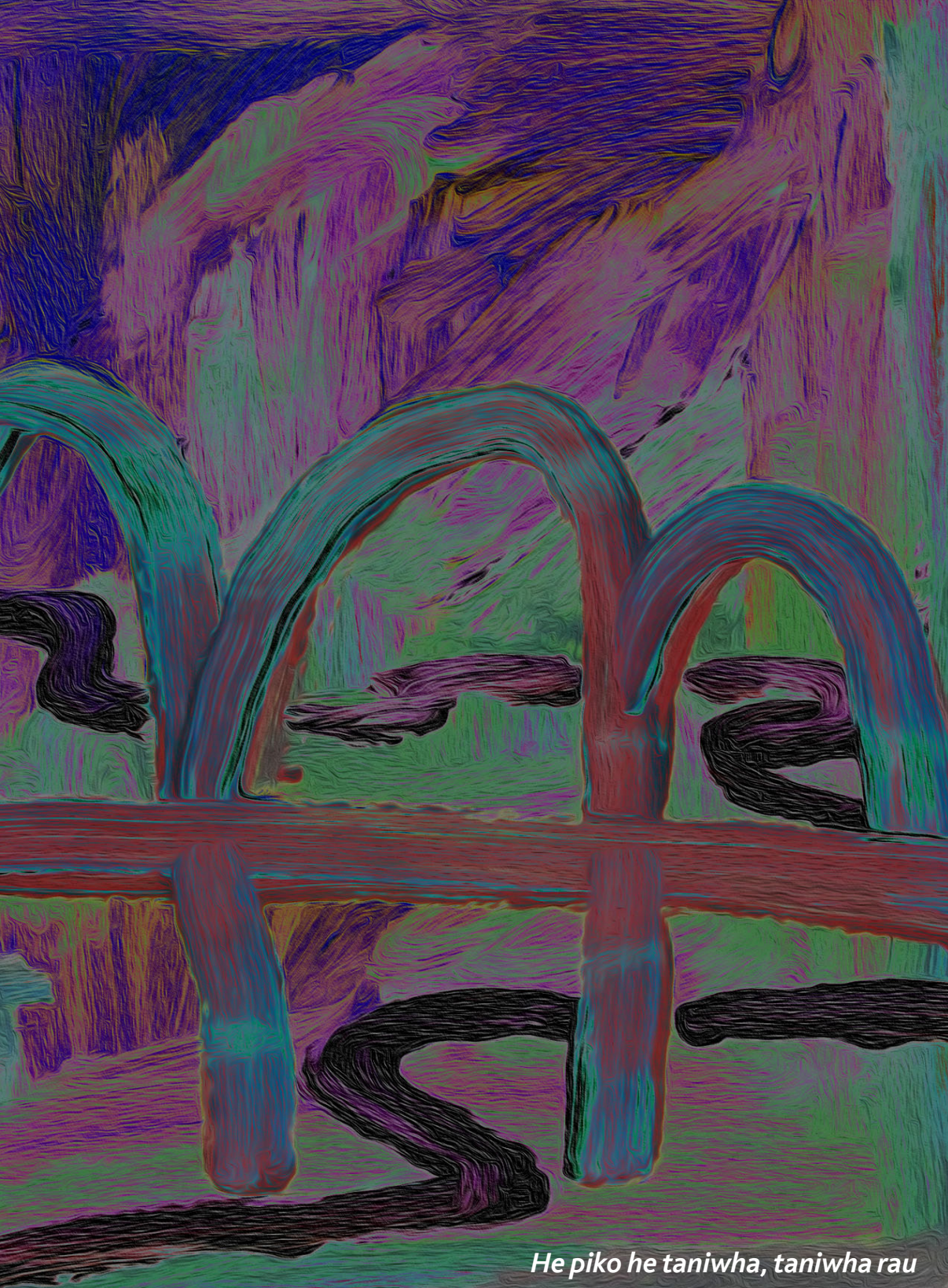




Wilf Malcolm Institute  
of Educational Research  
*Te Pūtahi Rangahau Mātauranga o Wilf Malcolm*  
THE UNIVERSITY OF WAIKATO

# Waikato Journal of Education Te Hautaka Mātauranga o Waikato



*He piko he taniwha, taniwha rau*

Special  
20th  
Anniversary  
Collection  
2015

TE KURA TOI TANGATA  
FACULTY OF EDUCATION



THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wānanga o Waikato*

## Waikato Journal of Education Te Hautaka Mātauranga o Waikato

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Contact details: The Administrator Wilf Malcolm Institute of Educational Research, Te Kura Toi Tangata Faculty of Education, The University of Waikato, Private Bag 3105, Hamilton, 3240, New Zealand. Email: [wmier@waikato.ac.nz](mailto:wmier@waikato.ac.nz)

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# Waikato Journal of Education

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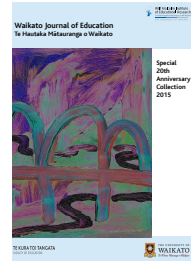
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## Editorial

### Special 20th Anniversary Collection 2015

The milestone of twenty years of the Waikato Journal of Education (WJE) is exciting and satisfying for those who have been closely involved in its origins and growth. This special issue is a collection of 23 papers from across the 20 years to celebrate the anniversary. Since its first issue in 1995 WJE has become a reputable academic publication that has made a valuable contribution to scholarship in the field of education in New Zealand and beyond. The journal began on a fairly modest scale with one issue annually. As contributions grew multiple issues were published in some years resulting in 26 issues.

WJE began a few years after the amalgamation of The University of Waikato and Hamilton Teachers College. It grew out of a realisation that the new School of Education (more recently Faculty of Education) had—at that time—over one hundred academic staff, enough to sustain a publication with a wide scope for papers in the broad field of education. So it proved. Academic staff more experienced in having their work published helped less experienced staff achieve publications.

I was privileged to be the first Editor and have maintained a close connection since. WJE was only possible because of institutional support through the School of Education Dean, Professor Noeline Alcorn (now Emeritus Professor) and the dedicated work of many people who have served as Editors and on the Editorial Board. Previous Editors include Clive McGee, Jim Denison, Deborah Fraser, Toni Bruce, Rosemary de Luca, Beverley Bell, Clive Pope and Noeline Wright. I also acknowledge the many authors who have submitted their papers to be considered for publication. From the outset the Editorial group wanted WJE to be a peer reviewed publication that would attract a wide readership through a diversity of writing and presentational styles of papers that were readable to academics and practitioners. To achieve this goal, board members and other volunteers worked tirelessly to review submitted papers, seek reviewers, edit, proof read and mentor first time authors. After the first few years of WJE, the Wilf Malcolm Institute of Educational Research became its ‘home’ providing administrative, secretarial and publication services. A few years ago, the journal became an online publication, resulting in a much wider readership.

The journal has the impressive 20-year output of over 300 papers. There are about 470 authors although some of them have contributed to more than one paper. Over half the authors were from the University of Waikato, nearly a third from other parts of New Zealand and an eighth were international. Most authors were from universities; however, some authors were teachers who were part of research teams. Papers have addressed a wide range of topics in the field of education.

In addition to unsolicited papers, WJE has published special interest sections that included papers by specific invitation to scholars or general invitation. There have been 18 special sections that together cover varied topics or themes in education. One issue published papers on a Solomon Islands—University of Waikato partnership in teacher education.



## Themes in this celebratory issue

The 23 papers in this celebratory issue are organised into five themes somewhat arbitrarily arrived at. The main selection criteria were that each paper represents a particular topic that was of educational and political interest at the time of publication; and that each would represent distinctiveness in terms of research approach and methods and style of presentation. There is a range of topics in each theme. Not surprisingly, there is considerable overlap between the themes.

A brief commentary on each theme is presented next, covering broad international and New Zealand research, policy and influences that have impacted across the last 20 years. Reference will be made to the WJE papers selected in each theme.

### Curriculum, teaching and learning

During the 20 years of WJE, researchers in many countries have investigated questions in ways that increasingly recognise connections and interdependencies between curriculum, teaching and learning. These three aspects have been combined into one theme. They are represented by the largest number in this collection. For the sake of clarity, each of the three aspects will be discussed separately.

#### Curriculum

The traditional and overriding international view of a school curriculum was a body of prescribed content organised in subjects and ‘taught’ to students. Individual learning was assessed by achievement tests. Under the influence of international child and student-centred ideology (and especially from the 1940s) New Zealand primary school curriculum documents gradually became more flexible and teachers enjoyed considerable freedom to experiment with teaching methods and learning activities. Secondary schools were necessarily constrained by the demands of national external assessment. From the early 1990s (not long before WJE began) a new New Zealand school curriculum was written with run-through Year 1 to 13 learning areas in eight achievement levels. A decade later, a revised curriculum became policy in 2007. The question of standards to be used to measure student achievement became a major political issue in the mid-2000s and national standards in mathematics, reading and writing for year 1–8 students were introduced in 2010. Assessment in secondary schools underwent a major policy change when the National Certificate of Educational Achievement was introduced from 2002 to 2004. Implementation required a combination of external and internal (in-school) assessment and gave greater flexibility in curriculum decisions to schools and teachers. Earlier, a new curriculum for early childhood education—*Te Whariki*—became policy in 1996.

The above curriculum policies are just a selection but are useful in making the point that the implementation of them has resulted in a considerable number of research studies, some of which have been published in WJE. A trend in international curriculum research in the last 20 years is for researchers to deconstruct dominant conceptions of curriculum design and implementation. More attention has been given to the study of power relations in schooling, students’ voices in relation to their own learning, and ethnic and class differences in school performance.

Early childhood education is the context for a 2011 paper by Sally Peters and Janette Kelly that reports research into how children’s perspectives—voices—can be gathered. Children’s voices and ways of ‘seeing things’ can help teachers understand children and plan curriculum and learning experiences that are relevant and meaningful. In her 1998 paper, Pirrko Markula used postmodern perspectives to explore ethnic dance as an expression of one aspect of authentic culture. It was found that in some dance performances ethnic differences were ‘sanitised’ into similarities that actually dissipated

authentic ethnic difference. Philosophical issues were identified that relate to dance performance and could relate to wider curriculum design issues in different educational settings and subjects.

At the school level, Lissette Burrows, Kirsten Petrie and Marg Cosgriff explored the ‘health invasions’ in schools in the last two decades that have tried to influence and change curriculum, for example, to reduce obesity. Their paper raises issues of power struggles for curriculum control in health. At the university level, a recent study by Jonathon Scott explored how the curriculum can be designed to highlight threshold concepts in learning processes. These concepts are keys to students’ understanding of the content of subjects being studied and teachers need to organise learning experiences so that threshold concepts are understood before students move on to further learning.

### *Teaching*

Internationally, psychology and educational psychology were of major importance in research on teaching and learning during the twentieth century. Much of the early research work on teaching was related to the goal of establishing a science of teaching. Researchers in psychology and education were influenced by the sciences where quantitative methods were used to replicate experiments in producing a level of certainty and robustness in research findings. For example, thousands of correlation research projects were carried out in America to see whether particular teaching methods and teacher behaviours could be linked to particular student learning and outcomes. This research effort focussed primarily upon the best ways to promote academic learning, using test scores as the main academic achievement measures.

The importance of educational psychology declined towards the end of the century. However, Preiss & Sternberg (2010) have demonstrated that in recent years educational psychology has again become important. There is renewed interest in the nature versus nurture debate, the nature of human intelligence, and the role of culture in human development and schooling. Evidence from genetics and biological sciences has helped our understanding of innate dispositions and educational processes. Longstanding views that innate determinants of learning are fixed by nature have been challenged. More is being learned about the psychological consequences of schooling and processes of teaching and learning. In the face of increased accountability on educational institutions, there is renewed interest in the assessment of student learning and methods of teaching. What kinds of teaching lead to increased student learning?

### *Learning*

The 1970s saw the early stages of a new interdisciplinary field called learning sciences. According to Sawyer (2006) it was based on research in a number of social science disciplines such as psychology, sociology, philosophy, anthropology, education and, later, computer science. By the 1990s—the decade WJE began—research on learning had resulted in several generally agreed findings about learning:

- Deeper conceptual understanding is necessary for useful learning;
- Students learn more effectively when actively involved in their own learning;
- Schools need to create learning environments for students to become good solvers of relevant problems;
- Learning is more effective when the learning environment builds upon prior learning and existing knowledge; and
- Students learn more effectively when they reflect on their developing knowledge.

For many years, behaviourist and developmental (learning is sequential) theoretical orientations dominated research on learning. In recent decades other orientations have become more influential. Social constructivist scholars emphasise learning as a personal linking of thoughts. Learning is enhanced by interactions with others. Sociocultural scholars advocate the importance of the socially-situated environments of learners and cultural identity. Collaboration between researchers from different orientations and disciplines has resulted in the emergence of mixed methods of research to investigate complex issues in learning. Increasingly, researchers investigating learning spend time in classrooms at early childhood, school and tertiary levels of education. There remains, however, much to be done to answer the question, How do students actually learn and how can disparities between students' learning achievement be reduced?

### *Teaching and learning*

A recent trend in teaching and learning research is the recognition that the processes of teaching and learning are closely linked. Historically there has been a tendency for researchers to investigate aspects of each as separate fields. *The International Handbook of Psychology in Education* (Littleton, Wood, & Kleine Staarman, 2010) has examples of research that better links teaching and learning. A growing number of papers in WJE over 20 years have also bridged the gap and a few examples have been selected. In Bronwen Cowie's paper it is demonstrated that different views of learning are actually linked—or ought to be—to practices of teaching and therefore to student achievement and the life of a classroom, in this case science education. Two major views of learning were analysed: a cognitive constructivist view and a situated-social view. Jones and Moreland investigated the pedagogical content knowledge (PCK) of teachers in technology curriculum. They found when positive links existed between the level of PCK and teachers' curriculum decisions, higher student achievement resulted.

At the tertiary level, Robyn Ewing and Robyn Gibson advocated creative teaching of the arts in primary schools. They explored how pre-service teachers needed to experience creative, imaginative teaching in their university arts education classes if they were to learn how to teach creatively themselves. Being able to see models was better than just being told. In another project in the arts Ralph Buck and Karen Barbour describe how they worked with tertiary students in a community dance education field trip. Students' experiences were interpreted through sociological, experiential lenses using narrative reporting techniques.

### *Māori and Pasifika education*

The last two decades have seen increased international interest in the educational opportunities of indigenous peoples. In New Zealand, there have been important recent policy changes in Māori and Pasifika education. An earlier development in Māori education was the so-called 'flax roots' movement from the 1970s that led to kohanga reo (Māori language preschools) and kura kaupapa Māori (Māori language schools) and immersion classes in 'mainstream' schools from 1985. The policy 'Closing the Gaps' was developed in the 1990s to improve the education of Māori students. *Ka Hikitia* is an education policy for supporting the success of Māori students, from 2008. In Pasifika education, the government has put in place the *Pasifika Education Plan 2013–2017*, policy to raise Pasifika educational achievement. These are but a few examples but they show how there are policies and imperatives for schools and early childhood centres to explore teaching and learning and curriculum content that better suit Māori and Pasifika students.

Two significant early papers in WJE outlining philosophical, cultural and educational issues in Māori education are included in this collection. Ted Glynn (1998) outlined bicultural challenges for educators in Aotearoa. A number of fundamental principles that can underpin teaching are described.



A research programme, Poutama Pounamu, is reported; a project involving whānau, teachers, students and researchers in efforts to improve the schooling experiences and achievement of Māori students. Russell Bishop's Inaugural Professorial Address was published in 2000. It is a broad sweep of issues in Māori education including teacher education, pedagogy, curriculum and learning. Suggestions are made for research approaches to investigate aspects of Māori schooling.

A special issue of WJE on Pacific education was published in 2006. In this, a paper by Tanya Wendt Samu explored the important issue of how teachers can respond to the diverse student population generally in schools and classrooms. In particular, attention is drawn to the diversity within and between students with Pasifika heritages. An Ethnic Interface Model was developed as a way of understanding Pasifika students' backgrounds and circumstances in relation to schooling.

### Politics and teacher education

During the 20 years of WJE, some papers reviewed previous education policies or corresponding ones such as national standards and assessment in schools, teacher education, and teachers' work as professionals. The paper by Noeline Alcorn provides a critique of reviews of teacher education in New Zealand from 1950 to 1998. For most of this period, there was reasonable consensus about teacher education. That changed in the 1990s when there was increased tension over concepts of professionalism and accountability. John Smyth analysed what he saw as damaging impacts of neo-liberal policy changes in the late twentieth century upon teachers' morale and practice. He argued the case for more trust of teachers and students by policy makers and proposed an 'epistemologically respectful paradigm'.

In the very first volume of WJE in 1995, Martin Thrupp's paper challenged neo-liberal assumptions about schools as marketplaces by reporting research evidence that the student mix in a school was a major contributing factor in variations in academic performance. The paper by Jean Clandinin about Canadian teachers and schools could just as easily have been in other themes, especially research methods and curriculum, teaching and learning. Of relevance to New Zealand, the topic is 'told' in narrative style, relating the experiences of teachers and students in their 'landscape' as they faced the impacts of policies of measuring competencies and standards.

### Information and communications technology (ICT) and e-learning

The teaching machines of B. F. Skinner in the 1950s were an attempt to provide systematic ways of learning content based on behaviourist theories. Many curriculum packages followed, especially in the United States, in which content was organised into learning 'bites' that students could follow reasonably independently. Early use of computers in classrooms was also based on behaviourist theories of systematic learning.

In the last 20 years, there has been a rapid international increase in the classroom use of various new technologies, mostly associated with computers and more recently, mobile and touch technologies. Online learning in tertiary courses was an early use of computer technology and the Internet to teach students at a distance. Early research evaluated the impacts of online teaching and learning. As the utilisation of a range of technologies in classrooms spread rapidly there is a growing body of research that has investigated their impacts. Much of the research is descriptive and there is little research evidence on whether new technologies actually improve student learning compared with more teacher dominated approaches; and if there *are* changes, what is the nature, quality and magnitude of change?

There are now useful overviews of innovations with technologies in schools, for example, Poore (2013) who points out how Web 2.0 revolutionised social media opportunities in general life and classrooms in just over a decade. People of almost all ages can learn to use blogs, wikis, Twitter,

Facebook, podcasts and so on. These media have opened up new opportunities in classroom learning by going beyond the largely transmission function of Web 1.0.

There are four recent papers in this celebratory issue on the use of different media that would not have been possible in the early years of WJE because the inventions had not been made. In a tertiary level project, Dianne Forbes explored the use of podcasting in initial teacher education. The context was an online ICT class. Students were helped to investigate podcasting and create reflective podcasts. A number of positive benefits were reported. Garry Falloon investigated an ICT partnership between a primary school taking part in a government-funded Science-for-Life programme and a Crown research institute. Teachers and institute staff cooperated to bring useful science information to students. ICT was a key means of communication with resources from the institute made available to students in the school. To date little else has been reported on how teachers and external science agencies form partnerships and what happens when they do. Using a sociocultural analytical approach Elaine Khoo and Michael Forret carried out research into the formation and operation of an online learning community of tertiary students. Setting up a successful online community had many challenges; however, the research revealed success factors that enhance teaching and learning.

The final paper in this theme by Margaret Walshaw is a timely report of recent research on the reactions and practices of students in relation to technologies they use at home and school. It explores the impacts of technologies upon students and the roles teachers do and could play in utilising ICT in beneficial ways in classrooms.

## Research methods

When WJE began in 1995 approaches to doing research in education were the subject of considerable debate internationally. Quantitative approaches using experimental or pseudo-experimental research designs had been dominant for many years particularly in projects that investigated teaching, learning and curriculum. By 1995, qualitative research was establishing its place as a reputable and rigorous alternative approach and many of the papers in this collection are examples of change. Increasingly in the last 20 years researchers have seen the benefits of research into complex ‘problems’ in education that uses mixed methods from both quantitative and qualitative paradigms, thus helping to remove the false boundary between them. The study of complex topics can now involve teams of researchers collecting and analysing a wide range of data.

Sue Middleton’s paper is a good example of issues in the use of qualitative research methods to study education topics in the mid-1990s. It draws attention methodological issues and ways to use emerging research methods and technologies. Bronwen Cowie et al report the experiences of teams of researchers and teachers collaborating in classroom-based research projects in science and technology. The value of this paper is a thorough analysis of numerous methodological issues in research in classrooms and how many can be resolved to the benefit of all participants. Teacher-researcher collaboration in research is also the focus in Deborah Fraser’s paper. The context is a project in the arts. A team of university and teacher-researchers worked to plan, teach and evaluate various topics across the arts. Strengths and tensions are analysed. A paper by Mere Berryman and Russell Bishop reports a quite different, but important research approach—the process of developing a data collection tool in the Te Kotahitanga Project. It is an observation tool to systematically measure aspects like student engagement, work completion and academic level. It attends to matters of reliability and validity in testing the tool.

## The future

To ensure future success WJE leaders should review the focus of the journal. Is its scope too broad? Can a broad scope be managed by the future continued use of special topic sections within issues?

Assuming a continued commitment to the wide field of education there should be an analysis of topics in education that have been neglected. Here are a few examples. There have been few papers using philosophical analyses to explore educational issues like particular policies. Similarly, there is a need for more historical research that can put current issues into perspective. Another gap is comparatively little research on teaching and learning in disciplines and curriculum areas in schools and tertiary settings. Most WJE papers have been in science, technology, the arts and mathematics. Little has been reported on social sciences education, health and physical education, aspects of literacy, and languages learning in schools. In spite of earlier comments, there is a shortage of papers that report research that uses complex statistical methods to analyse quantifiable data (assuming, of course, that the research was designed to require such analyses).

A reassuring thought about the future of WJE is that the field of education presents almost endless research possibilities. The field is broad and complex but with many particular ‘problems’ and issues to be explored and reported.

The Waikato Journal of Education has successfully reached the important milestone of 20 years of publication thanks to the participation of many people. There is every reason to celebrate the achievement and to believe that the next 20 years can be even more successful.

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**Emeritus Professor Clive McGee**  
Faculty of Education  
The University of Waikato