treatment versus control group. Random assignment to transitional mentoring or waitlist control group.	Academic performance (School grade records)  School behaviour (Office referral records)  School connectedness (Self Report Checklist)	None	*Reading scores	-0.44

**Table 3: Description of Studies' Methods and Outcomes continued**

Study	Participants		Context	Focus of Mentoring (peer, cross-age, college student or lunchtime) and duration	Design	Methods/sources of evidence	Follow Up	Gains made (* = significant effect, p < 0.05)	Effect size( <i>d</i> )
	N	Age							
Knowles & Parsons (2009)	3600	11-18	180 Secondary schools (UK)	School based mentoring programs with varied focus and duration.	Evaluation of mentoring programs across schools.	Qualitative Interview evidence.  'About Me' Self Report scale.  Attendance, attainment and behaviour records.  Mentee and mentor voice case studies.	None	Improvements noted in qualitative evidence with reports of positive experiences from mentors and mentees qualitative interviews and the 'About Me' Self Report scale.	None



#### **1.2.4 Assessing quality of studies and weight of evidence (WoE)**

Finally, studies included in the in-depth review were analysed using the EPPI-Centre weight of evidence (WoE) tool. This considered three criteria in order to make it possible to ascribe an overall quality and relevance to each study in a transparent way (Cifuentes & Yi-Chuan, 2000). These weights of evidence were based on:

- A. Soundness of studies (internal methodological coherence), based upon the study only.
- B. Appropriateness of the research design and analysis used for answering the review question.
- C. Relevance of the study topic focus (from the sample, measures, scenario, or other indicator of the focus of the study) to the review question.
- D. An overall weight, taking into account A, B and C.

### **1.3 Findings**

#### **1.3.1 General characteristics of the studies included in the in-depth review**

Table 3 summarises the characteristics of the 9 studies included in the in-depth review. The synthesis table shows that the majority of the studies included in the in-depth review were conducted in North America (N = 8). The remaining study is from South Korea (N = 1). All the studies were based in different types of schools (N= 9), with some in elementary schools (N= 2), some in middle schools (N= 2), one in a secondary school (N = 1) and the remainder in a combination of elementary, middle and secondary schools (N = 4). All of the studies involve evaluating mentee outcomes of school based mentoring interventions (N = 9). Some of the studies involved cross-age mentoring between school pupils (N = 2), some involved college students mentoring school pupils (N = 3) and the remaining recruited mentors from varied community, business or college backgrounds (N = 4) to mentor school pupils.

All of the studies used 'opportunity samples', meaning that participants were not randomly selected, but drawn from particular school populations convenient to the researcher where a mentoring intervention was being delivered. Two of the studies focused solely on one outcome. For instance, isolating peer victimisation (Elledge, Cavell, Ogle, & Newgent, 2010) and academic achievement (Choi & Lemberger, 2010). However, the majority of the studies focused on varied outcomes which could be classified as either educational gains, social gains or emotional gains (N = 7) for the mentees. None of the studies considered the gains of the mentors, although some studies (N = 3) did collect mentor views (Elledge, et al., 2010; Karcher, Davidson, Rhodes, & Herrera, 2010). One study didn't include the breakdown of male and female mentee participants, but for the remaining studies (N = 8), the mentee male participants (total = 1274), outweighed females (total = 1134). For some of the studies (N = 4) the mentor male/female participant breakdown was provided. In this case, female mentors (total = 587) outweighed male mentors (total = 197).

### **1.3.2 Experimental Design of the studies included in the in-depth review**

The majority of the studies (N = 5) included a control group, with random assignment of participants used in most experimental designs. The three remaining studies didn't use non-random allocation (Choi & Lemberger, 2010; Dennison, 2000; Knowles & Parsons, 2009). A further feature of these studies attempts to ensure internal validity included matched comparison groups (Converse & Lignugaris/Kraft, 2009; Elledge, et al., 2010; Herrera, et al., 2011; Karcher, 2008; Karcher, et al., 2010; McQuillan, Smith, & Strait, 2011). There were similarities in the function of the control group with the majority of researchers using the control group to compare the effectiveness of school based mentoring interventions with a waitlist comparison access to a mentoring intervention in school. The exception to this is Karcher (2008) who used an alternative treatment comparison group.

In one study Dennison (2000) used a pre/post design. There are inherent limitations with this type of design, notably threats to internal validity (such as maturation, history and selection effects) and external validity (in terms of generalizability of the

findings). On the whole, this study seemed to be less methodologically rigorous than those with a control group. For example, no descriptive statistics were provided about the participants (other than details of number of mentees and mentors). The author acknowledges that a control group was initially planned yet wasn't implemented due to administrative constraints. Despite this acknowledgement, the limitations of this study, due to a lack of a control group, are apparent. There is a sense that this study was designed more for practice.

### **1.3.3 Weight of Evidence**

Following the procedures outline above, judgements about weight of evidence were made for all 9 included studies, together with an overall weight. These are summarised in Table 4.

**Table 4 Summary of Weight of Evidence**

<b>Study</b>	<b>1 Karcher (2008)</b>	<b>2 Choi &amp; Lemberger (2010)</b>	<b>3 Herrera, Grossman, Kerr &amp; McMacken (2011)</b>	<b>4 Dennison (2000)</b>	<b>5 Elledge, Cavell, Ogle &amp; Newgent (2010)</b>	<b>6 Karcher, Davidson, Rhodes &amp; Herrera (2010)</b>	<b>7 Converse &amp; Lignugaris /Kraft (2009)</b>	<b>8 McQuillan, Smith &amp; Strait (2011)</b>	<b>9 Knowles &amp; Parsons (2009)</b>
<b>Weight of evidence A Quality of execution</b>	Medium	Low	High	Low	Medium	Medium	Medium	High	Low
<b>Weight of evidence B Quality of Design</b>	High	Low	High	Low	Medium	Medium	High	High	Low
<b>Weight of evidence C Relevance</b>	High	Medium	High	Low	Medium	Medium	High	High	Low
<b>Weight of evidence D Overall weight of evidence</b>	High	Low	High	Low	Medium	Medium	High	High	Low

The synthesis table indicates that four of the studies were seen as providing medium to high overall weight of evidence (D). These four studies were in the treatment versus control group, as studies in this group tended to be more methodologically sound and thereby more closely addressed the review question regarding the effectiveness of school based mentoring interventions for school pupils. Three studies were seen as providing low weight of evidence. Firstly, Choi & Lemberger (2010) due to the specificity of their sample (Low Income South Korean Middle & Secondary school pupils) which was judged to limit the generalizability of their findings. Second, Dennison (2000), due to a small sample size and pre/post-test design that failed to implement a control group which therefore meant that it lacked experimental rigour. Thirdly, Knowles & Parsons (2009) due to the weak experimental design. Only two studies in this group were seen as providing a medium weight of evidence (Elledge, et al., 2010; Karcher, et al., 2010). Both these studies recognised the limitations of their design and employed qualitative and quantitative methods.

#### **1.3.4 Outcomes and effectiveness – Short Term Effects**

The summary on Table 5 illustrates that the majority of studies (N = 8) found school based mentoring interventions to be effective in relation to at least one outcome directly post-intervention, according to the criteria set by each study and the research question posed. However, it must be acknowledged that comparisons between the different studies were difficult, for the reason that success criteria varied widely. Each study measured different outcome variables with a variety of instruments. This was compounded by the fact that not all studies provided descriptive statistics or a measure of effect size (or could have applied one).

**Table 5 Results Outcome Variable Table**

<b>Outcome Variable</b>	<b>Specifics</b>	<b>Study</b>	<b>Significant gains made?</b>	<b>Effect size</b>
<b>Academic performance</b>	Overall	Herrera et al. (2011)	Y	0.09
		Dennison (2000)	N	NP
	Maths	Choi et al. (2010)	Y	0.33
	Reading Comprehension	Choi et al. (2010)	Y	0.29
	Reading	McQuillan et al. (2011)	N	-0.44
<b>Social/Emotional Outcomes</b>	School connectedness	Converse et al. (2009)	Y	2.43
	Peer connectedness	Karcher (2008)	Y	0.25
	Self Esteem	Karcher (2008)	Y	0.16
	Self in Present	Karcher (2008)	Y	0.25
	Perceived Support from friends	Karcher (2008)	Y	0.18
	Self-perceptions of academic ability	Herrera et al. (2011)	Y	0.11
	Presence of a special adult	Herrera et al. (2011)	Y	0.18
	Peer reports of victimisation	Elledge et al. (2010)	Y	1.09
	Teacher relationship quality	Karcher et al. (2010)	Y	0.36
<b>Behaviour</b>				
	Office referrals	Converse et al. (2009)	Y	1.03

Studies are therefore further coded according to the treatment targets identified in the first set of inclusion criteria (Method Section): academic outcomes, social/emotional outcomes and behavioural outcomes. Table 5 indicates that the main outcome foci were academic performance (measured in four studies), social/emotional outcomes (measured in five studies) and behaviour outcomes mentioned in one study. More significantly, the table shows that in some studies there is evidence that a selection of these outcomes were affected significantly, in the short term, by a school based mentoring program. Where effect sizes were given, most were small (0.2) to medium (0.5), with some effect sizes being large (0.8).

There was one notable exception to this pattern. McQuillan et al., (2011) found no evidence of significant gains for any outcome category. In fact, they found a

significant reduction in an educational outcome; reading levels of mentees. Their findings indicated that following a school based mentoring intervention to facilitate transition from elementary to middle school the reading levels of mentees significantly decreased.

### **1.3.5 Outcomes and effectiveness – Long Term Effects**

Only one study in the review explored long term effects (Herrera, et al., 2011) but found no evidence of maintenance of significant gains. The lack of follow up studies is a limitation of the majority of the school based mentoring studies in the review. Although many of the studies highlight significant gains in one or more outcome category in the short term, there is a distinct lack of evidence to suggest that school based interventions have a long term effect.

## **1.4 Conclusions and Recommendations**

### **1.4.1 Conclusions of this review**

A number of conclusions can be drawn from the existing literature on the effectiveness of school based mentoring interventions for the academic, social/emotional or behavioural outcomes of school pupils. All the studies in the review – with the exception of McQuillan et al., (2011) – found such interventions brought about positive gains for mentees relating to either academic, social/emotional or behavioural outcomes. Of these studies eight proposed significant gains. Where effect sizes were calculated, the majority were in the low-to-medium range.

However, these results should be interpreted with caution due to the extensive variety identified between the different studies. For example, differences in terms of their methodology including design and control for internal and external validity. Limitations also exist due to variations in sample size and programme delivery. For instance, issues such as treatment focus – individual versus group – and programme

duration varied greatly between the different studies. To counteract this, weight of evidence is a useful tool as it allows studies to be compared both methodologically and theoretically. The majority of the studies in the in-depth review were considered to represent an overall weight of evidence in the Medium/High range; six of these involved a treatment versus control design.

In addition, one of the studies investigated the longer term effects of school based mentoring, but found no evidence of the maintenance of significant gains on academic, social/emotional or behavioural outcome measures. Though this finding clearly merits further investigation, the results can't be judged to be overly reliable due to the lack of evidence from other studies of follow up data relating to the long term effects of school based mentoring. In summary, there is some evidence to suggest, with caution, that school based mentoring interventions can be effective in a wide range of school populations, including elementary, primary and secondary school pupils and children in vulnerable populations in promoting positive gains related to educational, social/emotional and behavioural outcomes. However, there is no evidence to indicate that such gains are effectively maintained long term or after a school based mentoring intervention has finished. This suggests that there is a need for future studies to explore whether increasing the duration of school based mentoring interventions will provide links with stronger short and long term gains. For example, exploring how long programs need to be to yield impacts that are sustained past program involvement (Herrera, et al., 2011).

#### **1.4.2 Limitations of this review**

Several limitations of this review are acknowledged. A principal limitation regards the way in which the studies included in the in-depth review were coded. Though some attempt was made to use a transparent system, both to code the studies and to attribute a weight of evidence judgement, conclusions are necessarily limited by the fact that multiple coders were not used in this process. Furthermore, the difficulties in defining mentoring mean that it is likely that my search strategies missed studies that would have met the inclusion criteria. Also, this paper suffers from the criticism levelled at many reviews and the meta-analyses, known as the 'file



drawer problem' (Rosenthal, 1979). This suggests that studies which yield significant results are more likely to be submitted for publication and accepted by journals, and studies which do not, are more likely to be neglected. Thus, the decision of this review to exclude unpublished studies from analysis may bias its conclusions.

A further limitation concerns the variability between the contexts and participants in the studies selected for in-depth analysis. Studies were identified based on clearly stated inclusion and exclusion criteria, yet there were still considerable differences in the contexts (ranging from elementary schools, to middle schools and secondary schools) from which participants were drawn, and the referral criteria that they were selected for. In addition to this only nine studies were included, only one of them UK based which may limit the generalisation of results in informing UK contexts. Therefore, generalisation of results to broader school populations in the UK should be made with caution. The studies selected in my review represent a section of literature and therefore my conclusions must be interpreted within this context.

#### **1.4.3 Recommendations for further research and practice**

There are numerous directions which future research into the effectiveness of school based mentoring for school pupils academic, social/emotional and behavioural outcomes may follow. Some of these have been acknowledged previously, for example, the need for further evidence relating to the effects of school based mentoring in the long term and after mentoring interventions have finished. Furthermore, there is further evidence required relating to the actual length of school based mentoring interventions. Whilst some studies propose that the longer the intervention, the greater the gains, others concluded that the length of a mentoring intervention had no significant influence on effect size.

Similarly, there is a lack of clarity relating to the importance of the background or gender of the mentor and no evidence of significant gains, if any, acknowledged for them. Some studies used mentors from school, while others used adult mentors from the local community. There were, however, no comparative studies of school

based mentoring interventions where mentors from different contexts were compared. There is a need for further investigation of the mentors' experience of mentoring and the benefits for them.

Running parallel to this, more research is needed into the mechanisms through which school based mentoring works. For example, although this review highlights tentatively short term gains for school pupils, as acknowledged earlier, future studies need to focus on how to develop new programs or modify existing ones to help ensure a permanence in effective outcomes and to promote children and young people's development long term (Herrera, et al., 2011). Furthermore, future research directions are required in relation to specific populations of school pupils and particular types of mentoring. For example, lunch buddy mentoring for 'at risk' children (Elledge, et al., 2010).

Overall, there is limited support for the suggestion that there is comprehensive evidence in one particular outcome of significant gains for school pupils having mentors. Ultimately, school based mentoring, unlike its community based counterpart, has yet to produce consistent replicable positive results in randomized efficacy trials (McQuillan, et al., 2011). There is some evidence base but further research is required to reach a more confident conclusion that school based mentoring interventions can be effective in promoting positive educational, social/emotional or behavioural outcomes for school pupils. Wheeler, Keller & Dubois (2010) echo this view in a recent meta-analysis arguing that although they are optimistic about the available evidence for school based mentoring, they highlight that we should proceed with caution in disseminating this type of intervention until there is further evidence of positive effects (Wheeler, et al., 2010).

## **Chapter 2: Bridging Document**

### **2. Introduction**

This paper describes the links between my systematic literature review and my research paper. On a professional level, I initially became interested with mentoring due to my experiences as a trainee educational psychologist (TEP) working in a multi-disciplinary team. Working in this context, enhanced my awareness of mentoring in different forms as many of my professional colleagues mentor children in schools. I also found myself working with schools exploring the introduction of peer mentoring and peer tutoring interventions into the school timetable to support learning in the classroom. These combined experiences sparked my interest in mentoring and I realised I wanted to learn more about the perceived benefits for children and young people involved in the mentoring process.

On a personal level I have previously worked privately as a mentor supporting children in academic subjects including literacy, numeracy and science. I became surprised at the benefits I gained from these experiences and through mentoring others I felt that I had developed my own learning in particular topics. These experiences intrigued me and increased my curiosity about the experience and learning of the mentor during mentoring interventions. Again, I became curious about the learning experiences for mentors and how they could be supported during mentoring interventions.

Running parallel to my interest in mentoring was an increased awareness within the local authority I was based in relating to the video intervention, Video Interaction Guidance (VIG). This intervention, based on the principles of attuned interaction and relationship building (Kennedy, 2011) has been used successfully to develop communicative connections between parents and children (Fukkink, 2008). I had an initial training session at university where I learnt about the practical elements of the VIG process. VIG is a method where individuals view video clips micro-analysing

their successful communicative interactions. In shared review sessions with a guider, clients engage in a process of active reflection on moments when they 'connect well' with others through collaborative discussion. A framework of attuned principles and interactions are used as a guide for these discussions (appendix A). Yet it is not about teaching others to communicate 'better' but more a collaborative, learning process where guider and clients learn together through active, shared experiences (Kennedy, 2011).

As I began to gain some initial experience through applying the VIG approach in my own practice I was struck by how powerful the medium of video was when playing back clips to clients. I was also encouraged by the principles of collaboration and empowerment that are the foundation of the intervention because I felt that they were closely linked to my own values as a trainee educational psychologist. Relationship building is at the heart of the mentoring relationship and of the VIG process (Galbraith & Winterbottom, 2011; Kennedy, 2011) and I became curious as to the possibilities of using VIG with peer mentors to explore the potential it had to support them during a peer mentoring intervention.

## **2.1 Ontological Assumptions**

In my qualitative research I took a relativist ontological position. Ontology is conceptualised by what there is to know about the world, and how reality is formed. It proposes that it is impossible not to make some assumptions about the nature of what there is to know (Willig, 2008). Therefore, I acknowledge that I was making the assumptions that phenomena are independent from fixed, law bound structures that have a cause and effect relationship (Willig, 2008). In fact, similar events or phenomena can be described in different ways, and therefore understood in different ways so that there are multiple realities rather than one true reality (Krauss, 2005).

## **2.2 Epistemological Assumptions**

My ontological perspective that there are multiple realities is complimented by my epistemology. The epistemological assumptions in this research were social constructionist. Social constructionism is the theory that knowledge is created

through language, historically, culturally and in social context (Burr, 2003). It rejects the positivist stance that the world is ordered, all phenomena have a cause and effect relationship and there is one truth (Krauss, 2005). Therefore, the findings of the research should not be taken as fact but as an exploration of my own constructions of meaning in the context of peer mentors experiences in using VIG. Taking this perspective I am acknowledging that both the researcher and participants are involved in the research process and are therefore both involved in influencing the construction of the data. The aim of the study is an exploration of how certain forms of knowledge are generated by people in a specific context through interactions with each other (Silverman, 2000).

### **2.3 Methodology**

Silverman (2000) highlights the difference between the terms methodology and method in qualitative research proposing that the former relates to the general approach to studying research topics, while the latter refers specifically to the research technique used. I selected a qualitative methodology in my research as I wanted to remain committed to my ontological and epistemological beliefs. Employing a qualitative methodology was in alignment with my social constructionist epistemological stance and ensured that I was committed to my personal principles as a researcher. A qualitative methodology offers a flexible approach where a diverse range of research methods can be used (Willig, 2008). Furthermore, it is proposed that qualitative research gives opportunities for a deeper understanding of the dynamics of social phenomena (Attride-Stirling, 2001). This seemed particularly appropriate in this research where I was interested in exploring what meanings the peer mentors attributed to using VIG.

### **2.4 VIG as a Research Tool**

I used VIG as a research method as the flexibility of the intervention suggests that it can lend itself to an increasingly wide range of contexts (Kennedy & Sked, 2008). It is also an intervention that reflects my world view as VIG is underpinned by theories of social constructionism. It is an intervention that recognizes that experiences and the creation of new knowledge are constructed in a social context (Cross & Kennedy,

2011). It is based on the principle that successful responses to the communicative initiatives of others are the foundations of an attuned interaction pattern. The VIG intervention draws on several theoretical frameworks that are related to social constructionist approaches to learning including the theory of inter-subjectivity Trevarthen (1979), theories of mediated learning (Vygotsky, 1978), theories of observational learning (Bandura, 1962; Bruner, 1978) and video self-modelling (Dowrick, 1991). It also draws on principles of person centred psychology (Rogers, 1977) and of solution orientated practices (De Shazer, 1985). Overall these theories combined with the principles that underpin an ethical framework of VIG support empowerment, collaborative working and positive change.

The VIG cycle of filming and shared review sessions were part of the data gathering process. This involved the video recording of peer mentoring sessions and video recordings of the shared review sessions. The video clips selected for the peer mentoring sessions acted as a contextual basis for the collaborative discussions in the shared reviews. The video recordings of the shared review sessions provided a representation of the constructions of meaning within a particular moment in time during the intervention and research process. By recording different shared review sessions over time, this provided visual representations of interactions over time.

## **2.5 Video Enhanced Reflective Practice**

Video enhanced reflective practice (VERP) is a further method of using video that has evolved from VIG but is less researched or theorised to date. It is used to promote the development of other professionals' interpersonal communication skills (Strathie, Strathie, & Kennedy, 2011). In adults daily lives, communication and building relationships are central to work and home life (Strathie, et al., 2011). Similarly, the development of communication skills are at the heart of mentoring relationships including peer mentoring (Galbraith & Winterbottom, 2011). In a paired reading relationship mentors have to deal with heavy demands on their cognitive and interpersonal skills (Galbraith & Winterbottom, 2011). The video intervention used with the peer mentors in this research project was based on the contact principles of attuned interaction and guidance (Kennedy, 2011) (see appendix A) and therefore more closely associated with VIG. However, it is acknowledged that the research is

exploring how video can support children a specific role, as peer mentors, so due to this there are some links to the VERP model.

## **2.6 Case Study**

A case study method was selected for the research and is defined by Robson (2011) as:

“Development of detailed, intensive knowledge about a single ‘case’, or of a small number of related ‘cases’. “ (p. 79)

I selected this approach as case studies allow for the study of a case in its context and can be interpreted widely including focusing on an individual person, a group, a setting or an organization. A case study method is particularly useful to new research areas where there is limited evidence of pre-existing theory (Eisenhardt, 1989). Also, case studies are a flexible and versatile approach that provides opportunities to explore situations where the intervention has no clear set of outcomes (Willig, 2008; Yin, 2003). This was appropriate in this research as there have been no other studies exploring how VIG could support peer mentors. Furthermore, this approach allows the researcher to answer ‘how’ and ‘why’ type questions when exploring a new phenomenon in a social context, in this instance, exploring how VIG could be used to support peer reading mentors. It is also an approach that compliments a constructivist paradigm (Stake, 1995; Yin, 2003) enabling in-depth exploration of the peer mentors and researchers co-constructed experiences of using VIG (Willig, 2008). It also provides a focus on change and development which compliments VIG as they are key underlying principles of the process.

## **2.7 Paired Reading**

The focus of the mentoring was reading as this was a key stage two priority in the school where the research was conducted. The form of peer mentoring that the mentors were trained in was based on the Paired Reading (PT) technique (Topping, 2001). Paired reading is defined as one application of peer tutoring where one

individual supports the reading of another (Miller, Topping, & Thurston, 2010). It is a structured approach devised by Topping (2001) to support peer learning (see appendices B and C). To summarise, pairs choose their own books, talk about them, read together and the mentee gives a signal when they want to read alone. If the mentee makes a mistake the mentor waits four seconds before correcting them. This approach was selected as it is democratic; encouraging the mentee to support half the process and the tutee to support the other half (Topping, 2001).

The majority of research related to mentoring, tutoring and paired reading focuses on the gains made by mentees and mentors. There is evidence of gains for mentees and mentors during paired reading interventions relating to self-esteem (Miller, et al., 2010) and reading progress (Topping, Miller, Thurston, McGavock, & Conlin, 2011). However, there is more limited research that explores the mentors experiences during mentoring interventions (Galbraith & Winterbottom, 2011). Furthermore, it is often highlighted that mentor training during an intervention is essential in supporting mentors (Topping & Ehly, 1998) but there has been little investigation as to what types of training helps mentors and more specifically peer reading mentors. This research investigates a new dimension that has yet to be explored and looks at how video interaction guidance can support peer reading mentors, using the Paired Reading (PR) technique, during the mentoring process.

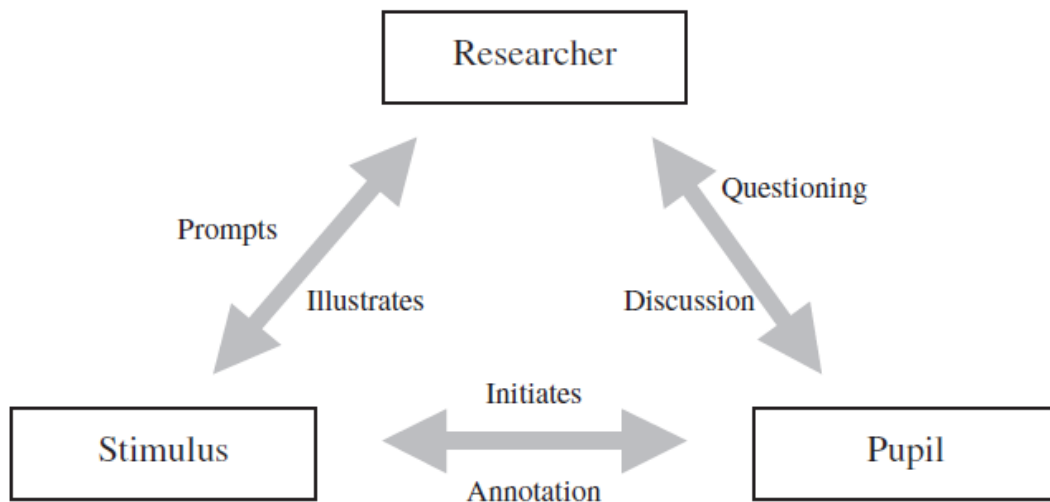
## **2.8 Visual Pupil View Templates**

Visual pupil view templates, developed at the Centre for Learning and Teaching at Newcastle University (Wall, Higgins, & Smith, 2005) were used with the peer mentors following video shared review sessions to support a more child centred approach. These visual templates are a learning and research tool that explores reflective dialogue between adults and children (Wall & Higgins, 2006). This method originates from work by McMahon and O'Neill (1992) that used speech bubbles to explore discussion with children and so they could interact with it, for example, draw on the template (Wall, et al., 2005). The image on the template is designed so that children recognise it. In this instance, the template was adapted to show a VIG shared review context where the children are looking at a computer screen (see appendix D). Information was sought using the template to further explore the peer



mentors' views of viewing the video clips. An advantage of this approach is that responses are succinct and it allows direct participation of the children. Figure 2 depicts the process of the research tool becoming a three way interaction between the researcher and pupil.

**Figure 1 Model of interaction with template**



## **2.9 Ethical Considerations**

My research project was approved by Newcastle University ethics committee and based on the guidelines proposed by the British Psychological Society (BPS) Code of Conduct (BPS, 2009). However, not all ethical issues and dilemmas can be planned for or solved prior to the research process (Brinkmann & Kvale, 2008). Groundwater-Smith & Mockler (2007) argue that,

“The conduct of quality practitioner research is in its very nature ethical business.”(p.209)

In alignment with my values as a researcher I acknowledge that ethics is not a procedural practice but is a position that should be at the core of practitioner research and embedded throughout the process.

I shared a letter with parents informing them about the research process (see appendix E) and then I collected informed written consent (see appendix F) from

parents. Also, I shared a letter with the children that explained the research, invited them to participate and collected written consent from them (see appendices G and H). The parents and children participating in the research had a clear understanding that they could withdraw their consent at any time during the process and felt confident in opting in and out. For instance, one peer mentor elected to withdraw from the process due to missing work in the school timetable and then requested to re-join the process the following week. The video clips were stored safely and securely throughout the research project.

Transparency, collaborative opportunities and transformative intent are key ethical guidelines in qualitative research (Groundwater-Smith & Mockler, 2007). I recognised that the importance of transparency and creating opportunities for collaborative practice during the research process, for example, the shared review meetings with the peer mentors. In trying to support the peer mentors in their role using the video intervention this research was transformative in its intent and action to develop their skills as peer mentors.

I had an awareness of the power imbalance between myself as a researcher and the Year 5 peer mentors and with the research taking place in a school context. Although, underpinned by democratic and collaborative values (Kennedy, 2011) the use of VIG as a research tool is not in itself a democratic approach (Barrow & Todd, 2011). In participatory research it is essential that steps are taken with respect of and to reduce the power differentials between participants and researchers (Barrow & Todd, 2011). This was a particularly salient issue in this research process due to the researcher being intrinsically involved with the children in the video intervention process. To counteract the power imbalance different research methods were used, for instance, the visual pupil templates completed by the peer mentors after shared review sessions. As acknowledged earlier this visual tool was used to explore the peer reading mentors' views of a particular context as only asking children their views directly is an approach inherent with difficulty (Todd, 2003).

## **2.10 Reflexivity**

Reflexivity in the research process is captured by Willig (2008) as,

“...an awareness of the researcher’s contribution to the construction of meanings throughout the research process, and an acknowledgement of the impossibility of remaining ‘outside of’ one’s subject matter while conducting research.”(p.10)

Willig (2008) highlights the importance of epistemological reflexivity which challenges the researcher to continually think critically about the assumptions that we have made during the research process and to reflect on how these will influence the findings. I have acknowledged earlier that social constructionist epistemology emphasises that my identity, values and experiences have influenced the research process, the data analysis and findings. VIG is based on the values of respect, empowerment and hope which compliment my values as a researcher and reflect a core part of the video intervention process as VIG supervision is an integral and reflexive process where learning and self-reflection on practice are central (Silhanova & Sancho, 2011).

Willig (2008) takes reflexivity further suggesting that there is personal reflexivity, where the researcher must reflect on the way their own values, experiences and beliefs have influenced the research process. This involves being aware what I have learned from the research process and how I have potentially changed. This research journey has led me to reflect on my on practice as a trainee educational psychologist when using VIG with children and families. I have increased my understanding of the principles and values that underpin the VIG intervention. I am struck by how I have become more observant and reflective of my own communication skills through using VIG as a research tool in this project.

I acknowledge that at the start of the research process that I was new to VIG and that working with the peer reading mentors was one of my first experiences of the process. Kennedy (2011) highlights that being a guider during the VIG process is not about teaching. I felt that initially I may have taken a more teaching than guiding role when conducting shared reviews with the peer reading mentors. However, I have learnt through using VIG with children, in this context, to be more aware of how to engage children and young people in the process. I have changed my practice when working with children and young people in shared reviews, for example, I have learnt

to guide more by leaving space rather than naming the contact principles explicitly. This learning process has also highlighted to me, not only the flexibility of VIG but of the potential that it has to support people in a range of contexts. Furthermore, to record my personal reflexivity throughout the research process I wrote a research diary to capture reflections, think critically about next steps and record ideas week to week (Charmaz, 2006).

### **2.11 Thematic Analysis**

Thematic analysis was selected to analyse the data as it is a flexible and accessible approach. It is a method for identifying, analysing and reporting patterns within data and is a useful data analysis tool as it reveals a rich, detailed and complex picture of data (Braun & Clarke, 2006). Exploring how VIG can support peer mentors is an under-researched area so I wanted to achieve a rich overall description of the predominant or important themes from the entire data set. A further advantage of this approach is that it is compatible with a theoretical paradigm of social constructionism as the process examines events, realities and meanings through language (Burr, 2003). The initial step of the thematic analysis was to transcribe the shared review sessions which Braun and Clarke (2006) emphasise is a useful way for the researcher to familiarise themselves with the data. It is proposed that there is not one set way to record a transcript but that a thorough account of verbal and nonverbal utterances is important.

The transcription process is emphasised as being key in a researcher becoming more familiar with the overall data set. Using this approach means that some depth and complexity of the data may be lost but a rich overall description is maintained (Braun & Clarke, 2006). I adopted an inductive, bottom up approach to analysis to attempt to maintain strong links between themes identified and discussed and the data itself. The analysis was conducted at a 'latent level' exploring the underlying ideas assumptions and conceptualisations that are theorised as informing the semantic content of the data. The results of the data are not to determine a truth of mentor's views relating to how the VIG process supported them but are a representation of my interactions with the data. Although, this means the data

subject to bias I attempted to reduce this bias by looking at the whole data set to gain an overall description.

## **2.12 Summary**

This paper presents the links between my systematic literature review exploring peer mentoring in UK schools and my research paper focusing on exploring the experiences of peer reading mentors in a video intervention based on the principles of VIG. By making the learning journey explicit and critically reflecting on my ontology, epistemology I have identified the reasons for the methodology used. I have discussed my commitment to reflexivity in my practitioner research project. The constructionist standpoint has been complimented by employing VIG, an intervention based on constructionist principles, as a research tool. I have also emphasised the importance of ethical considerations throughout my research journey.

## **Chapter 3: An exploration of using video interaction guidance to support peer reading mentors**

### **Abstract**

Peer mentoring interventions are increasingly being introduced to support children in UK schools. They vary greatly in their content and aims including to support children socially, emotionally and academically. Many benefits for mentees are reported in the literature and although benefits for mentors have also been emerging this area remains under-researched. However, there is little research that explores what kinds of benefits are experienced by mentors and the process by which any benefits are experienced. Also under-researched is any process by which mentors are supported in their role. This paper explores a new perspective examining how peer mentors can be supported in their roles and learning using Video Interaction Guidance (VIG), a relationship based video approach. A case study methodology was used to explore two mentoring pairs in a primary school; the peer mentors were in Year 5 and the mentees in Year 3. The focus of the mentoring was reading with each pair participating in six sessions of mentoring. Each mentor took part in three video shared review sessions with the researcher. Thematic analysis was used to analyse the data. The themes identified were reflecting and evaluating self, attunement and body language, video as a learning tool, mentor skills and collaborating. It was concluded that VIG provided a platform for the peer reading mentors to learn about their communication, share their skills, to reflect on their practice and evaluate their work.

### **3.1 Introduction**

Peer mentoring is being used increasingly in schools in the UK in recent years (Mentoring and Befriending Foundation, 2010). The literature detailing a range of applications, contexts and benefits for mentees is extensive in the United States but is notably more limited in the UK. Historically, the United Nations Convention on the

rights of the Child (United Nations, 1989) supported the need for children to actively participate in decision making processes and to the right to have an education that respects and develops their personality, talents and abilities. School based peer mentoring interventions have been applied to support children to actively collaborate and to give them a platform to develop their skills in various forms (Hall, 2003). The school based peer mentoring literature reports benefits to mentees in a diverse range of areas including improving friendships (Karcher, et al., 2010), improved self-esteem (Karcher, 2008), reducing bullying (Elledge, et al., 2010) and improving learning (Choi & Lemberger, 2010; Herrera, et al., 2011). Despite an emerging picture from mentoring literature proposing similar peer mentor benefits (Galbraith & Winterbottom, 2011), the peer mentoring process for the mentors is an under-researched area requiring further exploration. This pilot study used Video Interaction Guidance (VIG) as a research tool to support peer reading mentors and to explore their experiences.

Video Interaction Guidance is a relationship based intervention that promotes the development of attuned communicative interactions by reflecting on video clips and micro-analysing individual's behaviour (Kennedy, 2011). It is underpinned by principles of empathy, learning and collaboration and has successfully supported adults and children to develop their relationships (Fukkink, 2008; Kennedy, 2011). Video modelling techniques, similar to VIG, have been used previously in schools to support children's learning, communication skills and relationship building successfully (Figueira, 2007; Hitchcock, Dowrick, & Prater, 2003). The peer mentoring process places heavy demands on mentors communication skills and at the heart of any peer mentoring intervention are the principles of collaboration and relationship building; key skills to promote learning (Galbraith & Winterbottom, 2011). There are clear links between peer mentoring and the relationship building intervention VIG but they have not yet been combined. This study explores how VIG can support peer reading mentors to learn, build and develop relationships with their mentees. The focus of this pilot peer mentoring project was reading where there is considerable evidence of benefits for the mentee or tutee but again, less exploration of the peer mentors' experiences (Topping, 1990; Topping, et al., 2011).

### **3.1.1 Peer Mentoring & Tutoring Literature**

Peer mentoring exists in many different forms (Colley, 2003) and it is acknowledged that it is difficult to conceptualise and that there is no agreed single definition (Colley, 2003; Hall, 2003). In this study the term peer mentoring is employed to capture the process where children take on specific roles with emphasis on one-to-one support in curriculum content, comparable to peer tutoring (Topping, et al., 2011). The National Mentoring Network Peer Mentoring Pilot Programme included data from 300 schools and 4,000 pupils and was conducted in partnership with the Department for Education and Skills. The findings, unexpectedly reported that peer mentors benefited as much, if not more than those children being mentored (National Mentoring Network and Department for Education and Skills, 2004). An early study by Robertson (1972) highlighted the potential benefits for children taking on the mentor or tutoring role. In a control study of cross-age paired reading, the trained tutors had significantly more positive attitudes towards concepts of reading, teaching and self, compared to control groups. Winter (1996) carried out research comparing a control group who read independently daily for 15 minutes and an experiment group of paired readers who read together daily for 15 minutes. Findings suggested that tutors, those in the mentoring role, were reported to show higher intrinsic motivation to learn than control students and reported being more in control of their lives.

Although the research literature is separate, there are clear links between academic peer mentoring and peer tutoring where children are supported, by same-age or cross-age peers to develop their understanding of a particular school subject (Dubois, et al., 2002). Topping, et al., (2011) conducted a large scale randomised control trial of reading tutoring in 80 schools using the Paired Reading (PR) technique. The results found that there were significant gains in self-esteem for tutees and tutors in comparison with a control group. Similarly, Tymms, et al., (2011) conducted a randomized control trial over two years that involved 129 schools in one Scottish local authority that positively enhanced the attainment for both reading and maths for tutors and tutees.



Galbraith & Winterbottom (2011) explored specifically the mentoring process for those in an academic mentoring or tutoring role. Although involving older children, they found that tutors mentally rehearsed and revised the subjects that they were going to tutor. Topping (1996) proposed that when a mentor “scaffolds” mentee’s learning through discourse, their own learning may be extended. It is proposed that tutors undergo a restructuring and reorganising of the material to be taught because of the role they are in (Allen & Feldman, 1972) with the tutor role potentially raising tutors’ self-esteem due to the authoritative role that it provides (Allen & Feldman, 1972). However, as acknowledged earlier further examination of the relationship building process between a mentee and mentor is required in the literature.

### ***3.1.2 Video Modelling in Schools***

One approach both to explore children’s skills in relationship building in schools and also to support them in this process is to use VIG (Gavine & Forsyth, 2011). VIG is a video approach underpinned by the theory of modelling; a process where observers pattern their thoughts, beliefs and behaviours, from those displayed by models (Schunk, 1987). Observing models completing actions successfully conveys information to observers about the sequence of actions to use to succeed. Bandura’s social learning theory takes this further proposing that viewing oneself perform successfully strengthens one’s belief in their ability to complete specific skills competently or successfully (Bandura, 1969). No peer or adult can exhibit characteristics as close and relevant to an individual as they can themselves (Buggey, Hoomes, Sherberger, & Williams, 2011).

The term video self-modelling was pioneered in the 1970s when video was used as a vehicle to support a child suffering from asthma to role play social skills (Creer & Miklich, 1970). The results suggested that role play had no effect on behaviour but that the child viewing the results on video did. Video self-modelling (VSM) has been used in school settings (Bellini & Akullian, 2007) to target a diverse range of ages and behaviours to promote learning (Buggey, et al., 2011). A range of skills have been explored in these interventions including stuttering, selective mutism,

classroom behaviour and targeted language responses (Hitchcock, et al., 2003). The effects of the video self-modelling interventions were usually immediate which make it time and cost efficient (Hitchcock, et al., 2003).

A review by Hitchcock, Dowrick and Prater (2003) proposed that VSM can be used with an array of behaviours and academic skills and can also be combined with other interventions. It draws on self-modelling theory that seeing oneself perform successfully provides the ultimate in role models, gives clear information on how to perform skills, strengthening self-efficacy (Dowrick, 1991, 1999). VIG is an extension of the VSM approach and is more commonly used with families but an alternative approach is to use it directly with children (Gavine & Forsyth, 2011). VIG is a therapeutic, relationship based intervention that supports the development of attuned interactions, usually between a care giver and a child. It is underpinned by the theories of intersubjectivity (Trevarthen, 2001) and attunement (Kennedy, 2011). The shared review sessions with a guider provide an opportunity for clients to review and discuss video clips of their own successful interactions in shared review sessions with a guider. During a VIG intervention, viewing oneself on video has the potential to promote learning and effect change (Cross & Kennedy, 2011). Details of the stages of the VIG process are provided in Table 6.

**Table 6 Stages of the VIG Process (Kennedy, 2011)**

Stage 1	A film is taken of parent and child completing an activity, often in a relevant context for instance the family home, although this is not essential.
Stage 2	The VIG guider selects clips that show moments where the parent and child are “connecting well.”
Stage 3	The guider then shares the video clips with the parent and child in a feedback session with opportunities to reflect and discuss the clips.

### **3.2 Methodology**

The aim of the qualitative research was to explore how VIG, being used as a research tool, could support peer reading mentors. The case study method was employed which enabled the researcher to explore unique perspectives of those directly involved in a phenomenon and can be used to describe, explore or develop

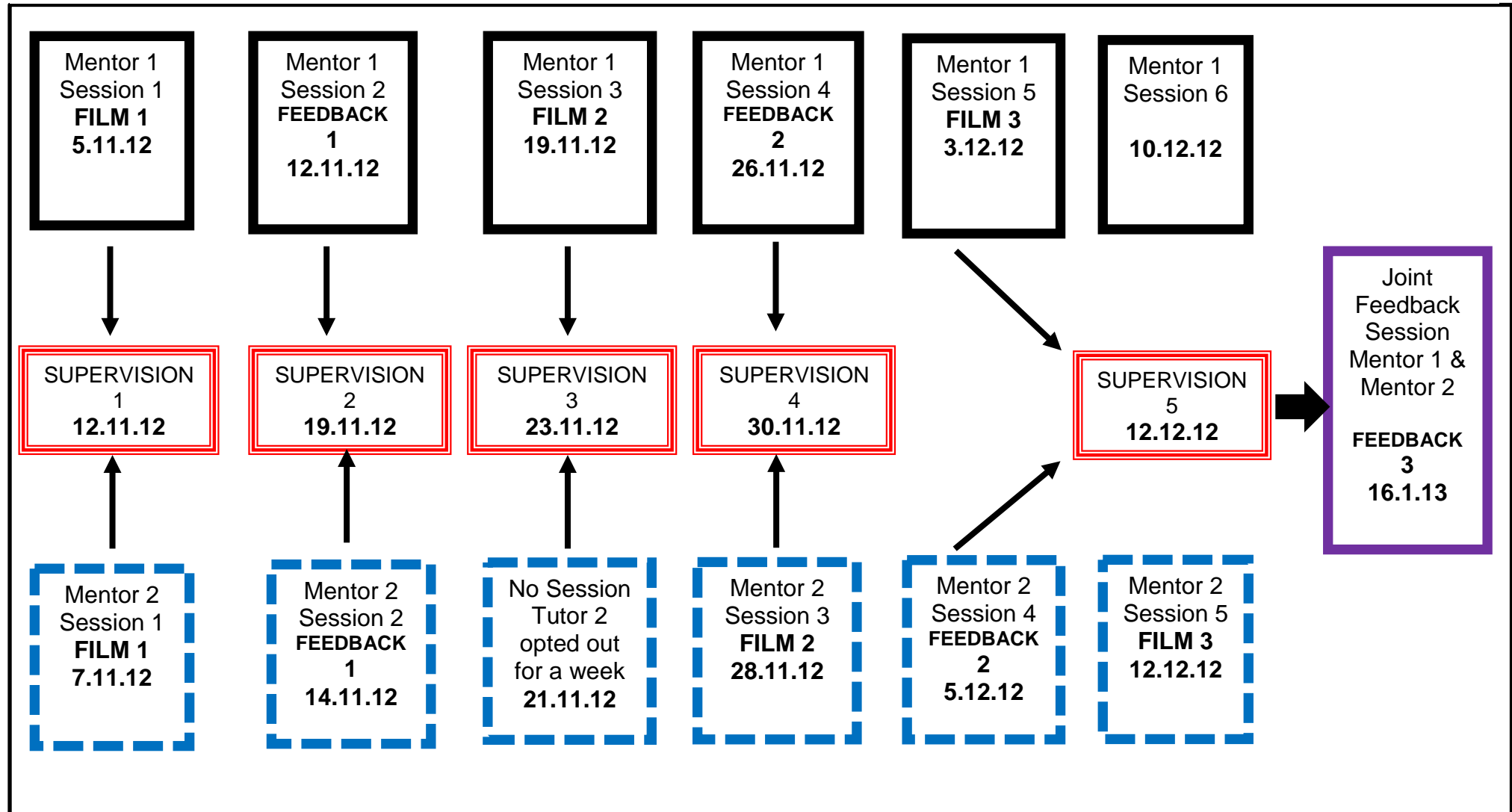
interventions and theory (Baxter & Jack, 2008). Two mentoring pairs took part; the peer mentors were in Year 5 and the mentees in Year 3. The focus of the mentoring was reading with each pair participating in six sessions of mentoring. Each mentor took part in three video shared review sessions with the researcher, where video clips of their practice were reviewed and discussed. The research was conducted in a primary school in a rural local authority. Staff, parents, and children were briefed about the VIG approach, peer mentoring and the research intervention. Informed consent was collected initially from the children's parent/carers and then from the children themselves. Parent/carers and children were aware they could opt out of the project at any time. Children were supervised during the peer mentoring sessions and shared reviews by the researcher for the duration of the study. Following the completion of the study school staff, pupils and parents were debriefed in a letter to thank them for their participation. The school was given support to continue the peer mentoring sessions with other children.

In alignment with literature it is strongly suggested that successful peer tutoring programmes involve mentors being trained (Mentoring and Befriending Foundation, 2010). The peer mentoring training sessions took place in school and involved three different sessions lasting 1 hour with both mentors. The training sessions were used to introduce the mentors to the Paired Reading (PR) technique through role play and discussion activities, a structured method for supporting peers reading (Topping, 1987; Topping, et al., 2011) (see appendix C). Following training, peer mentors met once a week with their mentees to support mentee reading for 30 minutes for six weeks. Mentor 1 and mentee 1 met on Monday afternoons and mentor 2 and mentee 2 met on Wednesday afternoons during an autumn school term in 2012.

Six films were taken of the peer mentoring in total, three of mentor pair 1 and three of mentor pair 2. A further five films were taken of the shared review sessions with the mentors and the researcher. The final film was a joint shared review with mentor 1, mentor 2 and the researcher. Following this each of the video shared review sessions were taped, transcribed and analysed. This was in parallel with the process of supervision, where the video clips were shared and discussed with my VIG supervisor. After shared review sessions visual pupil view templates (Wall & Higgins, 2006) were used to further explore the mentors' reflections on viewing the

video clips (see appendix D). Following this the video tapes of the shared reviews were transcribed. To maintain confidentiality transcribed shared review sessions were made anonymous. From this a set of thematic maps were developed which explored the themes over time arising from the shared review sessions (see appendices N, O, P and Q). Below is Figure 2 which provides a visual description of the filming, shared review, and supervision process, giving dates.

Figure 2 Timeline of video recording and shared review process (mentor 1 in black, mentor 2 in blue and both in purple)



The films of the mentoring sessions, the shared reviews and visual templates were analysed as data. Transcriptions were made of two shared review sessions with each mentor, and one joint shared review session. The method employed to analyse the data was thematic analysis (Braun & Clarke, 2006). Thematic analysis was used as a data analysis tool to analyse the transcribed data due to its flexibility (Braun & Clarke, 2006). An inductive approach was used where the content and themes were directed by the data but with a latent, constructionist approach. The themes identified are the co-constructions of the researchers interactions with the data rather than the perceived to be a truth emerging from the data set (Braun & Clarke, 2006). The stages of the analysing the data are set out in Table 7 below. Although it implies that sequential stages were followed with the steps in order this was a recursive process.

**Table 7 Thematic Analysis Process (Braun & Clarke, 2006)**

Stage	Description
Stage 1 Familiarisation with data	Familiarisation of the data through reading, re-reading and examining each phrase and sentence to capture what was said. This involved transcription of the shared reviews with the mentors including numbering and annotating (Appendix I).
Stage 2 Coding	The generation of codes that identify important features of the data and involves the whole data set. Codes are then grouped together (Appendices J and K).
Stage 3 Searching for themes	Using the codes to identify significant, broader, patterns of meaning and then collating the data to review the viability of the themes. (Appendices L & M).
Stage 4 Reviewing themes	Themes generated were then refined, grouped to form the basis of the thematic networks, represented as non-hierarchical web like structures depicting, 'global themes' supported by 'basic themes' that tell the story of the data (Appendices N, O, P, Q and R).
Stage 5 Naming themes	Defining and naming the themes and considering how it relates to the research question.

### 3.3 Findings

The main aim of the research was to use the VIG intervention process to explore mentor learning and to support peer reading mentors in their role. Thematic analysis led to the creation of individually coded data extracts that were combined to generate 5 overarching themes. These were: reflecting and evaluating self, attunement & body language, video as a learning tool, mentor skills and collaborating. The overall themes are presented with supporting quotes from mentors.

#### 3.3.1 Reflecting and Evaluating Self

Mentor 1 and mentor 2 reported different views about viewing the video and seeing themselves on screen initially. Mentor 2 expressed worry and concern about seeing himself on the screen at the start of the shared review session.

*...just seeing yourself, I don't like seeing myself....(Mentor 2)*

The initial concerns expressed by one of the participants about being videoed highlight the need to consider sensitively the ethical implications for using video in schools (Hayes, Richardson, Hindle, & Grayson, 2011). However, this initial unease was alleviated by the end of the first shared review session where mentor 2 reported that looking at the video was enjoyable and helpful.

*I said it was fun because I just like looking back on what I've done. (Mentor 2)*

In comparison, mentor 1 was less anxious about looking at the video clips and expressed more intrigue with the process of being filmed and watching it back. He described it as strange.

*.....it's weird cause it's looks like I'm watching it live and it looks like I've got like a twin brother and he's reading to a year 3.... (Mentor 1)*

Mentor 1 and mentor 2 also used the video to reflect and evaluate on themselves when they were in the peer mentoring role.

*.....I think he's trying, I think he's trying to see that I'm looking at the word to try and help him and that, and that em, not, and I'm not that [acts out resting head on arm] bored.....(Mentor 1)*

In addition to positive self-evaluation, during the shared review sessions mentor 1 responded to the video, highlighting in his view, times when he felt that his responses in his role as a peer mentor were not positive.

*.....I don't like the way I went 'nice try' cause it sounds like you're saying like someones trying to attack you and something and you're going [imitates teasing/mocking/hissing voice and scrunches up face] nice try..... (Mentor 1)*

### **3.3.2 Attunement & Body Language**

The use by mentees of non-verbal communication to create connection or attunement between mentor and mentee was one of the main themes. An awareness of different types of body language was evident in the shared review sessions. Words and actions to describe and refer how they used their body in the peer mentoring sessions was mentioned by both mentor 1 and mentor 2 during the shared review sessions.

*I was nearly breaking my neck turning my head I was like [acts out leaning over and turns head dramatically to the side].(Mentor 1)*

Mentor 2 was more able to describe using language to respond to video clips and identify what he felt he was doing well as a peer mentor.

*[I gave]....body language, clues.....eye contact.....like turn towards her.....and looking at her and stuff.(Mentor 2)*



Mentor 1, in particular, responded to video clips by 'acting out' perceived negative body language to acknowledge what he didn't do and therefore identify what he felt he was doing well.

*I was looking [acts out leaning over and looking] like, ah trying to see, eh, what he was trying to read and trying to help him.(Mentor 1)*

*Cause I was listening and I wasn't going, if he, if he was over here I wasn't going like that [turns head away in opposite direction, slouches and leans head on arm of chair sighs]. (Mentor 1)*

*I wasn't like, I wasn't like this when he was talking, yap yap yap yap yap yap yap [multiple yaps] I wasn't like that when he was trying to talk. (Mentor 1)*

### **3.3.3 Video as a Learning Tool**

During shared review sessions mentor 1 and mentor 2 were able to articulate what they valued about the video process. The word 'improve' featured frequently suggesting that the mentors valued the process of looking at the video to learn from it.

*Eh, to show, to show me the week after how and, watch the video and talk about what I, I can improve on and what I did good.(Mentor 1)*

*I like to see what I haven't done and improve on it. (Mentor 2)*

Mentor 2 identified being able to learn from the video to improve his skills as something that he valued.

*It was, it was good, it's nice to see what what hm nice to learn off [pause] trying to make stuff better with what I've done. (Mentor 2)*

The peer mentors also commented that they enjoyed the feedback sessions when they looked at the video clips showing them connecting well with their mentees.

*I like it that you chose certain parts of it and like where I've been helping him and stuff.(Mentor 1)*

*I really like how I can talk about the good things we been doing.(Mentor 2)*

### **3.3.4 Mentor Skills**

An appreciation of peer mentor skills to support the Year 3 readers was also apparent in the shared review sessions. The peer mentors were able to comment on and describe specific skills that they used to support their mentees reading. Mentor 1 identified skills that he was using to support his mentee particularly listening and helping.

*That I was listening to him and helping him. (Mentor 1)*

*He knows that I was helping him with his word. (Mentor 1)*

Mentor 2 highlighted some different skills in himself including prompts he used to support his peer mentee read words when she was stuck including giving clues, asking questions and reading on.

*Like how I gave her clues. (Mentor 2)*

*Ask her questions. (Mentor 2)*

*[Smiles] Help I help them understand the words and tell them to read around the sentences so you can [LM: yeah] get the so you can get the word right. (Mentor 2)*

Both mentor 1 and mentor 2 commented that they noticed that they gave their mentor praise during the mentoring sessions and this was frequently identified in the shared review sessions.

*I gave him praise.(Mentor 1)*

*And I gave them encouraging, encouragement. (Mentor 2)*

### **3.3.5 Collaborating**

Collaboration between the mentors was particularly manifest in the shared review session where both mentors shared clips and commented on each other. It was evident that both peer mentors enjoyed the process of sharing clips and look at what each other had been doing.

*I just liked it that today we looked at what each other's been doing and em that we get to look back over what we've been doing the week before. (Mentor 1)*

This was echoed by mentor 2 who also acknowledged the process of looking at the clips together and highlighted the value of comparing his own practice with mentor 1.

*Just like seeing what they've done and comparing it with what I've done. (Mentor 2)*

The mentors, in the shared review, also were able to comment on their peers' skills, picking out moments when they identified responses from each other that they believed to be positive.

*You were laughing with him and having fun with him. (Mentor 2)*

Mentor 1 highlighted that mentor 2 was using his own knowledge and understanding of reading to support his mentee.

*He was giving her the beginning sounds so she would get it. (Mentor 1)*

More specifically, and interestingly, there was evidence of insights about each other's role as a mentor. Mentor 1 commented on the space that mentor 2 gave to his mentee, which he had not discussed in his own individual shared reviews.

*Giving her he was giving her time to [pause] giving her time to try and do it herself.  
(Mentor 1)*

To summarise, both peer mentors responded positively to the VIG filming and reported enjoying the process. The opportunity to reflect back over work they had done, share their video clips with each other and to talk about the moments when they were connecting well with their mentees was reportedly valued by them. However, even more than this, the VIG process seemed to enable a sense of collaboration between the mentors and the development of insight about each other. VIG provided the opportunity for some of this insight to be verbalised between them.

### **3.4 Discussion**

The purpose of this study was to explore how VIG, a relationship based intervention, could support peer reading mentors and could enable the learning of mentors to be explored. The findings have suggested that mentors used VIG as a tool for learning in a range of ways. The video enabled the peer mentors to not only use the video as a learning tool but raised their awareness of the importance of body language and their communication skills, known as attunement in the VIG field, when building relationships with others. Also, the video encouraged the peer reading mentors to identify their skills, to reflect on their work, evaluate their practice and gave them an opportunity to collaborate and to share ideas.

In the mentoring and tutoring literature, it is proposed that mentors (and tutors) extend their own learning through a restructuring and reorganising of material (Allen & Feldman, 1972; Topping, 1996). The findings of this research project suggest that using VIG to support the peer reading mentors potentially extended their learning further. However, the VIG process is not about *teaching* children or adults (Kennedy, 2011) to interact better or to build relationships. It a collaborative process whereby those involved are supported to notice moments of attunement and how these have come about and it is based on the therapeutic principles of empathy, collaboration and mediated learning rather than instructional learning. Potentially, it

is links to these principles underpinning the VIG intervention process that have facilitated a process of learning for the peer reading mentors.

The themes of learning, reflecting and evaluating are in alignment with existing VIG literature that highlights the reflective and reflexive values of the intervention (Chasle, 2011). The peer mentors often responded to the video with evaluative comments suggesting what they thought they were doing well and what they wanted to improve on. Reflecting on learning experiences is acknowledged as evidence that deep and rich learning has taken place (Kolb & Kolb, 2009). Throughout the peer mentoring project, by using VIG with the peer mentors they were repeatedly given opportunities to observe their previous experience and to reflect on it through the medium of video. Kolb and Kolb (2009) argue that through a process of reflection new experiences can become richer, broader and deeper. This suggests that VIG gave the peer reading mentors further opportunities to learn at a proposed deeper level.

Dweck (2006) proposes that opportunities to develop a learning identity are important and argues that those who believe they can learn and change themselves rather than seeing their abilities as fixed have a more competent learner identity. When observing the video the peer reading mentors often commented on the skills they were using in their mentoring role, for instance, sounding out parts of a word or giving clues. Both peer reading mentors reported that viewing the video gave them an opportunity to look back on themselves and see what they believed they could 'improve' on. In other words, VIG seemed to help them to believe that they could learn and develop, that they could have a learning identity (Molden & Dweck, 2006).

An increased awareness of communication skills have potentially been a further learning and development opportunity provided by the VIG process. The peer mentors used the video to identify, evaluate and reflect on their communicative interactions in supporting their mentees to read, for example, looking, listening turn taking and giving space. These micro-moments of communication are directly linked to the concept of attuned interactions and guidance (Kennedy, 2011) that underpin VIG. The peer mentors were able to identify these skills in themselves as they observed micro-moments of 'connecting well' with their mentees. Bandura (1997)

proposed that learning from observing oneself as a model can develop self-efficacy in an individual. This suggests that using VIG may also have developed the peer reading mentors self-efficacy as they viewed themselves communicating and working as a peer reading mentor effectively.

Finally, the peer reading mentors were able to identify the strengths and skills in each other when they viewed the other peer mentor's clips in the joint shared review session. Both peer mentors commented that they particularly liked sharing their own clips with each other. VIG seemed to foster collaboration. Theorists such as Bruner (1996) highlighted the importance of learning in a social context and Vygotsky (1978) emphasised the importance of learning being constructed through talk. This links to the theoretical principles of VIG and is supported by the proposal that children learn best in situations that present a community of learners (Rogoff, Paradise, Arauz, Correa-Chavez, & Angelillo, 2003).

### **3.5 Limitations**

The limitations of the research mean that generalisations from this study should be made with caution. It is acknowledged that in terms of the data collected in the shared review sessions bias is possible due to the participants being aware that they were being studied which may have led to the peer reading mentors displaying demand characteristics or the social desirability affect (Bryman, 2001; Denscombe, 2002). The exploratory study suggested that the mentors had developed their learning through using the VIG intervention, one limitation that could be considered is a lack of involvement from school staff. VIG is an intervention that requires active participation and commitment from those involved in the intervention. It is also natural for VIG participants to display apprehension about being filmed (Strathie, et al., 2011) and therefore the use of video can be a disincentive. This may have been a factor in school staff not becoming so embedded in the research process. A further issue is that children's active participation in the research was during the VIG intervention which was the data collection phase and their constructions were interpreted by the researcher. The flexibility afforded by thematic analysis can leave the data open to manipulation and bias (Willig, 2008). However, by detailing a clear

audit trail when analysing the data the researcher has attempted to reduce bias where possible.

### **3.6 Future Research**

This exploratory study in a previously unexplored area only provides information about two peer mentors using video interaction guidance. The experiences of the peer reading mentors who took part in this research suggest that they enjoyed using VIG as a learning tool and that the video process helped promote learning. However, this exploration of peer mentors constructions of using a VIG intervention is only a starting point and may offer some future areas for investigating how video can support peer mentoring, and in the wider context peer learning, in schools. Further research in this area is needed that explores children's learning and participation during the VIG process in peer mentoring interventions and could explore how learning shifts can be observed in peer mentors behaviour over time in mentoring interventions sessions. In the wider context, the majority of the VIG research focuses on adults interactions with children (Fukkink, 2008) but continued research exploring children's experiences of the VIG process is required. This research has provided further insight into the potential that VIG has in being applied in a wide range of contexts. Further investigation of how VIG can be used to support children and exploring their experiences of the preparation, analysis and sharing of outcomes is required (Gavine & Forsyth, 2011).

### **3.7 Conclusion**

This study has explored how the relationship based intervention VIG could be used to support peer reading mentors. The findings suggest that the peer reading mentors found the video experience to be an opportunity to learn, develop their communication, reflect, evaluate and collaborate. It is more common for VIG interventions to involve adults and children but this alternative approach of the guider working directly with children suggests encouraging findings. This has implications for future peer mentoring as combining this intervention with VIG has been successful, highlighting the potential for video being used in similar peer support initiatives in the future. This has been an exploratory project in an uncharted area.

Further research that actively involves younger participants in the VIG process may be considered to explore and understand the types of learning that may occur for children during such interventions.



### 3.8 References

- Allen, V. L., & Feldman, R. S. (1972). Learning through tutoring: Low-achieving children as tutors. *Journal of Experimental Education*, 42, 1 - 5.
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405.
- Bandura, A. (1962). *Social Learning Through Imitation*. Lincoln, NE: Univeristy of Nebraska Press.
- Bandura, A. (1969). *Principles of Behaviour Modification*. New York: Holt, Rinehart & Winston.
- Bandura, A. (1997). *Self-efficacy: The excercise of control*. New York: Freeman.
- Barrow, W., & Todd, L. (2011). Beyond Therapy Supporting a Culture of Relational Democracy. In H. Kennedy, M. Landor & L. Todd (Eds.), *Video Interaction Guidance A Relationship-Based Intervention to Promote Attunement, Empathy and Wellbeing*. London: Jessica Kingsley Publishers.
- Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544-559.
- Bellini, S., & Akullian, J. (2007). 'A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autistic spectrum disorders. *Exceptional Children*, 73, 264-287.
- BPS. (2009). Code of Ethics and Conduct.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Brinkmann, S., & Kvale, S. (Eds.). (2008). *Ethics in Qualitative Psychology Research*. London: Sage.

- Bruner, J. (1978). Learning how to do things with words. In J. Bruner & G. A (Eds.), *Human Growth and Development*. Oxford: Clarendon.
- Bruner, J. (1996). *The Culture of Education*. Cambridge, MA: Harvard University Press.
- Bryman, A. (2001). *Social research methods*. Oxford: Oxford University Press.
- Buggey, T., Hoomes, G., Sherberger, M. E., & Williams, S. (2011). Facilitating Social Initiations of Preschoolers With Autism Spectrum Disorders Using Video Self-Modeling. *Focus on Autism and Other Developmental Disabilities*, 26(1), 25 - 36.
- Burr, V. (2003). *Social Constructionism* (2nd ed.). London and New York: Routledge.
- Charmaz, K. (2006). *Constructing Grounded Theory*. London: Sage Publications.
- Chasle, C. S. (Ed.). (2011). *Reflecting on VIG Practice from a Relational Systemic Perspective*. London: Jessica Kingsley.
- Choi, S., & Lemberger, M. E. (2010). Influence of a Supervised Mentoring Program on the Achievement of Low-Income South Korean Students. *Mentoring & Tutoring: Partnership in Learning*, 18(3), 233-248.
- Cifuentes, L., & Yi-Chuan, J. (2000). *Concept learning through image processing*. Paper presented at the 23rd National Convention of the Association for Educational Communications and Technology.
- Colley, H. (2003). *Mentoring for social inclusion: a critical approach to nurturing mentor relationships*. London: RoutledgeFalmer.
- Converse, N., & Lignugaris/Kraft, B. (2009). Evaluation of a School-based Mentoring Program for At-Risk Middle School Youth. *Remedial and Special Education*, 30(1), 33-46.
- Creer, T. L., & Miklich, D. R. (1970). The application of self-modelling procedure to modify inappropriate behaviour. A preliminary report. *Behaviour Research and Therapy*, 8, 91-92.

- Cross, J., & Kennedy, H. (2011). How and why does VIG work? In H. Kennedy, M. Landor & L. Todd (Eds.), *Video Interaction Guidance A Relationship-Based Intervention to Promote Attunement, Empathy and Wellbeing*. London: Jessica Kingsley.
- De Shazer, S. (1985). *Keys to Solution in Brief Therapy*. New York: Norton.
- Dennison, S. (2000). A Win-Win Peer Mentoring and Tutoring Program: A Collaborative Model. *The Journal of Primary Prevention*, 20(3), 161-174.
- Denscombe, M. (2002). *Ground rules for good research: a 10 point guide for social researchers*. Buckingham: Open University Press.
- Dowrick, P. (1991). *Practical Guide to Using Video in the Behavioural Sciences*. New York, NY: Wiley.
- Dowrick, P. (1999). 'A review of self-modelling and related interventions'. *Applied and Preventative Psychology*, 8(1), 23-39.
- Dubois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30, 157 - 197.
- Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. New York, NY: Ballantine.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Elledge, C. L., Cavell, T. A., Ogle, N. T., & Newgent, R. A. (2010). School-Based Mentoring as Selective Prevention for Bullied Children: A Preliminary Test. *Journal of Primary Prevention*, 31, 171-187.
- Erickson, L. D., McDonald, S., & Elder, G. H. (2009). Informal Mentors and Education: Complementary or Compensatory Resources? *Sociology of Education*, 82, 344 - 367.
- Figueira, J. (2007). *The effects of video self-modelling on the compliance rates of high school students with developmental disabilities*, Unpublished master's thesis. Brigham Young University, Provo, UT.

- Ford, G. (1998). *Career guidance mentoring for disengaged young people. (NICEC/ICG Briefing)*. Stourbridge: Institute of Careers Guidance.
- Fukkink, R. G. (2008). Video feedback in widescreen: A meta-analysis of family programs. *Teaching and Teacher Education, 26*, 1652-1659.
- Galbraith, J., & Winterbottom, M. (2011). Peer tutoring: what's in it for the tutor? *Educational Studies, 37*(3), 321-332.
- Gavine, D., & Forsyth, P. (Eds.). (2011). *Use of VIG in Schools*. London: Jessica Kingsley Publishers.
- Groundwater-Smith, S., & Mockler, N. (2007). Ethics in practitioner research: an issue of quality. *Research Papers in Education, 22*(2), 199 - 211.
- Hall, J. C. (2003). *Mentoring and Young People A Literature Review*. Glasgow: University of Glasgow.
- Hayes, B., Richardson, S., Hindle, S., & Grayson, K. (2011). Developing teaching assistants' skills in positive behaviour management: an application of Video Interaction Guidance in a secondary school. *Educational Psychology in Practice, 27*(3), 255 - 269.
- Herrera, C., Baldwin Grossman, J., Kauh, T. J., & McMaken, J. (2011). Mentoring in Schools: An Impact Study of Big Brothers Big Sisters School-Based Mentoring. *Child Development, 82*(1), 346 - 361.
- Hitchcock, C. H., Dowrick, P. W., & Prater, M. A. (2003). 'Video self-modelling intervention in school-based settings - A review'. *Remedial and Special Education, 24*(1), 36-45.
- Jekielek, S. M., Moore, K. A., Hair, E. C., & Scarupa, H. J. (2002). *Mentoring: A promising strategy for youth development. (Child Trends Research Brief.)*. Washington, DC: Child Trends.
- Karcher, M. J. (2008). The Study of Mentoring in the Learning Environment (SMILE): A Randomized Evaluation of the Effectiveness of School-based Mentoring. *Journal of Prevention Science, 9*, 99 - 113.
- Karcher, M. J., Davidson, A. J., Rhodes, J. E., & Herrera, C. (2010). Pygmalion in the Program: The Role of Teenage Peer Mentors' Attitudes in Shaping Their Mentees' Outcomes. *Applied Developmental Science, 14*(4), 212-227.

- Kennedy, H. (2011). What is Video Interaction Guidance (VIG)? In H. Kennedy, M. Landor & L. Todd (Eds.), *Video Interaction Guidance A Relationship-Based Intervention to Promote Attunement, Empathy and Wellbeing*. London: Jessica Kingsley.
- Kennedy, H., & Sked, H. (2008). Video Interaction Guidance: a Bridge to Better Interactions for Individuals with Communication Impairments. In S. Zeedyk (Ed.), *Promoting Social Interaction for Individuals with Communicative Impairments*. London: Jessica Kingsley.
- Knowles, C., & Parsons, C. (2009). Evaluating a formalised peer mentoring programme: student voice and impact audit. *Pastoral Care in Education*, 27(3), 205-218.
- Kolb, K., & Kolb, K. (2009). The Learning Way: Meta-cognitive Aspects of Experiential Learning. *Simulation and Gaming*, 40(3), 297- 327.
- Krauss, S. E. (2005). Research Paradigms and Meaning Making: A Primer. *The Qualitative Report*, 10(4), 758-770.
- McMahon, H., & O'Neill, W. (1992). Computer mediated zones of engagement in learning. In T. M. Duffy, J. Lowyck & D. H. Jonassen (Eds.), *Designing Environments for Constructive Learning*. New York: Springer-Verlag.
- McQuillan, S., Smith, B., & Strait, G. (2011). Randomized Evaluation of a Single Semester Transitional Mentoring Program for First Year Middle School Students: A Cautionary Result for Brief, School-Based Mentoring Programs. *Journal of Community Psychology*, 39(7), 844-859.
- Mentoring and Befriending Foundation. (2010). *Peer Mentoring in Schools A review of the evidence of peer mentoring in schools including findings from the MBF Outcomes Measurement Programme*. Manchester: Mentoring & Befriending Foundation.
- Miller, D., Topping, K., & Thurston, A. (2010). Peer tutoring in reading: The effects of role and organization on two dimensions of self-esteem. *British Journal of Educational Psychology*, 80, 417-433.
- Molden, D. C., & Dweck, C. S. (2006). Finding "meaning" in psychology: A lay theories approach to self-regulation, social perception and social development. *American Psychologist*, 61, 192-203.

- National Mentoring Network and Department for Education and Skills. (2004). *Peer Mentoring Pilot Programme 2001-4 Evaluation Report*. London: National Mentoring Network and Department for Education and Skills.
- Petticrew, M., & Roberts, H. (2006). *Systematic Reviews in the Social Sciences: A Practical Guide*. Oxford: Blackwell Publishing.
- Phillip, K., & Hendry, L. B. (1996). 'Young People and mentoring: Towards a typology?'. *Journal of Adolescence*, 19(3), 189-201.
- Portwood, S. G., & Ayers, P. M. (Eds.). (2005). *Schools*. Thousand Oaks, CA: Sage.
- Rhodes, J. E., Contreras, J., & Mangelsdorf, S. (1994). Natural mentor relationships among Latina adolescent mothers: Psychological adjustment, moderating processes, and the role of early parental acceptance. *American Journal of Community Psychology*, 22, 211-228.
- Roberts, A. (2000). Mentoring Revisited: A phenomenological reading of the literature. *Mentoring & Tutoring: Partnership in Learning*, 8(2), 145 - 170.
- Robertson, D. J. (1972). Intergrade teaching: Children learn from children. In S. L. Sebesta & C. J. Wallen (Eds.), *The first R: Readings on teaching reading*. Chicago: Scientific Research Association.
- Robson, C. (2011). *Real World Research A Resource for Social Scientists and Practitioner-Researchers* (2nd ed.). Oxford: Blackwell Publishing Inc.
- Rogers, C. (1977). *On personal power*. NY: Delacorte Press.
- Rogoff, B., Paradise, R., Arauz, R. M., Correa-Chavez, M., & Angelillo, C. (2003). 'Firsthand learning through intent participation'. *Annual Review of Psychology*, 54, 175-203.
- Rosenthal, R. (1979). The 'file drawer problem' and tolerance for null results. *Psychological Bulletin*, 86, 638 - 641.
- Schunk, D. H. (1987). Peer models and children's behavioural change. *Review of Educational Research*, 57, 149 - 174.
- Silhanova, K., & Sancho, M. (Eds.). (2011). *VIG and the Supervision Process*. London: Jessica Kingsley.

- Silverman, D. (2000). *Doing qualitative research: A practice handbook*. London: Sage.
- Sipe, C. L., & Roder, A. E. (1999). *Mentoring school-age children: A classification of programs*. Philadelphia: Public/Private Ventures.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Strathie, S., Strathie, C., & Kennedy, H. (Eds.). (2011). *Video Enhanced Reflective Practice*. London: Jessica Kingsley Publishers.
- Todd, L. (2003). Consulting with children. *Special Children, September/October*, 15-19.
- Topping, K. (1987). Paired Reading: A Powerful Technique for Parent Use. *The Reading Teacher, 40*(7), 608-614.
- Topping, K. (1990). Peer Tutored Paired Reading: Outcome data from ten projects. In S. Goodland & B. Hirst (Eds.), *Explorations in Peer Tutoring*. London: Blackwell.
- Topping, K. (1996). The effectiveness of peer-tutoring in further and higher education: A topology and review of the literature. *Higher Education, 32*, 321 - 345.
- Topping, K. (2001). *Thinking Reading Writing: A Practical Guide to Paired Learning with Peers, Parents and Volunteers*. New York & London: Continuum International.
- Topping, K., & Ehly, S. (1998). *Peer Assisted Learning*. London: Erlbaum.
- Topping, K., Miller, D., Thurston, A., McGavock, K., & Conlin, N. (2011). Peer Tutoring in reading in Scotland: thinking big. *Literacy, 45*(1), 3-9.
- Trevarthen, C. (1979). Communication and cooperation in early infancy. A description of primary intersubjectivity. In M. Bullowa (Ed.), *Before Speech: The Beginning of Human Communication* (pp. 321-347). London: Cambridge University Press.
- Trevarthen, C. (2001). Infant Intersubjectivity: Research, Theory and Clinical Applications. *Journal of Child Psychology, 42*(1), 3-48.

- Tymms, P., Merrell, C., Thurston, A., Andor, J., Topping, K., & Miller, D. (2011). Improving attainment across a whole district: school reform through peer tutoring in a randomized controlled trial. *School Effectiveness and School Improvement*, 22(3), 265 - 289.
- United Nations. (1989). Convention on the Rights of the Child. Retrieved 29 March 2013 from <http://www.unicef.org/crc/>
- Vygotsky, L. S. (1978). *Mind in Society The Development of Higher Psychological Processes*. Cambridge, Massachusetts/London, England: Harvard University Press.
- Wall, K., & Higgins, S. (2006). Facilitating metacognitive talk: a research and learning tool. *International Journal of Research & Method in Education*, 29(1), 39-53.
- Wall, K., Higgins, S., & Smith, H. (2005). 'The visual helps me understand the complicated things': pupil views of teaching and learning with interactive whiteboards. *British Journal of Educational Technology*, 36(5), 2005.
- Wheeler, M., Keller, T., & Dubois, D. L. (2010). Review of three recent randomized trials of school-based mentoring. *SCRD Social Policy Report*, 24, 1-21
- Willig, C. (2008). *Introducing Qualitative Research in Psychology* (2nd ed.). England: Open University Press.
- Winter, S. (1996). Paired Reading. *Educational Psychology in Practice*, 12(3), 182-189.
- Yin, R. K. (2003). *Case study research: Design and methods*. CA: Thousand Oaks: Sage.



## Appendices

### Appendix A: Principles of attuned interactions and guidance

Being attentive	<ul style="list-style-type: none"> <li>• Looking interested with friendly posture</li> <li>• Giving time and space for other</li> <li>• Turning towards</li> <li>• Wondering about what they are doing, thinking or feeling</li> <li>• Enjoying watching the other</li> </ul>
Encouraging initiatives	<ul style="list-style-type: none"> <li>• Waiting</li> <li>• Listening actively</li> <li>• Showing emotional warmth through intonation</li> <li>• Naming positively what you see, think or feel</li> <li>• Using friendly and/or playful intonation as appropriate</li> <li>• Saying what you are doing</li> <li>• Looking for initiatives</li> </ul>
Receiving initiatives	<ul style="list-style-type: none"> <li>• Showing you have heard, noticed other's initiatives</li> <li>• Receiving with body language</li> <li>• Being friendly and/or playful as appropriate</li> <li>• Returning eye-contact, smiling, nodding in response</li> <li>• Receiving what the other is saying or doing with words or phrases</li> </ul>
Developing attuned interactions	<ul style="list-style-type: none"> <li>• Receiving and then responding</li> <li>• Checking the other is understanding you</li> <li>• Waiting attentively for your turn</li> <li>• Having fun</li> <li>• Giving and taking short turns</li> <li>• Contributing to interaction/activity equally</li> <li>• Co-operating – helping each other</li> </ul>
Guiding	<ul style="list-style-type: none"> <li>• Scaffolding</li> <li>• Extending, building on the other's response</li> <li>• Judging the amount of support required and adjusting</li> <li>• Giving information when needed</li> <li>• Providing help when needed</li> <li>• Offering choices that the other can understand</li> <li>• Making suggestions that the other can follow</li> </ul>
Deepening discussion	<ul style="list-style-type: none"> <li>• Supporting goal-setting</li> <li>• Sharing viewpoints</li> <li>• Collaborative discussion and problem-solving</li> <li>• Naming difference of opinion</li> <li>• Investigating the intentions behind words</li> <li>• Naming contradictions/conflicts</li> <li>• Reaching new shared understandings</li> <li>• Managing conflict</li> </ul>

(Kennedy, 2011)

## **Appendix B: Paired Reading Technique**

Peer tutoring training and sessions were based on the Paired Reading and Read On technique devised by Topping (2001).

### ***Book***

Mentor invites mentee to choose a book of their choice.

### ***Talk***

Mentor and mentee start by talking together about the book (words and pictures) Talk before you start, while you are reading, and at the end to make sure the mentee understands.

### ***Reading Together***

At the start and hard bits of the book the mentor matches the reading speed of the mentee and only points to words if they really need to.

### ***Reading Alone***

Mentor and mentee agree on a signal when the mentee wants to read alone (tap, knock, nudge). When the mentee gives this signal the mentor praises and stops reading together.

### ***Mistakes***

If the mentee says a word wrong, the mentor waits for them to put it right (up to 4 seconds). If they don't the mentor says word right, and mentor repeats it correctly - then carry on.

### ***Mentor Praise***

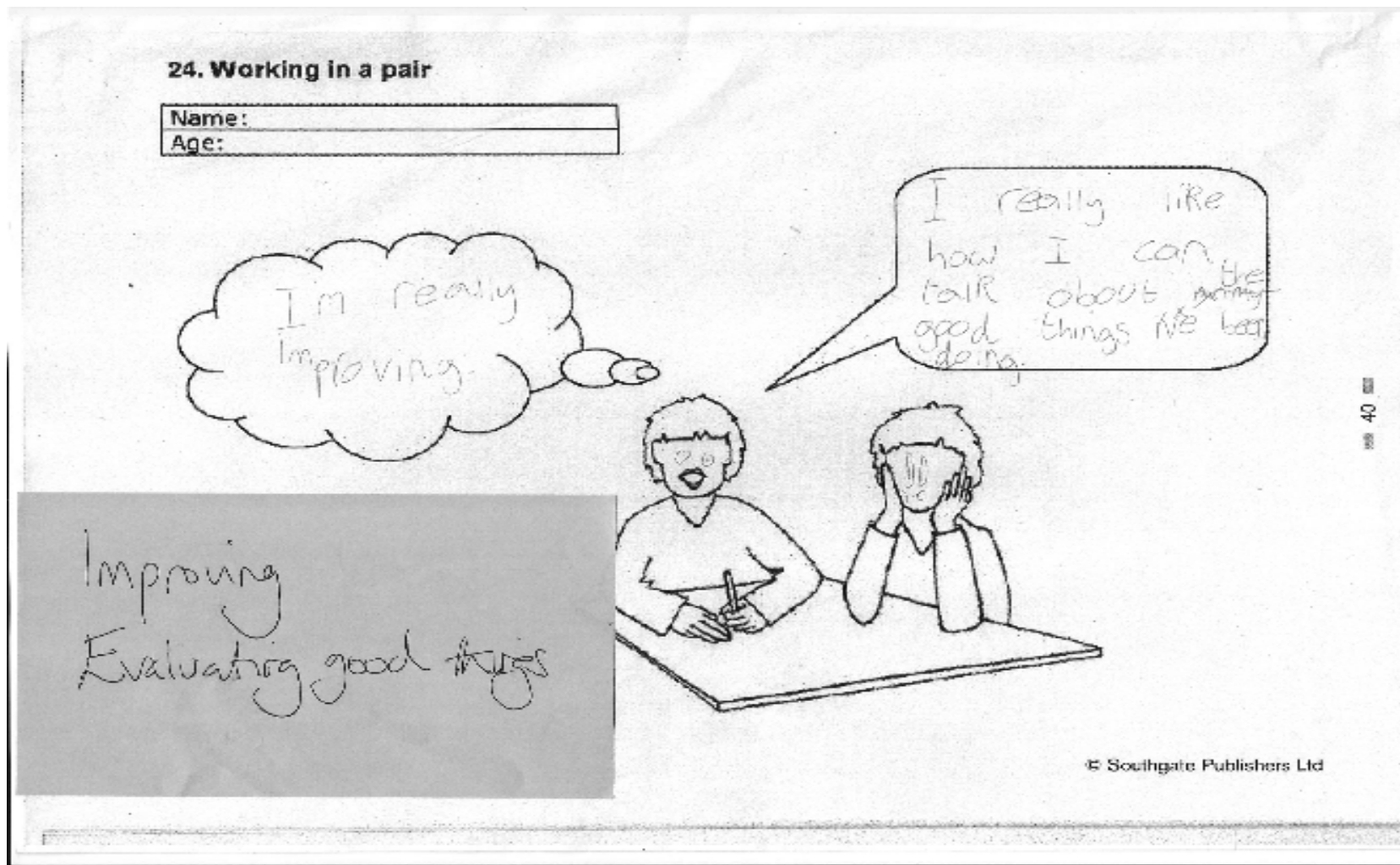
Mentor gives praise to the mentee for good reading of hard words or longer sections and praise for mentee putting their own mistake right before the mentor. Mentors give praise often but using different words to encourage their mentee.

### **Appendix C: Mentor Training Session Planning (30/40 minutes approx)**

The peer mentoring training sessions were based on the paired reading technique from Topping (2001) (Appendix B).

<b>Date</b>	<b>Detail</b>	<b>Resources</b>
17.10.12	<p><b>Introduction:</b> How can I be a good mentor? Brainstorm ideas and record on mind map.</p> <p><b>Session:</b> Introduction to paired reading technique. Model to mentors how to do paired reading technique. What did they notice about the technique? Any questions?</p>	Paper, coloured pens and books to read.
22.10.12	<p><b>Introduction:</b> Diamond ranking how to be a good mentor. Mentors discuss what is most important and put them in order.</p> <p><b>Session:</b> Review paired reading technique. Model to mentors technique again. Mentors practise the paired reading technique with each other. E.g. Inviting their mentee to choose a book, explaining they are going to read together and counting to 4 if their mentee gets stuck.</p>	Diamond ranking activity and books to read.
24.10.12	<p><b>Introduction:</b> Meet &amp; greet mentee. Mentors and mentees meet each other and say hello.</p> <p><b>Session:</b> Review paired reading technique with mentors. Each mentor take turns in being the mentor and mentee. Mentors discuss what the mentoring session will look like and ask any questions.</p>	Books to read

Appendix D: Example of pupil view visual template



## **Appendix E: Parent information sheet**



### **Parent Information Sheet**

#### **Newcastle University Research Study**

Please retain this sheet for your information.

My name is Laura MacCallum and I am training to be an educational psychologist at Newcastle University. Part of my course involves working in Northumberland and doing a research project. In this study, your child is invited to take part in a school based peer mentoring project. School based peer mentoring is a popular method that more schools are using in the UK to support learning. Peer mentoring is a learning process where children can build on and develop their social skills, critical thinking and friendship skills through interacting with each other. The process using video will be used to support the development of the mentoring relationship. The research project will begin in the autumn 2012 school term.

#### **What is the aim of the research?**

The aim of the research is to investigate if using video can support the interaction skills of mentors in a school based peer mentoring project.

#### **How will the peer mentoring project work?**

The peer mentors will have training sessions before the peer mentoring sessions begin. The peer mentoring sessions will take place approximately once a week and will involve reading activities and games. Peer mentoring is reported in research studies as a positive experience for children in schools.

#### **When will the video recording happen?**

During the project the researcher will take a short video recording of the peer mentor training sessions and peer mentoring sessions between, the mentor, and the child who they are mentoring, the mentee. The video intervention is a positive approach that highlights the things that someone is doing well.

### **Who will watch the video clips?**

The peer mentors and mentees will each be invited to look at video clips highlighting positive communication skills and to talk about them with the researcher. These sessions will also be recorded. Throughout the research period, your child will be asked for their views on the mentoring and video experience. Finally, at the end of the study, you will be given an opportunity to find out about the outcomes of the research.

The only people who will view the video clips will be myself, your child, their mentor/mentee and Professor Liz Todd, my university research tutor and qualified video supervisor.

### **What happens to the data collected?**

The video data will be stored securely on the Northumberland County Council central server on a password protected computer. Your child's participation in this study is voluntary; and you may withdraw consent for them to participate at any stage. You can also choose to have any data that involves your child in this study completely destroyed at any stage, either during or after the study, before my written report is published.

### **Is the study confidential?**

The video and transcript of the video will be kept confidential, subject to any legal requirements. No person's responses will be identifiable in the report of the results of this study.

### **Researcher contact details**

If you have any questions or queries please don't hesitate to contact me at the details below.

Laura MacCallum  
Trainee Educational Psychologist

University of Newcastle Upon Tyne & Northumberland Locality Inclusion Support Team

Phone: 01670 624169

Email: [l.e.maccallum1@ncl.ac.uk](mailto:l.e.maccallum1@ncl.ac.uk)

**Please note:** If you are unhappy with any aspect of the study or would like to ask further questions please contact Professor Liz Todd at [Liz.Todd@newcastle.ac.uk](mailto:Liz.Todd@newcastle.ac.uk)

**Appendix F: Parent consent form**



**Peer Mentoring Project Parent Consent Form**

**If you are happy for your child to participate please read and sign the consent form below and return to Laura MacCallum, Trainee Educational Psychologist by post or in person.**

I confirm that I have read the attached information sheet on the above study and have had the opportunity to consider the information.

I understand that my child's participation in the study is voluntary and that I am free to withdraw at any time without giving a reason.

I understand that sessions in the peer mentoring project will be video recorded.

I agree for my child (Insert child's full name) \_\_\_\_\_ to take part in the above project, the particulars of which, including details of the procedures, have been explained to me.

\_\_\_\_\_  
Parent/Carer Name (Please Print)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**Please note:** If you are unhappy with any aspect of the study or would like to ask further questions please contact Professor Liz Todd at [Liz.Todd@newcastle.ac.uk](mailto:Liz.Todd@newcastle.ac.uk) Further contact details below.

**Address & Contact Details for Professor Liz Todd**

School of Education Communication and Language Sciences  
Newcastle University, NE1 7RU, United Kingdom

**Education & Communication** Telephone: +44 (0)191 222 3471

**Language Sciences** Telephone: +44 (0)191 222 7385

## **Appendix G: Child information sheet**



Dear

My name is Laura MacCallum and I am learning how to be an educational psychologist (EP). An EP is someone who gets to go to different schools and talk to children, parents and teachers. I also have to do a project. Do you sometimes have to do projects at school? I have chosen to do mine on video and peer mentoring and I am wondering if you would like to take part. The project will take place at school one or two afternoons per week.

### **What is peer mentoring?**

Peer mentoring is where you meet with a partner, older or younger than you and you get to do some activities together. The aim of my project is to find out if using video can help you and your partner work together on reading activities and games. If you are in Year 5 you will have some training sessions so you know what to with your partner. If you are in Year 3 you will meet with you partner and play games with them first then bring a reading book and do some reading and games with them.



### **Will I be filmed?**

Yes, if you want to take part in the project then I'll take some 10 minute video clips of you working with your partner and talking about the video clips. I'll then look at the video clip with my teacher, Liz Todd, and then I'll show them to you to see what you think of them - that is called a feedback session.

### **Do I have to take part?**

No, only if you want to. Your parent/carer has said it is ok for you to take part but if you start the project and then decide you don't want to continue that is fine too. If you have any more questions you can ask me now or at any time if you decide to do the project.

Best Wishes

*Laura MacCallum*

*Trainee Educational Psychologist*

*University of Newcastle Upon Tyne*



**Appendix H: Child consent form**



**Child Consent Form**

**Newcastle University Research Study**

- I have read the information about the project and I understand it. I have asked any questions I want to and I know I can ask more if I want to.
  
- I understand I don't have to take part in the project but I want to. I know that I can pull out of the project at any time and I don't have to say why.
  
- I understand that I will be video recorded during the project.

I confirm that I would like to take part in the peer mentoring research project.

Please sign below

\_\_\_\_\_  
Child's Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Child's Signature

## Appendix I: Sample Transcript Extract

### Extract taken from Shared Review 2 with Mentor 1

Mentor 1: I didn't like the way I went *nice try* cause it sounds like you're saying like someone's trying to attack you and something and you're going [imitates teasing/mocking voice/hissing and scrunches up face] nice try

LM: [Laughs] I see what you mean

Mentor 1: It sounds a bit weird

LM: Did you think it sounded weird

Mentor 1: Yeah cause it was like [repeats imitating teasing/mocking/hissing voice and scrunching up face] nice try

LM: [Laughs] But do you think [Mentee 1] thought that you were thinking that

Mentor 1: Shakes head

LM: What did you what do you think he thought when you said it

Mentor: He, cause I had this look on my face that was saying [imitates approving look and nods] nice try and he and he thought I was being put the thought in his head [imitates wide eyed expression and says in high pitched voice] I'm a very good reader

LM: Yeah I think your right yeah I think it was nice that you said that there is quite a lot of things going on it that clip cause it's a little bit longer was there anything else that you liked about what you were doing there

Mentor 1: The way I was asking him questions about the book and [pauses] the cover

LM: Yeah so you were asking him about the cover and you

Mentor 1: I help, I help him with the name cause when he tried to say ian he went [slows down speech] L...a...n. [Imitates taking turns] ian ian em and then when he said Adro Adro Adreean Adreean I went Adrian

LM: Yeah so you helped him when he kind of said the word slightly in the wrong way yeah

Mentor 1: [nods]

## **Appendix J: Transcript Extract Initial Coding**

### **Extract taken from Shared Review 2 with Mentor 1**

Mentor 1: I didn't like the way I went *nice try* cause it sounds like you're saying like someone's trying to attack you and something and you're going [imitates teasing/mocking voice/hissing and scrunches up face] nice try **EVALUATING SELF**

LM: [Laughs] I see what you mean

Mentor 1: It sounds a bit weird **EVALUATING SELF/AWARENESS OF TONE**

LM: Did you think it sounded weird

Mentor 1: Yeah cause it was like [repeats imitating teasing/mocking/hissing voice and scrunching up face] nice try **EVALUATING SELF/AWARENESS OF TONE**

LM: [Laughs] But do you think [Mentee 1] thought that you were thinking that

Mentor 1: Shakes head

LM: What did you what do you think he thought when you said it

Mentor: He, cause I had this look on my face that was saying [imitates approving look and nods] nice try and he and he thought I was being put the thought in his head [imitates wide eyed expression and says in high pitched voice] I'm a very good reader **SUPPORT TO READ/GIVING PRAISE/EVALUATING SELF**

LM: Yeah I think your right yeah I think it was nice that you said that there is quite a lot of things going on it that clip cause it's a little bit longer was there anything else that you liked about what you were doing there

Mentor 1: The way I was asking him questions about the book and [pauses] the cover **SUPPORT TO READ**

LM: Yeah so you were asking him about the cover and you

Mentor 1: I help, I help him with the name cause when he tried to say ian he went [slows down speech] L...a...n. [Imitates taking turns] ian ian em and then when he said Adro Adro Adreean Adreean I went Adrian **HELPING ROLE/SUPPORT TO READ**

LM: Yeah so you helped him when he kind of said the word slightly in the wrong way yeah

Mentor 1: [nods]

## Appendix K: Transcript Extract Initial Coding

Below are examples of codes being grouped together to identify initial patterns across the data set.

Detail	Code	Phrase
Line 4,5 P.1	<b>To look back on actions</b> <b>Reflecting</b> <b>Improving</b> <b>Exploring good practice of self</b>	Em, to show, to show me the week after how and, watch the video and talk about what I, I can improve on and what I did good
Line 28 P.1	<b>Acting out perceived negative body language</b>	I wasn't, I wasn't doing this [Mentor 1 turns away from LM and folds arms, slouches head on arm of chair]
Line 34 P.2	<b>Describing video</b> <b>Observation of video</b>	That was kind of Mentee 1 explaining the game to me there
Line 39 P.2	<b>Describing video</b> <b>Observation of video</b>	He realised, he realised he must have played it before
Line 50 P.2	<b>Describing video</b> <b>Observation of video</b>	It looks like I've got my tongue out at the end [moves forward and points to laptop screen]
Line 56 P.2	<b>Listen</b>	I listen to him
Line 58,59 P.3	<b>Acting out perception of negative body language</b>	And I don't go [slouches and lies head on arm and says 'yeah, sure, oh whatever'] I don't go like that
Line 61 P.3	<b>Acts out perceived good body language</b> <b>Awareness of eye contact</b> <b>Exploring good practice of self</b> <b>Reflecting on skills</b>	I actually look at him and say [raises head up and nods approvingly] like and stuff
Line 66 P.3	<b>Praise</b>	And I used praise likes it said on the letter
Line 72, 73,74 P.3	<b>Acts out perceived negative body language</b> <b>Listening</b>	Cause I was listening and I wasn't going, if he, if he was over here I wasn't going like that [Turns head away in opposite direction, slouches and leans head on arm of chair sighs]
Line 81,82,83 P.3	<b>Acts out perceived negative body language</b> <b>Reflecting</b>	I wasn't like, I wasn't like this when he was talking, yap yap yap yap yap yap [multiple yaps] I wasn't like that when he was trying to talk
Line 85 P.3	<b>Listening</b>	I was actually listening to him
Line 87 P.4	<b>Turn taking</b> <b>Leaving space</b>	Yeah, but I had waited for him to finish
Line 93 P.4	<b>Description of video</b> <b>Observation of video</b>	It looks like I've got my tongue out like that at the end [shows an impression of sticking tongue out]
Line 100 P.4	<b>Description of video</b> <b>Observation of video</b>	I must have been blinking at the time you paused it

## Appendix L: Initial Themes

Below are the codes grouped together to enable patterns to be explored. I identified these patterns as initial themes.

### Initial sub -theme: Reflection on self

<b>Shared Review</b>	<b>Code</b>	<b>Initial Sub Theme</b>	<b>Extract</b>
Mentor 1	3	Reflecting on practice of self	I was giving him praise and look I was giving him time to read em [coughs] eh [pauses] and I was making eye contact with him when he was struggling, I looked at him [acts out moving head] and then looked at the word and then helped him with the word
Mentor 1	7	Reflecting on viewing video	It's weird cause it's looks like I'm watching it live and it looks like I've got like a twin brother and he's reading to a year 3
Mentor 2	3	Reflecting on practice of self	I notice that when she forgot what it was called I went back to the I went back to the title to show her

### Initial sub-theme: Support to read

<b>Shared Review</b>	<b>Code</b>	<b>Initial Sub Theme</b>	<b>Extract</b>
Mentor 1	16	Support to read	I help I help him with the name cause when he tried to say ian, he went [slows down speech] l...a...n [Imitates taking turns] Ian Ian em and then when he said Adro Adro Adreean Adreean I went Adrian
Mentor 2	16	Support to read	The way I said read round the sentence
Mentor 2	16	Support to read	Like how I gave her clues

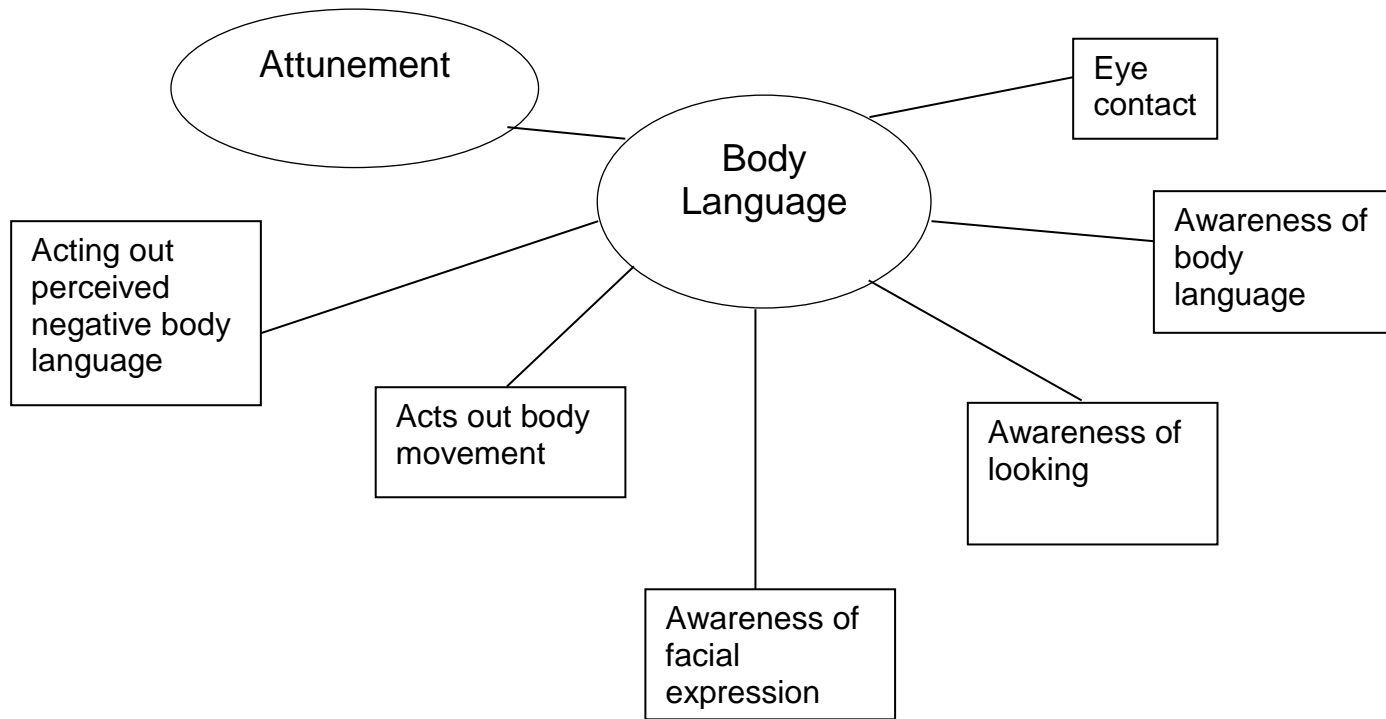
## **Appendix M: Identification of Initial Themes**

The full set of sub-themes identified from looking across the data set and grouping the codes are detailed below in the table.

Attunement	Evaluating viewing video	Role of mentor	Reflecting
Body language	Evaluating self	Giving clues	Exploring practice of self
Awareness of facial expression	Improving	Support to read	Looking back
Awareness of looking	Looking back	Giving praise	Sharing practice
Awareness of tone	Learning from video	Helping role	Having fun
Eye contact	Giving space	Listening	Summarising clips
Exploring practice of other		Support understanding	Describing clips

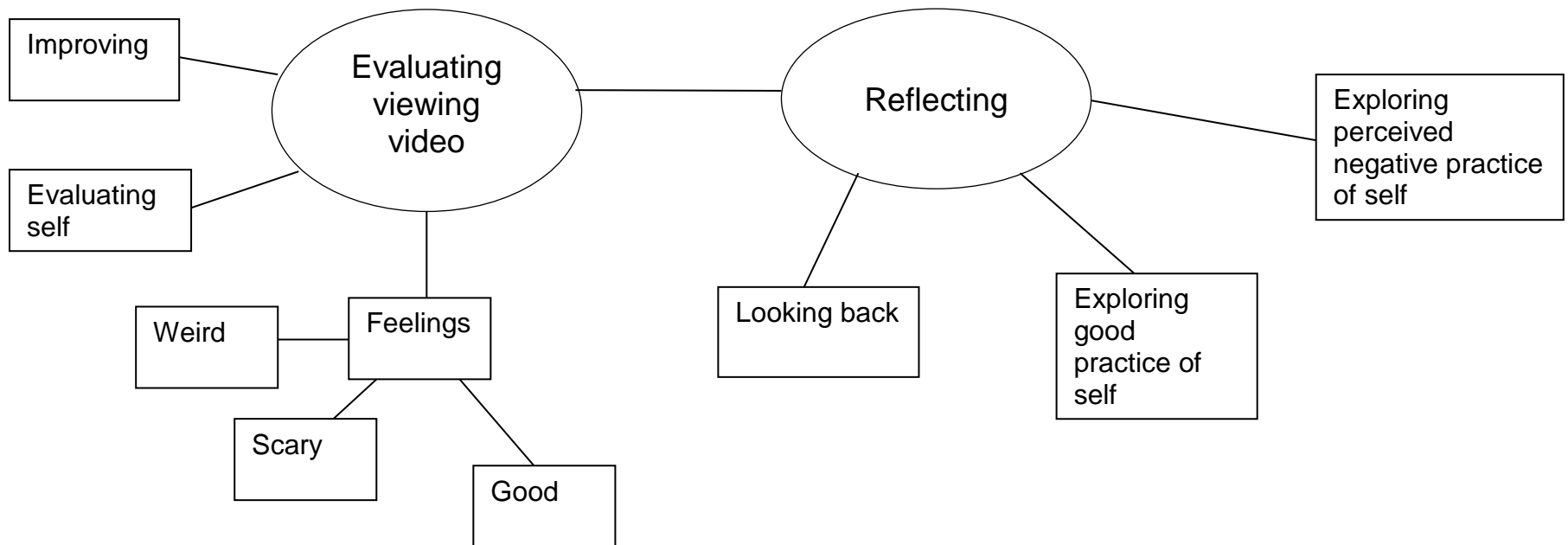
**Appendix N: Thematic map – Body Language & Attunement**

A thematic map depicting a visual representation of the initial themes enabling the data to be organised into themes and sub-themes.



**Appendix O: Thematic map – Evaluating & Reflecting**

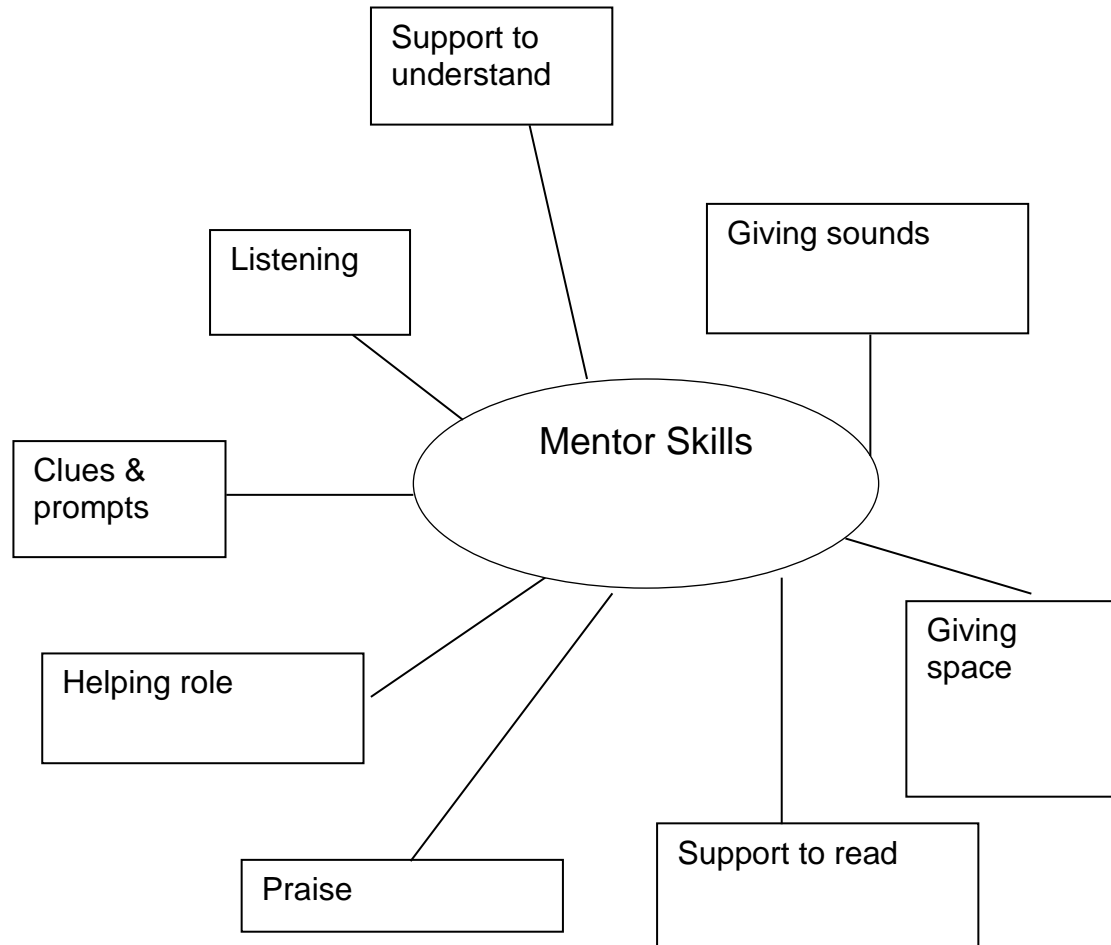
A thematic map depicting a visual representation of the initial themes enabling the data to be organised into themes and sub-themes.





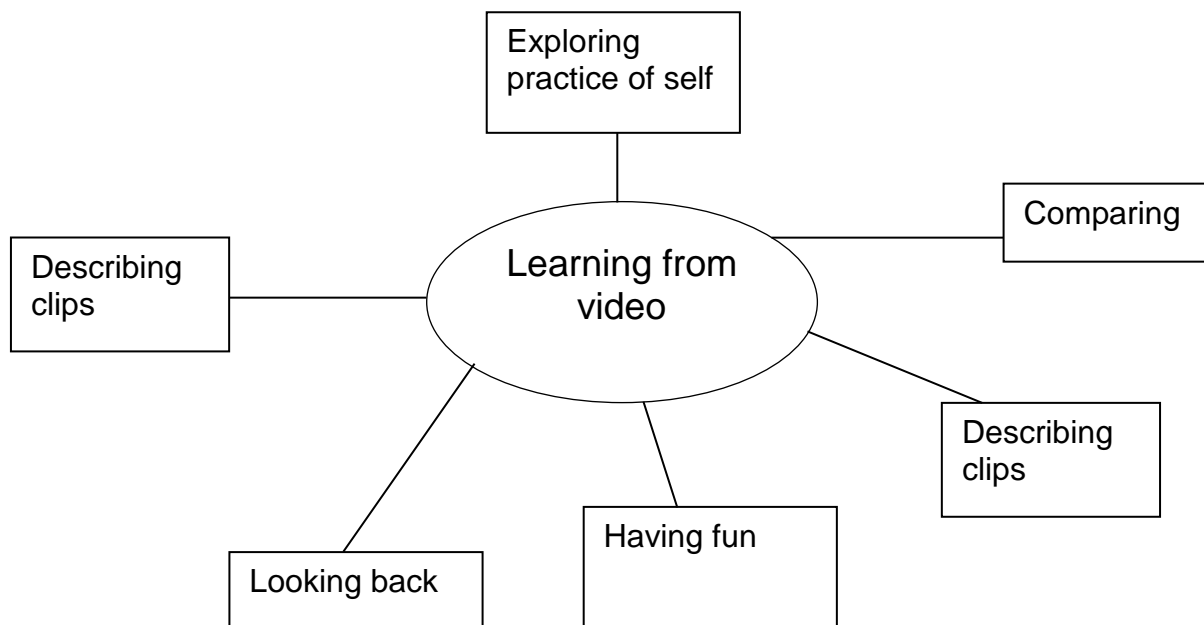
**Appendix P: Thematic map - Mentor Skills**

A thematic map depicting a visual representation of the initial themes enabling the data to be organised into themes and sub-themes.



## Appendix Q: Thematic Map – Video as a Learning Tool

A thematic map depicting a visual representation of the initial themes enabling the data to be organised into themes and sub-themes.



## Appendix R: Thematic Map – Collaboration

A thematic map depicting a visual representation of the initial themes enabling the data to be organised into themes and sub-themes.

