

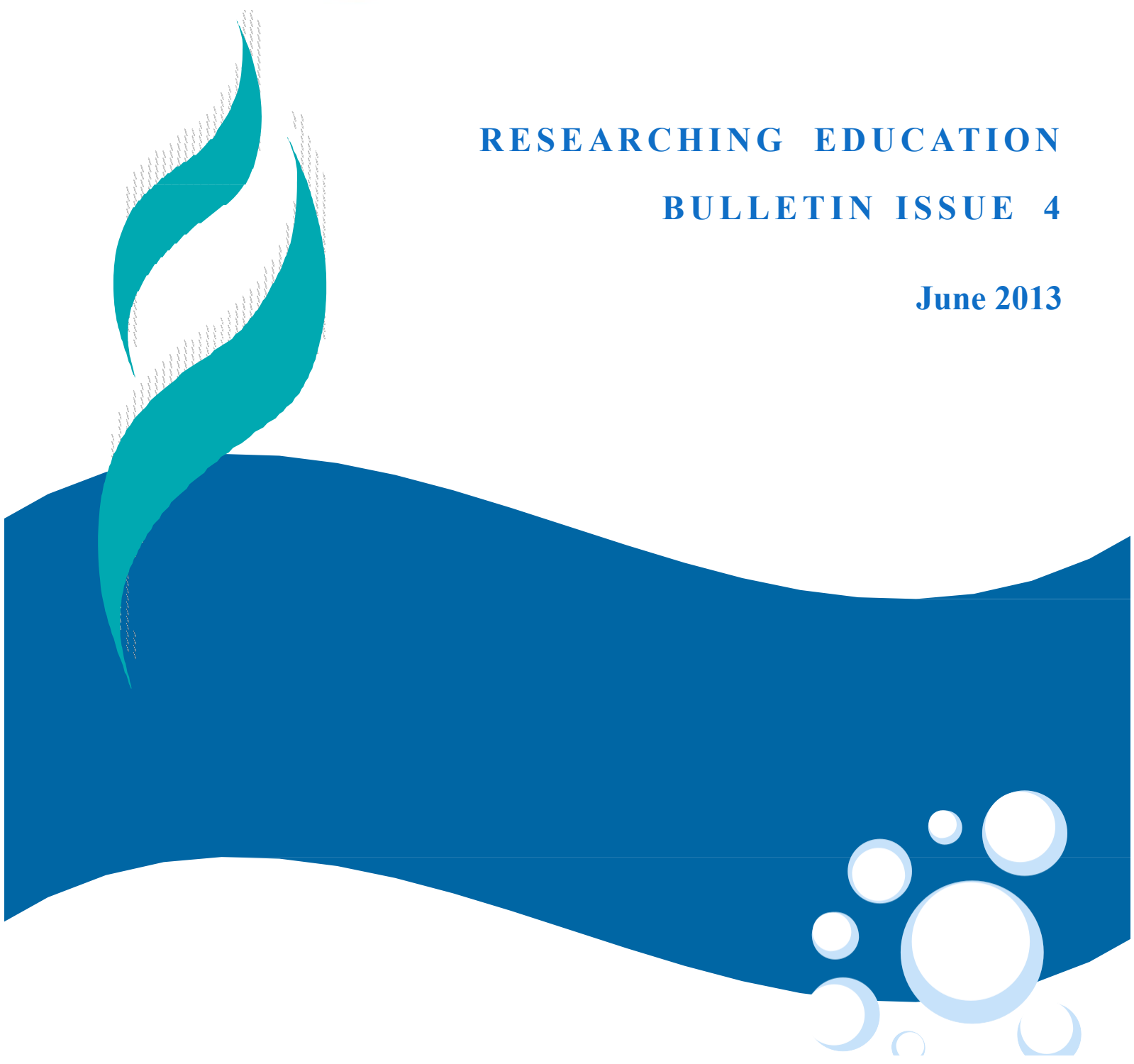


*Improving education
through research*

RESEARCHING EDUCATION

BULLETIN ISSUE 4

June 2013



Editorial

Welcome to the fourth issue of [SERA's *Researching Education Bulletin*](#). Once again we are lucky to have a wide range of research or discussion pieces from diverse groups involved in education both within and out with Scotland. Where there is a longer report available, authors have kindly provided a web address so that you can explore the work more fully.

We start this issue with a follow on article from Lynne Jones – Still Vertically challenged? In which she investigates the extent to which the issues raised in her original work had been addressed. This is then followed by a large-scale research project (carried out by a team from Glasgow University) concerned with assessment and transition between p7-S1 as well as the ways that teachers' approaches to assessment might be developed and enhanced.

Our next paper is a discussion article concerned with Bloom's Taxonomy and the significance of task context by David Morrison-Love. Kirsten Darling then takes us into a consideration of the very nature of learning, drawing on complexity theory, Vygotsky and Dewey. Learning how to learn how to learn follows on, looking at this topic within the context of the Netherlands. Finally, Evelyn Arizipe draws on research into the use of images in children's literature and the ways that visual strategies might encourage varied responses and the building of reading communities.

[Lorna Hamilton](#)
[University of Edinburgh](#)

On behalf of the Editorial team I hope that you will enjoy reading this issue.

Table of Contents

Still Vertically Challenged? Lynne Jones	P4
Assessment at Transition L Hayward, I Menter, V Baumfield, R Daugherty, N Akhtar, L Doyle, D Elliot, M Hulme, C Hutchinson, G MacBride, M McCulloch, F Patrick, E Spencer, G Wardle, H Blee, L Arthur.	P11
Bloom's Taxonomy, Contexts And Task Challenge David Morrison-Love	P15
Reconnecting Learning: exploring embodied learning possibilities Kirsten Darling	P18
Learning to learn how to learn Support for learning of students And teachers Erik Wormhoudt	P21
Research report: Journeys from Images to words Evelyn Arizpe	P27

Still Vertically Challenged?

What do vertical groups look like in my setting now?

What has been the impact of the initial research?

Lynne Jones, Chartered Teacher, West Lothian

... you are enticed to create some type of movement or change in the (stagnant) water ... You reach down, pick up a stone, and toss it as far out into the center of the pond as your strength allows you. Lying beside the pond, the stone had no chance of impacting the water. But once tossed in, the stone not only disturbs the stillness of the water in the immediate vicinity of where it landed but also creates ripples of water that emanate out from the stone's landing reach the perimeter of the pond.



An unshared teacher the pond. Unless that conversation and dialog base for teaching, the change. However, once status quo of educational

beginning with the teacher himself or herself and his or her immediate vicinity ... and emanating out to a school, a district, a state, eventually reaching and contributing to the transformation of the perimeter of all practice – the profession of teaching itself. (Dana & Yendol-Hoppey, 2009: 187-188)¹

RESEARCH FOCUS

Commissioned by the school's Headteacher (HT), this follow-up enquiry investigated the extent to which the issues identified in the original 'Vertically Challenged?' research had been addressed. With Dana and Yendol-Hoppey's (2009) stone throwing metaphor in mind (see quote ¹ above), data was analysed in order to tease out the effect that publication had on the content and organisation of vertical groups (VGs), a mixed age grouping practice, as well as the various participants, the school as a whole and the researcher in person.

In 2011, VGs worked with the same teacher each week, and while the HT believed that **'the staff have ... input beforehand and the leaders or co-leaders have been trained for anything that they've had to take forward'** the staff spoke repeatedly about a lack of advance notification regarding the content of the vertical group sessions and some pupil leaders admitted that **'most times the leaders do not know what they are doing'**. In reality, one member of staff was charged with planning the lesson every week for all 12 groups.

So in 2012, in response to these (now public) revelations, it was agreed that the 12 teachers who hosted a VG would each plan a lesson that they would then facilitate once a week for 12 weeks, each time with a different vertical group.

In 2011, many teachers felt that the active citizenship issues tackled in VG sessions, such as Fairtrade and the United Nations Convention for the Rights of the Child (UNCRC), were too challenging both for the youngest pupils to understand and for the pupil leaders to facilitate. In 2012, the two most popular suggestions from a whole school consultation - Animals and The Olympics – became the overarching themes for two series of 12 VG sessions, the separate elements of which were derived from another round of pupil consultation.

RESEARCH METHODS

As before, the data gathered was qualitative in nature. This time it comprised:

VISUAL DATA: ‘What do vertical groups look like?’ drawings by pupils of all ages (N=177), annotated ‘ladders of participation’ created by staff (N=5) (see Figures 3 and 4), photographic and film evidence from vertical group sessions throughout 2011-12 .

CONVERSATIONS: To follow-up some of the drawings, brief conversations with individual pupils in a bid to verify the interpretations I had made of the images they had created, ‘Vertical groups are ...’ circle with one VG (N=18).

COLLABORATIVE GROUP INTERVIEW: Discussion with all teaching staff involved in vertical groups (N=19).

WRITTEN DATA: PMI (plus, minus, interesting) evaluations by pupil leaders (N= 22) and the researcher’s professional journal.

ONE-TO-ONE SEMI-STRUCTURED INTERVIEWS: With the HT and also the teacher with responsibility for overall organisation of VGs, to collect perceptions about the changes and their impact from these two specific perspectives.

Data and analyses from this project were compared with data and analyses from the original ‘Vertically Challenged?’ research.

DATA ANALYSIS

P6 co-leader: (It’s positive) how we are more involved with decisions and are more prepared for vertical groups.

Headteacher: I think the ‘Class of 2012’ (regional showcase) where we had the research work up and video evidence of the working and everything – the majority of the comments from the HMIE, Education Scotland ... were really about how this (VGs) was Curriculum for Excellence in action, so I think it’s good to know that we’re on the right track.

P4 pupil: I prefer to move around because you get to do new stuff. I feel excited because every time I go to vertical groups, it’s always fun!

Figure 1: A selection of affirmative comments gathered in the course of the data collection.
The majority of data was in this vein.

P2 boy: I prefer last year’s vertical groups, you got to play more games. Vertical Groups are boring now.

Teacher: I haven’t enjoyed it as much having groups changed every week although it has its benefits.

P7 VG leader: It’s worse (pupils are) misbehaving more because of the different teachers, they’re pushing them.

Figure 2: Less positive opinions such as these were few in number.

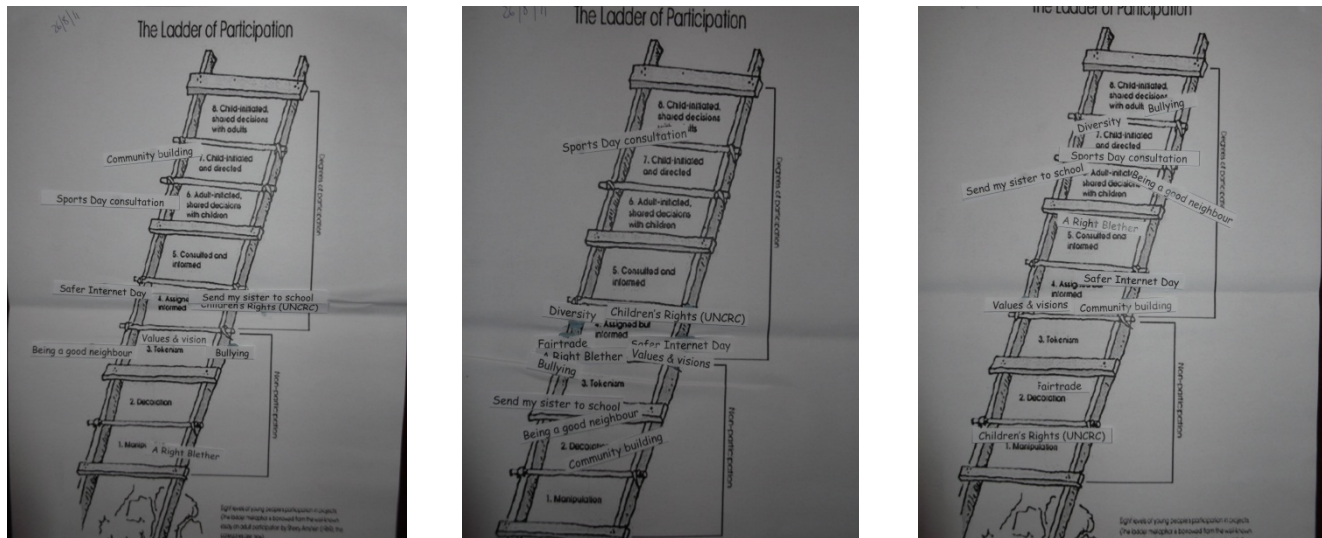


Figure 3: 2010-2011 Hart's ladders of participation²

In groups, teachers considered the level of student leadership and pupil voice in all the different sessions that had been planned for them to undertake with their pupil leaders. Over the whole sample, there was no consensus. This was perhaps due to the minimal engagement of the majority of the teaching staff in the design and preparation of the sessions in the first year.

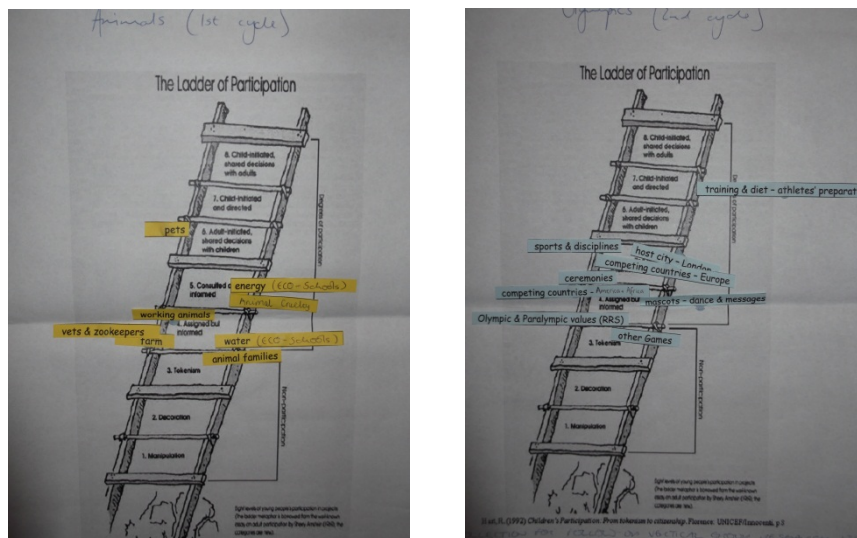


Figure 4: 2011-2012 Hart's ladders of participation²

Individual teachers placed their particular lessons on the rung on the ladder which represented the authenticity of the pupil participation that they had planned for and supported in their own specific vertical group sessions. The data shows a general upward trend on the ladder, with more lessons higher up on the ladder in the second cycle (blue, Olympics) indicating greater levels of pupil participation.

FINDINGS

Analysis of the new data, clearly demonstrated that the adjustments made in terms of planning and preparation were generally recognised by all parties as having successfully tackled the issues relating to lack of confidence and understanding of content amongst both teachers and pupil leaders (see Figures 2 and 5).

Comparison of both the ‘Vertically Challenged?’ and ‘Still Vertically Challenged?’ data and analyses point to some changes in perception over time. In 2011, the most common feature relating to the content of VGs in pupil drawings was discussion, with related words or images occurring in 24% of drawings. However, in 2012 the most common feature was ‘making things’ in 28% of drawings, with discussion in only 1% of drawings. This appears to indicate a significant switch, from a focus on talking about issues in the first year, to an emphasis on creating things that demonstrated knowledge of a topic in the second. This perhaps reflects the move away from active citizenship towards curriculum oriented learning.

The majority of teachers interviewed in 2012 agreed that **‘pupil leaders (had taken) more of a leadership role’**. However, the pupil drawings seem to tell a different story. In 2011, 17% of drawings featured pupil leaders and 11% teachers. In 2012, 9% of drawings featured pupil leaders and 21% teachers. One interpretation is that in 2011 pupil leaders and teachers were effectively supporting each other in facilitating lessons planned by another person and enactment of any level pupil leadership was a novelty worthy of remark. In 2012, though pupil leaders had access to all lesson plans in advance (see Figure 5 below), teachers were responsible for planning their own session and devising creative activities; consequently teachers were more confident with explaining activities and related learning intentions. Admittedly others of the drawings may have included pupil leaders or teachers who were not specifically identified but, an increased level of teacher ownership could be what is reflected in the drawings, while at the same time, pupil leadership was less novel and noteworthy.

Figure 5: Advance preparation and regular, ongoing evaluation



Pupil leaders have a copy of all 12 lesson plans in a series, it is their responsibility to familiarise themselves with each session ahead of time and afterwards, assisted by the co-leader, to keep the group's evaluation record up-to-date.

CRITIQUE

The processes of implementation, research and publication encompass different elements of action surrounding the innovation that is vertical groups, and **'it is only through action that we come to understand and develop the skills and clarity to actually make change successful.'** (Fullan 2007: 13)³

Now into their third year, VGs continue in my setting. In addition, encouraged by positive comments from HMIE (see Figure 4, above), the school's Pupil Council and following consultation with teaching staff, another weekly period of mixed age working has been instituted this year. This time, the stated aim is to facilitate skills development, and to provide opportunities for the children to identify, transfer and apply these skills in other areas of life. Moreover, following extensive moderation and assessment, mixed age mathematics grouping has begun across P5-P7, approved by the pupils as **'that's vertical learning'**.

Since August 2011, the initial research has been shared with a variety of practitioners and educationalists from Scotland and further afield in several different local and national contexts. On a personal level, through the action research process and the subsequent publication of the ‘Vertically Challenged?’ poster, this researcher’s sense of agency grew exponentially with each (re)validation of the professional learning undertaken. Launching a second stone into the water with this follow-up enquiry, the ripples may emanate further still.

REFERENCES

¹Dana, N. F. & Yendol-Hoppey, D. (2009) *The Reflective Educator’s Guide to Classroom Research: Learning to Teach and Teaching to Learn Through Practitioner Inquiry, Second Edition*. Thousand Oaks, CA: Corwin Press, SAGE

²Hart, R. (1992) *Children’s Participation: From tokenism to citizenship*. Florence: UNICEF/Innocenti

³Fullan, M. (2007) *The New Meaning of Educational Change, Fourth Edition*. New York: Routledge

Scottish Educational Review

<http://www.scotedreview.org.uk/>

Aims and Scope *Scottish Educational Review* (SER) publishes academic articles and research notes relating to the field of educational policy and practice. The journal is written for academics and researchers in the field of education, teachers and managers in schools and local authorities and those concerned with the development and implementation of education policy. While some of the focus is Scottish, we aim to publish work that is of wider interest to the readership. We also publish work relating to education outwith Scotland, that may be of interest to a Scottish audience.

Availability of papers SER is available in paper form by subscription. The website contains an archive of back issues (papers as downloadable pdfs). The most recent edition is available as **abstracts only**, but all older articles are available in full back to 1997.

ASSESSMENT AT TRANSITION

L Hayward, I Menter, V Baumfield, R Daugherty, N Akhtar, L Doyle, D Elliot, M Hulme, C Hutchinson, G MacBride, M McCulloch, F Patrick, E Spencer, G Wardle, H Blee, L Arthur.
University of Glasgow, Summer 2012
(Funded by Scottish Government)

Outline

Set in the context of Curriculum for Excellence, this project gathered evidence from research, policy and practice to:

- identify desirable assessment approaches affecting progression in learning at P7-S1 transition
- propose ways of developing teachers' assessment professionalism.

Specific focal issues were particular kinds of assessment arrangements which support learning effectively at transition, interpretations of the term “standards” and clarification of what promotes trust in professional judgements. Key aims were to align research evidence, policy and practice more effectively and to promote impact by interacting with Scottish Government, Education Scotland, local authorities and schools during the project and after publication of the report to support action relevant to the findings. The findings suggest need for action principally in four important areas:

Developing teacher professionalism in bringing together curriculum and assessment

Managing learning and progression at transitions

Building trust in professional judgement

Ensuring intelligent accountability in CfE.

The Research: Evidence-base and Findings/Recommendations

The evidence base included

- an extensive research literature review;
- analysis of CfE assessment guidance
- interaction with research and policy representatives in three seminars;
- analysis of LA and school assessment documentation;
- interviews/interaction with managers, teachers, pupils from 25 primary and 4 secondary schools in 4 LAs and with LA staff.

Findings led to the following major recommendations for action.

Developing teacher professionalism in bringing together curriculum and assessment

Beginning from clear understanding of the curriculum, thinking and discussion about assessment should be embedded in planning all learning/teaching activities, including:

- developing good learning and assessment tasks;
- articulating success criteria;
- involving pupils in planning and assessing their own and others' learning;
- gathering and evaluating classwork evidence;
- providing feedback and identifying next steps;
- summarising achievement and progress (including, when required, making a 'level judgement'); and
- reporting information about pupils' learning.

Managing learning and progression at transitions

Teachers should be involved in the design of the information gathering system at all points of transition, to ensure motivation to use the information they receive.

Information should be

- manageable
- relevant to curriculum planning and/or learning/teaching for individual learners or groups.

Detailed accounts of individual progress in all curricular areas are unlikely to be used. Teachers can build on prior learning using

- information about curriculum coverage
- "learning conversations" with pupils, perhaps informed by reference to relevant work in a folio
- regular purposeful meetings of primary and secondary colleagues, informed if possible by visits to one another's classrooms.

Building trust in professional judgement

Action is needed in relation to *assessment for learning* and *assessment of learning*.

In addition to existing AfL practice, there is need for

- more dialogue about progress in learning between teachers and pupils and amongst pupils
- evidence-informed decision-making about what has been learned and next steps.

In assessment of learning, teachers need support in sharing information about pupils' progress without reference to levels and in deciding on level achievement. The former involves forming an understanding of progression through discussions of curriculum plans, learning and assessment tasks, success criteria, pupils' work (with teacher annotations), focusing on immediate 'next steps' **and** the 'big picture' of key aspects of learning in a curricular area over years. Parents should be consulted on different forms of communication about their children's learning, including, eg, discussion of portfolios of work rather than detailed reports.

There is a strong case for reporting on achievement of levels only at P4, P7 and the point of moving from broad general education. This would help keep the focus on deep learning and progression and strengthen validity of levels judgements. A 'Best Fit' approach is needed, comparing a number of pieces of work to a level rubric (describing the expected key learning and quality of work) and different kinds of annotated exemplification of how pupils have matched the rubric or not.

Describing progress without levels and making levels judgements both need planned moderation, bringing teachers together to compare the quality of work against agreed standards and rubrics, preferably with the guidance of professional advisers.

Ensuring intelligent accountability in Curriculum for Excellence To ensure that accountability arrangements match the broader aspirations of Curriculum for Excellence, Scottish Government and Education Scotland should:

- Promote continuing self-evaluation and improvement planning based mainly on evidence about quality of learning/teaching and descriptions of pupils' progress, involving levels judgements only at three stages (as above).
- Discourage too frequent use of levels for tracking individual pupils' progress (levels judgements made on the basis of only small amounts of curricular coverage and pupil work lack validity).

REFERENCES

Hayward, L., Menter, I., Baumfield, V., Daugherty, R., Akhtar, N., Doyle, L., Elliot, D., Hulme, M., Hutchinson, C., MacBride, G., McCulloch, M., Patrick, F., Spencer, E., Wardle, G., Blee, H. And Arthur, L. 2012. *Assessment at Transition*. Glasgow: University of Glasgow.

Full report available on request from Susan.Kelly@glasgow.ac.uk

(The report contains detailed evidence for and discussion of the issues included in this account of the project and other findings not referred to here.)

Executive Summary available at: http://www.gla.ac.uk/media/media_238641_en.pdf

SERA 38th Annual Conference

Widening Horizons: Scottish Research in a Global Context

The annual conference of the Scottish Educational Research Association this year is an opportunity to reflect on how, in a globalising world, education has an increasing responsibility to prepare children, young people and lifelong learners to flourish as individuals and to contribute meaningfully to local, national and international communities.

The 2013 SERA conference, to be held in Glasgow, will be inviting researchers working in Scottish and international research contexts to share their insights in a three-day conference under the theme “Widening Horizons - Scottish Research in a Global Context”

Wednesday 20th November 2013

Opening day – Widening Horizons – Linking Research, Policy and Practice across Scotland

Thursday 21st November 2013

Day 2 - Widening Horizons - Linking research, policy and practice internationally

Friday 22nd November 2013

Day 3 – Widening Horizons - Scottish Research in a Global Context

Click on the following link to go to the conference web-site:

<http://www.seraconference.co.uk/seraconference2013/Welcome.html>



Bloom's Taxonomy, Contexts and Task Challenge

David Morrison-Love, University of Glasgow. david.morrison-love@glasgow.ac.uk.

Taxonomies related to education and learning offer both potential and risk. Moreover, my experience as a secondary school teacher of Technology Education and now as a Lecturer, has lead me to significantly revise my own thinking in this area. Though taxonomies such as that presented by Bloom offer a great deal by way of crystallising core thinking processes in people's minds, I would argue there is a risk that they can mask the reality of task contexts. I think that rather than considering the elements of Bloom's Taxonomy as hierarchical, there is merit in viewing them more discretely and in direct relation to task contexts. Moreover, I would argue that in most instances, it is the task context (and prior experience of the pupil), rather than the level of the taxonomy, which dictate the challenge from a pupil's perspective. If a pupil is not experiencing challenge, questions could be asked about the depth of learning that is taking place. However, before elaborating on the issue of challenge, I will describe what I mean by task context.

The study of context is arguably very complex, and in many ways, in its infancy. Here, however, I take it to include at least two core elements. Firstly, the way the task is framed, set-up and presented to the pupil and secondly, the nature of the content and knowledge the pupil will be dealing with. Though somewhat simplified, I believe awareness and control of these in direct relation to the skills within Bloom's Taxonomy are critical for promoting deeper learning.

Of all the taxonomies associated with education, Bloom's Taxonomy of the Cognitive Domain remains the most prolific (Bloom, 1956). When it was first published nearly sixty years ago, it offered a notable step change in the way people were thinking about learning and cognition; the benefits of which are still being reaped today. For me, however, there are some cautionary aspects to this. Though used successfully as a planning tool, there is almost no empirical evidence that in practice the processes are moved through successively as the taxonomy may suggest (e.g. Moore, 1982 and my own empirical post-graduate work). Additionally, there is a risk that processes further up the taxonomy are seen as more valuable. This is something Bloom himself was at pains to avoid (*see* 4th Guiding Principle, Bloom, 1956, p.14) and a further aspect at odds with its pictorial

representation as a triangle. Similarly, processes may be thought of as somehow mutually exclusive to knowledge (Dewey's False Dichotomy). As described by Bereiter & Scardimalia (1998), this is not possible and knowledge is saturated within all levels. In this article, however, I am going to discuss some of the implications I think stem from the construct of 'difficulty' as a basis for differentiating the levels of the taxonomy.

The problem here, discussed also by Marzano & Kendall (2006), is that 'difficulty' is a relative construct, which is fluid rather than fixed. That is to say, what is easy to one person may appear difficult to another, and this will change for each with time and circumstances. Indeed, it is noteworthy that Bloom himself states that the taxonomy does not account for pupils' prior experience (p.39) and assumes problems to be new. Though there are indeed instances where processes higher up the taxonomy are 'harder' than those lower down, there are just as many where the opposite holds true; and this is arguably because of the task context and the pupil, rather than the taxonomy.

For example, an Art teacher shows her pupils a new painting and asks them to state something they like and something they dislike about it. After a few seconds, one pupil raises his hand and provides a valid answer for each. To do this, it could be argued that he had to analyse the painting and compare self-selected aspects of it to that which he knows to constitute his personal preference. Though it took him only seconds, this would appear quite far up the taxonomy. Other pupils may have struggled more. During a maths class later that day, the same pupil calculated sine as adjacent over hypotenuse. His teacher picked up on this and reminded him about 'SOHCAHTOA'; an acronym that was developed by teachers because of the difficulty pupils have in simply recalling knowledge. This, by contrast, would appear at the bottom of the taxonomy.

So why is this so? I would suggest that in the first instance, the context did not require the pupil to engage very deeply with the processes. If the task context and content force the pupil to engage more deeply with a given process, he or she would necessarily find it more challenging: 'evaluating' the advantages and disadvantages of one mobile phone against another is simply not as difficult as

necessarily abstract and the more abstract knowledge becomes, the harder it can be to recall. SOHCAHTOA is effective because it provides a framework that reduces this level of abstraction.

Whilst the contribution made by Bloom's Taxonomy cannot be underestimated, as a communication system derived from classifying different types of exam questions, it does not necessarily reflect contemporary understanding of how learning takes place. Having toiled with this over almost a decade, I have made three key decisions. Firstly, I consider such processes in relation to the task or learning context and not in isolation. Secondly, I do not view the elements in Bloom's Taxonomy as successive levels, but simply a collection of equally important intellectual processes I wish to promote and develop in learners; the challenge of which I control. Some of the most effective and authentic learning I have seen moves through Bloom's Taxonomy from top to bottom. Lastly, I will continue to develop my own understanding of the role and design of task contexts and ensure I teach learners search strategies and ways to navigate through and between these to promote deeper understanding (see Perkins & Salomon, 1988).

References:

- Bereiter, C., & Scardamalia, M. (1998). Beyond Bloom's taxonomy: Rethinking knowledge for the knowledge age. In A. Hargreaves, A. Lieberman, M. Fullen, & D. Hopkins, (Eds.), *International handbook of educational change*. Boston: Kluwer Academic.
- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: Handbook 1. Cognitive domain*. New York: David McKay Company, Inc.
- Marzano, R. J. & Kendall, J. S. (2006). *The New Taxonomy of Educational Objectives*. Education Resources Information Centre.
- Moore, D.S. (1982). Reconsidering Bloom's Taxonomy of educational objectives, cognitive domain. *Educational Theory*, 32(1) 29-34.
- Perkins, D. N. and Salomon, G. (1988). Teaching for Transfer. *Educational Leadership*. 46(1) 22-32. Education Resources Information Centre.

**Reconnecting learning: exploring embodied learning possibilities
within (and out with) the classroom**

Kirsten Darling (r02kad8@abdn.ac.uk), **University of Aberdeen: school of education**

‘Successful learner’ and *‘life-long learner’* are vogue terms in Scottish education. The fashioning of such competencies has implications in terms of learning and the assessment of learning. Following a brief critique of these implications and the related underpinning political agendas driving them forward, alternative notions of learning and assessment are then explored, drawing on complexity theory and the works of John Dewey and Lev Vygotsky. My objective is to reconnect key aspects of learning: learning process/product, learner/teacher and learner/community which can become separated and disjointed. Drawing on phenomenology, place-based pedagogies and embodied cognition a methodological discussion arises, offering a Participatory Action Research (PAR) design concerned with exploring possibilities for children’s *emergent* and *embodied* learning experiences. The qualitative analysis of the rich, contextualised data, collected over a school year, sets out to unveil both the possibilities and tensions which exist within (and out with) a classroom as alternative approaches to learning are explored.

Introduction:

My research project emerged after a process of critiquing a range of assessment practices at a national and international level¹. These practices, often established for accountability purposes, unveil underlying epistemological assumptions and political agendas (Biesta, 2004). The culture of assessing children’s learning in relation to externally imposed curricular aims and objectives reveals notions of learning as a static, individualised activity in which the child learns from teacher in a systematic, linear fashion. Politically, decisions made surrounding education are being driven by the economy, in a competitive, globalised market. Rhetoric surrounding education is therefore becoming transferable (Apple, 2006), creating a global brand of *‘successful learners’* despite localised needs and varying cultures, as children are *prepared* for a world of work.

¹ Scotland: 5-14 National Tests, SSA, Assessment is for Learning. America: Tennessee Value-Added Assessment System, No Child Left Behind

Within this context, key notions of learning are being separated. The learning process has become disengaged with the product(s) of learning; the teacher and learner operate in established and fixed roles and learning is individual, taking place in isolation from the local community. The challenge therefore resides in reconnecting these aspects of learning in order to ensure that schooling is meaningful to children and serves a purpose beyond current political demand.

Exploring alternative theoretical branches:

Overcoming these dichotomies requires exploration of alternative theoretical branches, which allow new relationships to emerge between: children, teachers and knowledge. Complexity theory supports insights into new relationships and *as yet imagined possibilities* within a class (Davis and Sumara, 2008). By re-connecting human activity and subjective understandings with the natural world, the focus becomes: participation (of the children and the teacher), knowledge *creation* and *emergent* learning. Such learning is *conditioned* for through the delicate balance between: cohesion and creativity, stability and instability, order and disorder. This balancing act can be further explored through the works of Vygotsky and Dewey. Vygotsky's work supports understandings into the cohesion of social groups through *internalisation* (Vygotsky, 1978) of language and other cultural tools. Vygotsky explored how historical, social and cultural practices aim to shape and maintain social behaviours and cultures (Van Der Veer, 1996). Conversely, Dewey focused on the timely and vital worth of embodied experiences which engage with the subjective worlds of children (Dewey, 1938). From this theoretical exploration three themes arise which support the construction of a methodological approach: *perception*, *place* and *embodied experiences*.

Research methodology:

From this theoretical discussion a PAR methodology emerged, designed to explore the possibilities of reengaging the learning process with the products, the teacher with the learners and individual learners with their community. The participative design encompasses: the value of place (Gruenwald, 2003), the embodied nature of learning (Lackoff and Jonson, 1999) and children's subjective understandings (Merleau-Ponty, 1945). This was achieved by employing walking and drawing as embodied methods which would enable participative leaning and relationships to emerge within, and between, a class of Primary 1 and 2 children as they explored and engaged with their local environment.

Analysis

The rich qualitative data collected over a school year, which includes: a research journal, audio data transcriptions, children's drawings and ethnographic field notes, is now in the process of being analysed. Of fundamental importance in the analysis is to maintain the complexity and *authenticity* of the highly contextualised data (Pink, 2007). The data analysis will take place on two levels. Firstly at a local level, relating directly to the actions and interaction which took place as a result of the PAR, including the contextual factors which enabled (and impeded) the research process, and secondly in reconnecting these findings at a macro level in order to bridge local activity with broader discussions in education.

Bibliography

- APPLE, M.W., (2006). *Educating the "Right" Way: Markets, Standards, God and Inequality*. 2nd ed. New York: Routledge.
- BIESTA, G., (2004). Education, Accountability, and the Ethical Demand: Can the democratic potential of accountability be regained? *Educational Theory*, **54** (3), 233 – 250.
- DAVIS, B. and SUMARA, D., (2008). Complexity as a theory of education. *Transnational Curriculum Inquiry*, **5** (2), pp. 33 – 45.
- DEWEY, J., (1938). *Experience and Education*. New York: Collier Books.
- GRUENEWALD, D.A., (2003). Foundations of Place: a multidisciplinary framework for place-conscious education. *American Educational Research Journal*, **40** (3), pp.619 – 654.
- LACKOFF, G. and JOHNSON, M., (1999) *Philosophy in the Flesh: the embodied mind and its challenge to western thought*. New York: Basic Books.
- MERLEAU-PONTY, M., (1945). *Phenomenology of Perception*. Paris: Gallimard.
- PINK, S., (2007). *Doing Visual Ethnography: images, media and representation in research*. (2nd ed) London: SAGE.
- VAN DER VEER, R., (1996). The concept of culture in Vygotsky's thinking. *Culture and Psychology*, **2** (), pp.247-263.
- VYGOTSKY, L., (1978). *Mind and society*. Cambridge: Harvard University Press.

Learning to learn how to learn; support for learning of students and teachers –

by Erik Wormhoudt MEd. (Netherlands)

What started as a research into *exploring motivational problems for students aged 15/16 in upper secondary education in my school* ended as a research into professional learning; into how we as teachers organize our own professional development. There are lessons to be learnt!

Support for student learning

Here is the story. In the first half of 2011 I decided I wanted to analyze the perception of our students and our teachers on the way we conduct our teaching and coaching in HAVO 4&5. HAVO 4&5 is upper secondary school, that in the Netherlands prepares students for higher education in a vocational track (universities of applied sciences). These last two years are problematic for many students and particularly year 4, in which many students struggle with the transition from being told what to do, to taking more ownership for their own learning. As a consequence they often lack motivation to work for school. Quite a large percentage of students have to repeat this pre-final year. We – the school – had the intention to do better so we decided to analyze our current performance. Drawing from Ebbens (2005), Boekaerts (2005) and Nokelainen & Ruohotie (2005), in my conceptual model for analyzing the problems with motivation I looked at four explaining components: the value component, the expectation component, the affective component and school-policy. The value component paints the picture of the perception of internal and external motives for learning; the expectation component of how students experience their readiness for this next step; the affective component of how they feel at ease in this year. School policy indicates how we assess and support our students. These four elements made it possible to get a picture of our current state of performance. Not surprisingly, students and teachers appear to have rather different perceptions. In general students perceive it too big a step from their third into their fourth year. More specifically, students are not as well prepared as we think they are: students don't perceive sufficient support for their learning process. In addition, our courses are not quite as interesting and challenging as we like to think.

After several discussions we decided to first develop better ways to support our students in their learning-process. We started from the general idea that we had to focus more on the learning-to-learn-process. From this starting point we worked on ways to support all students in all courses. Finally, we decided to work on documents in which we describe studying methods for three different areas: language subjects, science subjects and factual subjects.

Educational development: team learning

Here is where things turned around. In my original plan for the development of these documents I supposed a time-span of a few months would be enough. In my perception every teacher already had his/her own method for supporting the learning-process, so all we had to do was come together and put these methods on the table, discuss them and distill a common approach. But somehow it took us more than seven months before we had these documents. This is where I started to wonder how this was possible. What was wrong with my presumptions? What was wrong in our school? Why was educational development such a tough process in our school?

So I started to read more and more on professional development of teachers and the essential preconditions for this process. I immediately got the reassurance we were not the only one with this problem. For my new research I took from Engeström (2000) the conceptual model of the four distinctions for development of activity-systems, see figure 1, and drawing from Senge (1992) I constructed a conceptual model for key-processes for team-learning, see figure 2. Based on these conceptual models I tried to determine whether or not the first three stages of Engeström's cycle were addressed in our process.

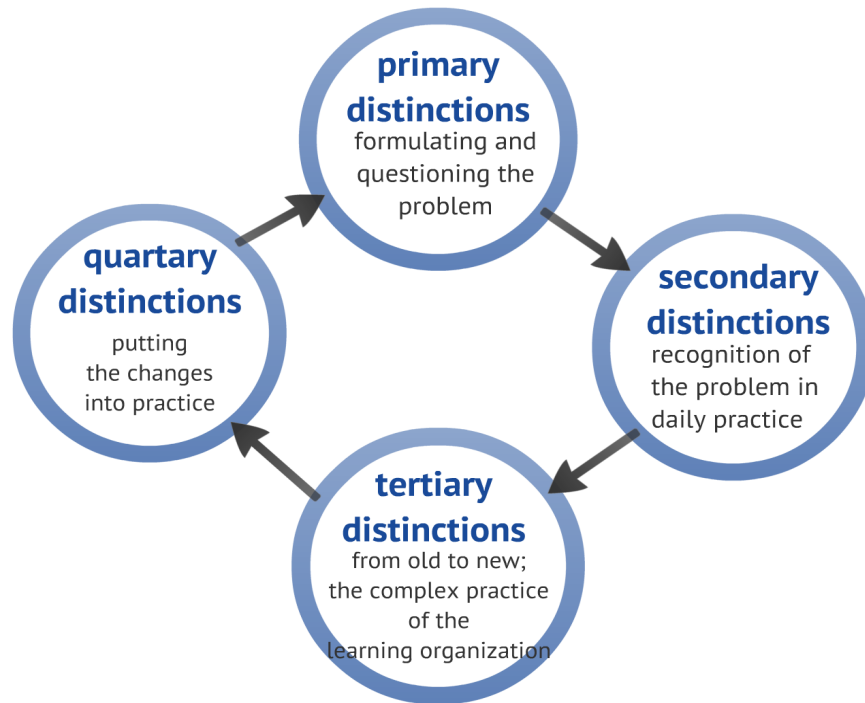


figure 1: cycle of distinctions, Engeström (2000)

In the first two stages most of the participants recognized the existence of the problem and said they felt its presence in their lessons. So it seemed we were ready to start to work on the problem. In the third stage we had to work towards a solution, work from the old to the new, and here is where my conceptual model of Senge came into view.

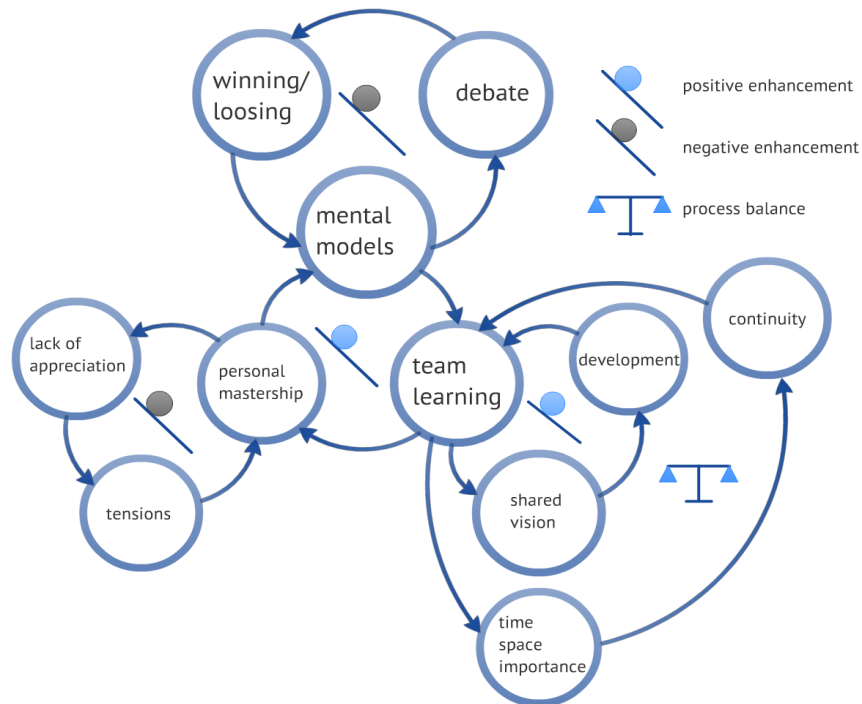


figure 2: learning and changing, drawn on Senge (1992)

The process of developing our education was to be a team-effort, so a couple of interlinked processes played a role in the process. The central cycle is the cycle in which - through dialogue and discussion - members share their mental models of the problem and started to build a shared vision of the solution. It seemed the conditions for this process were met: dialogue and discussion were main elements in the process. But what about the supporting and obstructing processes? First no debate seemed to have occurred, which was good, an open dialogue to share mental models was possible. Debate is mostly about how is right or wrong and convincing each other of your points. In team-learning Senge states debate is not fruitful, it's blocking the way to shared vision. Senge sees more in dialogue because of the openness and possibilities to understand and share each others mental models. In short, debate is about argumentation – winning and losing – dialogue is about understanding and sharing. Secondly every member was able to give his/her opinion and contribution and felt appreciated. So participants were able to strengthen their personal mastership. But the problem seems to be in the real cycle of development. Not enough time, room and involvement was created to support this cycle. We were driven by our daily problems and

management could not create enough momentum to keep things going. So in the end we were stuck with a very fragmented process. We were not able to create enough continuity in the process of development, which seems in accordance with findings from research by Geijsel (2009) and others.

Lessons learnt

My advice is to first carefully plan and structure the whole process in an learning cycle, see figure 3. Then make sure the problem you would like to address is fully recognized and perceived in practice. Collect research data and discuss them carefully. Next create a team learning process based on dialogue and discussion. Start working on a shared vision and a shared solution. At this stage, don't give too much room for debate and make sure everyone feels free and appreciated to participate.

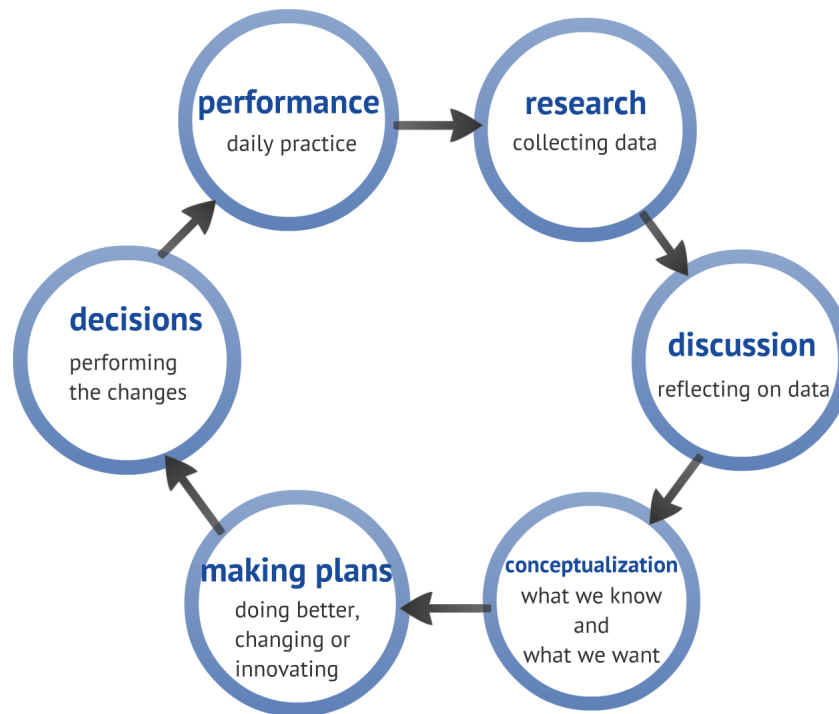


figure 3: learning cycle, van der Hilst (2011)

But we just cannot presume the process will lead itself – it has to be organized. Due to the perceived high workload in the Dutch educational system this is a real problem. In many schools time and room is scarce so organizing and planning educational development is necessary. But the daily routine is a tough nut to crack. Too many built-in habits prevent an effective approach to this problem. We still have a lot to do and discuss.

References:

Boekaerts, M. (2005). *Motivatatie om te leren*. Educational Practices Series – 10 vertaald uit het Engels door Cordys Onderwijstrajecten.

Ebbens, S. en Ettekoven, S. (2005). *Effectief leren. Basisboek*. Groningen: Wolters Noordhoff.

Engeström, Y. (2000). Activity theory as a framework for analyzing and redesigning work. *Ergonomics*, 43 (7), 960-974.

Geijssel, F.P., Slegers, P.J.C., Stoel, R.D., Krüger, M.L. (2009). The effect of teacher psychological and school organizational and leadership factors on teachers' professional learning in Dutch schools, *the Elementary School Journal*, vol. 109, nr. 4. Chicago: university of Chicago.

Nokelainen, P. & Ruohotie, P. (2005). *Modeling a Self-rated Learning Motivation, Learning Strategies and Social Ability Profile for Adult Learners*. Paper presented at ECER conference, September 8 2005.

Senge, P. (1992). De vijfde discipline. *De kunst en praktijk van de Lerende Organisatie*. Schiedam: Scriptum Books.

Research report from Journeys from Images to Words
Examining the efficacy of visual meaning-making strategies in the
development of inclusive communities of critical readers

Evelyn Arizpe

evelyn.arizpe@glasgow.ac.uk

Outline

This project involved researching and evaluating a teaching and learning approach based on the potential of image in children's literature and the use of visual response strategies with the aim of enhancing the language, literacy and intercultural competence of children from diverse backgrounds, including EAL/ New Arrival pupils. Through visual mediums, we sought to obtain data about children's home literacy practices as well as about their responses to stories about forced migration and encounters with 'other' cultures, beliefs and languages. We found that the understanding of both fictional and real-life situations contributed to a broadening of the intercultural knowledge base for the 'host' pupils and had an impact on the affective domain in terms of empathy, with a few pupils moving towards social action. New Arrival pupils participated more fully and confidently in the on going work of the class and participating teachers reported an impact on their own practice.

Summary

Funded by the Esmée Fairbairn Foundation, this project was based in the School of Education, University of Glasgow and was an extension of previous research, *Visual Journeys: Exploring children's visual literacy through intercultural responses to wordless picturebooks*, partly funded by the UK Literacy Association, UKLA (Arizpe 2010; Arizpe and McAdam 2011; Farrell, McAdam and Arizpe 2010; McAdam and Arizpe 2011). Visual strategies had proved successful in previous projects involving small groups of readers (Arizpe 2009; McGonigal & Arizpe 2007) and teachers

were keen to see how the approach would work in a whole classroom context that included children working at varying literacy and language levels. We aimed to 1) adapt these strategies to reading a variety of texts with different combinations of words and images; 2) investigate children's visual and text-based home literacy practices; 3) approach the themes of migration, journeys and intercultural encounters and 4) involve participants in a reflection on the efficacy of these strategies, through focus groups with children, interviews with teachers and the invitation to parents/ carers to comment on a visual display of the children's work.

The enquiry took place in two upper primary classrooms in Glasgow with a high multiethnic population, including asylum seekers and refugees. Planning workshops were held in collaboration with class and EAL support teachers. Two picturebooks were selected (*The Rabbits* and *Gervelie's Journey*) along with a chapter book (*Boy Overboard*). Research methods included classroom observation and analysis of oral, textual and visual student work. 'Walk- and talk- throughs' set the context and allowed time and space for looking closely at the images and their relationship with the text; co-constructing meaning and making personal links. A visual collage, "Rivers of Reading" (Bednall & Cranston 2008) used the metaphor of a river to represent literacy practices at home. Other multimodal responses were obtained through annotations of visuals and of text; photo journals and graphic strips.

Results showed that the visual strategies provided a level playing field for all students because there were no expectations about success or failure based on the traditional reading and writing skills. Students expanded their communicative language competencies in order to describe what they saw in the images and to express their ideas and feelings about the story. The visual annotations and graphic representations of some of the figurative language offered a way into the text and although close reading of the text with no pictures proved challenging, careful modeling of the task aided engagement. The potential of children's literature for approaching intercultural topics was made evident as it facilitated meaningful discussion of issues around migration and diversity (Botelho &

Rudman 2009). These generative themes (Freire 2008) resonated not only for migrants but also for the ‘host’ children who had experienced sectarianism and family separations. Responses revealed empathy and in some cases there was a move towards the children expressing a need for social action (Short 2009) around ‘helping’ refugees. The display of home literacy practices encouraged a gradual emergence of home languages and cultures in the discussions.

The project indicates that it is necessary to consider the influence of migration on literacy practices for all students given not only the requirements of New Arrivals in terms of developing confident literacies in their new contexts but also the need for communication and understanding between home students and their new classmates. Given our contemporary image-based culture, it is important to build on the potential of image in meaningful texts and visual strategies for encouraging multimodal responses as well as for creating reading communities which are inclusive and socially engaged.

References

Arizpe, E. (2009) ‘Sharing visual experiences of a new culture: Immigrant children in Scotland respond to picturebooks and other visual texts’ in Evans, J. (ed) *Talking Beyond the Page: Reading and Responding to Picture Books*, London: Routledge. 134-151

Arizpe, E. (2010) ‘Minority Voices Create Words for Wordless Picturebooks’. Paper presented at the 32nd International Board of Books for Young People (IBBY) Congress, Santiago de Compostela. <http://www.ibby.org/index.php?id=1066>

Arizpe, E. & McAdam, J. (2011) Crossing Visual Borders and Connecting Cultures: Children’s responses to the photographic theme in David Wiesner’s *Flotsam*, *New Review of Children’s Literature and Librarianship* 17 (2) 227-243.

Bednall, J. & Cranston, L. with Bearne, E. (2008). ‘The most wonderful adventure... going beyond the literal’. *English Four to Eleven*, 32, 19-26.

Botelho, M. J. & Rudman, M. K. (2009). *Critical Multicultural Analysis of Children’s Literature: Mirrors, Windows and Doors*, London: Routledge.

Farrell, M., Arizpe, E. & McAdam, J. (2010) ‘Journeys across visual borders with *The Arrival* by Shaun Tan: Annotated spreads as a method for understanding pupil’s creation of meaning through visual images’, *Australian Journal of Language and Literacy* 33 (3) 198-210.

Freire, P. (2008). *Education for Critical Consciousness*. London: Continuum.

McAdam, J. & Arizpe, E. (2011). Journeys Into Culturally Responsive Teaching, *Journal of Teacher Education and Teachers' Work*, 2 (1) 18-27.

McGonigal, J. & Arizpe, E. (2007) *Learning to Read a New Culture: How immigrant and asylum-seeking children experience Scottish identity through classroom books*. Final Report. Edinburgh: Scottish Government. <http://www.scotland.gov.uk/Publications/2007/10/31125406/0>

Short K. G. (2009). Critically Reading the Word and the World. *Bookbird* (2), 1-10.

Children's books mentioned

Gleitzman, M. (2003) *Boy Overboard*, London: Puffin.

Marsden, J. (S. Tan illus). (1998) *The Rabbits*. Sydney: Lothian.

Robinson, A. & Young, A. (J. Allan illus). (2008) *Gervelie's Journey. Diary of a Refugee Girl*. London: Frances Lincoln.

The research team was led by Dr Evelyn Arizpe and included Dr Maureen Farrell, Ms Julie McAdam, Dr Alison Devlin and Ms Caroline Bagelman. Further details can be found on the website: <http://www.journeys-fromimagestowords.com>

SERA Researching Education Bulletin Committee 2013

Lorna Hamilton, University of Edinburgh

lorna.hamilton@ed.ac.uk

Ross Deuchar, University of West Scotland

ross.deuchar@uws.ac.uk

Ian Matheson, Previously General Teaching Council Scotland

Tony Luby, Association of Chartered Teachers Scotland

aluby257@aberdeenschools.org.uk

Anna Beck, Graduate student, University of Glasgow

a.beck.1@research.gla.ac.uk