Teaching for Learning: Creating Powerful Learning Cultures

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“As we take up the challenges of recent research we will discover that we have much more profound effects on students’ abilities, ways of thinking and remembering, than we have so far imagined”

Nuthall & Alton-Lee, 1997
Understanding Learning & Teaching Project 3
Report to the Ministry of Education
“The Hidden Lives of Learners”
Graham Nuthall 2007

Creating a powerful classroom culture

“In other words there is a need to develop the classroom as a learning community …consideration of this enticing idea is a book in itself…” p. 106
Thanks to:

The Graham Nuthall Classroom Research Trust

• Jill Nuthall
• Associate Professor Alison Gilmore
• Dr Elody Rathgen
• Tracey Snape
• Nick Major
• Ian Leggat
• Dr John Vargo

• Tradition of research & development at the University of Canterbury
• Christine Rietveld
• Michelle Clarke

• South Pacific Press
Creating Powerful Learning Cultures - Overview

• What are our challenges?
• Bridging the teaching – learning gap: Why it matters so much
• Valued learner outcomes as a touchstone
• Forthcoming best evidence synthesis iterations – BES as a tool for eductors
• Creating powerful learning cultures across policy, research and practice in iterative knowledge building and use
Reading Literacy
NZ’s High Mean and Large Variance

Source: OECD (2001) Knowledge and skills for life, Appendix B1, Table 2.3a, p.253, Table 2.4, p.257.

Variation expressed as percentage of average variation across the OECD
New Zealand Certificate of Achievement
Level 2 and above
Figure 3. Variation in student performance within and between schools for 38 countries on the PISA Mathematics Literacy Scale (2003)
Māori School Leavers with NCEA level 2 qualification or above, Wāhakura and All Māori (1998 to 2006)
The Importance & Complexity of Teaching

• “It should not take large-scale research studies, or sophisticated regression analyses, to indicate that children who are taught to play the piano, do better at piano playing than children who have never received any lessons.”

• (Nuthall, 1974, p. 3).
36,000 quarter-or half minutes of classroom time
3442 item files
a predictive theory of classroom learning in social studies and science
from 62% accuracy of predictions to 80% accuracy of predictions for Māori, Pakeha and Pasifka case studies

• Whether a student learns or not reflects the students’ understanding of classroom tasks, management of social relationships, and the extent to which the student shares the cultural understandings and background knowledge of the teacher and other students. Ability appears to be the consequence, not the cause of differences in what students learn from their classroom experiences. (Nuthall, p. 213)
Craft practice insufficient

- The problem with this continuous decision-making is that teachers do not have direct access to how students’ minds are interpreting and understanding classroom activities. No matter how sensitive and responsive a teacher is …..the consequence… is the enshrinement of the busy active classroom as the model of effective teaching ‘

- Graham Nuthall (2001) *Unterrichts Wissenschaft*
Why did Erongi have an X-ray?
Holly's thinking book/MW/29.7.97
Pub Charity ERUDITE Study
Roadrunner, Understanding Learning and Teaching Institute, work in progress
“…only when teachers understand the principles by which their actions shape the learning process will they be able to ensure effective learning’ (p. 301)

- Nuthall (2004)
- Harvard Educational Review
• Well-intentioned educators and policy makers engage in practices that either do not result in learning or bring about outcomes contrary to good intentions:

For example:
• preferred learning styles
• drug education
• racism through social studies
• Some professional development
Why ‘best’? How (dare) ‘best’? Valued outcomes as touchstone

- ‘Bodies of evidence’ – interlinked – professional resource

- Not prescriptive

- Theoretical coherence – theory as a tool to inform infinitely creative educational practice and ever-changing contexts

- Vignettes & Case to exemplify findings and theory in ways that are practice embedded, bring to life and are accessible to teachers

- Not ‘best’ available – BES names gaps & proposes evidence-based processes
“The most comprehensive approach to evidence is the New Zealand Ministry of Education’s Iterative Best Evidence Synthesis Programme.

What is distinctive about the New Zealand approach is its willingness to consider all forms of research evidence regardless of methodological paradigms and ideological rectitude, and its concern in finding contextually effective, appropriate and locally powerful examples of “what works”. Its focus is on capturing and examining the impact of local contextual variables (e.g., population, school, community, linguistic and cultural variables).”
Responsiveness to Diversity Framework

• Evidence of difference as salient in education – in complex, context-specific and fluid ways

• Responsiveness to diversity framework

• Difference at the centre

• Universalising discourse of difference

• Away from ‘norm’ and ‘other’ thinking

• Teaching as key system influence- but importance of family and community influences critical also

• Educator enabled partnerships with families & communities strongest combined lever
Reading Together
Creating Powerful Learning Cultures

Educational Practice

Educational Research & Development

Educational Policy
Dialogue about educational research, policy, and practice:
To what extent is it possible and who should be involved?

Dialogue isn’t necessarily more efficient, but it’s more democratic and, therefore, more effective.

…Our preference is also based on the belief that in the long run dialogue and participation by a wide range of stakeholders produce better and more relevant educational research, policy and practice.

…Certainly, it may be easier – and, in that sense, more efficient – for researchers, policy makers, and practitioners in education to engage in action (or even in praxis) in isolation of members of the other groups.
However, the decisions that are made and the actions that are pursued are likely to be less effective. This is the case not only because the quality of judgments may be lower but also because the activities of one group may detract from or cancel out those of other groups.‘ (p. x)

PPTA regards itself as a partner in the BES programme. As the policy adviser at PPTA specialising in professional issues, I have been closely involved with the Best Evidence Synthesis work ever since 2003.

I have served on the advisory groups for the BES on Maths, Pangarau/Social Studies, Professional Learning and Leadership.

We also have a number of PPTA members involved in various ways on reference groups or serving as advisers or quality assurers for the projects.

The President and I were involved in developing strategy around the launch of the Alton-Lee and Biddulph BES work in 2003. I was part of the reference group which developed the Guidelines.

I believe that the BES programme is absolutely committed to promoting social justice, and for that reason our union, like NZEI, has committed itself to working alongside this research programme.

“I have finally read through your best evidence synthesis of quality teaching for diverse students and I am very impressed…

We haven't yet worked out how to translate research into policy or teacher education (or advice to teachers) in ways which fairly represent what is actually known from the research and the needs of teachers and policy-makers.

No matter, what you have done in the synthesis is a great way to change thinking - to shake loose the existing cultural myths about teaching and teachers and to start new ways of thinking and acting about teaching.”

(G.A. Nuthall, personal communication, July 24, 2002)
Effective Pedagogy in Mathematics/Pāngarau BES
Associate Professor G Anthony & Dr M Walshaw, Massey University.

- Synthesis of 660 studies linked to outcomes
- Due: Available for teacher education, schools and centres

http://educationcounts.edcentre.govt.nz/goto/BES
**Effective Pedagogy in Social Sciences / Tikanga-ā-iwi**

Dr G Aitken & Dr C Sinnema, The University of Auckland

- Make Connections to Students’ Lives
- Align Experiences to Important Outcomes
- Develop and Sustain a Learning Community
- Design Experiences that Interest Learners

in edit - over 1000 studies (see handout)
Excerpt from foreword:

“For those of us who have a long history of involvement in education, it is sometimes hard to imagine that there could be anything new under the educational reform sun, as old ideas are recycled and the pace of change often seems painfully slow. But periodically, something surfaces that has the power to fundamentally reshape how we work. The Iterative Best Evidence Synthesis Programme, of which this BES is part, has this potential.

The Iterative BES Programme is at the forefront of a wave of activity that is dramatically altering the reform landscape by linking research to policy and practice. This interest in evidence-informed policy and practice is driven by a growing awareness of the need for a better understanding of the complex problems confronting us and the need to fully utilise available knowledge to develop better solutions.”

Dr Lorna Earl, Former Head of the International Centre for Educational Change, Ontario
Teacher Professional Learning and Development BES
Professor Helen Timperley, Aaron Wilson, Heather Barrar & Irene Fung, University of Auckland.

- Extended time necessary / not sufficient
- External expertise necessary / not sufficient
- Teacher engagement in learning critical – teacher theories engaged not by-passed
- Prevailing discourses challenged
- Professional community of practice
- Active school leadership
- Integration of theory & practice – importance of the knowledge within the PD
- Teaching – learning link and use of assessment to inform critical
Every teacher I have met is the best teacher they know how to be. But unless we support our teachers with professional learning opportunities, they will act in isolation of the wider knowledge that research is making available and which could enhance their effectiveness. The first diagram suggests this situation:

- Graham Young, Immediate Past –president
- New Zealand Secondary Principals’ Association
- With Acknowledgements to Dr Graeme Aitken and Dr Claire Sinnema
  University of Auckland
Graham Young ....The Teacher Professional Learning and Development BES has the potential to help teachers complete the loop by showing them how to effectively access and use new pedagogical understandings in their daily practice:
Te Kotahitanga – longitudinal impact

- T.K. schools
- Weighted decile comp.

Percentage of Y11 students gaining NCEA Level 1
Educational Leadership BES
Prof Viviane Robinson, Dr Margie Hohepa and Dr Claire Lloyd,
University of Auckland

• BES undergoing formative quality assurance
• Professor Ben Levin, Canada Chair of Leadership and Policy
• Professor Michael Fullan International quality assurers
  • Due early next year

“The 2007 Hedley Beare Award for Educational Writing is presented to Professor Viviane Robinson for her internationally respected work as an educational researcher, and most recently for her tireless research and writings in regards to the Iterative Best Evidence Synthesis on Educational Leadership “Australian Council of Educational Leaders 11 October 2007
What school leadership activities are most critical to optimising valued outcomes for students?
Educational Leadership BES – Moving from Theories of Leadership to Leadership Practices - forward mapping

- Dimension 1: Establishing Goals & Expectations (0.35)
- Dimension 2: Strategic Resourcing (0.34)
- Dimension 3: Planning, Coordinating & Evaluating Teaching & the Curriculum (0.42)
- Dimension 4: Promoting & Participating in Teacher Learning & Development (0.84)
- Dimension 5: Ensuring an Orderly & Supportive Environment (0.27)
Key Messages – Educational Leadership BES

• The more leaders focus their relationships, their work and their learning on the core business of teaching and learning, the greater their influence on student outcomes.

• Importance of relationships to every other leadership activity.

• See William Walker Oration on BES website.
Iterative Approach
R & D

Knowledge constantly developing & evolving

Values the past; future focussed

Way of making a bigger difference for diverse learners
“As we take up the challenges of recent research we will discover that we have much more profound effects on students’ abilities, ways of thinking and remembering, than we have so far imagined”

Nuthall & Alton-Lee, 1997

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