# Teachers and Curriculum



KAIAKO ME TE MARAUTANGA

**VOLUME 16, ISSUE 2, 2016** 



# **Editors**

Special Section: The sigmoid curve

Rosemary Hipkins and Bronwen Cowie

General Section

Kerry Earl and Bill Ussher

# **Editorial Board**

Nigel Calder, Bronwen Cowie, Kerry Earl, Pip Hunter, Judith Mills, Carol Murphy, Kirsten Petrie, Carrie Swanson, 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

# **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: <a href="mailto:wmier@waikato.ac.nz">wmier@waikato.ac.nz</a>
Website: <a href="http://tandc.ac.nz">http://tandc.ac.nz</a>

#### **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.

ISSN 2382-0349

# **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/

# Copyright



This work is licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.</u>

# **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.

# **TABLE OF CONTENTS**

# **Special Section**

The sigmoid curve as a metaphor for growth and change Rosemary Hipkins and Bronwen Cowie	3
How can innovative learning environments promote the diffusion of innovation? Mark Osborne	11
The changing landscape of one primary school's mathematics curriculum Wendy Dent and Jane McChesney	19
Staying on the journey: Maintaining a change momentum with PB4L School-Wide Sally Boyd	27
Planning for sustainability from the outset Janet Bourne	37
General Section	
Introduction: General Section Kerry Earl and Bill Ussher	45
Reflective Practice AND Inquiry: Let's talk more about inquiry Kerry Earl	47
Listening to the voices of struggling students: A literature review Janet Blaauw	55
ThinkPiece: "Tell me, where do the children play?" Encouraging cross-sector conversations Jeanette Clarkin-Phillips	61
Thinkpiece 'We need something different to make a difference': Applying for the Teacher Led Innovation Fund	
Rachel Allan	65

# THINKPIECE 'WE NEED SOMETHING DIFFERENT TO MAKE A DIFFERENCE': APPLYING FOR THE TEACHER LED INNOVATION FUND

# **RACHEL ALLAN**

Te Uku School New Zealand

# Introduction

In November 2015, Te Uku School made the decision to apply for the Teacher Led Innovation Funding to support our 2016 target to lift student achievement in writing. The following explains the process we worked through, including the reason why we applied and my role as principal to ensure success.

# Why we decided to apply

Despite good quality and on-going professional development in writing we were concerned that we were not being successful in accelerating student progress. As teachers, we knew that both our strong pedagogical knowledge and shared understanding of writing expectations were evident in our regular moderation sessions. However, low progress learners including Māori and non-Māori boys and girls across all year levels were remaining below the national standard. When we moved beyond looking at the data, and tried to understand the needs of the individual learners we wondered if one of the main barriers was student self-belief about themselves as writers. If this were so, then further professional development to improve teachers' skills in teaching writing was unlikely to be the solution. We needed a different approach to this challenge.

We had learned through our recent professional development in mathematics that a change in teachers' language and practices was having a significant impact on student achievement in that area. There seemed to be three key factors that lead to this success: thorough analysis of both quantitative data and qualitative data to inform our plans using a range of sources (and with an emphasis strong on student voice); developing our pedagogical knowledge through professional reading and working with an 'expert' in mathematics and finally through observing and critiquing our practices. At this point it was clear to me that transferring these three factors to an action research project would be the best approach to support our 2016 target in writing.

Without doubt, the teacher lead innovation funding would help resource our proposed research project. We needed the funding in order to release teachers to interview students, to observe each other teaching, to meet together to analyse data, to meet with parents/caregivers of our target learners and to visit other schools. In a school our size, 160 students, our staffing allocation provides little opportunity for teacher release apart from Classroom Release Time days.

# Writing the concept proposal was stage one

It was a daunting thought at the end of a school year to embark on a comprehensive application for funding. We decided to commit to it. We chose an action research project approach to investigate more thoroughly the correlation between student self-belief and achievement in writing. Our interest in this research focus was inspired by some recent reading of Carol Dweck's studies (2012), and my attendance at a course run by education consultant James Anderson, on mindsets. Further to this, in our previous professional development in mathematics, we had started to notice a correlation between students' attitudes and their level of achievement. It made sense that students' self-belief in writing

Corresponding author

Email address: (Rachel Allan) rachela@teuku.school.nz

ISSN: 2382-0349 Pages 65-67 would also impact on their progress. Our research project was titled "Developing a Growth Mindset to Improve Student Writing".

My role as principal would be to ensure the very best conditions were put in place in order to be successful. Firstly, I appointed a senior teacher, Lee Clarkson, to lead the research project. Secondly, my expectation was that we would ask for, and accept, offers of help with writing our proposal. Due to a connection I had already formed with Kerry Earl from the University of Waikato, we called on her to plan our methodology and to get advice on data collection. We were intent on making this project relevant in relation to our context as well as successful by responding to the criteria clearly provided in the Ministry of Education guidelines (2015). We also accepted an offer of help from Barbara Wenn (our Senior Advisor at the Ministry of Education), who is a trusted colleague and with whom our school had worked in her role as facilitator of an Information and Communications Technology (ICT) contract a few years earlier. Barbara was able to provide helpful feedback on our first draft to help ensure it made sense, flowed logically and responded to the criteria in the guidelines. Getting this type of help was critical in developing a research project that would be rigorous, ethical and professional in its implementation.

As we worked through this initial process of the concept proposal, we started to realise that this project would provide a richer array of benefits than first imagined. The 'spiral of inquiry' framework (Timperley, Kaser, & Halbert, 2014), we had recently been introduced to, would potentially strengthen our teacher inquiry practices due to the "involvement of learners, their families and communities, underpinning and permeating each of the phases" (p. 6). Traditionally teachers have "decided what is right or wrong with learners, and what is good for them" (p. 6) so we felt excited at the prospect of engaging learners in a way that we have not done previously. We were adamant that this project would be focused on the changing of teacher practices, which are informed by student and parent feedback.

Another benefit would be our development of data literacy skills, collecting and analysing data. The initial proposal requirements meant that we had to be specific in our project design about selecting the type of evidence we would use to show that what we were doing would in fact make a positive difference to learning. We did not want to limit our measurements to levelled writing samples and attitude surveys. Previous experience in mathematics made us aware of the importance of student interviews on a one-to-one basis in which probing questions could be asked to gain deeper insights into students' thinking. We had already found out that when students are asked for feedback as a group, they are more likely to tell you what you want to hear.

At this concept proposal stage we were also very clear about our intention to focus our project on developing teachers' knowledge and understanding of growth mindset for a positive impact on teaching and learning. Although some of our teachers had already begun exploring the notion of growth mindset, we were aware that our understanding was still at a novice level. To be effective teachers using growth mindset, we felt the need to have a clear understanding of our own mindsets and to investigate the triggers (contexts and perceived threats) that create a fixed mindset. We thought that our inquiry process would help build teachers' capability to develop a deeper understanding for growth mindset that would in turn support the development and implementation of specific and effective growth mindset strategies that might engage our priority learners.

# Stage two—Writing the project proposal

It was exciting to learn in April that we had been short-listed for the funding, however, we then needed to complete a project proposal by May. We soon realised that this second proposal needed to be very detailed in its purpose. The questions that Lee and I asked ourselves were: "How does this align with our school's vision 'expanding hearts and minds'?" and "how does it build on current teacher practices?" In developing our research proposal, we drew from the findings of several researchers, whose work has been influencing our practices over the last eight years. In particular, Dweck's (2012) research on mindsets, Claxton, Chambers, Powell, and Lucas, (2011) research on 'building learning power', Hattie's (2012) synthesis on improving learning in schools and Bourke's (2010) research in New Zealand schools have all been used to develop our 'learning how to learn' and student self-regulation strategies, as an integral part of our school's curriculum. Knowing that some of

our student participants in the project would be Māori, we made links to Biddulph's research (Biddulph, Biddulph, & Biddulph, 2003) relating to Māori student achievement. We thought that our proposal to develop a growth mindset was a natural and logical step to further develop our student-centred practices.

We were deliberate in choosing a collaborative action research methodology (Harrison, 2013). With current renovations of all of our classrooms into open, flexible learning environments, in which three to four teachers will work together, we wanted to continue our focus on developing our skills of collaboration. Further to this, we thought an action research approach would provide an opportunity to work together to explore and develop our current practices for promoting a growth mindset that are relevant to our context.

We also had to be specific about when and how we would collect data. This made us consider what we would use as comparative data (beginning of project and end of project) and what data would be needed to inform our planning along the way. Comparative data is useful in helping determine overall success, but unless we planned to collect data along the way our plans for improvement would not be well informed. Therefore, student voice had to be integral to the decision making in developing our teaching strategies. Another important set of data to include was teacher voice. Although this data can be collected through surveys and interviews, we wondered how we could achieve an exploration of our mindsets in an open and honest way. This lead to the development of a set of ethical guidelines for teachers in the project to follow; we could not assume we would easily let ourselves be vulnerable and share our thinking really honestly. Through the implementation of this research project we are determined to validate teacher voice more than we have before. We want teachers to positively experience the sharing and critiquing of their practices with a 'genuine inquiry into what is going on for learners' and a willingness to 'move forward from there' (Timperley, Kaser, & Halbert, 2014, p. 6) without feeling incompetent or feeling as though our performance would be judged. Our school's mission statement to be continually improving the teaching and learning does support the notion that we are all learners, both staff and students.

# Benefits of receiving the funding

In June, we received notification that we had been successful in our application and would be receiving a total of \$50,000.00 over the next two years. After an initial feeling of elation, I started to realise the deeper, positive implications for our school at a strategic level. In all schools, often there are a lot of developments going on at once making it difficult to maintain a focus on priorities in the face of competing and complex demands. So, firstly, having this funding legitimizes in many ways our decisions about our use of time and resources, including valuable teacher time. Having a project leader other than the principal who would be accountable for meeting all of the project deadlines would keep us on track. We have selected an innovative approach that we think will address our hunch about the way in which students' low self-belief as a writer can impact negatively on their achievement. The changes we make to our practices should impact on all learning areas, not just writing. Finally, we feel confident that not only will we achieve improved results in writing, as a team of teachers we will learn new and improved ways of working together. All of these things will help create long term benefits for our school in lifting student achievement.

# References

Biddulph, F., Biddulph, J., Biddulph, C. (2003). *The complexity of community and family influences on children's achievement in New Zealand*. Wellington, New Zealand: Ministry of Education.

Bourke, R. (2010). The chameleonic learner. Wellington, New Zealand: NZCER.

Claxton, G., Chambers, M., Powell, G., & Lucas, B. (2011). *The learning powered school*. Melbourne, Vic, Australia: Hawker Brownlow Education.

Dweck, C. (2012). Mindset. London, England: Robinson.

Harrison, C. (2013). Collaborative action research as a tool for generating formative feedback on teachers' classroom assessment practices: the KREST project. *Teachers and Teaching*, 19(2), 202–213.

Hattie, J. (2012). Visible learning for teachers. London, England: Routledge.

# 68 Rachel Allan

- Ministry of Education. (2015). *Teacher-led innovation fund*. Retrieved from <a href="https://www.education.govt.nz/ministry-of-education/specific-initiatives/investing-in-educational-success/teacher-led-innovation-fund">www.education.govt.nz/ministry-of-education/specific-initiatives/investing-in-educational-success/teacher-led-innovation-fund</a>
- Timperley, H., Kaser, L., & Halbert, J. (2014). *A framework for transforming learning in schools: Innovation and the spiral of inquiry.* Melbourne, Vic, Australia: Centre for Strategic Education.