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Author(s): Mary Briggs and Christian Van Nieuwerburgh

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The development of peer coaching skills in primary school children in years 5 and 6.

Mary Briggs, Institute of Education, University of Warwick

Christian Van Nieuwerburgh, Coaching Psychology Unit, School of Psychology, University of East London

Abstract:

Can peer coaching skills be developed through 'non academic' tasks? The enquiry also aims to answer the following question: Can children give and receive feedback? The research methods reported are ethnographic combined with pre- and post- responses to the drawing task. The categorisation of the children's drawings and their use of feedback were analysed and for the majority of children the quality of the feedback did not affect their choice of accepting the feedback or ignoring the suggestions made, which appeared counter to our initial hypothesis.

Keywords: Coaching; education; primary children;

1. Introduction

The focus of this paper is to report on research work carried out in 6 classes within 5 primary schools in the county of Warwickshire in the UK in the academic year 2009-10. The researchers worked with primary school aged children in years 5 and 6 (9-11 year olds). Coaching as a method of intervention has been used at secondary school levels to target achievements in examinations in the UK often around grade boundaries (Alison and Harbour, 2009) and in the USA (Morse, 2009). In Australia, "hardiness and hope" were the focus of a recent coaching study on high school students (Green, Grant and Rynsaardt, 2007). Much of the coaching discussed in the current literature often refers to adult-child or older student-younger student coaching rather than child-child peer coaching. The choice of developing peer coaching skills was as a direct result of this approach linking to the theoretical perspectives in solution-focused, person-centred and cognitive behavioural coaching.

The four main skills of coaching are generally agreed to be: listening, asking open questions, clarifying points and encouraging reflection (Passmore 2010). A broad range of writers on the subject consider "giving and receiving feedback" to be one of the key capabilities, competencies of skills related to encouraging reflection (Hawkins and Smith, 2006; Whitmore 2002; De Haan and Burger 2005; European Mentoring and Coaching Council 2005; Cheliotis and Reilly 2010). It is the skills of giving and receiving feedback that the researchers focus on in this paper as the initial stages of developing peer coaching skills with primary school children.

2. Workshop approach

The researchers offered a workshop approach to developing peer coaching skills within school children's ordinary classroom context. The specific focus was on the skills of giving and receiving feedback and this was delivered through a workshop which incorporated a number of different

activities. The selection of these activities deliberately aimed at building coaching skills and did not seek to address academic areas of the curriculum. The rationale for this decision came from a number of key sources: firstly the experience of the researchers as coaches and teachers; secondly the lack of knowledge of the academic abilities in each class; and thirdly the influence of Wegerif, et al's (2004) work on the development of talk skills across the curriculum. In their project work 'Thinking together' they promote an approach to developing the skills of talk and thinking away from academic areas first before attempting to apply these to academic areas. We did not want children to become anxious about their academic skills and therefore not participate in the activities to develop their coaching skills. We decide upon a structure for the workshop based on these ideas and the previous work of Vlach and Carver (2008).

Utilising procedures already in place from the Primary National Strategy (PNS) of different forms of 'talk partners', the activities introduced to children focused on how to give and receive feedback after working a range of tasks. Initially these tasks were not based around 'academic' subjects and skills but around activities involving drawing, simple game play and a physical task. The rationale for this was to build up the peer coaching skills without directly addressing academic achievement in order to avoid raising levels of anxiety and potentially demotivating the children.

The key long term aim of this research is to examine whether the development of peer coaching skills in 'non academic' tasks have an impact on 'academic' attitudes and achievement. This is contrast to existing research around coaching which mostly focuses directly on the impact of subject achievement. The research also aims to answer the following question: Is it possible to develop peer-coaching skills in young children when the contextual constraints mean ignoring many of the key principles of what is seen as 'good coaching practice'? These principles include: "self-responsibility" and "confidentiality" (Bresser and Wilson, 2010) which we were not able to deliver through our workshops.

The coaching principles used to structure of the tasks given to the children and the selection of skills as a focus combines a number of different perspectives on coaching (Cox, Bachikirova and Clutterbuck, 2010; Garvey, Stokes and Megginson, 2009; Grant, 2003; Joyce and Flowers, 1996; Palmer and Whybrow, 2007; Passmore, 2010; Peltier, 2010). The research methods reported are predominantly ethnographic combined with pre- and post- responses to the drawing task given, linked to the work of Vlach and Carver (2008) though their focus was on observational coaching rather than peer coaching feedback skills. Our methodological approach includes class, teacher and researcher observations, and recording children's responses both as a result of the tasks and during their peer coaching feedback sessions.

Typical format of the workshop

1. Initially the researchers identified pre-existing attitudes to skills being developed--e.g. children's understanding of feedback; what it is like to give and receive feedback; and what use, if any, they make of the feedback already given to them. This was important in

setting a base for shifts in behaviour that would be identified larger as the project develops. Four activities were set as follows:

2. In the first activity, the children were given a stimulus, pictures and models of giraffes, and asked to draw a giraffe by themselves
3. Next, the children were asked to swop with their partner and give the other person feedback about their drawing, first finding three things they liked about the giraffe, and then one thing that they might change if asked to draw the giraffe again. This step links to the 'three stars and a wish' approach to self-assessment which was already in use in a number of the classes. Once they had written their feedback, they were asked to swop their drawings back with their partner and allowed time to review the feedback given before moving on to the next activity.
4. The second activity involved a competitive activity of playing 7 games of noughts and crosses or tick tack toe and then, after a moment's reflection, the pairs gave each other feedback back orally. Here too they were told to start with the positives and then select one area for improvement.
5. The third activity was a physical one where the children had to work collaboratively to complete the task of successfully throwing and catching a ball ten times without either person dropping it. At the end of this activity, the children were asked to reflect and then give feedback orally.
6. The final activity involved returning to their giraffe drawings and considering the feedback they had been given before drawing the giraffe for a second time. On this occasion there was no feedback given.
7. The workshop ended with a review of the activities. We asked the children what they had learnt. The children were invited to share with the researchers any questions or comments related to the day's work.

All the activities were completed in pairs with some sets of three children. We relied on the class teachers to assist with any groupings as necessary as they had day-to-day knowledge of the children.

3. Data Collection

The analytical framework of the qualitative data of responses from children, observations by teachers and researchers is through looking for patterns in behaviour during tasks and especially focusing on the language used in the feedback part of the tasks between pairs of children. Over a longer period we hope to see shifts in attitudes to learning and the transfer of peer coaching skills into academic situations in the classroom. The main focus of this paper is the analysis of the drawing task and the children's responses to the feedback given by their partner rather than all of the activities within the workshop. We collected each of the pairs of drawings the children and completed in plastic wallets to keep the same child's drawings together and these were copied and returned to the classes.

4. Ethical considerations

The researchers gained permissions for the workshop from the schools and teachers involved. As this was considered part of the normal school day the class teachers were present during all sessions. All children had the right to withdraw from the activity if they wished at any time. All drawings and responses were anonymous and no school and/or individual can be identified from the information presented here.

Initial hypothesis

We had hypothesised that children would find the giving of feedback a challenging task and that they would be more likely to adopt constructive feedback if it was presented in a focused way with a specific suggestion about how to make the improvement. This was based on a commonly held belief about the need for feedback to be specific. In an educational context, it has been suggested that “we need to give *specific* feedback focusing on success and improvement, rather than correction” (Clarke 2003). In the context of coaching, it has been argued that “when it [constructive feedback] is timely, specific, and builds on others’ strengths, it is very effective” (Cheliotis and Reilly, 2010). Furthermore, Hawkins and Smith (2006) have suggested that feedback should be clear and specific, and warned that “being vague will increase the anxiety in the receiver and will not be understood.

Analysis and results

In order to analyse the drawings of the giraffes before and after feedback, we decided to adopt the following categories of response. We did not attempt to make judgements about the quality of the drawings; rather we were interested in the differences between the first and second drawing based on the peer feedback. Our initial objective categories were as follows:

Table 1. Categories for drawings

Category	Description
A	No feedback given
B	Feedback given but not acted upon
C	Feedback given but it was unclear if this feedback had been taken into account
D	Feedback given for a specific aspect only and acted upon for only this aspect
E	Feedback given and acted upon

Figure 1. Example of B feedback given but not acted upon

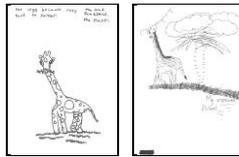


Figure 2. Example of C feedback given but it was unclear if this feedback had been taken into account



Figure 3. Example of D feedback given for a specific aspect only and acted upon for only this aspect



Figure 4. Example of E feedback given and acted upon

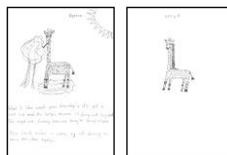


Table 2. Numbers in each category and percentages

Category	Description	Number of pairs of drawings in this category	Percentages of the total population
A	No feedback given	7	5 %
B	Feedback given but not acted upon	29	21.2%
C	Feedback given but it was unclear if this feedback had been taken into account	14	10 %

D	Feedback given for a specific aspect only and acted upon	6	4.8%
E	Feedback given and acted upon	81	59%
	Total	137	100%

Table 3. Categories per school

School	1		School	2		School	3a		School	3b		School	4		School	5
A	5		A	0		A	0		A	0		A	2		A	0
B	5		B	2		B	4		B	5		B	6		B	7
C	2		C	2		C	3		C	3		C	1		C	3
D	3		D	0		D	1		D	2		D	0		D	0
E	13		E	17		E	20		E	20		E	10		E	19
total	28		Total	21		Total	28		Total	30		Total	19		Total	29
Pos	Neg		Pos	Neg		Pos	Neg		Pos	Neg		Pos	Neg		Pos	Neg
16	5		17	2		21	4		22	5		10	6		19	7
57%	17%		80%	9%		75%	14%		73%	16%		52%	31%		65%	21%

NB: School 3 had two separate classes that took part whereas the other schools just had one class participating in the workshop of activities.

For the purposes of the initial analysis we could not categorise the lack of feedback as being positive or negative, nor could we say where the evidence was not clear, whether this was positive or negative. Feedback given and not acted upon was categorised as a negative response to the feedback. Those examples where feedback was given and it was acted upon regardless of whether the feedback was general or focused on a specific aspect of drawing a giraffe, we categorised as positive responses to the feedback.

We then returned to the drawings in the categories B and E. We considered whether the feedback given was specific, and whether it suggested how the child might make improvements to their drawing. Here we were particularly interested to discover if the feedback had to be specific and tell the child how they might improve in order for them to act upon it.

Table 3. The relationship between the specific feedback and details of how the improvement could be achieved

School	1	School	2	School	3a
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		Sp/how	Sp/not how		Sp/how	Sp/not how		Sp/how	Sp/not how		
B	5	4	1	B	2	2	0	B	4	2	2
E	1	9	4	E	17	17	0	E	20	10	10
	3										

School	3b			School	4			School	5		
	Sp/how	Sp/not how		Sp/how	Sp/not how		Sp/how	Sp/not how		Sp/how	Sp/not how
B	5	4	1	B	7	5	2	B	6	4	2
E	20	13	7	E	19	1	8	E	10	7	3
					1						

Figure 5. Example of specific feedback without details of how to improve drawing

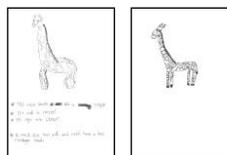
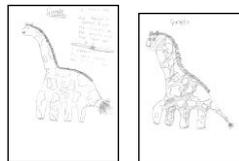


Figure 6. Example of specific feedback with details of how to improve drawing



5. Discussion

5.1. Potential reasons for the lack of feedback

For Schools 1 and 4 this was an issue with a small number of children apparently not receiving feedback. This can be explained in two different ways. For School 1 this was the first workshop conducted and therefore the process of refining the workshop approach was at its early stages with the potential of misinterpretation of the instructions and the procedures carried out. Also,

the researchers were not as organised about the collection of the drawings from the participants. There were also a high number of children with special educational needs who may have been concerned about writing their feedback for their partners. In the case of School 4 there were a number of slightly different issues occurring with a younger class of children, including a small number of children who it was difficult to engage in the activities yet who did not ask to withdraw from the workshop. This class also had a high number of children with special educational needs who were challenged by being asked to write down the feedback for their partner.

5.2. Dealing with the feedback

We had made an early assumption that if the feedback was not specific then the children might be more likely to choose to ignore it as unhelpful. The specific nature of the feedback does not appear to be the determining factor in whether or not the feedback will be taken into account in another attempt. Even if the quality of the feedback from an adult perspective appeared to be poor, some children chose to address the feedback in their second attempt at drawing the giraffe. There seems to have been a conscious decision to attempt to respond to the feedback. In the division between the specific feedback which suggested a clear way of achieving the improvement, and feedback which did not suggest a clear way of achieving the improvement, children who received the latter had to take the next step themselves.

Where feedback was given and yet not apparently responded to there are a number of possible interpretations. Firstly, children may have looked at the feedback and thought that they were not able to do what was asked of them. This raises the issue of capability to deal with feedback. Secondly, children may not have agreed with the feedback they were given and therefore ignored it. We are not in a position to categorise the drawings in which feedback appeared to be ignored or it was not clear whether it had been taken into account as we did not have the opportunity to interview individuals. Nor are we in a position to be able to shed light on any gender differences as some of the partners were same gender and some mixed. In addition, in a couple of the workshops some children worked in groups of three where there were odd numbers and pairs were not possible. Pairing and grouping in threes was done on the advice of the teacher about relationships and behaviour and the numbers in the class.

5.3. Alternative perspective

5.3.1 Bounded rationality

Herbert Simon (1957), writing about organisations, questioned the assumptions behind the rational decision making process in which individuals clearly define the problem, generate and evaluate all alternative solutions. From this process, he argued, they then select the best approach before implementing it. He pointed out that people decide rationally only in a limited number of situations. They make choices according to their interpretation of the situation which is often a simplification of a complex one. Rationality is 'bounded'; individuals seldom have

access to all relevant information and must rely on a 'strategy of satisfying', that is to make the best decision on limited information.

Although Simon's work is about organisations and managers' roles within them, his work has resonance here with the children making sense of the feedback they received and making decisions about the course of action. Do they act upon the feedback given or not? The information they receive may be incomplete, imperfect or even misleading. In the case of the drawings, the feedback may be unclear, not specific and not tell the recipient how they might improve things. Simon also suggested that many problems are complex. Although drawing a giraffe may not seem like a complex problem, the relationships within the classroom and the social construction of the rules in the class may certainly seem complex for the children. He raises two further points which are relevant here. Firstly, he suggests that human information processing is limited. For children, concentrating on the different elements of their drawing to ensure it had the key features of a giraffe is a complex task. Secondly, Simon discusses the limited time spent on decision making. In this study, the time restriction of the overall workshop might have been limiting as we were not able to give children unlimited time either to draw on either attempt or to make decisions although we did build in reflection time at various points whilst still maintaining some pace to the workshop.

6. Conclusions

For the majority of children the quality of the feedback did not affect their choice of accepting the feedback or ignoring the suggestions made, which appeared counter to our initial hypothesis. It may be interesting to undertake further research into this area, considering whether "attitudes towards receiving feedback" may have more of a correlation to the acceptance of feedback rather than the quality of the feedback itself. At this stage this is the first part of our work developing peer coaching skills with primary children. We are planning a series of workshops to offer to schools covering all the different skills of coaching. This will allow us to explore what motivates children to take on board and work with the skills and feedback they obtain. In turn this will enable us to offer teachers insights into the necessary conditions to encourage children to develop their peer coaching skills and transfer these skills to academic studies.

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