

Developing Assessment Practices

Which Support Pupils' Inquiry

Paul Black
Department of Education
King's College London

First Priority All pupils must actually do inquiries



This means that every pupil must be actively engaged and therefore

pupils must collaborate with one another in small groups.

For the teacher the work is very different from wholeclass teaching





So how can pupils learn how to make inquiries,

and learn about inquiry,

through and in their active involvement in inquiry work?

Dialogic Teaching



Children, we now know, need to talk, and to experience a rich diet of spoken language, in order to think and to learn. Reading, writing and number may be acknowledged curriculum 'basics', but talk is arguably the true foundation of learning. (p.9 in Alexander, R. 2006)



Inquiry dialogues

Can be by teacher to individual pupils
Or by pupils with one another
Or by teacher with pupil groups

Pupils are learning resources for one another

The teacher's interaction with pupils must be by formative assessment designed to help them develop their thinking, not to give them 'the right answer'

An example of teacher dialogue



- Jamal you have really impressed me today. Can you read your prediction out please. Let's see if you have done all the bits.
- I predict that the yeast will rise up in the warm water because the warm water will heat the yeast and the yeast will release the carbon dioxide.
- That's great, well done Jamal. (Refers to success criteria on interactive white board)

So Jamal said his prediction, he made his guess didn't he. He said 'because' and said why, he said 'because heat will release the carbon dioxide'. But he didn't say why the heat will help. So the last thing you need to do is to say why you think the heat will help the yeast to release the carbon dioxide. Does anyone know why the heat will help? Anyone written why the heat would help? Lauren what have you written?

Talking the talk



Such encounters are the source of experiences which eventually create the 'inner dialogues' that form the process of mental self-regulation.

Viewed in this way, learning is taking place on at least two levels: the child is learning about the task, developing 'local expertise'; and he is also learning how to structure his own learning and reasoning.

p.98 in Wood, D. (1998): *How Children Think and Learn (2nd edition)*. Oxford U.K.: Blackwells

Structure of Inquiry lessons



- ° Teacher presents a phenomenon to the whole class
- ° Each pupil-group discusses what they see, formulates a reason for what is happening and proposes how to investigate to check on their suggestion.
- [°] Each group presents its idea and its proposed investigation to the whole class. Teacher guides a whole class discussion by formative feedback.
- ° Each group revises its proposal and proceeds with its investigation. Teacher visits groups and gives formative advice.
- ° Each group presents its findings to the whole class. Teacher guides a whole class discussion by formative feedback.
- ° Teacher then specifies how pupils should write individual reports on the work

The Summative Dimension



NEED

Teachers, or their schools, may need summative results for their pupils. Each pupil will be helped by a summative judgment which explains the strengths and weaknesses of his/her work

TO MEET THIS NEED

Teacher collects on-the-fly notes made during each lesson.

Each pupil has to produce a written report at the end of a topic, or two or three reports, one at the end, others at intermediate stages.

For each pupil, the summative result may be based on a portfolio – a collection of that pupil's own work and of teacher's on-the-fly notes.

Fairness and Comparability



Need to ensure fairness and comparability between the summative judgments of different teachers.

One way to do this is for each teacher to select two or three portfolios. Then all the teachers in a group circulate and assess one another's selected portfolios.

Then the teachers meet to discuss one another's judgments and make any changes necessary to ensure fair alignment.

Dependability and Comparability College Moderation meetings

One teacher wrote about the experience of such discussions

"And we've had moderation meetings, we were together with the other schools, teachers in other schools looked at how rigorous our assessment would be and they criticised what, you know, our marking criteria is. And we changed it, which is all been very positive."

Black, Harrison et al. 2011



References: Assessment for learning



- •Black, P., Harrison, C., Lee, C., Marshall, B. & Wiliam, D, Founded 1829
- Assessment for Learning putting it into practice. Buckingham: Open University Press. 2003
- •Wiliam, D., Lee, C., Harrison, C. and Black, P. (2004) Teachers developing assessment for learning: impact on student achievement. *Assessment in Education*, **11**(1), 49-65
- •Alexander, R. (2006) Towards dialogic thinking: rethinking classroom talk. York: Dialogos
- •Mercer, N. & Littleton, K. (2007) *Dialogue and the Development of Children's Thinking;* A sociocultural approach. Abingdon, U.K.: Routledge
- •Dweck, C. S. (2000). Self-theories: their role in motivation, personality and development. Philadelphia, PA: Psychology Press.
- •Black, P., Harrison, C., Hodgen, J., Marshall, M. and Serret, N. (2011) Can teachers' summative assessments produce dependable results and also enhance classroom learning? *Assessment in Education.* 18(4), 451-469.
- •Black, P., Harrison, C., Hodgen, J., Marshall, M. and Serret, N. (2013) *Inside the Black Box of Assessment: Assessment of learning by teachers and schools.* London: GL Assessment.
- •Klenowski, V. & Wyatt-Smith, C. (2013) Assessment for Education: A guide for Students, Teachers and Researchers. London: Sage 31

References:Group Work



- •Lyn Dawes, Neil Mercer and Rupert Wegerif (2003) *Thinking Together.*Published by Imaginative Minds Ltd. http://www.thinkingonlinecatalogue.co.uk/
 http://www.thinkingonlinecatalogue.co.uk/
 Sets of classroom tack in a sequence for ages 8 to 11
- •Ed Baines, Peter Blatchford and Peter Kutnick (2009) *Promoting Effective Group Work in the Primary Classroom* London: Routledge
- •Mercer, N., Dawes, L., Wegerif, R. and Sams, C. (2004) Reasoning as a scientist: ways of helping children to use language to learn science. *British Educational Research Journal*, **30**(3), 359-377.

Classroom Dialogue

- •Alexander, R. (2006) *Towards dialogic thinking: rethinking classroom talk*. York: Dialogos
- Excellent short booklet: to order use <u>www.robinalexander.org.uk</u>
- •Mercer, N. (2000) Words & Minds: How we use language to think together. London UK: Routledge
- •Littleton, K. & Mercer, N. (2014) *Interthinking: Putting talk to work.*

Abingdon, U.K.: Routledge



Moderation Teaching and learning conversations

I think its quite a healthy thing for a department to be doing because I think it will encourage people to have conversations and it's about teaching and learning. . . . it really provides a discussion hopefully as well to talk about quality and you know what you think of was a success in English. Still really fundamental conversations.

Black, Harrison et al.,2011

Validity



Validity is achieved when inferences that users of the results need to make are justified by the evidence

The users are:

The pupil

Those who teach that pupil next year

Or in the next school

And all involved with the pupil after schooling completed

Validity in the future?

KING'S College LONDON Founded 1829

... the teacher is increasingly being seen as the primary assessor in the most important aspects of assessment. The broadening of assessment is based on a view that there are aspects of learning that are important but cannot be adequately assessed by formal external tests. These aspects require human judgment to integrate the many elements of performance behaviours that are required in dealing with authentic assessment tasks.

p.31 in Stanley, G., MacCann, R., Gardner, J., Reynolds, L. & Wild, I. (2009). Review of teacher assessment: what works best and issues for development
 17

 Oxford Centre for Educational Development; Report commissioned by the QCA.