

# Teachers and Curriculum



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## Editors

Kerry Earl and Bill Ussher

## Editorial Board

Marilyn Blakeney-Williams, Nigel Calder, Bronwen Cowie, Kerry Earl, Pip Hunter, Kirsten Petrie, Merilyn Taylor, and Bill Ussher.

Correspondence and articles for review should be sent electronically to Teachers and Curriculum Administrator, Wilf Malcolm Institute of Educational Research, Faculty of Education. Email: [wmier@waikato.ac.nz](mailto:wmier@waikato.ac.nz)

## Contact details

Teachers and Curriculum Administrator  
Wilf Malcolm Institute of Educational Research  
Faculty of Education  
Private Bag 3105  
Hamilton 3240  
New Zealand

Phone +64 7 858 5171

Fax +64 7 838 4712

Email: [wmier@waikato.ac.nz](mailto:wmier@waikato.ac.nz)

Website: <http://tandc.ac.nz>

## About the Journal

Teachers and Curriculum is an online peer-reviewed publication supported by Wilf Malcolm Institute of Educational Research (WMIER), Faculty of Education, The University of Waikato, Hamilton, New Zealand. It is directed towards a professional audience and focuses on contemporary issues and research relating to curriculum pedagogy and assessment.

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## Notes for Contributors

Teachers and Curriculum welcomes

- innovative practice papers with a maximum of 3,500 words, plus an abstract or professional summary of 150 words, and up to five keywords;
- research informed papers with a maximum of 3,500 words, plus an abstract or professional summary of 150 words, and up to five keywords;
- thinkpieces with a maximum of 1500 words; and
- book or resource reviews with a maximum of 1000 words.

## Focus

Teachers and Curriculum provides an avenue for the publication of papers that

- raise important issues to do with the curriculum, pedagogy and assessment;
- reports on research in the areas of curriculum, pedagogy and assessment;
- provides examples of innovative curriculum, pedagogy and assessment practice; and
- review books and other resources that have a curriculum, pedagogy and assessment focus.

### **Submitting articles for publication**

Please consult with colleagues prior to submission so that papers are well presented. Articles can be submitted online at <http://tandc.ac.nz/>

### **Layout and number of copies**

All submissions must be submitted online as word documents. Text should be one and a half spaced on one side of A4 paper with 20mm margins on all edges. Font = Times New Roman, 11 point for all text and all headings must be clearly defined. Only the first page of the article should bear the title, the name(s) of the author(s) and the address to which reviews should be sent. In order to enable 'blind' refereeing, please do not include author(s) names on running heads. All illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.

### **Foot/End Notes**

These should be **avoided where possible**; the journal preference is for footnotes rather than endnotes.

### **Referencing**

References must be useful, targeted and appropriate. The Editorial preference is APA style; see *Publication Manual of the American Psychological Association* (Sixth Edition). Please check all citations in the article are included in your references list, if in reference list they are cited in document, and formatted in the correct APA style. All doi numbers **must** be added to all references where required. Refer: <http://www.crossref.org/>

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### **Acknowledgement of Reviewers**

Thank you to the reviewers for their contribution to the process and quality of this issue. Many thanks to those who also helped with a review but the paper did not make it to this issue. Papers in this issue were reviewed by the following people (in alphabetical order):

Judy Bailey, Jennifer Charteris, Bronwen Cowie Kerry Earl, Richard Edwards, Jenny Ferrier-Kerr, Linda Hogg, Yvonne Kuys, Michele Morrison, Darren Powell, Merilyn Taylor, Bill Ussher, Cheri Waititi, Sandra Williamson-Leadley

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# CHANGING FOCUS

**ANDY BEGG**

*School of Education*

*Auckland University of Technology*

## Keywords

Aims; thinking; research; enquiry; asking

## Introduction

From time to time in education we need to reflect on our work, reconsider our focus, and change our practice to fit with our aims—but what are our aims, and how are they implemented?

## School-level aims

When I reflect on educational aims at school level, I think of the key competencies in the curriculum (Ministry of Education, 2007). And, these competencies (thinking; using languages, symbols, and texts; managing self; relating to others; and, participating and contributing) all seem to be subsumed under thinking if thinking is interpreted broadly. For me

- using languages, symbols and texts are ways of communicating thinking;
- managing self and relating to others are forms of caring thinking;
- participating and contributing are ways of using and sharing our thinking; and
- from this perspective *fostering thinking* becomes the aim of education.

Thinking can be interpreted and subdivided in numerous ways. For me, it includes the following nine partially overlapping forms (Begg, 2015):

- Empirical, sense-based, or experience-based thinking that occurs when we are aware of something through our senses. (For example, what we see, hear, and smell.)
- Critical (rational, logical, or concept-based) thinking that depends on a ‘system of logic’ and initial assumptions. (It involves evidence argumentation and proof in science, mathematics and other subjects, as well as in court.)
- Creative thinking that relates not only to art, music and literature, but to all aspects of our lives when we consider alternatives, ask “what if ...” questions.
- Metacognitive thinking that involves monitoring one’s thinking—consciously, unconsciously, and automatically. (This occurs when one asks oneself, have I done enough, or should I do more?)
- Caring thinking that includes caring for self, family, others, animals, plants, the environment, one’s culture and the cultures of others; and links with ethical and emotional thinking. (Caring thinking implies action—showing consideration; thinking about it is not enough.)
- Contemplative thinking that involves insight, direct knowing, and awareness. (This is sometimes cultivated through meditation or mindfulness.)
- Subconscious, unconscious, and bodily thinking that accounts for 95% of our thinking; because we are only conscious of 5% of what goes on in our brains (Mlodinow, 2012). (For example, we are not usually conscious of our breathing, healing, digesting, ...)
- Cultural thinking (including collective, communal, and global thinking) that acknowledges that people from different cultures often think differently. (It implies a need to seek

Corresponding author

Email address: [andy.begg@aut.ac.nz](mailto:andy.begg@aut.ac.nz) (Andy Begg)

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clarification, rather than talk past each other as words may have different nuances of meaning; and it is sometimes difficult, as one does not know what one does not know.)

- Systems thinking that is based on ideas of emergence and complex systems rather than on simple or complicated but predictable systems.

### **Research—an aim for all**

In tertiary education the current rhetoric that reflects the sectors' aims is summarized in one word, research; but what do we mean by research? The definition of 'research' in the tertiary education sector has been summarized in a policy statement from the New Zealand Qualifications Authority (1995, pp. 31–32): it distinguished between the following forms of research that are not mutually exclusive. The forms were: basic or fundamental research, strategic research, applied research, scholarship, and creative work (with consultancy and professional practice as sometimes being regarded as equivalent to research). The Qualifications Authority claimed that their definition was deliberately broad and that, 'research activities play a vital role in creating an environment in which the optimum teaching and learning processes occur, and in which staff and students are stimulated by the interplay of new ideas and the spirit of inquiry.' However, reflecting on my 25 years in the tertiary sector, I find little evidence of researching, enquiry, or thinking within formal tertiary education; indeed, I have seen very little change in tertiary education since my own days as an undergraduate. While research is the focus of thesis work in the final years of postgraduate study at masters and doctoral level, there seems to be little evidence of research as a mode of learning at lower levels of tertiary education.

Personally, I interpret the word research less formally and think of it as 'enquiry' or project work; and one's ability to enquire depends on one's ability to think. It starts at pre-school level when children seek to make sense of their world, it continues in schools with project work, though this seems to have diminished a little over the years.

### **Reality check**

In spite of the educational aims of the school and tertiary sectors that I have summarized as thinking and enquiry, it seems that within formal education too much emphasis is given to the assessment of content knowledge. Consequently teaching and lecturing continue to focus on pre-determined topics that are likely to be taught and assessed regardless of what students might already know or not know. The notions that teachers might "start where the learner is" and be aware that "no one gets taller by being measured more often" seem not to have significantly influenced institutional practice. Further, education appears to be based on the unfortunate assumption that teaching/lecturing and assessment are necessary and sufficient conditions for learning.

This situation leads to the following questions:

- What might be done to change the current situation?
- What stimulates good learning?
- What learning skills do students need to develop for lifelong learning?
- How might we change our practice as teachers?

### **One possibility?**

I remember being impressed by a teacher in a high school mathematics class in Japan. For the whole 60 minutes, the class was engaged in-group<sup>i</sup> work exploring a problem that the teacher had set them. During this time, the teacher only asked questions, and toward the end of the period asked the students what solutions they had. The groups seemed to have two different solutions and could not agree that either was definitely correct. The teacher told them to do some more work on the problem

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<sup>i</sup> Group work had been deliberately chosen for two reasons. Firstly, learning was seen as a group activity; and secondly, if an individual student was asked a question and answered incorrectly they would 'lose face' but if the answer was from the group then they would not.

at home and they would carry on with it in their next class. When I asked him why he had not given some tips or said that one was correct and the other incorrect, he replied that if he had, then the students would take his word for it and not continue to work it out for themselves, and he wanted them to develop persistence and learn for themselves. From this experience I came to see that: *teaching is asking, not telling*; and this experience reinforced for me the notion that enquiry/thinking is the goal of education, not recalling what one has been told (without necessarily knowing why it is so)—an enquiring/thinking mind is what students need if they are to become lifelong learners. The biggest challenge with such a teaching approach is to find the questions that can reasonably be solved over an extended period by a whole class. The teacher also mentioned that it took some time for the students to adjust to this way of learning as not all the teachers in the school used the same approach.

For me observing this lesson and talking to the teacher caused me to shift my thinking. I now see “teaching as asking, not telling”. I am aware that some teachers will respond by asking, but how will we cover the curriculum? My response to that is, “firstly, we do not cover the curriculum when students learn by rote, education is about understanding, not memorising” and secondly, “the aim of education is thinking, not the regurgitation of knowledge”.

### Final thought

So, my hypothesis is that teaching is asking not telling; and this implies, provoking thinking. I have not proved this to be true, but I have seen some evidence that it works; and now that my sole focus as a teacher is supervising research, which implies provoking thinking, I am convinced it works well for some people. My hope is that more teachers will explore this idea, take thinking as the aim of education, and ensure that all the students in their classes are improving their thinking skills.

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