Understanding Learners and Learning - Claire Formby MA Unit, 2007

As my understanding of the way children learn continually develops, how does this influence my everyday teaching?

Why do I teach?

At the end of an exhausting or difficult day this is a question I sometimes ask myself. I know that in my heart I still believe after nine years of teaching that I want to tap into the capacity of pupils to become excited by learning, to help them raise their eyes beyond the immediate and to learn more about themselves (Day, C. 2004, p.57).

Yet, how can I do that every day? Often I feel pressured by external factors. In my role as a Year 2 teacher I am ever conscious of the formal assessments that await the children at the end of the year. To that end my teaching becomes somewhat "results driven" and I feel guilty that I am not living my gentler values with the children. Equally I am aware of the HMI requirement to:

...compare, categorize and group young people by ability in order to provide appropriate and challenging teaching for all...(Hart, Dixon, Drummond & McIntyre, 2004, p.8)

Yet I am mindful of the ability labelling of children, sharing the view of Hart, Dixon, Drummond and McIntyre that *.....ability labelling damages young people's learning and prevents teachers from fulfilling their professional commitment to making a positive difference to young people's lives.* (p.16). During a recent OFSTED inspection I was shocked to be asked by the inspector, in front of the children, to point out my top and bottom ability numeracy groups, with no regard for their feelings at all. As I believe that each child's self image and self belief is crucial to their development as a learner, and that as Clarke says all children can learn... (2001, p.119), I tell them often to concentrate on their own learning journey rather than on comparing themselves with others in the class.

Referring back once more to the reasons why I find it difficult at times to live up to my aims as a teacher, I can also feel pressured by internal factors that inhibit my relationships with the children. I believe that to help each child reach their potential they need to know that I care about them, that I believe in them and that I connect with them. There is of course a downside to this and I wholeheartedly agree with Nias when he writes that:

....... It is very tiring, physically and emotionally, to attempt to sustain individual and sometimes intense relationships with many people throughout a working day. (1999, p.72).

At times I do feel exhausted, both at school and at home and on one occasion about eighteen months ago, with a particularly challenging class of children, I became over-stressed and depressed about my perceived abilities as a teacher. Fortunately, and with the support of my headteacher, this led to a realization that I needed to rethink my understanding and use of *...tried* and tested teaching routines (Day, 2004, p.107) and become a learner again myself. I realized that I had not been reflecting on my teaching or on my understanding of theories of learning and that my values did not always quide my actions (Day, 2004, p.107). I was lucky at that time to join an MA group at which I listened to other teachers critically reflecting, then developing their ideas about teaching and learning in a mutually supportive manner, allowing me the space for the emotional vulnerability which I was experiencing. As a result, becoming a teacher-inquirer and carrying out action research has helped me to begin to enjoy a period of professional renewal, (Day), specifically in terms of learning about Goleman and associated theories about the teaching of emotional literacy and also of the SEAL programme, with its subsequent impact on children's learning, and the development of the use of formative assessment, (Clarke, 2001) in the classroom. On a wider level my desire to embrace and reflect on as many teaching styles and potentially valuable theories of learning for all children in my class has been rekindled. I now ask myself how I could have continued in teaching without rediscovering being a learner myself.

Myself As A Learner Sharing With Colleagues

During a recent INSET day, I led a session about factors that can contribute to successful learning. This was based on what I have learned from the SEAL (Social & Emotional Aspects of Learning) resources "Going for Goals" material, which I was helping staff to prepare to teach this term. I quote from my presentation notes:

This theme is all about motivation and self awareness as a learner. It provides opportunities for children to reflect on themselves as individuals, particularly on their strengths as learners and to think about how they learn

most effectively. It encourages them to take responsibility for their own goal directed learning and especially at KS2 to make wise choices about behaviours associated with learning. I think that this theme more than any of the other 6 can help children to meet their curricular targets by focusing them very specifically on strategies to help them become better learners. (03/01/07, SEAL presentation notes, p.3) I gave examples of why I believed this, specifically from work done with my class last year when we co-created a "How to be a better learner" poster (see Appendix 1) plus clear evidence of an improved attitude to learning associated with this, noted by my headteacher in a literacy lesson observation and quoted by me in my MA Research Methods Assignment (Sept.06) (see Appendix 2)

In the course of the INSET day I asked the three groups of staff to list conditions they believed aided successful learning. Their ideas and my reflections are in Appendix 1a.

Later in that same INSET training session, I asked staff to share specific examples of a time when they had or had not learned successfully. Perhaps as expected, motivation played a large role in the successful learning scenarios - for example one teacher was very motivated to pay off her student loan in order to afford the house of her dreams! I was struck more however, by the written comments on a post it note from one colleague about her inability to learn anything connected with music. This stemmed from an incident in her teens when she was told in front of the whole class to mime when her group was singing. She is near retirement now but has never forgotten this incident - she has even avoided teaching singing as much as possible throughout her career! Although she laughed when recounting the incident, I think it is important to remember that:

Loss of dignity combined with an internalized sense of inadequacy creates psychological conditions that impair the capacity to learn. (Hart, Dixon, Drummond & McIntyre, 2004, p.25)

Finally I asked staff to carry out an activity in which they considered how they used intrinsic, external and internal motivation in the teaching and learning of different activities and skills. This was a lively session, even though it was straight after lunch (see Video clip in Appendix 3). During the activity (see Activity 3, Types of Motivation - Appendix 4) we all learned that of course different types of motivation motivate children to carry out and complete different tasks. For example one child may be intrinsically motivated by a maths problem because he or she loves numeracy, whilst another may be internally motivated to complete it because he/she has a hard working attitude, but without particular enjoyment. Following this, I showed two Powerpoint slides about motivation (Appendix 5), which led to a useful discussion about which type of motivation is most valued by teachers. I was able to share my learning and concern at the over- use of external motivation - stickers etc. to encourage children's learning based on making sure *....every child is task-focused, rather than ego-focused.* (Clarke, 2001, p.121).

This led to a further discussion about how to help children to see that they need to break a long task or a long term aim or goal into smaller, achievable chunks. As one colleague put it during this discussion:

....the children can't always see the big picture. It's like the mountain is shrouded in mist and all they can see are little steps (INSET day 03/01/07). That same colleague told me afterwards how useful the whole session had been to her understanding of SEAL and this term's resources.

Vygotsky, Piaget and Bruner

Although I endorse the teaching and learning of emotional literacy in my class as an important learning tool, I recognize the importance and validity of many "big" learning theories. I recently read some words that Vygotsky wrote twenty years ago which are as fresh and illuminating as the words of Christopher Day which I quoted at the beginning of my writing. Vygotsky wrote that in:

...receiving instructions in a system of knowledge, the child learns of things that are not before his eyes, things that far exceed the limits of his actual and even potential immediate experience, (1987, p.180)

This resonates with me because Vygotsky did not see a contradiction between the everyday and the scientific, between the social space and the development of new concepts (pp. 163, 168, 169, 1987). His is a child centred approach based in a social context. I recently went on a listening walk with my class as part of a Science topic on Sound and Hearing. It was a windy day and many children wrote that they could hear the wind and we continued to discuss whether this was true when we returned to class. One girl, almost thinking out loud, mused: You can't hear the wind, it doesn't have a sound. It makes other things move and you can hear them. You can't see the wind either and you can't see sound, but it's there.

As with Piaget's Schema theory, when this little girl was faced with a new challenge, she had to restructure her existing understanding of this concept to accommodate some new knowledge. Her learning was also based firmly in a social context. As a new teacher nine years ago I was very influenced by the constructivist ideas of Vygotsky as I planned my lessons with lots of instruction, yet building on what the children knew already, "scaffolding" their learning as necessary.

As I developed as a teacher I was also drawn to the theories of Bruner, in particular his three forms of representation. These can best be explained as:understanding by activity understanding by pictures, maps and diagrams understanding through the use of symbol systems such as spoken and written language, mathematical symbols or musical notation (Turner-Bisset, R. 2001, p.126)

There seems to be a pleasing progressive nature to this theory – I have used it often in Literacy, History and RE lessons, with drama followed by planning followed by writing.

Myself as a Learner with the Children

I wrote at the beginning of this assignment about the pressures that hinder me at times from teaching my pupils in a way that makes them excited about their learning. However even in the midst of these pressures the children can still find excitement and inspire me. For example, it was in the middle of an NFER numeracy test to be used to track pupil progression through the school that a moment of real insight into a child's learning occurred, as described below. The writing is taken from my reflective diary so is in the present tense.

In using video and digital camera in the classroom and including it in this assignment I have followed BERA guidelines and written to parents about my research. I have their full permission and cooperation.

Learning about dice

We are working under test conditions, children spread out between tables, hard back books forming screens between them. A small group of special needs children is working through the test with an LSA outside the classroom. It is very quiet as I read out each question to the children and they then think about it and write their answers in the test booklet. It is not exactly fun but we are making the best of it!

Then out of the blue comes an unexpected moment of creativity. The question in the test asks,

"The opposite sides on a dice add up to seven. The first picture shows one side of a dice (picture of one side of dice with 3 spots). The second picture shows the opposite side of a dice. Draw the missing dots on the second picture."

O's hand shoots up and I can see he is desperate for my attention. "Yes O?" I say. "All opposite sides on a dice add up to 7 Mrs Formby," he informs me confidently.

All sorts of thoughts flash through my mind, such as "I didn't know that and I'm 48, but then I never really bothered to look." And "I'm beginning to glimpse what makes you tick, O, and why you are so good at maths." Later, when O has shown the whole class that opposite sides on a dice do indeed add up to 7, I ask O how he discovered this. "Well" he said solemnly, "Sometimes I make dice out of blu tac with my brother (who is 10) and we put the spots on with the end of a pencil. Then we play with them."

I know I have hit on something really crucial here, something that is missing from much of my numeracy teaching - the fun and pleasure to be enjoyed when playing with numbers. The Year 2 curriculum is extensive, the pressure is great to push children to reach the next SATS level but the sacrifice is perhaps even greater. Isn't it better to know that opposite sides on a dice add up to 7? (reflective diary 19/11/06)

As I reflected on this wonderful moment I knew that I had a responsibility to the children to make learning a more creative experience for them. I realized the truth of the following words:

When we learn something new (at whatever age) we are making new connections between ideas and making sense of them for ourselves. We are

constructing knowledge and in this sense we could perhaps describe what we are doing as being creative. (Craft A. 2005, p.52)

I decided to teach two creative, skills based numeracy lessons the following week. As I planned them I felt a pressure lift from me that I had not really been aware of with regard to my teaching of numeracy. Thinking about it since, this pressure is the Year 2 curriculum, set out week by week in my medium term planning. I tick it off in red pen as I teach each bit and I highlight those areas I have not yet covered. Pressure, pressure, pressure! So it was strangely liberating to ponder what difference that sudden excitement I felt could bring to the way I teach the children the skills they need in the different areas of numeracy.

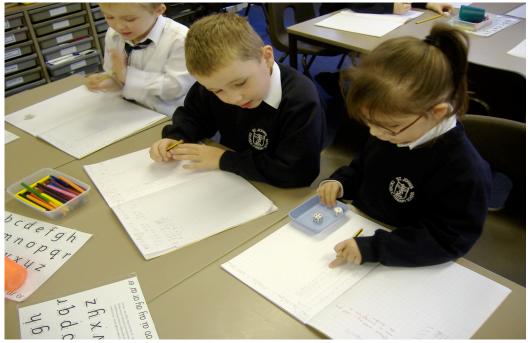
Howard Gardner said to Daniel Goleman ".... You learn at your best when you have something you care about and you can get pleasure from being engaged in." (Goleman, 1996, p.94)

So on Wednesday I continued to teach the children addition/problem solving but I took a new approach. I reminded them about O's comment about the opposite sides of a six sided dice adding up to 7 and we decided that 7 was a special number for six sided dice. So I asked the question "How many times do you think you would score 7 if you rolled two dice twenty times? The children were instantly engaged, we wrote down a few predictions and I paired them in higher/lower ability pairs wanting to see how the children worked out of their usual ability groupings too.

I stood back and watched the children as they excitedly wrote the question in their books and numbers 1 - 20 down the side of the page ready to record each score. The more able children who had a less able partner encouraged and helped with the initial writing, anxious to begin dice rolling! I was redundant so took some photos which clearly show the children on task and working well in their unfamiliar pairs.

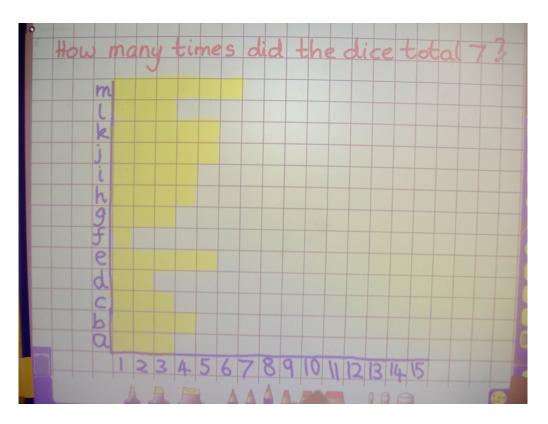


R and O absorbed in the task of dice rolling!



G asking her partner to check her adding!

When the children had listed their scores they brought the results back to the carpet and we used them to make a block graph on the interactive whiteboard to find out how many times each pair (given a letter name) had scored 7.



What I noticed was that the children wanted to find this out as much as I did and therefore stayed on task, eagerly answering questions about the graph when we had finished.

The next day I continued to draw on the children's enthusiasm, this time asking them, still in the same pairings, to find out how many different totals they could score with 3 dice. Once again they were keen to start and the bonus for me was that I could remind them about strategies to use to enable quick adding of three numbers, thus meeting my curriculum requirements too.

I also asked O if he would find out a bit more about dice for me, then gave him a ten sided dice and a tens and hundreds dice too. I asked him to find out what the totals of the opposite sides were. He couldn't wait and asked me to get him in early from lunchtime play to finish this. The next day he brought in an eight sided dice from home to total the opposite sides from that and has subsequently brought in a spherical die too.

As I reflected on the learning that had so clearly taken place during the above lessons, I realized I had witnessed many positive developments.

Firstly, children in my class (such as R.), who were prone to Dweck's *helpless-oriented pattern of response* (2000p.5-7) in a situation where a difficulty arose, had not responded in that way during the task (see photo above of R.) Normally, during a numeracy lesson or activity R will cry and become frustrated several times but this did not happen at all. As I observed the mixed ability pairs at work I noticed that even if the less able child became stuck when adding dice totals, she did not

...take the view that once failure occurs, the situation is out of their control and nothing can be done (p.6)

Instead the less able child seemed able to listen to their partner who invariable made comments such as "hang on, slow down, let's do that again". I heard laughter and obvious enjoyment from all the children.

Secondly, all children were motivated to complete the task, intrinsically (because the task was enjoyable) and internally (because it was worth doing). No external motivation was needed at all. They had ownership of what they were doing and they wanted to find out what happened as much as I did.

Thirdly, the task involved social activity, followed by talking in pairs and whole group, before individually making sense of the scores. I need to do this type of learning activity more often.

I know that mixed ability pairs may not be the universal answer for making the teaching and learning of numeracy more effective in all areas, but this experience has given me the confidence to be more creative in my approach to the teaching of this subject.

The role of personalized learning and formative assessment

I believe that: schools have a central role in helping pupils to develop the skills and attitudes for learning, on which they can draw throughout their lives.(2006, 2020 Vision, p.20) I also believe that these skills are as important as subject related knowledge, because my experience tells me that children who learn well feel good about themselves, have an understanding of how they learn best and what style of learning is appropriate to task. To realize the vision for personalized learning (p.16), the 2020 Vision report proposes that: a combination of assessment for learning, learning how to learn and pupil voice has the potential to contribute to developing all aspects of learning, (p.20)

I share this vision and in my class this year I have used formative assessment in Literacy and Numeracy, based on the theories explained by Shirley Clarke (2001), with the aim of personalizing children's learning. I make learning intentions clear for each lesson, discuss success criteria with the children to help them assess if they have achieved the learning intention and then I mark specifically against that learning intention & success criteria. As I mark a piece of work, firstly I praise success as appropriate, then I follow with one or two suggestions as to how to improve. I give the class a few minutes to read my comments at the beginning of the next lesson and I also refer to targets or improvement suggestions during the next lesson. The results so far have been encouraging and the children are more aware of their individual strengths as learners and of areas and strategies for development. I continue to work at making sure my comments show the children how to *close the gap* (2001, Clarke, p.57). My headteacher's comments following an exercise book review show that I am trying hard! (Appendix 6).

In my developing understanding of personalized learning, the use of formative assessment has linked well with my teaching of emotional literacy through SEAL, in particular the discussion of and explicit teaching about learning to learn, as described earlier in this writing and evidenced through the *How to be a Better Learner* poster in Appendix 1. Recently, the children shared the following wonderful ideas about how they think they learn:

- If you don't know something you can learn it
- Hard work helps you learn
- I learn when I am brave and try something new
- Asking questions helps you learn
- Adults can teach you some things

• Children can teach you things - O. taught Mrs Formby about dice As part of the reflective learning process in which I am engaged, I have spoken to the children about being a learner myself and going to University every week to help me learn. I feel that my relationship with the children is closer as a result of these interesting discussions. I now hope to develop the use of *pupil voice* as the children delve deeper into understanding themselves as learners and thinkers through the use of P4C.

Learning to ask questions through Philosophy for Children

The capacity for wonder has been called our most pregnant human faculty, for in it is born our art, our science our religion.' (email from Samways, J 16/01/07, quoting Sockman, R.)

I ask many questions of the children in my class throughout the day. I use a range of questions - open questions, closed questions, differentiated questions, targeted questions and even silly questions, but I agree with Ted Wragg when he wrote:

Children may ask a lot of questions - but not usually in school. (1993, p.6) Increasingly I am concerned that the children do not know how to ask questions across the curriculum. Recently when planning a Science topic on Sound and Hearing, during an initial circle time to find out what they knew already, I asked the children for questions they might like to find out the answer to or to investigate. There was a deafening hush!

So when I was given the opportunity to attend a Level 1 P4C course I felt excited to read that:

..... the crux of the programme is dialogue (Cleghorn P. 2004, p.1) especially when I knew that I would be teaching the children to develop philosophical questions following a story or poem stimulus. I hoped that this might develop question asking skills in some of the children! After day 1 on the course I carried out my first enquiry with the children. I chose the story of The Parable of The Workers in The Vineyard from the resource pack and was pleasantly surprised with the response from my class. Not only did they respond well to the process of "an enquiry" but also discussed the story and its themes sensibly in pairs, coming up with a few good questions, as listed below:

- Why did the owner need so many workers?
- How do you think the owner made so much money?
- Why are people jealous?
- Why do people fight over money?

The discussion that followed was disappointing and it petered out rather quickly, but I know that I need to improve my skills as facilitator and the children also need to practice developing their question asking and discussion skills. Ultimately, my vision is that I can develop *pupil voice* to the stage where the children can plan a whole curriculum topic as an enquiring community, drawing on their learning skills and strategies and from knowing themselves as learners.

Conclusion

In his inspirational writing about sustaining the passion for teaching, Day says it is essential:

....that teachers revisit core values and beliefs, regularly engage in reflection upon the contexts that influence their work and lives, engage in collaborative dialogue with colleagues about improvement so that the isolation and hopelessness that sometimes erodes passion may be broken. (p.177)

In reflecting on my present understanding of learners and learning I find myself focusing on what I wrote about the numeracy with dice activities: Secondly, all children were motivated to complete the task, intrinsically (because the task was enjoyable) and internally (because it was worth doing).No external motivation was needed at all. They had ownership of what they were doing and they wanted to find out what happened as much as I did.

I realize that I want to hear more about what the children think about learning and their understanding of themselves as learners in situations where they experience feelings of success. I also want to engage in a deeper action research process in which I am able to validate my developing theories about their ownership of their learning. Finally I wish to create conditions for personalized learning, conditions that will inspire the children to form questions, become more enquiring and ultimately to move on in their learning.

I conclude with the following words from the first page of the Vision 2020 report:

All children and young people have the right to receive support and challenge, tailored to their needs, interests and abilities. This demands active commitment from pupils, responsiveness from teachers and engagement from parents. (2006, Gilbert, C. p.1) Appendix 1 - "How to be a Better Learner Poster"

<u>How To Be A Better</u> <u>Learner</u> <u>Our Goals</u>

- Settle quickly to learning
- Keep concentrating don't be distracted
- Be independent. If you get stuck
 - Talk it through with a friend
 - Use classroom displays
 - Remember what you did last time you were stuck
 - Remember! It's ok to get stuck sometimes!

<u>Appendix 1a</u>

- Enjoyment
- Humour and sympathetic teaching
- Not feeling threatened
- No comparison with other learners
- Group support
- Good motivation
- Passion
- Good pace of learning

Next I asked them to list some conditions that hindered successful learning. These included:

- Scared of failure
- Criticism
- Comparison with others
- Feeling isolated
- Worry about looking stupid
- Negative comments
- Time management

As I reflect on their comments for my own learning, I am reminded of how careful I must be as a teacher when working with the vulnerable emotions of learners in my class if I want to create good conditions for learning. As Goleman says in The New Leaders A leader can model behaviour...... a caring attitude builds a sense of trust and belonging that underscores the shared mission. (p.231, 2002).

Appendix 2 - quoted from MA Research Methods Assignment, Sept.06

A few weeks after I had introduced the "better learner" ideas to the children (Appendix 1), I was formally observed by my headteacher, Bob. It was a literacy lesson in which the children were working on writing character profiles using traditional tales. I had been using the ideas from the "better learner" poster in all my lessons - these were

- listening
- looking
- concentrating

not distracting others or allowing yourself to be distracted
and I felt intuitively that the children were using and
responding to them, but this was the first time that someone had
come in to observe me since their introduction. Bob wrote in his
observation (Appendix 2)

Claire, you have developed greatly in your teaching which is allowing the children to learn more freely in a safe environment. Behaviour is now <u>far</u> more productive. <u>Congratulations</u> - you deserve credit for such development. This is an example to us all. We need to share some of these techniques to extend this good practice.

Appendix 3 - Video Clip of part of SEAL Presentation (Motivation)

<u>Appendix 4</u>

Activity 3 – Types of Motivation

You will need a large sheet of paper divided into three parts labelled - Intrinsic motivation, External motivation, Internal motivation, pens, post-it notes

What to do

In your group, think of a range of different activities that the children in your class do every day. Write them on sticky notes and discuss which of the three types of motivation were involved and how you encouraged them to complete the activity. Next place them on the flipchart paper under the appropriate heading.

Finally, as a whole group reflect on the following questions:

- What type of motivation are we trying to encourage in the children?
- How can we encourage the children to become more self-motivated?

<u>Appendix 5</u>

Intrinsic motivation This is when we are motivated by the experience of doing an activity which is in itself engaging, interesting and enjoyable for us. External motivation When we do something to obtain a reward or avoid a punishment. Internal motivation When we do something because the outcome is valued in itself.

To encourage internal motivation

- Explain that mistakes are a valuable part of learning
- Attribute failure to the nature of the task or some changeable aspect of the child
- Focus on individual improvement rather than making comparisons
- Provide informative feedback that helps the child improve
- Emphasize progress over time

Appendix 6 - Exercise Book Review (ID) 30th November 2006

<u>CF</u>

Literacy

Jake Little – supportive comments and some formative development. Gemma Gay – some lovely, supportive comments and detailed developmental comments. Gemma has taken real pride in her work. Rena Davis – there is a nice feel to the support you are providing for Rena and some targeted comments.

Grace Towers – some lovely extension comments. Clearly you are targeting developments.

Isabel Marsh – as Grace

Claire, it is a real pleasure to see the time and energy you take in marking your children's books. You are clearly focusing on the learning intention and are targeting your comments to success criterion.

<u>Science</u>

Lottie Perkins – some good formative comments. Oscar Emery – as Lottie Other books sampled.

Claire how are you covering your Science? You have some lovely work in their books but are you evidencing your more active sessions? (digital camera, floor book/ Big Book?)

Numeracy

Joshua Sanchez – formative comments became far more focused as November progressed.

Jake Little – Jake has received some very helpful comments to help him target his development.

Rhianna Nolan – many detailed comments.

Claire, thank you for the care and attention you show to the children in your class through your marking. Your comments have developed and show great clarity and address the success criteria more fully now. Keep ensuring your comments address the learning intention and aim to extend or help "close the learning gap".

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