

3rd GENERATION ASSESSMENT IN A PRIMARY CLASSROOM

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This action research project looks at how a model of 3rd generation assessment, devised by Professor Mary James from the London Institute of Education, might look in practice in a primary classroom.

James (2008 p21 *Unlocking Assessment: Ed Sue Swaffield*) looks at three models for learning and their implications for assessment. The first generation model is based on the behaviourist theory of learning, the second on the constructivist theory and the third on the socio-cultural or 'situated' view of learning. The following is a brief summary of both the teaching and assessment implications of James' model:

TEACHING IMPLICATIONS OF 3G (underpinnings: the socio-cultural or 'situated' view of learning.

- *Learning involves both thought and action in context.*
- *Thinking is conducted through actions that alter the situation and the situation changes the thinking.*
- *Learning is a mediated activity – tools and artefacts have a crucial role.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Learning is distributed within the social group e.g. language skill is not solely an indication of individual intelligence but the intelligence of the community that developed it.*
- *The collective knowledge of the group is internalised by the individual. As an individual creates new knowledge, then he or she will externalise it in communicating it to others who will put it to use and then internalise it (an expansive learning cycle).*

IMPLICATIONS FOR ASSESSMENT

- *Assessment alongside learning.*
- *Done by the community.*
- *Assessment of group learning as well as of the individual.*
- *'In vivo' studies of situated problem solving.*
- *Achievement captured and reported through narrative accounts and audio-visual media.*
- *Holistic and qualitative judgement.*

School Context:

I am a Year 2 teacher in a large Infant School (4 form entry) near the centre of Norwich. I initially conducted my research with my own class, but then extended the project to include other Year 2, Year 1 and Year R colleagues. The school has a creative, flexible and emergent curriculum and we use thinking skills, philosophy, drama and enquiry based learning to underpin our teaching and learning. My head actively promotes adult learning, innovation

and risk taking and has been involved in the action research group as part of a drive to create a model of excellence in our school approach to formative assessment.

Several colleagues involved in the project, including myself, use a pedagogic system called Mantle of the Expert (MoE). MoE is an approach to learning devised by education and drama practitioner Dorothy Heathcote. Children and teachers work together to create an imaginary community within which they function as if they were experts e.g. mountain rescuers or archeologists. As the work progresses many possibilities begin to emerge which the learning community uses to define and deepen the imaginary world and explore the lives of the people that inhabit it. The community engages in a series of collaborative tasks, often motivated by a client's demands, with team work, communication and problem solving central to the process.

There is a group responsibility for the project as it progresses and the children act and make decisions with responsibility and authority, tackling authentic issues which seem purposeful and urgent to them. Over the last three years I have worked with a team of practitioners guided by Luke Abbot on developing the use of MoE as a pedagogy in the classroom. Luke is a senior adviser on pedagogy and school improvement for Essex County Council and currently leads a national project promoting the use of MoE across the country and internationally.

The two Year 2 classes that I taught during this project worked as a Salvage company responsible for exploring the Titanic and a group of scientists sent to an uninhabited Indonesian island to log the animal and plant life. Some of the colleagues involved in the action research group were running their own MoE projects and others were working with their classes on a range of other enquiry based learning experiences. We all employed a range of assessment for learning systems to trial with our classes and collected evidence to report back to the group. The group then discussed and reflected on these practices and worked collectively to relate them to Mary James' 3G model.

My personal aim was to develop a cyclical and meaningful assessment system based on the 3rd generation model that worked both for myself and the children, particularly in the context of the MoE work with which we were engaging. I needed a system that was achievable, relevant and based firmly on the principles of a socio-cultural view of learning as set out by James. I also wanted to link this with the ongoing work in my classroom based on Guy Claxton's research into meta-learning.

Some of the assessment practices we used are standard AFL practices used in many schools and they combine 2G and 3G elements. We have sometimes adapted these to make them more aligned with 3G assessment principles. Others are combinations of our own ideas and those of other researchers and practitioners. The following sections show the range of assessment practices we trialled and how they relate to James' 3G model:

1. Dialogue as an integral part of ongoing work involving the whole class, groups or pairs of children, with or without an adult. Much of this learning dialogue was in relation to ongoing, collaborative tasks as part of MoE or other enquiry based learning projects.

'Discussions, in which pupils are led to talk about their own understanding in their own ways, are important aids to improved knowledge and understanding'
(Paul Black and Dylan William 1998)

In our school we have been working on developing a dialogic culture in the classroom so that meaningful, reflective dialogue becomes an integral part of the learning process. Some of the teachers involved in the project have used Philosophy for Children (P4C) with their classes as a way of inducting the children into a free flowing, non-judgemental dialogue in which they are in charge of the direction and content of the discussion. The teacher's role is as a facilitator and s/he takes a back seat as the children question, debate and challenge shaping the discussion through their own ideas and interaction.

Within MoE dialogue is a crucial part of the learning. It is how situations are considered, problems are solved, motives and feelings are discussed and is used continually to reflect on what has happened. Children who are situated in the world of MoE are experiencing the 'authentic' learning where valuable 3G assessment can take place. Also, In MoE, the teacher is part of the learning community and, in a peer role, can act as an interpretive assessor who is situated firmly within the learning situations. This sits firmly within the principles of 3G assessment. Also, much of the assessment within MoE is being done by the learning community as a whole – 'how has our team done? How could we do it better next time?' As the learning in MoE is driven forward by the classroom community, it is fitting that the assessment is carried out by the same community.

It is the teacher's job, as an effective assessor, to decide which are the most pertinent or relevant areas to assess in relation to the context of the dialogue. As dialogic talk is an ongoing feature in MoE and much of the other classroom learning, there are therefore many opportunities during the year for a range of assessments. The nature of this type of situated dialogue is such that many of these lifelong learning skills, which are actually listed as key skills in our National Curriculum, are being regularly rehearsed and demonstrated.

Skilled questioning on the part of the teacher in MoE is a vital way of drawing out higher order responses and discussion from the children. As a school, we have worked hard to refine the use of open ended questions and to carefully consider how the use of our own language when questioning can either close down or open up the children's responses. Michael Bunting, one of my Year 2 colleagues has produced an excellent booklet entitled 'Questions, Questions' in which he lists and categorises the types of questions that might be used during a MoE enquiry.

The teacher, during these dialogues can take notes, but I have found that using a Dictaphone is more productive as it frees me up to listen more carefully during the discussion and to facilitate the debate through my own

questioning. Using the Dictaphone also means that the discussion can be analysed in more detail afterwards. The dialogue can take place as a whole class, in groups or in pairs. The children can also use peer assessment during these sessions, focussing on specific questions to ask each other. I feel that it is also important to consider the dialogue itself as formative assessment whether it is recorded or not. Even if notes are not taken it is an essential learning tool in building on current knowledge and understanding, reflecting on situations and ideas and moving children's learning forwards.

There are many areas that can be assessed more formally during these sessions, depending on what the children have been discussing. If the talk was about the latest diving mission conducted by our Salvage Company, the assessment focus could be on scientific knowledge and understanding, related to National Curriculum (NC) targets. The assessment focus could also relate to NC targets for speaking and listening. If the teacher / school places value on a wider remit of learning the assessment might focus on an area such as thinking skills, problem solving, team work or intra-personal skills. This can be further broken down into smaller but vital areas of deep and valued learning, some of which are listed here:

- Questioning
- Planning
- Negotiating
- Hypothesising
- Collaborating
- Participating
- Empathising
- Reasoning
- Building knowledge
- Connecting
- Generating ideas
- Presenting

Sometimes the dialogue happens as part of a reflective session at the end of a unit of work or, in MoE at the end of a particular episode or task completed in the imaginary world. Language and questioning are, again, crucial and we have tried to model the language of evaluation and reflection in order to help young children begin to use the vocabulary that they need for this purpose. The following are some of the questions we have tried to use during these sessions. We have tried to relate these questions to 3G principles as much as possible:

Where could I look for help?
What would I do differently?
What would I like to do now?
Why was I learning this?
How did I react?
What would I like to do now?
What was good / not so good?
Was there a problem?
How could I fix my problem?

What have I learnt about myself?
Is it my fault something didn't work?
Have I understood?
What needs improvement?
What do I need help with?
What would I like to learn next?
How can we help each other?
What connections can I make with any other learning?
How have I worked with my team?
How has my team worked together?
Could I have done anything differently?
Could I teach this to someone else?
Was this interesting or boring – why?
Have I got any questions?
Have you surprised yourself?
Has anyone else surprised you?
Did I change your mind about anything?
Did I help anyone else?
Did anyone else help me?
How did my group / class team do?

SEE APPENDIX 1

3G elements present in situated dialogue:

- *Learning involves both thought and action in context.*
- *Thinking is conducted through actions that alter the situation and the situation changes the thinking.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Learning is distributed within the social group*
- *Expansive learning cycle.*
- *Assessment alongside learning, not as an after learning event.*
- *Assessment of group learning as well as that of the individual.*
- *'In vivo' studies of situated problem solving i.e. participation in authentic activities or projects.*
- *Done by the community – role for self-assessment, peer-assessment and teacher assessment.*
- *Holistic and qualitative judgement – not atomised and quantified.*

2. Blog Diary recording the day to day life of our shipwreck salvage company (MoE) October 2006 – May 2007 <http://theseacompany.blogspot.com/>

This was a day to day diary, recorded on a blog-site so that it was available for anyone to read as our MoE project work progressed. Although this was a time consuming process it was an invaluable way of recording and reflecting upon the learning of the class community. One of the main reasons for this is

that is the very nature of MoE as a pedagogy i.e. it places pupil and teacher participation at the centre of the learning as the group build up their knowledge and understanding collaboratively.

MoE is also concerned with many of the deeper, life long learning skills that were mentioned in the section above, so I felt that I was, again, assessing what was valuable and meaningful, alongside standard NC targets. As MoE positions learning in an authentic context it nurtures the development of these transferable skills and is very much aligned to the principles of 3G assessment which values these skills. This narrative way of recording and reflecting on work as it is happening also gives a holistic picture within which one can assess learning.

One of the most important factors that is revealed through the blog is that the 'assessment is happening alongside learning and is not an "after learning event" ' (James). Although reflection does happen at the end of MoE sessions, much of this type of thinking is bound up intrinsically in the action, the things the company are doing and the problems that are being worked through. It's like real life – you're reflecting, rethinking and revising things as they happen – not in a plenary session at the end of the day!

James also argues that there should be a close relationship between the nature of the learning that is happening in the classroom and the way in which that learning is assessed, which I believe is very evident when reading the blog. An additional advantage of the blog site is that the work became open to a wider community so that children, parents and other teachers have been able to find out about and understand the learning that has taken place.

The only problem here is that, although recording the blog was incredibly rewarding, it was also very time consuming and it would be unrealistic to expect a busy primary teacher to undertake this type of recording for assessment on a regular basis. I would, however, recommend having a go, it would be easily manageable for a much shorter project, maybe a couple of weeks or even a couple of days.

3G elements present in a blog diary:

- *Learning involves both thought and action in context.*
- *Thinking is conducted through actions that alter the situation and the situation changes the thinking.*
- *Learning is a mediated activity – tools and artefacts have a crucial role.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Learning is distributed within the social group*
- *Expansive learning cycle.*
- *Assessment alongside learning, not as an after learning event.*
- *Assessment of group learning as well as that of the individual.*
- *'In vivo' studies of situated problem solving i.e. participation in authentic activities or projects.*
- *Achievement captured and reported through narrative accounts and audio-visual media.*
- *Holistic and qualitative judgement – not atomised and quantified.*

3. An ongoing portfolio containing notes and reflections + a range of collected evidence (annotated photos, self assessments, transcriptions of dialogue from Dictaphone, video evidence, pieces of work etc)

Like the blog diary, this has been a long term record of the learning that has gone on in my class this year. Because of the range of evidence it contains it has become an invaluable and holistic record of the year's work that has covered a whole range of learning skills and shows progression and a wide range of valued attainment. Next year I would like to get the children more involved in choosing some of the content that goes into the portfolio and making it accessible on a daily basis for parents and children.

3G assessment elements present in an ongoing portfolio:

- *Learning involves both thought and action in context.*
- *Learning is a mediated activity – tools and artefacts have a crucial role.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Assessment alongside learning, not as an after learning event.*
- *Assessment of group learning as well as that of the individual.*
- *'In vivo' studies of situated problem solving i.e. participation in authentic activities or projects.*
- *Done by the community – role for self-assessment, peer-assessment and teacher assessment.*
- *Achievement captured and reported through narrative accounts and audio-visual media.*
- *Portfolio has the potential to capture 'assessment as inquiry'.*
- *Focus on how well pupils exercise 'agency' in their use of resources.*
- *Holistic and qualitative judgement – not atomised and quantified.*

4. Individual learning diaries kept by the children.

These are kept individually by the children and contain the following:

a) Individual targets: these are a combination of 1 target set by the child him/herself and 1 set by the teacher. Alongside these are written ways in which the child can be helped to achieve their targets. These are shared, agreed and reviewed with each child on a 1:1 basis each term. Here is an example of one child's targets:

My own target: to get my work finished every time.

How I can do this: cut out distractions – not talk so much!!

Mrs B's target: to leave spaces between every word.

How I can do this: use my finger to make a space each time until I get used to doing it.

End of Term Review: *I get more work finished now, but I'm still a chatterbox! I don't need to use my finger now because I just remember to leave spaces.*

b) Reflections on work that has gone on during the week. This might be a picture and some writing about a favourite piece of work, something a child is proud of, something new they have learned or an answer to a specific question e.g. 'have you surprised yourself this week – how?' I tried to relate some of these learning questions specifically to 3G principles e.g. 'how has your team worked together this week?'

c) Samples of work: at the end of each term I put out all the children's work books and folders of loose leaf work and the children look through them and pick out one piece of work they are particularly proud of. They either write themselves or I scribe why they are so proud of this work and then stick it, or a photocopy of it, into their learning diary. The children really enjoy doing this and there is a real buzz in the room as they all look through all their hard work over the term, sharing it with others and remembering moments of their learning.

I was really pleased with how these learning diaries worked. Many of their comments are perceptive and valuable both as a self assessment tool for the children and for my assessment of their understanding, progression and attitudes to learning. Next year I am going to combine the learning diaries with the children's home/school contact book so that parents can share all the above.

SEE APPENDIX 2

3G assessment elements in learning diaries:

- *Assessment of group learning as well as that of the individual.*
- *Focus on how well pupils exercise 'agency' in their use of resources.*
- *Holistic and qualitative judgement – not atomised and quantified.*

5. Daily sessions focussing on meta-learning.

The children interact with a puppet (Sniffles the Hopeless Hamster!) in a dialogue concerning the '5 R's' (Guy Claxton). We focus each day on one aspect of one of the following: Resilient learners; Reflective learners, Resourceful learners; Responsible learners; Relationships . I have rephrased a range of aspects of these learning attributes into age-appropriate language and printed them onto cards. Each day Sniffles picks out a card that becomes our learning target for the day, or sometimes the week e.g. "I'm a strong learner" or "mistakes help me to learn". The children know that Sniffles finds learning difficult and doesn't understand how to put the cards into action so the children help him out by telling him how to be effective learners and giving him lots of advice.

The children love Sniffles and it is yet another session that I can virtually hand right over to them with no intervention. It would obviously need to be adapted for older children. As this is done at the beginning of everyday it gets the children tuned into thinking about their learning before the school day starts. I have found that these sessions have inducted them into the language of meta-learning which has helped them to discuss how they learn in a range of classroom situations. They are also able to apply this directly to their learning e.g. *'I've been a clever learner today because I use my imagination to give me new ideas for my story'*, or *'I've worked well with my team on our mind map – we all shared our ideas to make a really good map'*.

3G elements in meta-learning sessions:

- *Learning is a mediated activity – tools and artefacts have a crucial role.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Learning is distributed within the social group*
- *Assessment of group learning as well as that of the individual.*
- *Done by the community – role for self-assessment, peer-assessment and teacher assessment.*
- *Focus on how well pupils exercise 'agency' in their use of resources.*
- *Holistic and qualitative judgement – not atomised and quantified.*

6. Variety of self / peer assessment tools: easy – hard continuum; hot spot assessments; self evaluation grids; end of year individual/group evaluations.

Traffic Lights (red= 'I found this work difficult'; amber = 'it was ok – maybe tricky in places'; green = 'I could do this easily'. The children use an appropriately coloured dot to self assess specific pieces of written work. I also invite children who want to, to talk about their choice of traffic lights with the rest of the class at the end of the session.

Scattergrams / Hot Spot assessment: (place yourself in relation to a learning target according to how you think you've done). These are quick, useful ways of the community self assessing their learning and also for the teacher to see how the group as a whole have managed. It is important to have discussions (as with the traffic light system) about honesty and for this system to be non-competitive. The children have previously had a lot of discussion about this during meta-learning sessions so know that it is not shameful to put a red traffic light or to say they didn't understand. The children are very aware that mistakes are important, that learning can be difficult and that it is helpful to explain what has been tricky and why. They are incredibly honest in self-evaluations such as these and have become more and more adept at explaining why they have put themselves in a certain place.

SEE APPENDIX 3

Continuums (place yourself on a continuum line e.g. easy to impossible)

I like using continuums because they are a very versatile way of decision making and open to lots of interpretation. For instance, putting yourself at the easy end might mean that a task was enjoyable or boring. You can also move backwards and forwards on the continuum slide at different times during a session – you might start off at the difficult end and end up nearer the middle, or someone else might change your mind as to where you should be, maybe in relation to another individual or within the context of the whole class. It is even more effective when done in a physical line, rather than one drawn on the whiteboard – a visual and changeable assessment that works both individually and as a whole class group.

We have used the easy-impossible continuum in MoE to gauge how well the team are solving problems together. It can be used for something as straightforward as a writing target, or for big ideas e.g. staging a rescue at sea in the drama. Questions can be extended e.g. ‘where would you like to be on the line in the future?’ It is interesting to discuss with the children how where you might place yourself could relate to the way you are feeling at the time - sometimes you might want to be comfortable near the ‘easy’ end – sometimes you want to be challenged and feel happy to be nearer the ‘impossible’ end.

Self-Assessment pro-formas specific to a task (used for key pieces of work)

This is a standard self-assessment tool that we use regularly in school. I have tried to add 3G elements to the questions/statements rather than just having learning objective oriented questions. The following is an example of one I used for some story writing based on our MoE work on The Titanic.

Does my story have lots of action?	
Have I used some really interesting words?	
Do things happen in the right order?	
Have I written things that people are thinking or saying?	
I've highlighted a sentence I'm really proud of.	
I'm proud of my story because	
What or who helped me write this story?	

The children put smiley, indifferent or sad faces in the first four boxes according to how they thought they'd done. They really enjoyed finding the sentence they were proud of and did this very carefully – it usually was the most powerful sentence in the story.

3G elements in self-assessment tools:

- *Assessment alongside learning, not as an 'after learning' event.*
- *Assessment of group learning as well as the learning of the individual*
- *Holistic and qualitative judgement – not atomised and quantified as in measurement approaches.*

7. Home / school contact books contributed to by teacher, children and parents.

These books go between home and school every day and are very chatty and informal, talking about a wide range of aspects of the child's learning, both at home and at school. They encourage an ongoing dialogue between teacher and parents about the whole child which is valuable evidence for both learning and assessment purposes. Next year I am going to trial a combination of the home/school contact book and the children's learning diaries so that parents can see how their children are talking about their learning and share their individual targets.

3G elements in home/school contact books:

- *Done by the community*

8. Learning Surgeries (how can we help each other?)

This is a great way of the class community being involved in problem solving. Someone volunteers a problem they have encountered and the rest of the group offer their tips and ideas. They don't need me for this so it's a good opportunity for me to listen in and make notes for my own assessment purposes.

3G elements in Learning Surgeries:

- *Done by the community.*
- *Assessment of group learning as well as the learning of the individual.*
- *Holistic and qualitative judgement.*

9. Connections ("Only Connect!" E.M. Forster)

At the end of a day or a week we brainstorm all the areas of learning we have covered and begin to make connections. These could be between one area of learning and another e.g. *'fractions and cooking because we had to cut things in half* or between an area of learning and the wider world e.g. *'giving change in maths, because I went to the shop and had to check my change was right'.* We do it as a game – 'how many connections can we find? Can we beat our record? Making connections and links is an important key skill which helps pupils realise that learning does not happen in a vacuum – that we learn for a purpose and that learning has relevance to many areas of life experience. They also begin to see that different areas of learning enhance and link in with each other which begins to challenge the artificial delineation of 'subject headings', encouraging 'joined up learning experiences'.

SEE APPENDIX 4

3G elements in Connections:

- *Learning involves both thought and action in context.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Done by the community.*
- *Assessment of group learning as well as of the individual.*

10. Questionnaires involving parents and children

Questionnaires are valuable ways of finding out how a community views learning. Questions need to be carefully thought through to elicit useful responses by not being too leading, or by being worded so that children can understand what is being asked. Examples of responses to questionnaires are given in APPENDIX 5. The first shows children's answers to questions about how they learn best and then about why they enjoy working within MoE. The childrens' answers told me a lot about their own understanding of the way they were learning, which is very different to the standard 'what have you learnt?' question. We are therefore assessing the process as well as the product, which I feel is an important aid for teachers to build on their own learning and to continue to plan an effective curriculum that engages and motivates their pupils.

The second was a questionnaire I sent out to parents towards the end of our MoE work as a salvage company. Their responses are both a testimony to the power of this way of learning and a demonstration of the way in which parents were understanding many elements of the deeper learning that goes on through this work. I feel that these comments are a real example of the learning community in its wider sense assessing learning – after all, the parents are our clients and they are showing very explicitly their understanding of not only what their children have learned, but how they have learned.

The main 3G elements that parents are picking up on here are:

- *tasks are collaborative*
- *the children are working on authentic tasks*
- *the learning community jointly solves problems*
- *most valued outcome is engaged participation*

11.Evidence of children's work.

I have also always believed in meaningful marking of children's work. If we are to move away from summative testing we still need to have some evidence of individual attainment. I believe that well marked pieces of work provide this evidence. I see children's work books as ongoing working documents, not necessarily examples of 'best' finished work, although their books will probably contain examples of these too.. A plan for a story, sketched out in rough, as any writer knows, is valuable evidence of thinking and organisational processes and a piece of totally independent work next to a piece of adult supported work could be an incredibly useful assessment tool.

In my children's writing books, for example, I can immediately see what they are able to produce in relation to a range of writing genres. I can also see evidence of handwriting, spelling, punctuation, organisational skills, vocabulary etc. I can see progression from their first to their latest piece of work and pick up on any problems they are experiencing. All this is in conjunction with my own understanding of the whole child and also of the context of the work in relation to the bigger picture of our learning / curriculum. These books are also very accessible and always available to parents and can, therefore, become part of a wider community of assessment. 'Show mum your poem you write yesterday – read her that line that made us all laugh.'

This writing book is ultimately the property of the child, though, so will also contain comments to take forward learning e.g 2 stars and a wish. This consists of two positive and specific comments such as 'I like the way you used a really exciting adjective to describe X's appearance' and one way to move forward e.g. 'could you remember to use speech marks when you put in dialogue'. Of course, what is not evident in their books is the talk that was going alongside the learning as it happened. This is particularly important for early years children who might not be able to read written comments and for this age child I see that this unrecorded ongoing learning dialogue as the most effective way to move forward the children's learning.

3G elements:

- *Teachers and students become a learning community and jointly solve problems.*
- *Most valued outcome is engaged participation in ways which others find beneficial.*
- *Learning involves both thought and action in context. Learning is a mediated activity.*
- *Learning is social and collaborative.*
- *Learning is distributed within the social group.*
- *Expansive learning cycle.*
- *Assessment alongside learning.*
- *Done by the community.*
- Holistic and qualitative judgement.

12. PSHE linked assessments: The Blob Tree; The Circle of Courage; Feelings Wall.

PSHE in our school runs through everything we do. We do not teach it as a separate subject but incorporate it into all areas of learning and school life. It is, therefore, also intrinsically linked with assessment for learning. We believe that well being and recognition of feelings and emotions has a huge impact on the way children learn and therefore on the way in which we can help them to understand and move forward in their learning. We have therefore developed a range of PSHE related assessment tools that we use regularly with the children.

The Blob Tree

This is a tree developed by Pip Wilson who has also created a range of related PSHE resources. Blob figures inhabit the tree portraying a range of emotional stances e.g. proudly at the top of the tree; hanging desperately from one of the branches; supporting a friend; lying face down at the bottom. Each figure is numbered so the children can easily relate their own emotions to the corresponding blob figure on the tree e.g. *'I feel like number 8 because he's helping his friend and I helped Jamie use his number line'*. We use the Blob Tree in relation to learning activities and the dialogue that ensues helps the children relate their learning to their feelings and well being. We also discuss what they can do to change their position on the tree e.g. how do you get from struggling half way up to the top? The Blob Tree also helps the children develop and emotional vocabulary: angry, sad, frustrated, proud etc

SEE APPENDIX 6

The Circle of Courage

This is a model of positive development, based on Native American philosophy and developed by Brendtro, Brokenleg and Van Bockern. Based on four universal growth needs – **Generosity; Belonging; Mastery and Independence** – children can use the circle to explore why people do what they do and how we should treat others. One Year 2 colleague has used the Circle of Courage as a tool for dialogue, reflection and assessment throughout the year.

Children put their own names or someone else's name in one of the four sections of the circle and talk about why they have put it here e.g. *'Sam gave his time up to help me build my model so I have put his name in Generosity.'* As with the Blob Tree it helps the children to develop the appropriate language to describe how feelings, emotions and well-being are an important part of functioning as a learning community.

Feelings Wall

This can be used in a variety of ways. In a Year 2 class a large tree was put up on the wall. Underneath the tree were boxes of leaves with different emotions written on them: worried; unhappy; confident. At any time during the day the children can put a leaf onto the tree so that the teacher can instantly gauge the social health and the mood of the class e.g. able to spot confusion or a general feeling of confidence and then adapt the learning accordingly. The same teacher also used the tree at key moments in the learning – 'how are we all feeling right now about what we are doing?'

In a Year R class feelings words were gradually introduced to the children e.g. *proud*. Pupils talked about the words and what they meant and then began to put them into context, relating them to experiences at home and at school. The words were made into laminated word cards that the children could then go and fetch to put on the wall when they experienced that feeling. This is introducing the vocabulary of emotional literacy to our youngest children and

they are already beginning to relate this to areas of their learning in school. By the time these children are further up the school they will hopefully be immersed in the culture and language of formative assessment, particularly in relation to how learning makes them feel.

13. Mind Maps

Mind Maps, developed by Tony Buzan are a great way of finding out what children know. We use them widely in school for a range of purposes. Because the children can choose whether to write or to draw pictures, or both, it is an inclusive and very visual way of them recording their ideas. I have used mind maps to find out what children know and what they want to know at the beginning of a project and at the end of the project to assess their knowledge and understanding. The children have made mind maps for all these purposes either individually, in pairs or in groups. The mind maps have the additional value of showing how the children are both categorising and connecting their learning as they link ideas which go together and draw arrows to show wider links and connections with other branches of the mind map. It has also been very valuable to record the dialogue that goes on when they are making their maps, particularly if they are working in teams.

3G elements in Mind Maps

- *Learning is a mediated activity – tools and artefacts have a crucial role.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Learning is distributed within the social group e.g. language skill is not solely an indication of individual intelligence but the intelligence of the community that developed it.*
- *The collective knowledge of the group is internalised by the individual. As an individual creates new knowledge, then he or she will externalise it in communicating it to others who will put it to use and then internalise it (an expansive learning cycle).*
- *Done by the community.*
- *Assessment of group learning as well as of the individual.*
- *Holistic and qualitative judgement.*

14. Peer teaching

In one Year R class a peer teaching system has been set up. When a new skill is to be learnt an adult will show a group of 4 children what to do. They complete the task and then, in turn, show the next group of 4 what to do, rolling the system over until the whole of the class have participated. I find it amazing that 4 and 5 year olds can work in this way and it proves how children can act as independent and responsible learners and effective communicators at this early age. A teacher observing this in action would be able to make a wide range of notes about the children's learning, communication and social skills or use a video or Dictaphone to capture the learning as it is happening.

Children have also taken on master /apprentice roles in school, with – older children teaching younger children. Expert Year 2 paper aeroplane makers showed Year R children how to make planes and modelled writing in the Reception Class writing corner. We have asked children in school who have a particular expertise to share this with children in other classes and have also used this to give a boost to children with low self esteem.

3G elements in Peer Teaching

- *Learning involves both thought and action in context.*
- *Learning is a mediated activity – tools and artefacts have a crucial role.*
- *Learning is social and collaborative – people develop their thinking together.*
- *Learning is distributed within the social group e.g. language skill is not solely an indication of individual intelligence but the intelligence of the community that developed it.*
- *The collective knowledge of the group is internalised by the individual. As an individual creates new knowledge, then he or she will externalise it in communicating it to others who will put it to use and then internalise it (an expansive learning cycle).*
- *Assessment alongside learning.*
- *Done by the community.*
- *Assessment of group learning as well as of the individual.*
- *Achievement captured and reported through narrative accounts and audio-visual media.*
- *Holistic and qualitative judgement.*

APPENDIX 1: Class Debate 16.1.07

We have been doing some cross curricular work based on the Katie Morag stories by Mairi Hedderwick. The children were really interested in how their own city based lives were different from those of a child on a remote Scottish island and had already started to talk about which they thought they preferred so I decided to set up a debate on this very subject. We started off with paired discussions – the children had been really enjoying the stories and had also looked at photographs and videos of island life so had a good idea of how it compares to their own lives. They were excited to discuss this and talked with their partners for a good 5 minutes.

I then asked them to sort themselves into two factions – island fans and city fans. The two factions sat opposite each other, with one side at a time giving a reason why they preferred their location. I also said that, if anyone was swayed by the other side's argument, then they were free to change over sides at any time. I also asked them to think of any problems that might arise from either lifestyle so that we could discuss those and see if the opposing group had any solutions. I very much wanted the children to be in charge of the debate and to act only as a facilitator (they are used to this way of working).

There were some excellent pros for each place, so several children changed sides – some more than once. The big one for Norwich was having NCFE, which was a clincher for several boys who had previously opted for the freedom and adventure of island life!

At the end of the debate I asked a show of thumbs for a) people who had not changed their mind b) people who had once and c) people who had more than once – and asked each group why they thought this had happened. Group a were adamant that their reasons were watertight and unchangeable! Group b said that one particular argument had shone out for them (this was mainly the football one). Group c said that people were coming up with so many good reasons for their choice that it was really hard to make your mind up.

The next part of the debate arose from the moment, as I was interested to observe the children who were clearly not going to change their minds. It struck me that maybe these children were not yet ready to be part of an expansive learning cycle (but surely many adults are similarly not able to do this!!!) I asked them is it better to stick to your guns, or to be open to persuasion and perhaps to have their minds changed. There were two clear factions here. It engendered a really interesting discussion, with some children arguing that if you are open to change it makes you listen better to what others are saying and it also makes you think more. One child said 'sometimes you close your ears if you don't want to hear'. Another said 'you can always change back again.' Real thinking was going on here – these children are only 6 and 7. I was thrilled with the whole session – it was very 'easy' because all I had to do was listen to what they were saying and scaffold by feeding in the follow up questions – the children took control of the rest of the learning themselves.

I felt that, during this session, we were really reaching into some strong contextual and social learning experiences, with reflection built in as a natural part of the process, not as an afterthought.

APPENDIX 2 : EXCERPTS FROM LEARNING DIARIES:

Focus questions about the week's learning (chosen from list of questions on page 4) The following are just three examples of questions and answers.

What went really well for you this week?

The map work because I did things that I never knew I could do.

Estimation – someone came to help me because I was the last person left!

The Titanic work because it was fun and enjoyable and I was good at it.

Doing the mind maps because I like labelling and drawing things.

What went not so well?

My music because I got all the wrong notes.

The true or false work because Green Team were too noisy.

The number square because it was hard to put the number in the right place.

Ordering numbers because I am always hungry for my lunch.

Did you help anyone else to learn?

I helped somebody with their spellings – Kay into Katie, Linm into Liam, helle into hello.

I helped Will – I teached him on the computer.

Me and Maisie helped each other in maths because some of the sums were hard..

I helped Izzy to learn by not making a fuss of her.

Did you solve any problems?

I solved a problem with foxes because Oliver didn't want me to do types of foxes but we solved it by compromising and we agreed that I should as I'd already started it!

Foxes – My team stuck too much photos on our piece of paper so we had to take some photos off and leave some on the paper and leave some on the table.

When I was doing the booklets I got to a really hard question. It took a long time but then I worked out a way to do it.

It was hard sticking stuff into my cabin because my fingers were too sticky but then I solved it by washing my hands and then not getting my hands sticky but using something to make it glue on.

At the end of each half term the children looked through all their work books and folders and chose a piece of work they were really proud of to stick into their learning diaries, giving the reason why they chose that piece of work. Here are some of their reasons:

Because I worked very hard and concentrated and took my time.

(EAL child who had previously a had big confidence problem with any writing)
My picture is absolutely perfect – my spelling is really good. I know how the real Titanic is. At first it was difficult – then I felt so happy. I was so fine with my work and so happy afterwards. I was thinking so hard what to write – I wrote with happiness!

I love this piece of work because I put lots of detail into it.

I got them all right – they were hard and fun.

I thought a lot about this work and it turned out to be fabulous.

- I asked the children to draw a picture of their dream learning team and annotate it with words to describe the team:

Kind, funny, happy, nice, confident, fun, a happy bunny, responsible, positive, compromising, strong learners, people willing to take risks, careful, people who know that mistakes are important, trustful, non-copiers, good concentration, teamwork.

APPENDIX 3 : Excerpts from children and teacher reflecting on the morning's learning. 25.1.07

Discussing scattergram at end of story writing: at the centre of the whiteboard was a statement saying 'confidence' which was a meta-learning subject we had been discussing during the week. As children finished their stories they positioned a cross near to the middle or further away from the centre according to how they felt they'd done.

Teacher: *'who would like to explain why they put their cross near to the centre?'*

Joe: *'I did a whole page'.*

Freddie: *'I like writing stories and it's really easy – and fun too – it was fun'.*

Alfie: *'Well, it's really cool, because you just said I had confidence – I'm actually quite good at stories and I agree with you!'* This child is very unconfident about writing and worries about it, often getting very little done in a session. As he started his writing I had reminded him about our confidence discussion earlier in the week – ½ an hour later he came to show me his fantastic story, so I said 'see – you had confidence and you did it!' This is what he was referring to here.

Teacher: *'Some people have put their crosses a bit further away – would anyone like to explain why?'*

Ruby: *'I got a bit stuck and couldn't think about what to write. My confidence went away'*

Teacher: *'Oh – that happens to me too – I think it's called writer's block!' It happens a lot!'*

Jasmine: *'That happened to me too! I put my cross a bit far away – I was doing really well and then I got stuck like half way through'*

Teacher: *'So what did you do? Can you give any tips to anyone?'*

Jasmine: *'Well, I had to stop and think of something that was going to happen later and then it helped me think of what was going to happen (i.e. next).'*

Teacher: *'What a brilliant idea - !'*

Several children together: *'Yeah – I do that – it helps you – when you plan the think ahead you know what's going to happen before – it's called planning ahead – '*

APPENDIX 4: Connections

I have been encouraging the children to make connections between different parts of their learning so that they can see that what they are doing is part of a bigger picture and relates to all sorts of aspects of real life. This is still at a very clumsy stage at this age and their connections are very literal, but I do feel that they are beginning to make links and bridges between different aspects of their learning and how that learning links into the wider world.

Jimmie: *'Mine's about what we were doing today, writing a story – I write loads of stories at home too.'*

Archie: *'That connects with reading too because we're reading the books – and drawing too.'*

Teacher: *'Yes, I guess when you're writing you're reading at the same time ...'*

Michael: *'I've been reading and writing together'*

Ruby: *'I think company work (MoE) and home, because I've been doing company work on my lap top at home – finding out about Eva Hart (child on the Titanic) – finding out about the children.'*

Jasmine: *'dancing – we did it in school and I do it at home.'*

Tiah: *'food and natural objects – some food is natural and some is not.'*

Ruby : *'computers – I just got a new Apple computer at home!'*

Campbell: *'blank number lines and halves and quarters because they're both maths'. Teacher replies 'do you think you could use a blank number line to find halves and quarters of numbers?' Chorus of replies 'yes! No! maybe! No – impossible! I think you could with some numbers but not others'*

Freddie: *'Food and The Titanic – there were lots of restaurants and kitchens.'*

Oscar: *'Sports hall and materials – we need to wear special clothes at the sports hall and they're made out of materials.'* (from this followed on a mini discussion about all the other materials at the sports hall – the hall itself, the sports equipment.'

Alfie: *'our ice experiment and The Titanic – it hit an iceberg!'*

Campbell: *'ice experiment and home – I've got ice cubes in my fridge.'* 'No – not your fridge – your freezer!' someone replied.

Maisie: *'The Titanic, food and ice, because on the Titanic they would have to keep the food cold with ice.'*

Archie: *'ice experiment and dancing because you can dance on ice'. Chorus of agreement 'yes there's that programme on TV about ice dancing.'*

APPENDIX 5 : a) responses from questionnaire to Year 2 children about how they learn best; b) responses from questionnaires about why they enjoy learning through MoE

a)

'I learn when I ask good questions.'

'I use my brain all the time.'

'I use my imagination.'

'I ask friends for ideas.'

'I keep trying even when it's hard.'

'I think in my head to help me to learn.'

b)

'All our little ideas have made one big, fantastic idea.'

'It's like having golden time all the time!' It helps me to learn – it's a fun way of learning.'

*'It's like real life – there's big trouble! We can learn about solving problems.'
'I like being different people.'*

'It's exciting because anything can happen.'

'It's fascinating. You get to learn about things much more. You're learning things while you're having big adventures.'

'You can pretend to do things you can't do in real life.'

'I like it because you find out about yourself ... I have learnt that I am brave.'

'I think it's brilliant because there are so many dilemmas and adventures that never end. I learnt about myself that I keep trying until I get it perfect.'

'I like it because it seems so real. I'm learning about other people and how to work as a team.'

'I like the drama because it is adventurous. I've learnt to care about people.'

Responses from questionnaire to parents about our MoE project as a shipwreck salvage company:

'He will talk about what he has learned without prompting which isn't normal. He is excited about the way you are teaching him which is brilliant!'

'She seems very engrossed in the team effort this work involves and has told us all about the different roles. She's the bones expert!'

'She's definitely motivated by this type of learning – there's obviously a great deal of enthusiasm for this project, not to mention the excitement factor. She is always pleased to tell us she will be doing company work today. It's almost role reversal and she's become the adult!'

'It extends and challenges her way beyond the classroom.'

'It's very important for her, as an only child, to learn to work in a team situation. It has stimulated her to ask various questions she might not have asked about before.'

'He's been consumed by it!'

'She really enjoys working in the salvage company. She's told us everyone has a role and is involved.'

'He's completely motivated – I believe it's because it's so different – personal and intriguing – he takes it to heart.'

'I think it's crucial as it covers all learning styles and needs.'

'Carry on educating others about the importance of this exciting and much needed approach to teaching. I only wish that we could guarantee that Year 2 children will get more chances in the future to experience this imaginative work.'

'There are lots of exciting things to do – we've heard all about who is doing what in the company, about diving – looking at the real gear - and about the history of the Titanic . We've taped TV documentaries and looked up things in books to feed the interest developed.'

'Working with the group and with partners is fun. It's memorable and interesting. The children use their imagination to lose themselves in the drama – they're really living these experiences rather than just learning about them in a more traditionally passive way.'

'It seems to give school work a purpose.'

'It encourages imagination and broadens their horizons – most 7 year olds would probably never give any thought to the considerations of running a company.'

'I like the way that one subject can cover all sorts of curriculum areas. It makes learning more relevant and cohesive.'

'He tells us all about it! Various jobs – he thinks he has an important job as a restorer. '

'It teaches various topics in a practical sense, like research, team-work and other jobs and responsibilities.'

'I like the way they work in a team with a focus, communicating with peers, bringing various talents and understanding.'

'This is a creative way of teaching. They have goals and responsibilities – it is definitely a good way to learn.'

APPENDIX 6 : Review of the big dive down to The Titanic in the submersibles. MoE April 07 (See blog for complete story of the dive).

One of our submersibles got into trouble and a dramatic rescue took place. It was a very powerful session so we took some time to reflect on what had happened the next day – we also had to write up details for the subsequent investigation into the accident so it was important to go through what had happened. The children used the 'Blob Tree' to help them relate what happened during the rescue to their own feelings and emotions. (See Blob Tree for ref. Numbers).

Orange Team member: *'number 9 – we were scared we might die.'*

Blue Team member: *'17 – we were worried about Orange team.'*

Will: *'number 1 – fantastic! I had a plan and we used it!' (Wills' plan was to combine two teams to make the rescue more effective – it worked brilliantly!*

Red Team member: *' number 5. We were proud about the rescue.'*

Yellow team member: *'number 12 – we thought the rescue wasn't going to work – then at the last minute it did!'*

Jasmine: *' number 8 – I was being careful to make sure they didn't get hurt.*

Jack: *24 – because I thought my plan was really bad – I thought it wasn't going to work – we only had 2 seconds left.*

Bethany: *number 12 – I thought one of the robotic arms was going to snap. I was terrified!*

Tiah: *number 19 - ' I was in charge of the CCTV camera and it went wrong – I couldn't see what was going on – it was scary. We managed in the end though, so I felt like number 2.'*

The children then wanted to talk more about their worst moments on the dive:

'When the rescue was happening – I thought that we would never get out and we would die.'

'When Orange team got stuck I felt really, really scared because they might die – you wouldn't really want to die in a submersible that was trapped would you?'

'If I was in Orange team, thinking I was going to die, I would be looking out of the window, flooding into tears.'

' I was so worried something bad was going to happen. I think I wouldn't talk about it afterwards. (Someone then remembered that there were Titanic survivors who didn't want to talk about it.)

I was struck by the serious and contemplative nature of this reflective session. The imaginary dive we had been on had obviously had a profound effect on some of the children and real empathy came out in their talk. The other powerful factor was that they had worked in teams and held a collective responsibility for the safety of their fellow divers. There had been real collaboration and team work going on here.

APPENDIX 7 :The Blob Tree

Summary

'An assessment activity can help learning if it provides information to be used as feedback, by teachers, and by their [students] in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged.' (Paul Black et al. 2002)

I am aware that many of the assessment practices we have trialled in school over the last two years have a mixture of 2G and 3G elements. Some, particularly the use of situated dialogue; the blog and the portfolio, are very much 3G tools. Also, like any other school, we are required to assess our children in relation to NC levels, to use SATs in Year 2, both of which are standard 1G procedures.

Mary James concludes her article with the question *'can all three generations of assessment practice be housed under the same roof? Is inter-generational conflict inevitable?'*

She also asks if *'...there might be possibilities for a synthesis whereby a more complete theory can emerge from blending and bonding of key elements of previous theories'*.

I believe that it is possible to house the different elements under the same roof and to blend and bond those key elements, as James suggests. If the statutory (1G) elements are kept to providing NC levels in English, Maths and Science, we can, as teachers who know our NC, provide this information relatively easily, however little validity we feel they have as an effective way of assessing children's learning. SATs, with their high stakes implications are more of a problem, particularly in Key Stage 2 where the learning in Year 6 can become narrowed down, in the worst scenarios, to a training programme for children to pass the tests.

I still feel, however, that teachers and schools who are determined to assess what they value, can find a way to keep deep learning and formative assessment at the heart of what they do. Many of the 2G/3G assessment tools we have trialled are quick and easy to implement. Formative assessment as ongoing, situated dialogue and reflection is part of all good primary practice and, just because it may not always be recorded, does not mean that it should be less valued. Some of the other tools we have used, especially the Blog and transcriptions of dialogue form a Dictaphone, are much more time-consuming. No-one would be able to manage to implement the whole range of tools we have worked on in one classroom. It would be up to heads and individual teachers to decide which are the most effective assessment tools to use for them. I always use the '2 M' rule – if assessment is not meaningful and manageable it becomes a burden and teachers will feel put upon and will either burn themselves out or not do it!

Our colleagues in the Foundation Stage have, for many years, provided excellent assessment models in the form of observation notes, narratives, PSHE based assessment, photographs and portfolios. The very fact that

these very young children are not able to record work independently or to 'sit' more formal types of test, means that early years practitioners have had to be more creative in the way they assess. Even they, however, have to balance these excellent assessment practices with the monster of tick lists which is the Foundation Profile!

Part of the swing towards more formal 1G practices as children get older is because it is easier and less time consuming to test children in this way. The fact that it is possible to sit 30 11 year olds in silent test conditions means that you can get them all 'SATed' within a relatively short space of time! The margin of error and unreliability of these narrow tests, let alone the effect on these children's emotional well being and wider learning, is an area of huge debate.

One of the potential problems of 3G assessment that Mary James has pointed out is that it can be problematic assessing individual attainment. I think that the annotated evidence of individual children's ongoing work (see above: '**Evidence of children's work**') which is available for most children apart from in the very early years, could be used very effectively for this individual assessment. Also, the ongoing group diaries have the potential to contain a wide range of notes about individual attainment as well as social, learning behaviours and other personal notes. The children's individual learning diaries are also useful for this purpose.

My work with Philosophy for Children and Mantle of the Expert had already made me acutely aware of the importance of formative interaction and promoting learning through meaningful dialogue. I was also aware of the implications of the shift in my status from leader and give of knowledge to facilitator, mediator and co-participant. Paul Black refers of it as *'a delicate leadership task, requiring a balance between letting discussion wander at random and controlling it so tightly that pupils do not feel free to express their ideas.'*

It was this dialogue that consistently tied in with the principles of 3G assessment more than any other form of assessment I used in this research. It is so complemented by the pedagogy of MoE because of the careful questioning involved and the way in which the teachers handles responses. One of the most valuable lessons I have learned from working with both MoE and 3G assessment is to listen, listen, listen (also implying that I talk less!). As Paul Black says:

"Questions should open up a dialogue, pupils being time to discuss issues with one another, and then invited to report their ideas to the class. The teacher's role is then to listen, and to respond constructively in the light of what has emerged."

He also quotes a pupil who says:

"Now I know she is interested in what I think, not in whether I've got the right answer."

As a school we now feel that we need to look at the long term impact of using these assessment for learning tools. How are our children benefiting from being heard and being able to express themselves using the language of formative assessment and emotional literacy? Pupil voice is at the heart of our school vision and values and our children learn within a community of support in which they are empowered, listened to and knowing that what they say will be acted upon as much as possible.

We are already seeing children suggesting own solutions to problems. As the children become immersed in AFL culture will they, in time, be able to suggest suitable tools for assessment depending on what is being assessed? We hope that teachers in school are now becoming knowledgeable and confident enough to select the right assessment tool for the learning going on e.g. 'the easy – hard continuum would really suit a reflective session about the tiger hunt we went on in our drama today ...'. Just as teaching and learning needs to be emergent, flexible and adaptable, so do the procedures that assess that learning. In MoE we are still learning how to select the most effective dramatic convention or the most appropriate questions to deepen and enrich the dramatic situation. We therefore need to do the same with the way in which we choose to assess the learning most effectively.

We want our children to begin to realise that AFL is for everyone. It is important that children see adults modelling learning and admitting that things can be difficult – that adults struggle and make mistakes when they learn too. We have tried to develop a culture where we are explicit about how we are assessing learning to both help the child move forwards and to inform our own planning so that we can become more effective teachers. We are trying to be honest about lessons that might go wrong, so discuss this with the children and ask how that lesson could be better next time.

One of the striking things that has emerged over the project is the way in which the ongoing learning dialogue has helped children develop the specialist vocabulary to express their ideas about their learning. We feel that this is a powerful tool that has engendered both higher order speaking skills and acts as a shared vocabulary built up by the learning community that has enabled us to discuss learning with more precision and effectiveness.

We have found that trialling forms of 3G assessment has been a really positive move forward from the first and even from some of the second generation assessment practices which we have found so difficult to make part of the teaching and learning in our classrooms. As our own pedagogies have evolved and changed due to some of the innovative and creative thinking and practices we have embraced as a school, so we have needed to develop a new way of assessing for learning that complements this pedagogy. We have seen my children use the systems we have put into place eagerly and with ease and reap almost immediate benefits in their learning because it is so bound up in the active learning process itself. We also feel that we know much more about how our children are thinking and learning and am therefore able to reflect on our own practice more effectively.

Many aspects of previous assessment have ignored much of the deeper learning that goes on in the classroom such as metacognitive skills, group problem solving, information processing, reasoning, enquiry and creative thinking skills. These are all, however, key skills from our own National Curriculum, skills that should be underpinning all the teaching and learning that is going on in our classrooms.

It is so rewarding to be nurturing, valuing and assessing transferable, real life learning skills and dispositions. Through the assessment procedures we have trialled we can see our young children developing and flourishing as strong learners, effective communicators and reflective thinkers. Surely it is our job as educators to make sure that these crucial skills are reflected in the assessment of our children?

'We must learn to measure what we value, rather than value what we measure' (Dr Colin Connor NCSL)