Making Assessment Work in Practice

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Assessment Practice in Hong Kong Primary Classrooms

During the course of the Study on Small Class Teaching (SCT) in the period 2004-2008 many primary classrooms were visited and besides the systematic observations of teaching a considerable amount of information was collected bearing on the working lives of teachers (Galton & Pell, 2012). One fact stood out: Hong Kong primary teachers worked much longer hours than their counterparts in the West. Whereas in countries such as the UK and Canada an average week was around 45 hours, and this was slightly higher than in New Zealand and Australia, (Galton and MacBeath, 2008) in Hong Kong the figures ranged from 60 hours minimum to 70 hours maximum. Most of the difference could be explained in marking children's work either in the form of the set homework or the worksheets that were completed and collected during the lesson itself.

Besides taking up a considerable amount of a teacher's non contact time, over-reliance on this form of assessment has one big disadvantage: the teacher only discovers whether her pupils have understood what has been taught after the lesson has been completed. By then it is too late to have changed his or her approach to include further explanation of key points and the only solution is to spend time in a subsequent lesson re-teaching the previous content. During the course of our classroom observation teachers often would pause and say such things as, "Does everyone understand?" Most hands would go up but it was often obvious that in some cases this was because particular pupils did not want to advertise their difficulties in front of their peers for fear of losing face. In theory teachers could also use questioning throughout the lesson to check for understanding. In practice, however, questions were usually concerned to elicit factual knowledge, involved brief one to one exchanges, and were rarely extended to probe for conceptual misunderstandings. Often the exchange was guided by the teacher's response so that the pupil was able to arrive at an acceptable answer through the teacher's prompting.

Some of the teachers in our study adopted a practice used in the UK and known as 'traffic lights'. Children were given three coloured cards or discs in red, orange and green. Displaying a green card meant that the pupil could work by himself without help; an orange that help was needed but it could probably be got from another pupil displaying a green card. A red card indicated the teacher's help was needed. In this way the teacher's attention was directed to the pupils with serious learning problems.

Creating a Positive Classroom Climate

Critics of this approach have argued that the use of the cards is often ritualistic rendering the procedure ineffective. For example, some pupils show the green card for similar reasons that prompted them to put their hands up whenever the teacher asked the class if they had understood; namely to avoid loss of face. Consequently the teacher still had to set homework to check. Such systems, such as traffic lights, will only work if the classroom climate is such that the teacher can rely on the pupils' response and, as important, there is a cooperative spirit among classmates and an understanding that we often learn through our mistakes. Teachers often tell pupils that it is important to learn from one's mistakes but they are rarely believed, particularly in Hong Kong classrooms. Partly this is because the most common form of feedback is to call for class approval when a pupil comes up with a correct answer. The class will clap and chant in unison, "He is good, he is great". There is rarely praise for a good effort or rarer still public approval for a pupil who self corrects his mistakes. To change the classroom climate to one that facilitates this kind of mutual respect among pupils teachers must actively single out for praise any incident which reinforces the desired behaviour.

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By way of illustration consider a lesson I saw in the UK and described in Galton (2010). The class the equivalent of Hong Kong's P3, were being taught by a visiting dancer, although the class teacher was present, and were preparing for a parent's concert. The dance involved pupils forming themselves into a tight spiral. This coil then unwound slowly with pupils breaking off to form new groups ready for the next routine. On this particular day, one girl, Melissa, left the spiral too early and ran to her next position. Realising her error she clasped her hand to her mouth in horror.

Teacher (shouting above the music): Melissa. Concentrate and pay attention.

The dance teacher waited until the music finished. There had been some aggressive behaviour because when children came out of the spiral they didn't always end up at the exact spot where they were supposed to stand waiting for the next move to begin. When more pupils arrived they frequently tried to take over the occupied space by pushing their peers out of the way. The dance teacher then turned to Melissa and said the following:

I want to congratulate you Melissa. You did exactly the right thing. You went to the next spot and didn't run back into the spiral. I did something like that when I was your age and I was so embarrassed I did what you did and put my hand over my mouth. But afterwards I realised that nobody in the audience would know it was a mistake, that is until I put my hand to my mouth. They thought I was doing a solo. And now then you others [turning to address the rest of the class]. Melissa has taught us all something. Mistakes are going to happen. It doesn't matter. What matters is how you cope with them. So when you come out of the spiral and you find someone is in your position don't try to move him away but go to his place instead. That way it will look as if it was planned to the audience. So well done Melissa for teaching us all such an important lesson.

This dance teacher used an incident from her own childhood, including her feelings on making her mistake in public, to empathise with Melissa (and no doubt other pupils listening) before going on to deal with the behaviour issue of pushing and shoving. This incident had a powerful impact on the class. When interviewed and asked the usual question, "Is Alex (the dance teacher) like a teacher in this school?" they all gave negative responses and said that this was mainly because, "She didn't shout like teachers." Asked to explain further, they mostly talked about the above incident with Melissa and the way it gave them confidence to take risks with their learning.

Promoting Mutual Trust by the Use of Group Work

Another important means of developing a sense of mutual respect among pupils is to encourage the use of cooperative learning in groups. There is no shortage of evidence supporting the view that at its best the use of groups not only aids learning but also promotes social cohesions and improved relationships, not only between peers but between the teacher and the class (Cohen & Lotan, 1995). The latter includes more honest evaluations of their performance by pupils when questioned by the teachers (Blatchford & Baines, 2010; Kutnick, Blatchford & Baines, 2002). But as Damon & Phelps (1989) note differences in initial perspectives can only lead to improved understanding all round when the respective participants are not influenced by an inequality in either power or knowledge. In setting up groups therefore a class needs to develop its group rules along the lines of everyone has a turn to speak, everyone being listened to without interruption etc. Various activities need to be introduced to build mutual trust, some of which can be found in Baines, Blatchford & Kutnick (2009). Many are based on those developed for the UK Leicestershire Education Committee by Kingsley Mills, McNamara and Woodward (1992) who argue that in a climate of trust 'group members feel safe to express and share their feeling and points of view.... and lead to greater participation by all class members' (p202). By way of illustration, one such exercise takes about 20 minutes and forms the class into groups of six. Each group is asked to link themselves together to form a structure such as a bridge, a tree, a bus or a tower etc. More advanced exercises involve exploring sensory awareness. An example is to place pupils in pairs with one of the pair blindfolded. The second pupil has the task of leading the blind person on a walk around the playground or going up or down a flight of stairs. The roles are then reversed. Afterwards the pair discusses how it felt to be led and to be a leader.

Finally the class come together to discuss the qualities needed to be a good leader.

The final stage in developing of these relational aspects of group work involves regular debriefings. From time to time the teacher needs to ask pupils to make 'honest evaluations' of how they worked as a group and to make suggestions about how they might function better next time. A variation to this exercise is for individual members of a group to complete a brief evaluation sheet on the lines, Did I listen carefully to everyone's contributions? Did I take my turn? etc., and to share their assessment with the rest of the group.

Planning a Teaching and Learning Strategy

Having developed a classroom climate designed to facilitate honest reporting by pupils, the question arises of when and how teachers should make use of these improvements to enhance the range and accuracy of their assessments and, in particular, to cut down on the current marking load.

The starting point in a planned assessment strategy is to identify the learning objectives, first over the course of a topic and then for individual lessons. Too often, as teachers, we tend to specify our objectives only in terms of the content of the lesson. Thus we may list that a prime objective in a mathematics lesson is to identify various types of four sided figures such as a square, rectangle, parallelogram etc. In English pupils may be asked to memorise the words of a poem or song. When objectives specify only the content there is a danger that the teacher becomes fixated with completing the prescribed content at all costs to the detriment of the pupils' learning. I have seen many lessons where the teacher, realising that s/he is running out of time begins to speed up the presentation towards the end of the lesson. As most lessons tend to proceed from simple to more complex activities quickening the pace at this point in time is likely to hinder pupils' attempts to grasp what is being taught. Furthermore, when one focuses solely on the content of the lesson there is a tendency to teach that content so that direct teaching becomes the main pedagogic strategy. In the SCT study it was found that for nearly 70% of a lesson teacher talk dominated with no interaction with individual pupils even when they were part of a class, a group (Galton & Pell, 2012). Teachers made presentations, demonstrated, gave instructions. The class responded by reciting (or in English often singing) in unison. Thus in Chinese the class might recite a poem together, read a text out aloud, or trace a Chinese character with their finger. In mathematics the class might count up to one hundred in tens. When not engaged in these ways pupils would work silently on some exercise from the textbook or from a homemade worksheet. Despite teachers claiming that a small class increased opportunities to help individual pupils this was the least used strategy. Consequently it was extremely difficult, if not impossible, for teachers to assess the degree of understanding that existed within the class.

To break away from this pattern requires teachers to consider the purposes behind the various activities which form part of a lesson and, in particular to what use will the new knowledge or skills acquired by the pupils be put. This shifts the emphasis towards *process* objectives. In this matter a useful way of proceeding is to describe the objective in terms of action words. Low level objectives require pupils to *recall, define, identify, recognise, name, measure* etc. Medium level ones get pupils to *use, show, perform, explain, illustrate, predict* and *interpret*. Finally, there are high level objectives where pupils are asked to *classify, design, organise, compose, discover, summarise, identify, draw conclusions* or *distinguish* one case from another.

Having described the purpose of the lesson in terms of expected pupil behaviour using action words similar to the above examples, the next step is to identify appropriate teaching strategies. Low level objectives are mainly concerned with *transmission* (imparting new knowledge or skills) for which direct instruction is the most appropriate pedagogy. In this approach the teacher first uses rapid questioning around the class to determine how far the knowledge acquired in the previous lesson has been retained. If it proves that retention is patchy a quick revision of the main points is undertaken. Only then does the teacher introduce new knowledge using simple examples or analogies to illustrate the main points. This is followed by practice first as a whole class activity and then individually.

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But in moving beyond low level objectives a different pedagogy is required. This is because pupils are now required to *apply* this newly acquired knowledge (medium level) and demonstrate *understanding* (high level) which in the many cases means that they are required to apply this new knowledge in unfamiliar situations. To do this they are required to construct appropriate cognitive frameworks (schema) but also to re-construct existing ones in ways that fit with this widening perspective. This process of construction and reconstruction is best pursued by extended interaction with others, both teacher and fellow pupils. Goswami and Bryant (2007) in summarising the evidence for this claim explain that shared experiences of this kind allow pupils to enhance both their neural and social networks. This approach differs from the *instructionist approach* in which a more knowing expert transmits what s/he knows to the novice learner and focuses instead on the cognitive conflict that arises between individual learners which leads to higher order understanding. At the centre of this connectivist or social constructivist approach, the capacity to learn through the help of others is promoted by the use of extended dialogue both in the form of class discussion and challenging interactions between pupils during group activity. To paraphrase the late Jere Brophy (2004) 'extended talk drives learning'. For Brophy, teaching for understanding requires a classroom where,

- Pupil exploration usually precedes formal presentation of new ideas by the teacher,
- Pupils' questions and comments often determine the focus of classroom discourse,
- The greater proportion of talking is done by pupils so the teacher is a *listener* or *guide on the side* rather than the *sage on the stage*,
- Pupils are required to reflect critically on the procedures and methods used.

Brophy's final point seeks to move pupils beyond the social constructivist framework of conceptual development and to introduce the notion of strategic

thinking. To become 'metacognitively wise' (Galton, 2007) pupils must learn to self-regulate their own learning by not only acquiring a repertoire of appropriate strategies for solving problems (automacity) but also be able to quickly recognise when a chosen strategy is inappropriate (executive control). A key to developing strategic knowledge of this kind is the use of appropriate feedback mechanisms by the teacher. This requires the use of what Earley, Northcroft, Lee and Lituchy (1990) refer to as *task processing feedback*. This includes getting pupils to identify their own mistakes, questioning them about the suitability of their chosen approach and calling for suggestions as to how to approach similar tasks in future (Earley et al., 1990:105). This approach therefore involves what has now become as Assessment *as* Learning.

The Choice of Appropriate Assessment Tasks

Having specified the teaching objectives more precisely, and chosen appropriate teaching strategies to meet these objectives, the teacher is now in a position to consider the form that the Assessment *of* Learning should take. The following diagram summarises one possible approach:

(Objective Level	Main Teaching Approach	Main Assessment Tools
1.1	Low level	Teaching for transmission	Rapid class questioning,
		using direct instruction	multiple choice tests
1.2	Medium level and	Teaching for understanding	Use of dialogic
	some higher level	using extended class	questioning with suitable
		discussion and group work	wait times and extended
			written work
1.3	Advanced higher	Teaching for strategic	Use of task processing
	level	thinking mainly through	feedback, pupil
		investigations, problem	reflection and class
		solving etc.	debriefing

For low level objectives mainly concerned with knowledge and skill acquisition multiple choice test items are most appropriate since they require pupils to recognise a correct answer rather than creating one. Here the importance of developing a supportive classroom climate is useful since it will allow neighbouring pupils to swap papers and mark each other's answers, thus saving time and allowing the teacher to question the class when it appears that many have chosen an inappropriate answer. In this way misconceptions can readily be identified and corrected.

In teaching for understanding, however, the teacher often needs to follow the chain of thought which leads pupils to come up with a particular response. Extended class discussion is particularly appropriate because it allows the teacher to follow up answers with further questions such as "Why do you say that?" or "Can you explain a little more please?" thus exploring the reasoning behind the pupil's response. Drawing other pupils into the exchange so that a dialogue between pupils developed can also be promoted by asking such questions as "Do you agree?" or "Anyone wish to add anything?" Extended written work in the form of a paragraph for younger pupils now replaces multiple choice and here a short written comment is to be preferred to a tick in the margin. In such written work pupils are expected to show their working in mathematics or provide reasons in English and Chinese. Teaching pupils at an early stage that any suggestion or conclusion should always be followed by a *because* is a useful means of introducing this approach.

Finally in seeking to promote strategic thinking, task processing feedback is essential. Written answers provide few opportunities for teachers to follow the logic of a pupil's thoughts. This can only emerge through extended conversations with the individual whereby the teacher can discover the reasoning (and motivation) behind the choices made. Class debriefing exercises where a pupil comes to the front and explains his or her reasoning is a particular valuable form of this approach. Other pupils can be asked to comment and to suggest alternatives with the various suggestions evaluated.

Planning one's teaching in this way is time consuming but it can pay rich dividends. For this reason it is best done as a joint activity with fellow teachers in the form of what in Hong Kong has become known as *learning circles* where the circle of teachers jointly plan lessons, observe some of these either *in situ* or on videotape and then provide feedback with a view to further improvement.

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