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Associate Editors
Dr Chris Astall, University of Canterbury, New Zealand
Mr Murray Fastier, University of Canterbury, New Zealand
Professor Letitia Fickel, University of Canterbury, New Zealand

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Cover design: Representation of a tukutuku showing the stepped poutama pattern symbolising growth or achievement - like climbing a staircase. The MTchgLn poutama (Te Poutama: Ngā pou te ako) is organised around the four core values of the programme and represents pre-service teachers’ development and growth of adaptive expertise and action competence.
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Editorial

Welcome to the inaugural issue of the Journal of Initial Teacher Inquiry. This special issue has a focus on contemporary teaching and learning issues. This journal celebrates inquiry based research as conducted by Initial Teacher Education (ITE) students completing the intensive, one year Master of Teaching and Learning (MTchgLn) course at the University of Canterbury, Christchurch, New Zealand. The MTchgLn is a new initial teacher education qualification with a particular focus on inclusive and culturally responsive teaching and learning in support of Māori and diverse learners, including Pasifika youth, students for whom English is a second language, those from low-socioeconomic backgrounds and those who experience special learning needs (i.e. Ministry of Education defined ‘priority’).

E kore e taea e te whenu kotahi
ki te raranga i te whāriti
kia mōhio ātou ki ā tātohu.
Mā te māhi tahi ō ngā whenu,
ma te māhi tahi ō ngā kairāranga,
ak oti tēnei whāriti.
I te otinga
me tītiro ātou ki ngā mea pai ka puta mai.
A tana wā,
me tītiro hoki
ki ngā raranga i makere
nā te mea, he kōrero ano kei reira.

The tapestry of understanding cannot be woven by one strand alone. Only by the working together of strands, and the working together of weavers, will such a tapestry be completed.
With its completion, let us look at the good that comes from it and, in time we should also look at those stitches which have been dropped, because they also have a message.

This programme has an emphasis on professional inquiry for the development of action competent and critical pedagogues. In broad programme design and conceptual framing, this is achieved through the interweaving of the centralising constructs of ‘learning to practice’ principles (Timperley, 2012) and central tasks of initial teacher education (Feiman-Nemser, 2001) that align with research-evidence on high-quality initial teacher education programme design (Darling-Hammond & Bransford, 2005).

One key principle of the programme is that teaching is a complex, learned profession. Therefore, critical analysis and reflection on experiences of classroom learning leads ITE students to a systematic examination of their ‘puzzles of practice’. This inquiry approach to teaching and learning is research informed and ITE student learning is focused on the development of adaptive expertise (Davis & Fickel, 2014). As they consider their ‘puzzles of practice’, our beginning teachers need to be able to draw on, understand and critique research related to aspects of teaching, curriculum and assessment. They need to be able to integrate this developing professional knowledge into their inquiry approach in order to support their ongoing, complex decision-making. This development of adaptive expertise with ITE students is an important focus for our MTchgLn teacher education programme. However, in order for our ITE students to develop research-informed, culturally responsive teaching and learning practices, it is also important to promote teacher action competence which:

...includes, but is also more than, having a repertoire of effective pedagogical tools. It denotes having knowledge about learners, society and teaching (knowing about), combined with know-how and knowledge of how to act (knowledge in action), and the will to act to bring about educational change (values for action)... (Abbiss & Astall, 2014, p. 6-7)

Consistent with the ‘learning to practice principles’ (Timperley, 2012) that provide the foundation for the MTchgLn programme, a carefully constructed learning community, consisting of the teacher educators, mentor teachers, partner schools and the ITE students themselves, provides opportunity for a collaborative, supportive, authentic space for shared learning. Working within this collaborative space our MTchgLn students were required to conduct a critical literature review based on a contemporary issue in education that resonated with ‘puzzles of practice’ emerging from their developing contexts. The twenty three research articles resulting, relate to a mix of both primary and secondary school-based contexts and are organised under the following themes:

- Assessment and Accountability
- Teaching as Inquiry – Changing Pedagogies
- Professional Development and Teacher Relationships
- Family and Community Partnerships in Education

With topics being classroom related, we believe they will be of genuine interest for pre-service teachers, classroom teachers and teacher educators alike. Each article is concise, comprised of approximately 1,500 words and has undergone a robust peer review process in order to ensure high academic quality and rigour. An overview of each theme is provided below.

Assessment and Accountability

In considering student achievement, particularly for priority learners, Hannah Ewing explores the notion of how the influence of negative stereotypes of a particular group may result in increased anxiety and impaired cognitive ability in assessments. Chris Houghton analyses the gap in achievement in ākonga within New Zealand, particularly for Māori and Pasifika, and discusses the use of cultural frameworks to support formative assessment practice in order to engage learners. This leads to a review of some issues surrounding formative and summative assessment practices by Vanessa Price. Effective feedback is crucial to supporting ākonga to improve learning. Nicki McFadzien examines what effective feedback is and why reciprocity is so critical in supporting both learning and teaching. Nicole Mehrzens reviews standardised assessments, accountability and the implications for ākonga learning. In the final article of this section, Sasha Johnson takes an international perspective. She explores how standardised assessments are used internationally to compare and rank countries and explores what is measured and what is most useful in terms of predicting economic competitiveness.
Teaching as Inquiry – Changing Pedagogies

In the first of the reviews in this section, Genevieve Williamson critiques three key concepts related to self-regulated learning; metacognition, motivation and behaviour. She discusses the benefits for ākonga and implications for teachers. The next two articles focus on technology and its influence on pedagogy. Nicholas Shimasaki identifies some key barriers to the integration of technology in schools and Nathan Sinclair discusses how learning with technology should be guided and supported by pedagogy. The challenges associated with the complex nature of teaching and the process of becoming a teacher is revealed by Kim Griffin. She discusses the relationship between teaching as inquiry and the importance of developing dispositions for teaching. Corinna Wells, in her review considers the Structure of the Observed Learning Outcome (SOLO) taxonomy model in relation to assessment and pedagogy. Finally, Sione Areli reviews how indigenous epistemologies are incorporated into modern pedagogical practice.

Professional Development and Teacher Relationships

Ways of working within communities of practice, and the importance of supporting relationships within these communities, to facilitate āko learning are highlighted in the next series of reviews. Ethan Smith considers the importance of collegial relationships between kaiako to support professional development within learning communities. The breadth and nature of professional relationships required to support students with special educational needs is highlighted by Nicole Hook. The February 2011 earthquake provides a reminder of how important ākonga-kaiako relationships are in times of extreme stress; especially to a child’s healing and resilience. In her review, Alice Foote reviews research of disasters, including the Christchurch earthquakes, and discusses the role teachers’ play in supporting student recovery. Teachers also have a significant role in developing ākonga-kaiako relationships outside of the school context through extracurricular activities. Gareth Sutton identifies some affordances and constraints of such extracurricular engagement. Lucy Brownlee acknowledges the importance of parental involvement in supporting relationships with ākonga and whānau. She discusses why these relationships are important and how teachers can continue to encourage them. Finally, Veronica Noetzli explores how adopting a restorative approach to relationships in a school environment has a numerous benefits for students, staff and the wider community.

Family and Community Partnerships in Education

Olivia Proctor identifies the role of the teacher in supporting citizenship education and the importance of using controversial issues as a context for developing this aspect, although she cautions for the need to support teachers in this practice. The power relationships between parents and teachers can be supportive as well as destructive. Using the recent case of a Christchurch student, Erin Small reviews these power relationships and explores how they can support and promote student achievement. Aimee Gledhill continues with the theme of engaging parents and examines the literature around parental involvement with homework and some of the challenges this provides. Those barriers to parental involvement, particularly for minority and disabled parents, and their effectiveness on student achievement is discussed by Heather Humphrey-Taylor. Finally, Graeme Jones researches bullying and bullying behaviour in terms of the style of parenting and leaves us with some thought provoking questions.

Our MTchgLn programme whakataukī emphasises the value we place on our ITE students and their learning;

*Ahakoa he iti, he pouanui*

Although it is small, it is greenstone

We do hope the articles are of intrinsic interest to you, the reader. We believe they are a testament to what the MTchgLn graduates can achieve when asked to examine classroom practice through a teaching inquiry based lens.

Chris Astall, Murray Fastier and Letitia Fickel
Co-editors

School of Teacher Education
Te Rangai Ako me te Hauora
Te Whare Wananga o Waitaha
College of Education, Health & Human Development,
University of Canterbury

References


Stereotype threat and assessment in schools

Hannah Ewing

College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

There is abundant evidence that demonstrates that individuals’ intellectual performance is undermined in situations that remind them that they are stereotyped which is causing them to underperform (Schmader, 2010). This phenomenon has been identified as stereotype threat (ST). Research shows that students from disadvantaged minority groups experience poorer achievement outcomes than students who are provided with equal academic opportunities. In education, it is important to understand how ST affects the performance of stereotyped students (Taylor & Walton, 2011). Reminders of negative stereotypes create questions of self-perception and uncertainty about one’s abilities. This process of suppressing negative thoughts and feelings manifest a fear of confirming the stereotype, which impairs cognitive ability and causes anxiety that affects performance during assessments. Fortunately, evidence suggests that value affirmation can help eliminate the negative effects of ST on assessment and learning (Taylor & Walton, 2011). However, more evidence on how to teach students to feel more competent at school is needed.

Keywords: stereotype, stereotype threat, assessment, anxiety, value affirmation, minority groups

Introduction

Dismantling institutionalized barriers, in the struggle for equality, has not closed the racial and gender gaps in achievement, as these groups continue to underperform in academic settings (Schmader, 2010). Claude Steele’s theory, stereotype threat (ST), provides a reason for underperformance from these groups. ST is defined as, “a disruptive apprehension about the possibility that one might inadvertently confirm a negative stereotype about one’s group” (Taylor & Walton, p.1, 2015).

This critical review discusses four different case studies that examine the effects of ST in academic settings. Most of the articles found on ST were written in the United States with a limited number of studies conducted in secondary and primary education. Furthermore, studies of ST in New Zealand were not found; however, it is important to consider the implications ST has on minority groups of students, as negative attitudes towards Māori still exist (Holmes, Murachver, Bayard, 2001). This review shows ST can hold powerful implications for the individual abilities of students and help generate racial and gender differences in academic performance and assessment. For the purpose of this paper, the review will concentrate on three implications ST poses on academics and assessment.

These are: fear of confirming a stereotype, the connection between ST and anxiety and ways to help reduce ST.

Fear of confirming stereotypes

Subtle reminders of stereotypes that presume incompetence with certain groups can create concern with confirming the stereotype and impair the ability of one performing to their potential (Schmader, 2010). ST may cause people to demandingly suppress thoughts of the negative stereotype rather than promote positive outcomes, which can lead to decreased performance (Smith & Hung, 2008). This ‘threat’ of confirming the negative stereotype creates questions of self-perception and uncertainty about one’s abilities (Schmader, 2010). Smith and Hung (2008) highlight this idea in a study examining ST against women in maths testing. Results indicated that female students who were included in ST manipulation performed worse than females in the non-removed ST environment.

Gender based stereotype threats for women occur when there is belief that she will be judged by the stereotype that women’s math ability is inferior to men’s. This fear causes underperformance (Smith & Hung, 2006). Similarly, Taylor and Walton’s (2011) study revealed that Black students who had studied in the ST-inducing environment defined half as many words correctly than White students; however, in non-
threatening environments, Black students outperformed the white students (Taylor and Walton, 2011). Osborne (2001) declares that students who belong to groups with a negative intellectual stereotype risk embarrassment, failure and fear of confirming the stereotype. Fighting the stereotype causes increased anxiety that leads to poor performance of students. Unlike other studies, Osborne did not directly test if ST can undermine learning performance; but the relationship between race and anxiety to poor performance was studied. Results indicated that anxiety accounted for a significant portion of achievement test differences between African American and White students (Osborne, 2001). In addition, Osborne (2007), states that awareness of a negative stereotype increases evaluation apprehension and situational anxiety that can inhibit performance.

Effects of anxiety on assessment

ST not only increases sensitivity to one’s abilities, but also increases anxiety. While anxiety during a test might not be problematic if one is feeling confident, it can become a distraction when experiencing doubt (Schmader, 2010). Osborne’s (2001; 2007) studies of how anxiety can create racial and gender differences in academic performance provide proof of ST. Osborne’s (2001) earlier study measured the anxiety of five, different racial groups of secondary students. Students were tested on a series of timed vocabulary tests and afterwards students completed a short survey to measure anxiety. The survey asked how students felt while taking the test and included words such as: under pressure, nervous, jittery and calm. Results indicated that white students performed significantly higher and had lower anxiety scores than other students. However, Osborne posed concerns that since the results were from self-reported anxiety, this created more room for interpretation (Osborne, 2001). In Osborne’s (2007) later study, the effects of anxiety on performance were measured during assessment versus afterwards. Physiological reactivity, such as heart rate and blood pressure were measured for female and male students while they sat a Mathematics assessment under ST conditions. Similar to his previous study, the stereotyped group (females) showed inflated levels of anxiety, stress and arousal under high ST conditions and a large gap in performance between males and females, with males outperforming females. (Osborne, 2007)

While both of Osborne’s studies (2001; 2007) aid in attempting to clarify the mechanism for which ST manipulates performance, there are caveats. These studies only investigated two aspects of ST, so it is important not to generalise these results to other instances such as race and age. Also, experimenter sex may have had an influence on the reactions of participants (Osborne, 2001; 2007).

In addition to anxiety creating academic achievement discrepancy, Smith and Hung (2008) express that psychological factors such as ST and low self-esteem, can also contribute to academic performance gaps. Taylor and Walton (2011) do not specifically indicate the effects of anxiety on performance, but declare that there are psychological consequences of ST, including cognitive depletion, loss of focus and increased arousal levels. Understanding the psychological and physiological effects of ST is an important factor in learning how to improve learning for students in threatening environments.

Helping reduce ST: Possible solutions

Individuals live in diverse environments; therefore, there could always be subtle reminders of social stereotypes. As a result of this, it is important to consider how to change performance conditions in schools to encourage more positive views of one’s racial or gender group (Schmader, 2010). Changing ST environments could have possible effects, in the New Zealand school system, where Māori students continue to perform poorly and are perceived by their peers and teachers as being less competent students (Holmes, et al., 2001). Understanding how brief threat-reducing interventions can produce benefits in ST environments was also a part of Taylor and Walton’s (2011) study. In the study, Black students were or were not assigned to complete a written exercise that served as the value-affirmation manipulation. In this exercise, students identified their most important value and its significance to them. Next, students performed in a series of non-threatening “warm-ups” and threatening “tests”. Results indicated that Black students who completed the value affirmation exercise performed nearly 70% better on the threatening “test” than those Black students who did not. Taylor and Walton’s (2011) results suggest that affirmation improved participants’ learning by preventing stereotype suppression and supporting focus. The authors’ tone is encouraging that these findings are important to the future of children’s education. These findings are significant when considering the psychological processes where value-affirming interventions may improve real academic outcomes for students who experience ST; otherwise, these students may not pursue the same learning opportunities as others (Taylor & Walton, 2011).

Changing the nature of performance environments to encourage more positive views of one’s group or abilities could help reduce gaps in the achievement of students (Schmader, 2010). A similar urging tone is portrayed by Smith and Hung (2008) who make clear that further research is needed to investigate whether ST is transnational and if psychological factors, such as one’s ego or family structure, can have an influence on ST. There is also a need for research on how ST affects other minority groups (Osborne, 2001). In addition, the authors elaborate that minority parents can help their children by teaching them to feel competent at school. Osborne (2001) states that anything parents, schools, teachers, peers or communities can do to help undermine negative group stereotypes concerned with ability will improve academic outcomes for people of those groups. This can be achieved by teaching children that regardless of their grades, everyone is special and deserving of respect. Further, it will help children learn that what they think about themselves is more important than what the majority thinks (Smith & Hung, 2008).

Osborne (2001) also has recommendations to improve outcomes for these students by: protecting students from ST by progressing how far students have learned prior to assessment and evaluation, emphasising challenge and effort versus talent and aiding students in their notions that intelligence in not a fixed quantity, but rather, a more malleable trait. It is also important to create system level changes to undermine the
effects of ST, such as the implementation of multicultural curriculum. Osborne (2007) did not elaborate on ideas to help reduce ST in his later research, but did emphasise that ST threat research has demonstrated that minimal alterations in assessment situations can help reduce achievement gaps (Osborne, 2007). Osborne’s bias and the bias of other authors from this review portray that ST effects on students’ achievement during assessment in schools is an important issue that should not go unnoticed or unstudied.

Conclusion

The threat of confirming the negative stereotype of a group that creates questions of self-perception and uncertainty about one’s abilities is known as stereotype threat (ST). This review has provided evidence that ST can lead to racial and gender differences in academic performance and assessment. The studies in this review reveal that ST impairs performance (Schmader, 2010) despite socioeconomic status, academic preparation and educational opportunities (Osborne, 2001). It is also argued that once stereotypes are established, they tend to remain stable whether one believes them or not (Holmes, et al., 2001). ST poses implications for learners as it generates underperformance by creating fear of confirming the stereotype and increasing levels of anxiety; however, research indicates that value-affirmation of stereotyped groups can help manipulate the effects of ST on learners’ performance (Taylor & Walton, 2011). Negative stereotypes of priority learners, such as Māori being less competent students, could be a contributing factor in academic success and assessment. Therefore, research in New Zealand about how ST affects priority learners should be considered (Holmes, et al., 2001).

References

Underachievement of Māori and Pasifika learners and culturally responsive assessment

Christopher Houghton
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
Māori and Pasifika students have historically made up a large number of those ākonga that underachieve within formal education in New Zealand. The gap in achievement between Māori, Pasifika and other ethnicities identified in Aotearoa is alarming and consideration of current assessment practice is necessary. This article explores the possible reasons for this disparity in achievement, problematising the practice of standardised testing, the measurement of ‘success’, and what cultural bodies of knowledge are valued in the development of assessment and the classroom environment. Further this article seeks to demonstrate how certain culturally responsive frameworks of teaching and learning, such as more effective use of formative assessment, can be implemented to encourage all ākonga, including Māori and Pasifika, to be actively engaged in their learning and achievement.

Keywords: assessment, Māori and Pasifika learners, culturally responsive practice

Introduction
To be Māori or Pasifika in New Zealand’s formal education system qualifies one to identify with the priority learner category, as recognised by the Education Review office (2012). The reason that Māori and Pasifika learners identify with this category is that their participation results are 10-15 percent below that of other tamariki in Aotearoa (Ministry of Education, 2010). Further, the New Zealand National Standards results for 2014 highlight the concern for Māori and Pasifika learners across the three standards of reading, writing and maths. Both of these ethnic groups fall roughly 10% to 20% points behind ākonga that identify ethnically with Asian or European/Pākehā (Ministry of Education, 2010). These statistics have prompted much debate and discussion around what is causing this ethnic disparity in educational results.

Modern research around these educational issues have come to similar conclusions. This research generally suggests the need for an active shift, initiated by kaiako, towards a more culturally inclusive and responsive pedagogy and assessment. The literature in this review has been selected specifically in regard to education in New Zealand. It explores why Māori and Pasifika students are underachieving in schools, and what possible solutions there are to remedy this through the lenses of assessment and pedagogy.

What is the issue?
Aotearoa is home to many cultures that inevitably gives rise to a significant challenge; ensuring that there is an on-going appreciation for the cultural diversity of New Zealand’s indigenous and Pasifika people. Garcia (as cited in Slee, 2010) compares ‘culture’ to an iceberg with most of the differences ‘beneath the surface’ with the visible signs representing very little of the diversity. Therefore it is important when seeking an equitable and more inclusive approach to assessment in education to recognise that Māori and Pasifika, as separate ethnic collective, are by no means a homogenous group (Mahuika, Berryman & Bishop, 2011). Different cultures identify with particular ways of being, knowing, and ways in which they view the world (Mahuika et al., 2011). Ormond (as cited in Slee, 2010) expounds this idea claiming that it is ‘one’s cultural background that influences the perspectives and values that one acquires [and] the skills that one masters and finds important’. These findings on the notion of culture therefore problematise current educational policy, and assessment practices by asking the question of whether formal education in New Zealand is measuring what is valued, or measuring what is easily measured and thus end up valuing what (can) be measured (Biesta, 2010). For both Māori and Pasifika students being educated in Aotearoa it is identity that is greatly valued and seeks authentic recognition. Schools must avoid the risk of developing, or maintaining deficit theories
around Māori and Pasifika students by acknowledging more than simply cultural difference, but the individual identity of how one wishes to be perceived (Nakhid, 2002).

The process that must take place to achieve this is an ‘identifying process’. This is when each student is able to see themselves in the processes and structures of the school, feeling a sense of belonging within the education system (Carrington & MacArthur, 2012; Nakhid, 2002). Nakhid believes that Pasifika [and Māori] people in New Zealand are ascribed an identity by the predominantly Pākehā majority through the narrow lens of their shortcomings; low socio-economic status, under-achievement, and Pasifika ethnicity (2002).

The consequences of this ascribed identity could encourage teachers, consciously or subconsciously, to set below average or low expectations for these students and prepare them for what they, the teacher, believe is their future pathway. This notion of an ascribed identity could contribute to why Māori and Pasifika students have historically made up approximately 61.7% of all students that leave high school with no formal qualifications (Nakhid, 2002). To gain equity in achievement for Māori and Pasifika students kaikō must seek to understand and acknowledge the essence of Te Tiriti o Waitangi (The Treaty of Waitangi), which Macfarlane and Macfarlane (2012) suggest not all kaikō understand or acknowledge.

What is causing the issue?

The New Zealand Education system uses a standardised testing system that makes possible the comparison of students’ academic performance individually, in groups, and internationally. An implication of such an assessment system that relies heavily of the measurement of ‘success’, is the impact that it has on the preparation practices of teachers, specifically in regard to Māori and Pasifika learners. Popham describes how standardised testing has been known to cause teachers to relentlessly drill students on test content, eliminating important curricular content not covered by the test (as cited in Volante, 2006).

Evidence based research gathered by Bishop, Berryman, Wearmouth, Peter and Clapham (2012) challenges the summative pedagogy and assessment approach to teaching that standardised testing can impose, reporting that the way that teachers teach and how they interact with Māori students is what influences them to become engaged in learning. For Māori and Pasifika students to positively engage in their own learning, as a result of the relationship with kaikō, reflects the sociocultural context of these ethnic groups where whānau and relationships are of great value. Mahuika et al., (2011) support this idea stating that ‘compatibility between the school and home environments will better facilitate effective learning and assessment’.

What action should be considered?

The first step towards assessment being more culturally responsive is teachers, who are predominantly Pākehā in Aotearoa, becoming aware of the normalisation of their own culture and the way that their values and beliefs are reinforced within the current education system (Mahuika et al., 2011).

Once kaikō realise that their cultural beliefs are ubiquitous they can seek to be agents of change in adopting a sociocultural perspective that recognises individuals in terms of their social and cultural context (Macfarlane & Macfarlane 2012). Frameworks such as Ka Hikitia (Ministry of Education, 2008) have been provided to urge the education system to fit the student rather than requiring the student to fit the education system (Macfarlane & Macfarlane, 2012). A culturally specific framework produced by Macfarlane and Macfarlane (2009), Te Pikinga ki Runga (Raising the Possibilities), has been configured using four specific holistic domains in its educational approach to wholeness and wellbeing. Highlighted within this framework are four central aspects of culturally responsive pedagogy including relational, physical, psychological and self-concept. The framework also specifically focuses on strengthening cultural identity in relation to whānau engagement and assessment, making significant links to the key competencies of the New Zealand Curriculum.

On a more practical level Mahuika et al., (2011) strongly recommend the regular use of formative assessment to combat the culturally exclusive and test focused approach to assessment. A possible implication in moving towards a more formative assessment approach in education could be the loss of accountability, which summative assessment provides. Summative assessment promotes accountability that can have a positive effect in motivating improvement, supporting parent and student decisions in seeking the best education, and ensuring that schools are maintaining successful academic results in comparison to others (Looney, 2011).

Therefore it would seem most beneficial for all learners to have a balance of the two assessment approaches. However, Mahuika et al., (2011) argue that the formative approach should be at the forefront of a teachers pedagogy, as it can aid them in taking learning further with an on-going awareness of what is happening during learning activities and recognise where the learning of ākonga is going. Further, its implementation must be consistent for Māori and Pasifika to derive the same benefits as their non-Māori and Pasifika peers, with teachers being aware of their own assumptions and expectations within the classroom context (Brookfield, 1995; Mahuika et al., 2011). By pathologising the lived experiences of Māori and Pasifika students in relation to assessment and learning teachers deny the opportunity to bring about change in learning outcomes and risk harbouring deficit theories and maintaining the status quo of educational disparities (Mahuika et al., 2011).

Conclusion

The New Zealand Ministry of Education recognise the significant disparity between the achievement of Māori and Pasifika students, in comparison to other ethnic groups within the New Zealand education system. The New Zealand education system’s assessment practices currently adopt a more summative approach, under the overarching structure of standardised testing.

However for Māori and Pasifika learners evidence based research, specifically that carried out by Mahuika et al., (2011), reveals that a more formative approach to assessment with kaikō actively building positive learning relationships with ākonga is more effective for engagement and therefore achievement. Assessment must be culturally responsive and therefore active in acknowledging and respecting what ākonga value, integrating worldviews, prior knowledge and cultural epistemologies into pedagogy. Macfarlane’s (2008) framework Te Pikinga ki Runga is recommended when considering pedagogy and assessment due to its holistic view of ākonga,
inclusive and responsive approach to assessment, and active efforts not to homogenise Māori and Pasifika.
For teachers to work towards creating a culturally responsive learning environment, especially for priority learners, the start point is to provide ākonga with regular opportunities to engage with a formative assessment style.

References

Exploring effectiveness and rationale of different assessment types

Vanessa Price
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

This paper explores issues surrounding the effectiveness and rationale of use of summative and formative assessment. Summative assessment is effective for informing third parties of student achievement in comparable methods. However this creates high-stake pressures, which can have negative influences on student performance. Formative assessment is generally perceived as effective for developing students as lifelong learners, the variations in literary definitions and assessment design guidelines result in confusing implementation and effectiveness. To alleviate issues of effectiveness and comparability, an integration of summative and formative assessment may produce more idealistic assessment design parameters.

Keywords: effective assessment, formative, summative, assessment design, rationale, effectiveness

Summative Assessment

Summative assessment is usually designed as a summary of students’ descriptive content knowledge at the end of units, years or schooling (Crooks, 2011). The results may be used to inform students’ of their progress, however this information is better suited for third parties such as national policy makers, future employers and tertiary institutions. The third party use is a controversial rationale for maintaining summative assessment in education, as some believe the information is unreliable and of low validity (Harlen, 2009). Dufaux (2012) argues while the standardisation from these én masse assessments is important for qualification, they do not provide a holistic insight into students’ capabilities due to the high-stakes pressure influencing performance. However Dufaux’s (2012) argument is based on the assumption that summative assessments are a valid source of information; a perspective Black, Harrison, Hodgen, Marshall & Serret (2010) queries. With the standardisation of summative assessment, Black et al. (2010) found teacher’s attention to the validity of assessment was undermined by the assessment regimes. Crooks (2011) supports Black et al. (2010) conclusion and adds New Zealand contextual evidence to the perspective. Crooks (2011) recognises the distrust in teacher’s professional judgements regarding validity, as this is generally reflected in political and media criticism.

In assessing the political rationale for national summative assessment, it appears to be logical – the need for standardisation to illustrate international competitiveness. However with validity criticism from Black et al. (2010), literature now questions the ability of New Zealand to truly reach national targets like ‘85% NCEA Level 2 achievement’ for secondary schools (Parata, 2012). Crooks (2011) adds to the query by highlighting schools’ strategic response to such targets. Due to the high-stakes pressure of schools being accountable for student achievement, schools encourage and discourage students to participate in certain academic pathways; thereby hindering future achievement possibilities (Crooks, 2011). This is strong evidence for the invalidity of national summative data, not to mention the strong influence schools are having on individual achievement (Looney, 2009; Rosenkvist, 2009).

However validity is not the only concern for national summative achievement influences, the practice-policy gap regarding pedagogical values of the New Zealand education system is also impacting the development of student learning. The policy encouragement from recent documents (Assessment Reform Group, 2002; New Zealand Curriculum, 2007) state education leaders and policy makers value assessment as a tool for students’ lifelong learning development through formative assessment. However with the aforementioned pressures of targets, Crooks (2011) is concerned for the genuine implementation of these values beyond the literature. With these criticisms in mind, it becomes challenging to see the importance of summative assessment. Therefore it appears the use of summative assessment should not be focused to influence
students’ learning, but should supply summarised information of students’ content knowledge to concerned third parties. To influence student learning the alternative, assessment for learning is generally accepted as an effective pedagogy.

**Formative Assessment**

Formative assessment currently has ambiguous definitions. Literature agrees it is assessment with the intention to help learners improve content knowledge and/or skills. However, one of the factors attributing to the confusion surrounding formative assessment is the definition of ‘learners’ improvement. Authors including Harlen and James (1997) suggest learners’ improvement refers to the individual student developing knowledge acquisition skills, social and emotional maturity and the development of cognitive processing skills. Thereby, taking a holistic approach to learner development there is a need to be conscious of the influence education has on this. However the practical implementation of this idea varies; this is Bennett’s (2011) concern for the impacts and future of formative assessment in education. Few have attempted to define the practical implementation; Wiliam (2011) provides a matrix with a focus on students, peers and teachers working to facilitate learning development. While this is a clear explanation, the Assessment Reform Group (2002) have their own definition of formative assessment as “Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to be, and how to get there.” With variations in definitions throughout literature it is clear to see the source of Bennett’s critique. From varied definitions and understandings of formative assessment, Bennett (2011) claims this is negatively impacting the effectiveness of formative assessment. Unlike summative assessment, the rationale for formative assessment in education is student centered. Dixon and Ecclestone (2003) claim effective formative assessment enhances conceptual learning, and promotes student autonomy and motivation.

To achieve these idealistic targets, Black and Wiliam (1998, p58-59) provided a comprehensive list of aspects teachers should take into account when designing effective formative assessment.

- The assumptions about learning underlying the curriculum and pedagogy;
- The rationale underlying the composition and presentation of the learning work;
- The precise nature of the various types of assessment evidence revealed by the learner’s responses;
- The interpretative framework used by both teachers and learners in responding to this evidence;
- The learning work used in acting on the interpretations so derived;
- The divisions of responsibility between learners and teachers in these processes;
- The perceptions and beliefs held by the learners about themselves as learners about their own learning work, and about the aims and methods for their studies;
- The perceptions and beliefs of teachers about learning, about the ‘abilities’ and prospects of their students, and about their roles as assessors;
- The nature of the social setting in the classroom, as created by the learning and teaching members and by the constraints of the wider school system as they perceive and evaluate them;
- Issues relating to race, class and gender, which appear to have received little attention in research studies of formative assessment;
- The extent to which the context of any study is artificial and the possible effects of this feature on the generalisability of the results.

However with further research it is becoming clear another significant separating factor between summative and formative is the focus on results. While summative assessment is results and accountability focused, Black and Wiliam’s (1998) list implies the focus of formative assessment is how students are learning, how they perceive their learning and what goals they strive to achieve as a result of feedback. As a result, formative assessment is more accepted as it is viewed as a way for teachers to design assessment around their students with the intention of help them achieve – rather than highlighting their shortcomings (Harlen, 2009; Looney, 2011). However, Bennett (2011) argues formative assessment has not reached its potential effectiveness to transform students into lifelong learners.

Bennett recognises the focus of formative assessment is currently content knowledge, therefore due to the varied understanding of formative assessment, the results and implementation are also varied.

To provide comprehensive effective formative assessment Bennett (2011) believes, teacher’s need to place more focus on the conceptual development of assessment, where questions like; what is being assessed, why is it being assessed, and how does it impact on students’ learning, should be answered.

**Effective Assessment**

Although summative and formative assessments have aspects attributing to their efficacy, Looney (2011) suggests an integration including these aspects as a way beyond the summative versus formative argument. Looney suggests four methods of improving assessment effectiveness including, bottom up direction, promotion of teacher professionalism, consideration of economic costs, and addressing gaps in research development. Since assessment impacts students, teachers, and schools treating teachers as leaders in development of effective pedagogical assessment strategies seems to be a logical shift in direction. Currently the New Zealand system operates in a top down form (policy makers down to teachers), but with teachers constantly interacting with assessment, their inquiry and reflection as to the effectiveness of assessment can create continual practical improvement (Looney, 2011). Promotion of teacher professionalism can instil a change in the way teachers view their roles and the role of assessment. Looney (2011) suggests for teachers to effectively implement assessment, they require training to develop those pedagogical skills. Although New Zealand teachers constantly undergo professional development, the scope of that development (if it does not already) should include understanding how effective assessment can be carried out (Looney, 2011).

Although literature is continually evolving to produce methods of implementing effective assessment, there is a research-implementation gap – particularly in the New Zealand education sector. Beyond pre-service teacher education, teachers are only updating their skills during professional development courses;
which is generally not often enough to remain informed with literary developments. Therefore the innovations being made in regard to effective assessment get to teachers through a ‘trickle down’ system ultimately resulting in an information-lag. While this is not directly related to the effectiveness of either summative or formative assessment, the research-implementation gap is important for the widespread understanding of effective assessment, which as aforementioned is a leading cause for the ineffective implementation of assessment.

References


Why is effective feedback so critical in teaching and learning?

Nicki McFadzien
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

Teaching in the 21st century has begun to shift from a pedagogy which views the teacher as the bearer of all knowledge to an approach that values ako, reciprocal learning. Both formative and summative assessments are influential in teaching but it is how we use the knowledge gained that is important. Literature surrounding effective feedback points to benefits for both the learner and teacher. Feedback is where the future learning begins and without it, assessment purely states where children are at in a point in time. Analysis of the assessment helps inform the required feedback and therefore the learning steps for the students to achieve their goals. While feedback is not strictly assessment, it is the essential element in turning assessment into a tool for future learning. This literature review will be focusing on what constitutes effective feedback and why it is so critical in teaching and learning.

Keywords: effective feedback, teaching and learning, reflection, student success, reciprocal learning

Assessment for teaching and learning

Assessment in education is primarily conducted to provide information to improve students’ learning and teachers’ teaching (Ministry of Education (MOE), 2007). When used effectively assessment can; promote student learning, raise standards, reduce disparities of achievement and improve the quality of the programmes provided (MOE, 2007). The literature suggests that formative assessment can be defined as, assisting learners to develop learning skills to become lifelong learners. Feedback is a tool used in this process which helps students to make meaning of their learning journey. Improving learning through assessment requires five factors: providing effective feedback, students’ active involvement, adjusting teaching in view of assessment outcomes, recognising the influence of assessment on students’ motivation and self-esteem - both crucial influences on learning and, ensuring pupils assess themselves and understand how to improve (Black, Harrison, Lee, Marshall, & William, 2004).

While assessment is often referred to in relation to summative assessment, if implemented effectively, literature suggests that feedback, with an emphasis on assessment for learning, can positively affect teaching and learning. The New Zealand Curriculum’s (NZC) (MOE, 2007) aim is to create; “confident, connected, actively involved, lifelong learners”, and this review of literature helps to inform of the importance of feedback for teaching and learning, and creating individuals as envisaged by the NZC in New Zealand during the 21st century.

This review addresses: what constitutes effective feedback, the impacts of effective feedback on teaching and learning in relation to improving success and achievement, creating responsive learners and enhancing teachers’ teaching. The differences found within the literature are also discussed.

What is effective feedback?

The word assess is derived from the Latin verb ‘assidere’, meaning ‘to sit with’. This infers that assessment is something which we do with and for students rather than do to them (Green as cited in Knight, 2000). Feedback is a pedagogical framework of assessment, for learning not of learning (Black & William, 2009). Effective feedback is described by the Ministry of Education, (n.d) as: specific, descriptive, student initiated (combined with self/ peer assessment), time appropriate, suited to needs of individuals, provides strategies for improvement, allows time for action, happens as a conversation and communication surrounding the adequacy of the feedback provided (MOE, n.d). While written feedback can be effective, issues can arise due to language, extent of content and the inclusion of grades. Hattie & Temperley (as cited in Lipnevich,
McCallen, Miles & Smith, 2013), Black et al. (2004) and Crooks (as cited in Knight, 2000), all identify that if feedback is presented alongside a grade, the benefits which the feedback provided can be reduced. If the grade is omitted, it supports the learner and parents to focus on the learning rather than interpretation of the grade (Black et al., 2004). As teachers it is important to reflect on practices in the classroom and how these affect students.

Carrington & Macarthur (2012) emphasize the important role of reflection as a key catalyst for change. Effective feedback is important for teaching and learning and the current literature supports this suggesting that it is; necessary for improvement and learning, influential in creating learners responsive to their learning and important in enhancing teachers’ teaching. The responsibility for learning is in the hands of the teacher and the learner and therefore they both must act to have the best outcomes for learning (Black & William, 2004).

**Bridging the Gap**

The literature reviewed points to effective feedback influencing improvement and success for students. Feedback identifies for the student the gap between their level of performance and their desired level (Shute, 2008), scaffolding the learning (Alton-Lee, 2003), Ramaprasad (as cited in Black & William, 2009) and Nicol & Macfarlane-Dick (2009) suggest that the key processes that underpin teaching and learning; establishing where the learners are in their learning (their current state of learning) where they are going (their goal) and what needs to be done to get them there are considered. When students are appropriately informed about their progress they are able to identify their next steps for learning (Education Review Office, 2012). Black et al. (2004) and Knight (2000) suggest that when learning is seen as a competition, as is implied when grades are given, the effort invested is reduced in comparison to written feedback without grades. This is especially relevant to low achievers as they relate their low achievement to lack of ability resulting in a minimised belief that they can achieve (Black et al., 2004). If teachers focus on reinforcing the view that feedback will help students to learn rather than dictate how smart they are, it enables students to learn more (Black et al., 2004). Teachers are there to support students not to criticize them (Nicol & Macfarlane-Dick, 2009). Knight (2000) passionately asserts that educators should prioritize formative strategies of assessment over summative and perhaps even use evidence gathered from formative assessment to serve as the assessment to summarise achievement.

**Creating Responsive Learners**

Research suggests that to enhance learning, students must be encouraged to actively process the information and feedback received (Chappuis, 2012; ERO, 2012; Hattie and Temperley as cited in Lipnevich et al., 2013). This action, known as ‘mindfulness’ leads to the greatest gains in performance (Lipnevich et al., 2013). When students receive individual feedback they learn that their teacher wants to help them and are therefore more likely to trust the advice and use it to progress them towards improvement. Black et al. (2004) and ERO (2012) suggest that self-assessment is essential to learning, where students need to know the goal and what is required to achieve it. Teachers need to help students develop this skill, which requires the student to identify how they believe their understanding is progressing, and justify their judgements with peers (Black et al. 2004). Student-centred learning where students actively construct their own knowledge and skills is increasingly becoming a part of educational pedagogy (Nicol & Macfarlane- Dick, 2009). No longer is the teacher the transmitter of all knowledge.

While most of the literature supports the view that feedback is important in creating responsive learners, Nicol & Macfarlane-Dick (2009) suggest that students who are better at self-regulation produce better internal feedback and are therefore better able to achieve their goals. Similarly, Quinton and Smallbone (2010) emphasise the importance of student reflectivity in order for them to be responsive to the feedback, where structured reflection supports the final stage of knowledge generation (Alton-Lee, 2003). Teachers must help students make connections between the feedback, their work/learning and how to improve. Future research could help to identify the cause and effect relationship between both self-regulation and reflection and feedback. Quinton and Smallbone (2010) also suggest that students’ mind-set, either growth or fixed, can influence the effectiveness of the feedback regardless of how effective it was presented.

**Enhancing teachers teaching**

Literature suggests that assessment for learning is not only important for students but also for enhancing teachers’ teaching (Black & William, 2009; Black et al., 2004; Nicol & Macfarlane-Dick, 2009; Shute, 2008). The reflexive action of considering and reflecting upon feedback allows consideration of what is happening in the moment and what might happen in the future. This allows one to respond to insights, improve teaching practice and the inclusive nature of the classroom (Carrington & MacArthur, 2012). When used effectively, feedback can be used to modify teaching and learning activities to meet the needs of the students. By students reflecting on their understanding, they provide feedback for the teacher which can indicate where teaching needs to be focused (Black et al. 2004; Nicol & Macfarlane-Dick, 2009). When teachers are willing to adapt their lessons based on feedback, this supports the learners and their learning (Black et al. 2004). This supports the Ministry of Education’s vision in Tātaiako (2011) to create an environment that represents ako. Additionally Black & William (2009) note that feedback allows teachers to build models of how their students learn and to use this to inform future teaching and feedback processes.

**Opposing views**

In contrast to the themes in the aforementioned literature, Alton-Lee (2003) and Black & William (2009) say that if we are to look at the findings about particular variables alone, it is not helpful in guiding quality teaching because of the complexity of the relationships of variables in teaching. While a single variable may have a strong relationship with student learning, if teachers increase the amount of a single variable while trying to improve teaching, without paying attention to the learning processes of students’, the outcomes could be counterproductive. It is also suggested that too much of any behaviour even if it is positive can be too much and lead to undermining the learning.
Conclusion

This literature review emphasizes that teaching and learning is a reciprocal relationship where feedback is not only important for the learners and their learning but also for the way teaching can cause learning. All authors agreed that effective feedback is integral to teaching and learning. However, it is important to realize that this is part of the kete of skills and techniques for teaching and learning and there is no single variable that completely informs student learning. The literature encourages teachers to be critically engaged with literature to guide the learning practice as teachers. Teachers must continue to be reflective of their practice in order to improve student learning and classroom practice to cater to the diverse needs of the students. Further studies would be beneficial to understanding the other factors that interact with and contribute to teaching and learning as teachers aspire to be effective teachers and create an ever improving, inclusive learning culture in the classroom.

References


Implications of imposed nationwide testing (for accountability) on primary student learning

Nicole Mehrtens
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

Many education systems are increasing accountability measures through imposing standardised assessment practices. Assessment can have a significant impact on a young person’s development therefore it is essential to explore implications of assessment for accountability. This review summarises key themes in contemporary literature regarding the implications of high-stakes imposed testing for accountability at primary level. The level of accountability within the New Zealand education model is then discussed.

Keywords: standardised assessment, accountability, primary education, implications

Assessment for Accountability

Many countries impose standardised academic testing in order to measure how well students have achieved. These test scores are believed to reflect ability in a domain of knowledge (Herman, 2005). Nationwide tests are often part of a regime to enhance ‘accountability’ in education, with the intended purpose of improving performance by examining its impact, measuring quality and results, and impelling staff to achieve higher standards (Gariepy, Spencer, & Couture, 2009). Classroom assessment is considered to have a significant impact on a young person’s academic life and development (Crooks, 1988; Herman, 2005), hence it is important to consider the implications of assessment and accountability measures for students. For purpose of simplicity in this review, ‘assessment’ refers to imposed, standardised, summative tests. The following piece is a summary of the key themes in, and implications of, research regarding widespread imposed testing on primary level student learning.

A brief exploration of the influences driving the increase of accountability in education is covered first. Two key themes from contemporary literature regarding the effects of accountability on primary level student learning are then summarised: the negative effects; and issues with the reliability of test scores. Finally, the level of accountability in the New Zealand education system is summarised and future implications are considered.

The Accountability era

Many education systems in worldwide are increasing accountability measures through imposed assessment practices. Sadler (2000) and the Ministry of Education (1994) assert that assessment can serve three purposes; to improve learning capability; for reporting; and for accountability for providing summative information. Some academics claim that accountability is predominantly about the effectiveness and ‘value for money’ of the education system (Knight, 2000; Sadler, 2000). Numerous academics assert that the ascendancy of managerial values and neoliberal governmental ideology are influencing the modern accountability era in education – an arena that was previously based on trust and professionalism (Herman, 2005; Knight, 2000).

Today, education systems in many countries are monitored and audited much like any other service – via imposed testing. Information gained on student achievement and progress is regularly reported to parents and summarised for public knowledge in the media (Knight, 2000); accountability has increased on multiple levels. Some education systems aim to enhance teacher accountability by adopting performance-related-pay programs, resource-allocation, sanctions and consequences, to raise the stakes according to students’ test results (Gariepy, Spencer, & Couture, 2009; Podgursky & Springer, 2007). Pilot-programs and research have highlighted inherent difficulties in reliably identifying effective teaching –
something that many academics argue cannot be measured accurately as it is influenced by multiple factors outside of the teachers’ control (Podgursky & Springer, 2007). Consequences associated with performance-related-pay measures include a reduction in teacher collaboration, and a shift in the view and nature of teaching and learning (Podgursky & Springer, 2007). Critics of the neoliberal and managerialist approach of reducing education to simple ‘measurable’ outcomes, argue that this approach is impelling society to measure what can easily be measured, rather than what society values – thus impacting on the very nature and purpose of education (Biesta, 2010; Herman, 2005). Also, it is suggested by Knight (2000) that people who are systematically not trusted will eventually become untrustworthy. Assessment for educational accountability is influenced by neoliberal ideology and managerialism. This can lead to education being treated as a commodity.

**Negative effects on student learning**

A key theme in educational accountability literature is the negative effects of imposed testing on student learning. Research has acknowledged that test anxiety and assessment results can have a significant impact on a young person’s development (Crooks, 1988; Herman, 2005; Marlow et al., 2014; Putwain, 2008; Shutz & Pekrun, 2011). In addition, researchers attest that imposed accountability testing puts significant pressure on teachers and schools and elicits higher stakes for outcomes (Crooks, 1988; Herman, 2005; Putwain, 2008). The literature strongly implies that this pressure has resulted in prioritised attempts to improve student outcomes in tested domains of learning, while other domains are neglected (Herman, 2005). This is referred to as the ‘tested curriculum’, signifying a distortion of the curriculum and standards (Herman, 2005). Many researchers consider such changes in teachers’ use of classroom time concerning, as they were not motivated by any logical sense of curriculum or learning need (Herman, 2005).

Research also strongly suggests that educators who are under pressure to show improvement are ‘teaching to the test’; focusing on test-relevant skills and formats, particularly in poor schools (Herman, 2005). It is widely believed that this results in students efficiently answering questions about prescribed portions of knowledge, while broader and deeper cognitive processes are not being intentionally developed, measured or valued (Herman, 2005; Knight, 2000). It is argued that such trends can demotivate students by impacting their confidence and ability to learn whilst students who work in narrowly constrained ways are rewarded (Knight, 2000; Marlow et al., 2012). Another key theme in the literature is the importance of relationships, students’ sense of connection, commitment to schooling, safety, positive norms, and efficacy, which are essential for effective learning and academic progress (Herman, 2005; Shutz & Pekrun, 2011). Many researchers claim that accountability measures cause a reduction in meaningful learning experiences and negatively impact academic outcomes (Herman, 2005). Thus many academics advocate the need for a balance of social and academic capital to be developed (Herman, 2005).

**Unreliability of large-scale test scores**

An additional theme highlighted within the educational accountability literature is the unreliability of large-scale test scores as reflective measures of student ability. Along with many others, Herman (2005) and Crooks (1988) state that all measures of student performance contain error therefore important decisions should never be based on a single test result (Crooks, 1988). In addition, Herman asserts that a test can only measure a portion of what students are learning and is therefore imperfect, and that it is impossible for tests to assess everything that is important. Another aspect of dubious test score reliability is the restricted types of items that are included in tests according to their easiness to base questions on, whether they relate in empirically coherent ways with other items, and their level of difficulty (Herman, 2005). Research has shown that test scores typically increase substantially in the first three years of a new test being imposed, followed by a levelling-out (Herman, 2005). In addition, significant discrepancies between student performance on nation-imposed tests and other achievement measures with less substantial consequences, are commonly found (Herman, 2005). It is widely insinuated that this could indicate inflation of test scores, which would cause major discrepancies across the system (Brown, 2004; Herman, 2005). In addition to these wider influences, there are multiple factors that affect individual students’ (and schools’) performances on accountability tests. For example, how they are feeling on the day, their carefulness in completing answer-sheets, attentiveness, proportion of high or low achievers away that day, reading and language levels, disabilities and learning styles, and so on (Herman, 2005). Thus a discrepancy between the intended aim of assessment and what it is actually quantifying, is commonly recognised (Marlow et al., 2012). Students are considered to be diverse in their styles of learning, therefore many academics question whether they should all be tested in the same way to avoid eliciting unreliable information (Knight, 2000).

**The New Zealand Context**

The New Zealand education model of evaluation and assessment is considered unique and is characterised by a high level of trust in schools and professionals (Crooks, 2011; Nusche et al., 2012). Each school is responsible for interpreting the New Zealand Curriculum and is governed by a Board of Trustees. The Education Review Office regularly reviews the administration, management, teaching and learning of schools, and makes recommendations to maintain standards (Knight, 2000). Possible negative impacts of high-stakes assessment are limited in New Zealand, whereby a variety of optional, nationally-validated assessment approaches are available to measure students’ progress in relation to the national curriculum (Brown, 2004; Crooks, 2011; Nusche et al., 2012). Assessment in New Zealand has a broad focus on improving teaching and learning, and less focus on summative testing, according to international standards (Crooks, 2011). There are currently no imposed nationwide tests for accountability at the primary level, although recommended national standards for each age group have been identified alongside curriculum documents - student achievement is measured against these (Nusche et al., 2012).
It could be asserted that these standards may form the beginnings of further education reform and higher accountability measures. Based on the aforementioned themes within the literature, the potential detrimental effects on student learning would need to be heavily considered and negated if New Zealand educational accountability measures increase.

**Future Implications**

It is essential to consider the implications of imposed standardised testing for students as assessment can provide useful and necessary information about student learning, and can also have a significant impact on a young person’s academic life and development. Literature regarding assessment for accountability strongly supports two key themes among the implications for primary student learning: negative effects, and the unreliability of large-scale test scores as reflective measures of student ability.

The New Zealand educational accountability model is considered unique and ‘low-stakes’ according to international standards. Future New Zealand education policy must heavily consider the aforementioned findings and clarify the purpose of education, in order to encourage effective learning experiences and outcomes for students. There is an overall lack of readily available research in the area of consequential student learning outcomes at the primary level. There is also minimal research regarding teachers’ perceptions of educational assessment, and the impact of content in beginning-teacher programmes and resultant effects on views of assessment and accountability.

Teachers play an essential role in the education system, therefore their views should be considered. Future research must consider how the aforementioned negative effects of assessment could be mitigated in an accountable system, and whether accountability is necessary. Teachers will need to be prepared to navigate accountability and performance pressures from conflicting paradigms in education, and may need to keep parents informed and involved regarding educational decisions.

**References**


Education and international competitiveness

Sasha Johnson
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

Educational reforms are often based on the assumption that education, particularly in STEM areas, is the key to international competitiveness. This is valid to some degree, however, there are many other aspects that contribute to international competitiveness. Additionally, international competitiveness in an age of globalisation is considered by some to be a dated, neoliberal dream reminiscent of Cold War ideologies. Standardised assessment, particularly at the international level, is used to measure competitiveness and rank countries accordingly. Although assessment data at the international level can be useful for countries, particularly when it comes to educational reform and policy decisions, it is arguable that the ‘hard’ skills measured by these types of assessments are not necessarily the skills that will be useful and valuable to today’s (and tomorrow’s) learners.

Keywords: secondary education, international competitiveness, assessment, benchmarking

International competitiveness

International competitiveness is defined as “the set of institutions, policies, and factors that determine the level of productivity of a country” (World Economic Forum 2014, p. 4). The level of productivity of a country in turn predicts levels of prosperity and economic growth of that nation (World Economic Forum, 2014). Since the 1983 publication of A Nation At Risk, wherein the U.S. cautioned, “our once unchallenged pre-eminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world,” and called for educational reforms in the name of international competitiveness, developed nations across the globe have adopted similar neo-liberal foci in education (National Commission on Excellence in Education, 1983, p. 1).

There is much debate as to whether education is central to global competitiveness and the degree of importance of international assessment and benchmarking. Additionally, there is debate as to whether global competitiveness should be emphasised as a key purpose of education at the secondary level.

Education as a predictor?

The World Economic Forum (2014) introduces the current global competitiveness rankings by stating that although education at all levels is important to economic stability and growth (health and primary education and higher education and training are 2 of the 12 pillars of competitiveness, as defined by the World Economic Forum), it does not stand alone; the organisation identifies 10 other major factors such as institutions, infrastructure, market size, financial market development, business sophistication, and innovation, which all greatly affect international competitiveness. Some would argue international assessment is not only difficult to interpret, due to sampling problems and enormous differences across countries in poverty rates and societal values and objectives, but that it does not accurately predict a country’s ability to compete in the global economy (Rotberg, 2006). In the U.S., technical jobs are not often outsourced to countries which typically score highly on international assessments such as Australia, France, Sweden, Switzerland and the United Kingdom (the top ranking ‘competitors,’ so to speak), but to countries such as India and China where workers in technical fields are willing to provide the same services for far lower wages (Rotberg, 2006).

Mathis (2011) proposes that test performance is not linked to global competitiveness. Educational reforms often stress the need for high performance in STEM (science, technology, engineering and math) subjects in order to compete internationally. Mathis (2011) suggests this assumption is not justified by economics or by workforce needs. The link between education and international competitiveness is purely associational, not necessarily demonstrating a cause-and-effect relationship. Furthermore, the relationship between education and the economy is vastly different across the globe. Developing nations, for example, must invest significantly in emergent sectors of technology, engineering, and vocational skills development, whereas developed countries like the U.S. and New Zealand are more focused on innovation and invention (Mathis, 2011).
International assessments, for all their shortcomings, do provide a clear standard for measurement as well as comprehensive data for the purposes of educational policy reform. Phillips (2014) emphasises the importance of international benchmarking to global competitiveness, especially in the United States where educational policy and curriculum is different in each state and there is the issue of “50 states going in 50 different directions” (p. 16). Phillips (2014) supports standardised international assessment such as TIMSS, PIRLS and PISA for the sake of maintaining high and consistent expectations across the board in the U.S. for the purposes of unified national progress. He draws on the support of organisation leaders such as Andreas Schleicher, director of the OECD’s Programme for International Student Assessment (PISA), who stated in 2006, “It is only through such benchmarking that countries can understand relative strengths and weaknesses of their education system and identify best practices and ways forward. The world is indifferent to tradition and past reputations, unforgiving of frailty and ignorant of custom or practice. Success will go to those individuals and countries which are swift to adapt, slow to complain, and open to change” (qtd. in Phillips, 2014, p. 1).

In an open letter to Schleicher, Heinz-Dieter Meyer criticises PISA for “emphasizing a narrow range of measurable aspects of education,” and therefore taking “attention away from the less measurable or immeasurable educational objectives” (PISA, 2014, p. 1). Schleicher counters by explaining that not only does PISA measure student performance, it gauges social and emotional dimensions, student attitudes and motivations, equity issues, and parental support, areas that are reviewed every three years by participating countries. Meyer raises the point that social inequalities have an undeniable effect on the widening educational gap between the rich and the poor, and that educational reforms based on performance-based assessments like PISA are unlikely to change this. Schleicher retorts that analyses of PISA data suggest that “poverty is not a destiny” and the impact of socio-economic background on learning outcomes varies widely across countries and policy contexts (PISA, 2014, p. 2).

**Measuring what is valuable**

Research suggests that the types of skills measured by standardised assessment are not necessarily the skills that will be valuable to first world societies in the foreseeable future (Zhao, 2015). Zhao (2015) stresses the importance of nurturing diverse talents and encouraging creativity, entrepreneurship and innovation, rather than homogenising students. That is not to say, let students do whatever they want; Zhao (2007) argues that schools should incorporate a broad range of subjects and cater to and nurture a diverse scope of talents in a systematic and disciplined way. Mathis (2011) argues in a similar vein that standardisation effectively narrows the curriculum and serves neither the student nor society. The functions of education required for the twenty-first century are far broader and include soft skills such as creative thinking, evaluation of information, listening and negotiating skills, moral and ethical decision making, and effectiveness in culturally diverse settings (Mathis, 2011).

In order to remain ‘competitive,’ Zhao (2015) suggests countries must strive to stand out rather than fit in. Zhao (2015) warns that New Zealand is in the process of initiating educational reforms similar to those in the U.S. which value testing over teaching and limit education to a narrow, homogenised scope. These reforms can limit innovation and fail to provide adequate support for children who need extra help. Gone are the days when standardised knowledge and skills were of high value in the workforce, now that so many jobs have become automated or have been outsourced to countries with an abundance of cheap labour. It was once easier to predict the skills and knowledge that beget ‘successful’ individuals when countries were more isolated from one other and the pace of change was slow; however, it has become impossible to prescribe what kinds of skills and knowledge will be necessary for the next generation. The modern globalised world requires creative and entrepreneurial thinkers to create new jobs and opportunities (Zhao, 2015).

**Conclusion**

Although it is important, education is not the sole predictor of economic competitiveness. Educational reforms are often based on the assumption that high performance in STEM areas is critical in order to compete internationally; however, evidence to support this claim is lacking. In fact, many jobs in these areas are outsourced to other countries not because those countries rank highly in terms of competitiveness, but because they have a large population of workers who are unable to demand higher wages. Furthermore, some would argue global competitiveness should not be a primary concern or purpose of education. In an age of increased globalisation, there is value in teaching global perspectives, competence and collaboration—countries working together across borders rather than striving for superiority over one another.

Although international assessment can be helpful in that it provides a way of reviewing the relative strengths and weaknesses of education systems, the types of skills measured by standardised assessment are not necessarily the skills that will be valuable for the next generation, which are becoming almost impossible to predict.

For this reason, moving forward it will be important to teach soft skills such as critical thinking, creativity, and competence in culturally diverse settings, as well as nurture a broad range of
talents. The next generation will need to create new jobs and opportunities rather than fill them; such entrepreneurial ventures will require creative and innovative minds that strive to stand out rather than fit in. It is the charge of educators to support young people to skilfully and confidently navigate the rapidly changing twenty-first century, and that requires identifying and privileging knowledge and skills that are truly valuable, regardless of the implications for global competitiveness rankings.

References
Self-regulated learning: an overview of metacognition, motivation and behaviour

Genevieve Williamson
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
The following review provides a synthesised summary of self-regulated learning in relation to metacognition, motivation and behaviour. It provides evidence regarding the need for, and benefits of, self-regulated learning. The implications for teachers are also specified in the review. These include the importance of acknowledging the social nature of self-regulated learning and supporting learners in setting goals and monitoring progress. The literature emphasises the importance of facilitating intrinsic motivation and avoiding the use of extrinsic motivation such as tangible rewards. Process orientated teaching is also addressed as it is recognised as an effective teacher practice associated with self-regulated learning.

Keywords: self-regulated learning, metacognition, motivation, behaviour

Introduction
The role of the classroom teacher has changed significantly over time. This change has coincided with developments in the definition of learning. While learning was once associated with knowledge absorption it is now recognised as the active construction of knowledge (de Jager, Jansen & Reezigt, 2005). As explained by Boud (2001), learning today needs to be about dealing with challenging situations or problems as opposed to regurgitating or applying objective facts. This understanding of learning has resulted in a number of pedagogical developments, one being the increased need for learners to be self-regulated. ‘Learning how to learn’ has become an important educational issue (Vermunt, 1995). Consequently, there is a need for teachers to understand how self-regulation can be promoted in the classroom. A key competency from the New Zealand curriculum that signifies the importance of self-regulation is ‘managing self’. This competency encompasses concepts such as self-motivation, self-belief, solving problems, working independently, setting goals and assessing one’s own learning. Learners who can manage themselves demonstrate resourcefulness, reliability and resiliency (Ministry of Education, 2007).

The following overview provides a summary of a selection of relevant literature. To begin, the theoretical underpinnings of self-regulated learning will be discussed. This will be followed by a description of the social nature of self-regulation and an examination of meta-cognition, motivation and behaviour in the context of learning and implications for teachers.

Self-regulated learning
In order to actively promote and support self-regulation in the classroom, it is integral that teachers appreciate the theoretical concept of self-regulation in the context of learning. Self-regulated learning focuses primarily on one’s ability to think metacognitively, motivationally and behaviourally (Zimmerman, 1990). Self-regulation is a mindful process in which learners use a range of strategies such as self-evaluation, self-monitoring (Watson, 2004), goal setting, time management and organisation (Gibbs & Poskitt, 2010). The literature provides strong support for the proposition that it is important that learners make use of self-regulatory processes and behaviours. However, there is also evidence that many teachers are neglecting to teach their students how to learn autonomously (Zimmerman, Bonner & Kovach, 1996).

A theme that frequently arises in the literature regarding self-regulated learning is the idea that it is not “asocial in nature” (Zimmerman, 2002, p.69). Dignath, Buettner and Langfeldt (2008) completed a meta-analysis on self-regulation training programmes. From their research, they determined a number of characteristics that made programmes more effective. One of these characteristics was having a programme based on social-cognitive theories. This finding is supported by Zimmerman’s (1989) theoretical account regarding a social cognitive view of
self-regulated learning. Zimmerman (1989) explains that self-regulation is not a process that occurs at an individual level but is determined by interactions with the environment as well as personal and behavioural influences. Self-regulation is something that can be learned through modelling, scaffolding and direct instruction (Watson, 2004). It can be learnt through observing and interacting with parents, teachers, coaches and peers who demonstrate these behaviours (Zimmerman, 2002).

**Metacognition**

Another recurrent idea in the literature is the close link between metacognition and self-regulated behaviour (Zimmerman, 1990; Dignath et al., 2008). The term metacognition in relation to self-regulated learning refers to a learner’s ability to think consciously about their cognition and have control over their cognitive processes (Zimmerman, 1989). Metacognition is associated with the learner’s ability to monitor, plan, organise and evaluate their own learning (Boekearts, 1996; Zimmerman, 1989). Watson (2004) investigated the principles of effective practice in helping learners to become self-regulated. They looked particularly at the learning goals of students and how these contributed to their self-monitoring and self-evaluative abilities. One of their pertinent findings was the need for the explicit teaching of required skills and strategies. This idea is shared by Boekearts (1996), who asserts that academically and socially oriented learning goals should be explicitly communicated by the teacher to encourage learners to form a mental representation of these goals. This helps to support learners in adopting or self-setting goals that are reflective of the overall learning goal (Boekearts, 1996). Dignath et al. (2008) also found evidence that it is advantageous for learners to be provided with more than the strategy itself. Their research suggested that learners should be provided with information regarding how to apply these strategies and the benefits of applying them. Self-monitoring, another important metacognitive process in self-regulated learning (Zimmerman, 1990), enables learners to decide whether there is an incongruity between their self-set goals and their current level of knowledge in that particular domain (Moos & Azevedo, 2007). When learners are able to recognise and acknowledge this incongruity they can then plan an appropriate strategy in order to reach their goal. There are a number of practical things that teachers can do to promote metacognitive processes. Firstly, guidance around goal setting is integral. In the classroom there should be settings that are both formal and informal to provide learners with ample opportunity to reflect on their learning (Nilson, 2013). It is also essential that learners are provided with the opportunity to self-assess in order to self-monitor and evaluate their set goals (Nilson, 2013).

**Motivation**

As previously stated, another important concept related to self-regulated learning is motivation (Zimmerman, 1990). In the context of self-regulated learning, motivation refers to a learner’s self-efficacy and autonomy (Bohuis, 2003; Zimmerman, 1990). Motivation is also closely linked to a learner’s goals, particularly those that are mastery orientated. Learners who set goals that are based on mastering a task through self-improvement tend to be more highly skilled in using cognitive and self-regulation strategies (Bohuis, 2003). When learners can observe the progress that they are making towards their self-set goals they are more inclined to engage in strategies that will help to improve their learning (Pintrich, 1999). In contrast, extrinsic rewards, such as tangible incentives, are not an appropriate source of motivation. This often draws learners away from being motivated by their goals (Bohuis, 2003) and decreases opportunities to develop important cognitive and self-regulatory skills (Pintrich, 1999). Intrinsic outcomes, such as increased self-efficacy often result from working towards mastery orientated goals. Increased self-efficacy is closely linked with academic achievement, engagement and motivation (Gibbs & Poskitt, 2010; Zimmerman, 1989) and therefore is key to positive learning outcomes. Teachers should consider this in their practice and avoid using extrinsic rewards as motivation. The literature also evidences the importance of agency and autonomy in motivation (Bohuis, 2003; Gibbs & Poskitt, 2010). When learners feel as though their perspectives are acknowledged they are more likely to be motivated and engaged in learning (Carrington & Macarthur, 2012). In order to foster motivation and high levels of self-efficacy among learners, teachers should first and foremost consider the learning environment. Nilson (2013) suggests all teachers should “consciously establish a positive atmosphere of emotional safety, encouragement, trust and support” (p. 79). This suggestion aligns well with the effective pedagogy in the New Zealand curriculum that highlights the importance of creating a supportive learning environment (Ministry of Education, 2007).

**Behaviour**

A third component of self-regulated learning is behaviour. This is to do with the decisions and actions made by learners in order to optimise their learning environment (Zimmerman, 1990). The current drive for independent learning means that many learners are already required to do this. One teaching strategy that frequently arises in the literature is process orientated teaching. It is suggested to empower learners in making effective decisions when it comes to their learning. Bohuis and Voeten (2001) and Vermunt (1995) investigated process orientated teaching. Like learning, it is viewed as multidimensional (Bohuis & Voeten, 2001). It incorporates the deliberate teaching of thinking and learning strategies alongside teaching domain specific knowledge (Vermunt, 1995). This teaching style is characterised by the teacher gradually handing over control to the learner through scaffolding and modelling (Bohuis & Voeten, 2001). It recognises learning as a social phenomenon and encourages the idea of a learning community. It fosters self-direction as well as collaboration and cooperation which are all closely connected to self-regulated learning (Bohuis & Voeten, 2001; Watson, 2004).

**Conclusion**

The increasing recognition of the need for learners to be self-regulated has required teachers to consider multiple aspects of their practice. A number of these considerations have been discussed in the literature. One avenue of research that should be pursued is investigating what teaching practices are most effective in promoting self-regulated learning. Dignath et al. (2008) completed a meta-analysis which helped to identify some effective and relevant interventions. Further research of this kind would provide teachers with practical guidelines.
regarding how to help their learners develop self-regulatory skills.

Teachers should acknowledge the social nature of self-regulation and not regard it as an intrinsic skill. They should also work to understand the metacognitive, motivational and behavioural (Zimmerman, 1990) influences on one’s self-regulation in a learning context. Teachers should reflect on the implications of these influences and how they can adapt their teaching styles to help foster self-regulated learning.

References


Integrating ICT into classroom pedagogies: an overview of barriers within the modern classroom

Nicholas Shimasaki  
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
The evaluation of current literature regarding Information Communication Technology (ICT) in education reveals the most significant obstacles facing its successful incorporation into schools and teachers’ pedagogies. As with any pedagogy, ICT is constantly changing and developing, and it is crucial, now more than ever, that great consideration is put towards how pedagogies involving ICT might evolve. In order for pedagogy to keep up with the ever widening chasm between technology that is available to use, and what is actually incorporated into pedagogical practice, the barriers to successful integration must be considered.

Keywords: integration, ICT, classroom pedagogies, barriers

Introduction
For effective teaching to occur in New Zealand classrooms, practitioners must adopt a stance where constant evaluation and reflective practice is evident. Effective pedagogies insist that consideration is placed on the implications of different methods of practice, and how these methods are affecting the students (Ministry of Education, 2007). A particular method of teaching which has been an area of contention is the integration of ICT within the classroom. ICT might be defined as “Information Communication Technologies” (Ministry of Education, 2007, p.66) and includes devices ranging from laptops through to tablets and beyond (Pegrum, Oakley & Faulkner, 2013). The main difficulty with ICT integration is its inability to align with current pedagogical practices. A number of research papers have investigated the most prominent barriers to its successful integration. These include; a lack of support and professional development (Bebell & O’Dwyer, 2010; Pegrum et al., 2013), issues with assessment (John, 2005; Shapley, Sheehan, Maloney, & Caramanis-Walker, 2010), and issues with funding (Cristol & Gimbert, 2013; Thomas & O’Bannon, 2013).

Understanding these barriers is crucial, as many teachers will achieve successes in their ICT integration, but all will come across difficulties (Schoepp, 2005).

Support and Professional Development
When assessing the barriers of ICT integration into pedagogy, the most problematic area is the innate lack of support and professional development that teaching practitioners receive prior to, and during integration of ICT initiatives. A common theme throughout the work of many educationalists (Bingimlas, 2009; John, 2005; Salehi & Salehi, 2012; Schoepp, 2005) is that teachers have an inherent “fear of failure, caused by lack of confidence” (Bingimlas, 2009, p.238). Teachers become foreign to the concept of ICT integration, and lose confidence in themselves as practitioners, and ICT as a pedagogical tool. John (2005) suggests a number of conditions that are necessary when integrating ICT into schools. One of these conditions is that teachers “must have confidence that the use of technology will meet existing…and higher level learning goals” (John, 2005, p. 483). The importance in this confidence is echoed by Bingimlas (2009) and Salehi and Salehi (2012). Bingimlas (2009, p. 238) highlights the severity of the issue, acknowledging that the issue spans from the Middle East to Europe, but concedes that the lack of confidence varies greatly from location to location. A factor which has led to the lack of confidence expressed by teaching practitioners is the absence of leadership and technical support to call upon. Schoepp (2005), Bingimlas (2009) and Levin and Schrum (2013) all express that the lack of leadership and support is a pivotal issue in schools. The absence of tech support and “tech facilitators who can lead professional development”...“at each school” was something identified as a
major barrier to successful ICT integration (Bingimlas, 2009, p.239; Levin & Schrum, 2013, p.40). Only discussed in Levin and Schrum’s (2013) article is the importance of leaders and facilitators as also being procurers of “resources for starting up and sustaining technology initiatives” (p.44).

Shapley et al. (2010), Bebell and O’Dwyer (2010), and Pegrum et al. (2013) all concede that high-quality, responsive professional development is required to ensure teacher confidence, and the successful integration of ICT into teachers’ pedagogies. Pegrum et al. (2013) challenges this view, and goes further to state that the professional development regarding ICT must be “targeted and contextualised” (p.76). Levin and Schrum (2013) add that the speed at which professional development is deployed must be in line with ICT as it “changes constantly” (p.41). These points are crucial if the integration of ICT is to become ‘student centred’ and part of inquiry practice.

ICT and Assessment

Another barrier to ICT integration is the highly problematic area that ICT holds in assessment. There are two distinct views on the matter in current literature. The first is that “the relationship between assessment and ICT is not straightforward” (McCormick, 2004, p.115) and that the “pencil and paper driven assessment structures” (John, 2005, p. 477) do not lend themselves well to the ICT driven pedagogies being adopted in schools. This view is held by the majority of research which has been presented, and its strongest advocates include McCormick (2004) and Pegrum et al. (2013). The contrasting view adopts the premise that, even though there is room for improvement, there are already positive effects occurring “in regards to student performance on standardised assessments” (Cristol & Gimbert, 2013, p.5).

For those that see ICT integration in assessment as a barrier, there are a number of factors at play. The first is that students are not able to utilise the “communicative skills…gained through…new technologies” (Pegrum et al., 2013, p. 73) when it comes to assessment. Although this trend seems to be gradually changing with the aging of our ‘digital natives’ (generation Y and Z), it is still a present issue (Pegrum et al., 2013). The second, presented by McCormick (2004), is the question of how you actually measure the communicative skills Pegrum et al. (2013) describes. For instance, how does a teacher measure the achievement level obtained in a cartoon designed by a student when it is beyond the breadth of what the assessment allows?

A pertinent barrier when contrasting the use of ICT alongside assessment is the initial design of the devices, that is, what they were initially intended to be used for. Often, the devices used in schools were not created to be used as pedagogical tools. This creates a number of issues. The first is identified by Pegrum et al. (2013). They highlight that a number of the ‘apps’, even when considering their ‘general’ application in the classroom are “pedagogically limited” (p.73), as their creation was not initially for educational purposes (Melhuish, 2010). These ‘apps’ then are certainly unusable in the confines of student assessment. McCormick (2004) too holds this sentiment. She concludes that “those dealing with ICT rarely deal with assessment” (p.115) and conversely that “the field of ICT in education at school level has much to learn from the developments in ICT” (p.118). All of the aforementioned educators agree, that applied correctly, and ensuring that assessment with ICT is “sensitive to the needs of particular pupils and shows them how to improve” (McCormick, 2004, p.129), that ICT can be a durable pedagogical tool.

Issues with Funding and Equity

Funding and equity present barriers that are deep rooted and double-edged. The issue of funding is completely reliant on the breadth and depth of ICT adoption. In cases where ICT has been purchased as part of a school led 1:1 initiative, educationalists argue that “the financial burden is large” (Cristol & Gimbert, 2013, p.2; Schoepp, 2005) and that this has caused many schools “to adopt a Bring Your Own Device…policy” (Cristol & Gimbert, 2013, p.2). This however has not solved the barrier, only transferred the responsibility, and it is partially responsible for the importance of getting parents and caregivers on board with ICT initiatives early (Levin & Schrum, 2013). There are some who try to invalidate the claim that funding is a barrier to ICT. Melhuish and Falloon (2010) argue that iPads and other mobile technological devices are “affordable” and provide “ubiquitous access” (p.4). This goes against the grain of the majority of research, and certainly raises questions of equity if these devices are meant to be as ‘ubiquitously accessible’ as they claim. In similarity to Melhuish, Thomas and O’Bannon (2010) argue that because of the drastic drop in cell phone prices over the last five years, that student’s access to “app driven and educationally transferable mobile devices has risen” (p. 17).

Equity has become a barrier to integration of ICT in teachers’ pedagogies. Many practitioners have taken the view that if devices are not available for all students to use, then ICT’s presence as a pedagogical tool becomes problematic (Cristol & Gimbert, 2013; Pegrum et al., 2013). In the study performed by Cristol & Gimbert (2013), a coordinator in one of their target schools identified that their “biggest concern was when a BYOD program is implemented” and “not every child can financially afford their own device” (p. 2). Similarly, Pegrum et al. (2013) found that teachers often used ICT as part of class sets and “in some cases, there are not enough for an entire class, which causes inequity and questions of equality” (p. 74). The question of equality in ICT implementation has led to hesitation of schools and teachers to adopt ICT in their practice, and in some cases, has halted the process of integration all together.

Conclusion

The three areas discussed; professional development, funding, and issues with assessment, make up a huge proportion of the reasoning behind the lack of ICT integration (Salehi & Salehi, 2012; Schoepp, 2005). Within these three areas there seems to be a consensus among scholarship that they are the most influential barriers to ICT integration. It is important however to understand that there are many other factors which contribute to the integration of ICT, and through time constraints and breadth of research, have not been able to have been explored in detail. Practitioners must be content that ICT will never become ‘perfectly’ integrated due to its constantly changing status, but for forward movement to occur, teachers must be prepared to experience “some trial and error” (Levin & Schrum, 2013, p. 39) within their pedagogies, and reflect on what has worked, and what has not. The understanding that it is ok to make mistakes when using technology must be present. Further study into the barriers present, and how they are developing, would lend itself well to developments within the field of ICT, and a study
focusing on positive mechanisms to overcome these factors would also be important.

References


How should our pedagogy keep up with rapidly changing technology?

Nathan Sinclair

College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

The place and potential of e-learning technology in education is in a state of constant development. Previously ‘cutting edge’ articles and books for teachers are quickly obsolete, as these resources, written for the age of Myspace and desktops, did not prepare educators for the arrival and popularity of tablets, smart-phones, and social media applications. This literature review explores six different articles on this subject addressing a range of perspectives in this area. They were found searching academic databases with the terms “e-learning”, “pedagogy” and “technology”. To keep the articles relatively current - to reflect the development of web 2.0 and 3.0 and other recent trends - the search parameters were restricted to 2011 onwards. The overwhelming position in the literature is that pedagogy must guide our e-learning. While some articles focussed on applying this in a classroom, others preferred to construct a framework to guide educators in their e-learning design.

Keywords: e-learning, pedagogy, technological change, ICT, education

Case Study Approach

One common approach to this issue was to conduct research on e-learning tools within classroom practice. These studies were motivated by attempts to anchor e-learning within pedagogy that promoted relevant skills, “social learning”, “collaborative skills” and “real-world connections” while exploring what was the impact on both the learning and attitudes of the students towards their learning (Apergi, Anagnostopoulou, & Athanasiou, 2015; Wang, Yu, & Wu, 2013). The two studies included in this literature review comprised of a broad range of ages, (‘6th Graders’ – University students), technologies (Web 2.0 and 3.0), and cultural contexts (Apergi et al., 2015; Wang et al., 2013). The two studies included in this literature review comprised of a broad range of ages, (‘6th Graders’ – University students), technologies (Web 2.0 and 3.0), and cultural contexts (Apergi et al., 2015; Wang et al., 2013). The ‘6th Grader’ study was based around a classroom’s use of Google Drive, and the university study was conducted around a course module based around “mobile assisted social e-learning” (eMASE) which included the following apps: Facebook, LINE, WeChat, Skype, and Google+ Hangouts (Wang et al., 2013). Additionally, these studies were underpinned by the separate but related theories of Project Based Learning and Social Constructivism, which harness the collaborative learning power of the student while transferring the teacher to more of a facilitation role (Apergi et al., 2015; Wang et al., 2013). These two studies resulted in some pertinent findings that demonstrate the potential gains achieved through thoughtful e-learning strategies. Higher interest, closer relationships fostered between students, reinforced cooperative skills, and improved critical and problem solving skills were reported in the students within the Greek study (Apergi et al., 2015). The students involved with the Taiwanese study also found the integration of eMASE tools improved learning outcomes, collaborative skills, effectively helped scaffold learning, and improved engagement away from campus. However, face-to-face interaction was still their preferred method of collaboration, while applications that the students were less familiar with (like Google+ Hangouts) were the least utilised in the course (Wang et al., 2013). These results suggest the potential positives of e-learning constructed upon a strong pedagogical framework for student empowerment and learning outcomes.

Theoretical Approach

Another popular theme, reflected within this literature study, is a theoretical approach to the issue of pedagogy in e-learning. This has many advantages, especially when we consider rapid technological change, alongside the even faster development of apps with educational potential. Among the literature surveyed, e-learning was often analysed within a constructivist perspective. (Apergi et al., 2015; Keengwe, Onchwari, &
Agamba, 2014) Others surveyed broader trends, covering many approaches from a historical and cultural perspective (Hillen & Landis, 2014). What united these articles was the underlying premise that effective e-learning needed to be firmly rooted in pedagogy, or always had some underlying theories behind them (Hillen & Landis, 2014; Keengwe et al., 2014; Rourke & Coleman, 2011). The overall trend over the years has been from “behaviouristic… e.g. drill and practice” towards more realistic, “cognitivist and constructivist… situation-based learning” (Hillen & Landis, 2014, p. 216). Rourke and Coleman (2011) argue that “[p]edagogy for good teaching has always led the curriculum and syllabuses”, while positoe the ase: “when did… new technologies take over the primacy of pedagogy in teaching and learning?” (p. 265) Additionally, they assert that new technology has, at times, driven education away from “communities of practice” towards more “cost-effective” versions of learning where the teacher’s role can be marginalised (p. 265-266). Keengwe et al. (2014) agree that technology has further empowered teachers to move away from being “the Sage on the Stage” towards being a “Guide on the Side”, which has a drastic effect on what classroom teaching looks like (p. 893).

Unfortunately, this development has been hijacked by parties that wish to see skilled teachers becoming obsolete or replaceable, as ‘digitally native’ students are assumed to be both proficient and motivated by technology, thereby changing the role of the teacher (Rourke & Coleman, 2011). However, according to Herrington, Reeves, and Oliver (as cited in Rourke & Coleman, 2011, p. 267) surveys show that “students are much less engaged… than expected” and may need to be scaffolded to appropriately use e-learning tools. Rourke and Coleman (2011), alongside Keengwe et al. (2014), both take the position that thoughtful e-learning practice underpinned by constructivist theory is the more effective for “authentic…[and] transferable” e-learning (Keengwe et al., 2014, p. 897). Hillen and Landis (2014), in their analysis of the European and American perspectives, argue for a “multi-theory” approach (p. 217). They propose that educators take advantage of the many methodologies and technologies available to create a learning programme that best responds to diverse learners, providing a “variety of paths for the benefit of individual learners” (p. 218).

For example, they argue that many learners are not ready for self-directed learning, a concern which is also echoed by the constructivist authors (Keengwe et al., 2014; Rourke & Coleman, 2011). What unites these authors is their position that learning needs to be tailored to suit pupils. Beside their clear theoretical basis, these articles suggest many considerations for educators as they implement pedagogically driven e-learning. These include: Is the technology pedagogically motivated? (Rourke & Coleman, 2011) Does it encourage real-world/relevant learning? Are there opportunities for learner autonomy, so students can contribute when they are ready? Is it interactive and co-operative? Is it usable? (Keengwe et al., 2014) Does it suit my learners? Is the e-learning “[adding] value?” (Hillen & Landis, 2014, p. 213). Their considerations could be summarised as purposeful e-learning: learning that meets students’ needs, providing both cooperative and independent study opportunities, while making real-world connections. This theoretical perspective is presented as a helpful framework that assists educators to appropriately adapt to technological advances.

An Alternative Theoretical Perspective

Although the overwhelming weight of the literature around the relationship between pedagogy and technology follows the primacy of the former over the latter, an outlier did surface during the search process. Jon Dron (2012) proposes that this “widely held belief” is not correct, due to the idea that pedagogy itself is, in the broader sense, a “[tool] for learning” (p. 23). Dron argues that, when clearly defined, pedagogy is itself a technology. Considering this idea and technology in the broader sense, he infers that pedagogy, as a technology, is part of an “assembly” of other technologies that constantly interact with each other. For example, “facilities…whiteboards…learning management systems…” are interdependent of each other (Dron, 2012, p. 27), they do not exist in isolation. Clearly all these ‘technologies’ need to work together to achieve the desired results. Additionally, and most importantly, Dron focusses on the part of the educational system that is the most crucial, “The teacher and the learner” (p. 32). The teacher’s “passion, breadth or depth of knowledge, creativity, … humour,” and communication skills are all vital parts of what makes someone a great teacher. These characteristics are not taken into account often enough in studies, as it is very “hard to quantify” a teacher’s true ability, or how much a great teacher can perform despite inadequate or outdated resources (Dron, 2012, p. 32, p. 35). This reality slants research results that seek to show the benefits of any particular pedagogical approach or technology. Due to this issue, Dron (2012) proposes that different kinds of research need to become more common place to better uncover what pedagogies are most successful. Soliciting student voice, “deliberately increasing passion and commitment” (p. 34), and assessing whether certain content better enfluses students, are the three proposals made to address this gap in the research. This counter-point to the prevailing perspective of pedagogy before technology challenges educators to consider what factors from their educational structure as a whole should influence their pedagogical and ‘technological’ decision-making (Dron, 2012).

Conclusion

In conclusion, there are two predominant approaches to this question within the literature, with a notable outlier. The overwhelming position is that pedagogy must guide our e-learning. While some articles focus on applying this in a classroom-based study (Apergi et al., 2015; Wang et al., 2013), others prefer to construct a framework to guide educators in their e-learning design. (Hillen & Landis, 2014; Keengwe et al., 2014; Rourke & Coleman, 2011) In contrast, Dron (2012) proposes that questions of pedagogy and technology need to be considered within a theoretical framework that acknowledges that both are ‘technologies’ that need to be implemented within a broader educational system. All three views regarding this subject could be reconciled if we regard them as snapshots with different foci on the teaching process. For example, case studies are ‘zoomed-in’ looks at e-learning as an isolated part of classroom practice (Apergi et al., 2015; Wang et al., 2013). Those arguing for ‘pedagogy before technology’ (Keengwe et al., 2014; Rourke & Coleman, 2011) create a broader blueprint for e-learning success. Dron’s (2012) perspective serves as a reminder of the over-arching context that surrounds and affects both blue-print and ‘zoomed-in’ e-learning implementation.
Areas for further research

Dron’s concept of ‘pedagogy is technology’ could be put into practice in a schooling context. It would be fascinating to see how his theory would affect a school’s decision-making processes. Additionally, more exploration as to how this idea could be packaged helpfully for educators, as they navigate through the issues related to course/curriculum construction would be helpful. Continuing to trial e-learning pedagogy within new learning contexts and with new technology is vital to test if our pedagogy is responding appropriately to our changing world. It is vital for educational researches to continue to hone and explore the best ways that educators can implement ICT within their teaching.

References


Building awareness of pre-service teachers’ dispositions - challenges for teacher education

Kim Griffin
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
Each and every individual have their own unique idiosyncrasies that they have picked up through life. These “dispositions” are the reasons why we do what we do in any given context. Becoming aware of your dispositions and finding out the reasons why you think and act in a certain way is an important competency to learn in teacher education programmes. Imparting knowledge to students effectively is one of the most fundamental aspects of a teacher’s domain. However, what if this skill wasn’t being effectively taught or assessed? What would be the implications for pre-service teachers not including this aspect sufficiently? Ten articles on the issue surrounding dispositions within education have been used to collate this literature review. The sources used are from journal articles, literature reviews, and education documents. These were found searching by searching the terms “dispositions”, “teacher training”, and “teacher standards.”

Keywords: dispositions, pre-service teacher, awareness, challenges, graduate standards

Introduction
Over the past twenty years, the word disposition has been acknowledged and adopted by education systems across the world. The acknowledgement regarding its importance for pre-service teachers to embody in order to be an effective teacher, has been accepted. There are many countries, to which graduating teacher standards have included dispositions as one of their competencies. The Graduate Teaching Standards in New Zealand recognise that in order to become proficient in teaching, pre-service teachers need to possess this competency. This literature review explores ten articles on the issue surrounding the extent in which dispositions appear, and how they are incorporated within graduate training programmes.

The concept of dispositions
The word disposition has become very popular and widely used by education systems over the last two decades. As a consequence of this, the word has accumulated a plethora of definitions. One of the first, over twenty years ago, in relation to education was that a person’s dispositions can restrict their actions in certain contexts (Katz & Raths, 1985). Whereas, a more contemporary definition suggests that dispositions are deeply rooted characteristics that have been formed by an individual’s prior experience, values, culture, and intellectual abilities (Stooksberry, Schussler, & Bercaw, 2009). In essence, dispositions distort the information received by others and their actions towards others (Stooksberry et al., 2009). Along with, dispositions being called accidental assumptions that influence the way someone interacts with another (Robinson, 2011). Even though the definition for ‘disposition’ have many interpretations, they all allude to the same viewpoint, that a person’s disposition can affect the way they think and act around different people and contexts, like a two-way filter (Schussler, Bercaw & Stooksberry, 2008).

Effective teaching
Imparting knowledge to students effectively is one of the most fundamental aspects of a teacher’s objective. In order to achieve this, a teacher needs to inspire, motivate, and interact in a meaningful, engaging way towards their students (Ripski, LoCasale-Crouch, & Decker, 2011). Throughout this teaching as inquiry cycle the teacher will be able to engage reciprocally, supporting their students in practice and research within any context while achieving effective outcomes for learners (Aitken, Sinnema & Meyer, 2013). However, if teachers are unaware of the way they conduct themselves through these interactions for example; what they say and how they say it, this could be either
an extremely positive or seriously detrimental impact on the students learning (Sherman, 2006). Being a pre-service teacher, knowing your characteristic traits plays an important role as it makes you conscious of the fact that certain behaviours, choices, and experiences can influence your thinking and actions towards learners (Ripski, et al., 2011). There are no arguments regarding whether or not the qualities of caring, kindness, empathy, and being culturally aware make an effective teacher (Helm, 2006). These dispositions are assumed to be mandatory qualities for pre-service teachers to possess while in teacher training programmes (Sherman, 2006).

**Teacher educators’ dispositions**

Given the complexity of every pre-service teachers own idiosyncrasies, to what extend are they visible enough to assess and evaluate with rubrics in developing an effective teacher? (Sherman, 2006). Teacher educators assessing someone’s dispositions can be an extremely personal and perhaps an immoral undertaking. This could prevent teacher educators from questioning behaviour due to the personal context they are in and instead, focus more on documented assessments (Sherman, 2006). This lack of inquiry into pre-service teacher’s personal dispositions could produce a deficit within the training programme. Predominately focusing on content and pedagogy may be damaging and even more dangerous than that of a teacher unaware of their own morals that negatively inform their actions (Schussler et al., 2008). For this reason, it is important that graduating teachers habitually recognise and have an awareness that the beliefs they currently hold may negatively affect students that are unlike themselves (Aitken, et al., 2013). Because dispositions are internal and only appear around particular contexts it may be difficult and intrusive for teacher educators to question someone’s disposition (Helm, 2006). This disposition within teaching programs needs to be addressed to the Graduate Teacher Standards because teaching will not move forward as a profession until there is a common curriculum and clear fundamentals around what pre-service teachers should have the opportunity to learn and how they should learn it (Aitken, et al., 2013).

**So what do the Standards say?**

The importance of dispositions within the education system have been achieved and included in the New Zealand’s Graduate Teacher Standards. However, positioned as standard six, part b, under Professional Values and Relationships. The teaching standards are arranged in three disciplines - professional knowledge, as mentioned, professional practice, and professional values and relationships and each discipline has their allocated standards (Education Council, 2015). This arrangement could imply a ranking system, however, to some, it gives an emphasis that there is disconnect and difference between each discipline (Aitken et al., 2013). These personal preconceptions of the standards could influence prioritising standards over others. The separate treatment of all three disciplines suggests a danger of what is happening in education programs in that teacher education programs focus on content and pedagogy for pre-service teachers due to the standards, rather than process-related aspects of teaching such as dispositions (Sherman, 2006). In the Graduate Standards it only states that you need to have “dispositions to work effectively”, but neglects to be specific of which ones (Education Council, 2015).

The New Zealand Curriculum also acknowledges graduate teachers dispositions however, nothing regarding an importance in challenging their own negative dispositional views of diversity (Aitken et al., 2013). Instead, the document says, “that graduating teachers need to develop an understanding of their own identity, language and culture, and of the relevance of culture in education” (Education Council, 2015). Given the interaction and responsibilities that pre-service teachers have towards their students on professional placement, should be mentioned and play a part in the other two graduating standards. The Graduate Standards of New Zealand need to avoid treating every standard separately (Aitken, et al., 2013) and consider the braided approach of dispositions as identified in the New Zealand Curriculum where “Māori and Pākehā recognise each other as full Treaty partners, and in which all cultures are valued for the contribution’s they bring” (Ministry of Education, 2012, p. 8).

**Implications for dispositions**

The literature portrays a need for a more in depth, holistic approach into teaching dispositions to graduates within teaching programs. The importance of deeper knowledge of learning about themselves by ways of applying a continual process to improve success in being a prospective teacher (Aitken et al., 2013). Without emphasis on these processes initial teacher training will be compromised (Aitken et al., 2013). Equally important, is that the Graduate Standards need to specify coherently the dispositions that are imperative to being an effective teacher for all learners.

**Conclusion**

Consideration should be taken with regards to the similarity of perspectives within this review. This could suggest either a consensus in the literature or the depth of the search. Simply possessing only knowledge and understanding of our dispositions is not enough. Student teachers dispositions need to be understood, developed and continually challenged if they are to continue to refrain from making assumptions stemmed from their own dispositions towards students unlike themselves. By challenging oneself, it uncovers all the assumptions that arose from our pre-existing ideas and experiences. This cycle of problem solving will have a great impact on the decision making and actions of teachers (Aitken et al., 2013).

**References**


The structure of observed learning outcomes (SOLO) taxonomy model: How effective is it?

Corinna Wells
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
This article explores the benefits of the Structure of the Observed Learning Outcome (SOLO) taxonomy model by undertaking a comparative literature review. As a result of this it was possible to highlight many positive effects of using SOLO that were found to be common throughout the literature, although potential issues within the taxonomy were also discovered. It was found that SOLO is a valuable tool in many ways especially with respect to its measurability, flexibility and potential to increase quality of learning and motivation towards deeper learning. It can also be valuable towards preparing for and performing in assessment, however its potential for ambiguity and low inter-rater reliability needs to be addressed with more research before the use of SOLO in 21st century education should increase.

Keywords: SOLO taxonomy, learning, motivation, assessment

Introduction
Various literature supports the Structure of the Observed Learning Outcome Taxonomy model in education. SOLO Taxonomy is a theory about teaching and learning with many merits, particularly due to its measurability, according to work by Courtney (1986), Prakash, Narayan and Sethuraman (2010), Lucander, Bondemark, Brown and Knutsson (2010), Chan, Tsui, Y. Chan and Hong (2002) and Biggs (1986). A common theme among this literature is the ability for teachers to clearly evaluate learning through the use of SOLO to analyse student responses to task material. By categorising responses according to SOLO framework, teachers can see where their students are at and students can clearly determine their next learning steps. SOLO Taxonomy is split in to five categories; Prestructural, Unistructural, Multistructural, Relational and Extended abstract. Prestructural is the first and most basic level of response which indicates that a student has not grasped the learning intention. Unistructural is the ability to list one obvious factor with only surface understanding. Multi-structural is where one or more factors are listed but without an understanding of inter-relations, and again understanding is limited. The relational level is the ability to integrate factors to form a conclusion or a deeper understanding. At the extended abstract level, understanding has progressed to be able to conceptualise, hypothesise, critique, predict, or reflect on information or factors that were not explicitly outlined.
Courtney (1986) noted that to be an effective teacher is to be able to review the level at which students understand material and to adapt teaching to this to develop the quality of the student’s understanding with challenges appropriate for them. SOLO taxonomy makes learning directly measurable, which makes it a valuable evaluative and instructional tool. Although as Biesta (2010) states, we must ensure that we are not simply measuring what is easily measurable and confusing that with quality, because what is valuable and of quality is not always simple to measure. Does SOLO measure what is valuable, or simply value what is measurable?

Quality of learning
Several studies have explored whether the SOLO taxonomy can be effective at promoting a deeper approach to learning and therefore distinguishing quality from quantity learning. Courtney (1986) notes that the way questions are structured either restricts or enables a certain level of response. He refers to an example where if only unistructural questions were asked, then responses are limited to the learning at that level only. Contrastingly, if questions are targeted at extended abstract level, only people with quality understanding are able to correctly answer. Courtney (1986) suggests using superitems as
a solution, where four questions are asked, each building through SOLO’s levels. Out of sixty-eight students, thirty-eight answered at the relational level, showing that the approach gave students sufficient chances to build up the quality of their answers to show their comprehension.

Lucander et al. (2010) conducted a similar study finding statistical significance among their test group who had performed at a relational level, due to being introduced to how to structure their answers according to SOLO. The control group, without this instruction, performed at multi-structural level and below. The test group believed that they should have been introduced to SOLO taxonomy earlier as it enhanced their awareness of their own learning and enabled them to find relationships between facts, rather than facts themselves.

Prakash et al. (2010) also found a correlation between their test and control group’s achievement after introducing them to using SOLO to structure their answers and advising them that is how they would be assessed. Although the significance was not as profound, 100% of the students still perceived their knowledge of SOLO to be advantageous in promoting the quality of their responses and how they would prepare for both short and long answer questions. All of these studies have indicated that the SOLO taxonomy can promote deeper learning and enhance quality answers.

Flexibility

All of the literature suggested that the use of SOLO Taxonomy is able to be applied interchangeably across many disciplines, from primary through to tertiary study, specific to year level as well as different types of assignments. The aforementioned works from Parkash et al. (2010) based on medical students and Lucander et al. (2010) on dentistry students, were both examples from a tertiary context.

Chan et al. (2002) referred to previous research conducted by Biggs & Collis (1982) as well as Hattie & Purdie (1988) both concluding that SOLO can measure learning across different subjects, across various kinds of assignments. Chan et al. (2002) later conducted another study, hypothesising this, which produced the same results with the addition of finding SOLO application effective across students of various levels, therefore confirming the hypothesis.

Biggs (1986) discusses that target modes could be defined across year levels, to indicate whether students have acquired the level of knowledge desired before finishing each year level. For example, primary school target modes would likely not go beyond multi-structural tasks, although some students could reach relational levels if they are familiar with the task. For students in their last year of secondary school who are hoping to study at tertiary level, should be aiming for extended abstract understanding at least in their focus subjects.

In Courtney’s (1986) work, reference to superitems in mathematics and science which were based on SOLO taxonomy were made and the idea that they could be particularly effective in geography with learning geographical concepts, issues and skills. All of the social sciences could potentially benefit, where there are many areas which require deeper conceptual understanding or critical thinking skills to assess topics such as war, social justice, human rights, feminism, evolution, the environment and politics. If this is the case, perhaps SOLO could be useful in both formative and summative assessment.

Curriculum development and assessment

The literature from Courtney (1986) suggests that if SOLO was used to write formative and summative assessment, it would encourage students to improve the quality of their responses, regardless of the type of assessments, in a way that the system at the time of the study did not allow for.

As for the medical students, perhaps there was not a significant difference between the control and test groups’ results after being introduced to SOLO because of the low benchmark to pass, at only 40%. It is possible that the students may have been content with achieving a narrow pass. Additionally, Prakash et al. (2010) believed that if SOLO taxonomy was applied across the board and not just to the test group of medical students, then perhaps motivation for all would have increased, and would continue to increase over time.

Biggs (1986) argues that SOLO can be a solution to the woes of standardized assessment such as stress, reproductive and meaningless learning, cramming and memorisation. If SOLO was used to define standards within schools, departments and teachers could develop their own curriculum and relevant formative and summative assessments, and make them more specific to the students and school context.

Lucander et al. (2010) backs the use of SOLO as well as highlighting that deep learning must be accompanied accordingly by assessment and the marking of the assessment obviously has to also align. Nevertheless, if SOLO was to be incorporated into curriculum development and assessment, some alterations need to be made.

Categorisation

An interesting discovery from Chan et al (2002) was evidence of a significant variance in the quality of three different students’ responses, all of which were still graded by assessors as at the multi structural level. One student listed two factors without any elaboration, another listed two points with relevant reasons, and the third student gave reason for the points she made, as well as making a comparison with other points and stating the advantages of her choice. This variance makes the SOLO categories less reliable than previously thought, as these answers display a mix of low, medium and high quality understanding. It also raises the issue of low inter-reliability and potentially high ambiguity between assessors. Due to different perspectives, it is possible that misjudgement can occur and different people can confuse extended abstract answers with pre structural level answers.

Chan et al. (2002) also found that one student’s work got given significantly different grades due to having two different assessors, so then hypothesised that if they broke the SOLO categories down further into sub-categories it would reduce ambiguity and increase reliability. Although this hypothesis was later accepted, having sub categories would not entirely eliminate ambiguity because of the dispositions among the raters. Perhaps adding in a third rater could help, or improving raters experience could increase their inter-rater reliability. Although dispositions will always vary between people, it is important for raters to recognise the effect they can have on student work and try to minimise influences. Additionally, testing a more extensive moderation process would assist.
Conclusion

The benefits of SOLO taxonomy are clear, but there are some loopholes. More research is required to address these issues. Enhancing agreement among assessors is key to maximising the positive effects of SOLO, especially if its use is likely to increase into 21st century education.

References


Changing pedagogies: including indigenous epistemologies and inclusive practices

Sione Areli
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
This literature review looks at a variety of sources in regards to the topic of the inclusion of indigenous epistemologies within modern pedagogy. The study focuses on Māori epistemologies and is therefore grounded in the New Zealand context. A number of authors are represented in this review and various opinions are supplied.

Keywords: Māori, education, epistemology, indigenous, pedagogy

Introduction
The following literature review has been composed in order to gauge, and question, how indigenous epistemologies are incorporated into modern pedagogical practice and strategies used within schooling environments. As an issue that affects all teaching practice, this paper will utilise a number of sources in order to determine whether it is important to incorporate indigenous epistemologies into educational pedagogy. In addition to this, it will be explored whether this leads to inclusive in class practice, and how this has, or is, changing in the modern education system.

Once evidence from the chosen articles have been investigated, compared and summarised, a conclusion which includes possible recommendations for future investigation will be provided. This paper has a direct focus on providing informed analysis of literature with the intent of guiding graduating teachers in their formulation of pedagogies that seek to use indigenous knowledge within the class environment. These may vary from what is traditionally taught in teacher education. The articles chosen for the literature review focus on introducing indigenous epistemology into educational systems, whether for or against the notion. Each item was read and the content and perspectives of the respective authors will be discussed. From each article a number of key notions for further discussion have been identified and these are as follows:

- Knowledge vs Education
- Identifying indigenous epistemology
- Incorporating epistemology into modern pedagogy
- Impacts on priority learners
- Impacts on all learners
- Changes that have/have not occurred

The above notions will be used as sub-headings for the remainder of this paper for ease of reading and analysis.

Knowledge vs Education
In order to begin to understand how incorporating epistemology into pedagogy can be achieved, it is clear from the literature that distinctions need to be made between what is knowledge the learner has acquired and the knowledge sets that formal education provides. Biesta (2006) approaches this by questioning assessment models, what we assess as desirable knowledge, and whether assessment should consider the acquired experiential knowledge of the learner. Biesta states that there is a "rise of a culture of performativity" and suggests that this has led to an education system where we do "not measure what we value... [but] end up valuing what we [can] measure". For Māori, this means leaving their true selves at the classroom door as personal values are not desired measurable traits. Biesta's ideas are echoed by Penetito (2011) when he draws upon his own schooling experiences to demonstrate how there is a disjuncture between "self and the curriculum". From Penetito's writing an unbalance between personal experience and the curriculum limits the effectiveness of the education system. In short he explains that if there is an unbalance there are two options one can take in a western model of education: sacrifice the self for purely academic pursuits, or sacrifice academic pursuits for oneself. Because of the negative discourses which plague Māori learners, in many respects it is easier to do the
latter. That is to leave school and work but maintain the essence of being Māori; community, whanau and fun. Much of the literature that supports a more holistic approach to Māori epistemology insertion within pedagogy advocates for the maintaining of this essence. It is important to include Māori values, experiences and, connection to community and whanau, with a specific need for the education system to embrace rather the awkwardly share a space within Māori learners.

What is indigenous epistemology?

So what exactly is Māori epistemology? Māori epistemology is not as straight forward thing, nor fix, as the insertion of Te Reo into the education system. It braids Māori tradition, tikanga, and values as well as many other things that add to the essence of being Māori. This is highlighted best in the writings of Garrick Cooper (2008) who does not explicitly advocate for the insertion of Te Reo into pedagogies that benefit Māori learners, but utilises Māori traditions to highlight shortfalls in modern pedagogies. Te Reo in many respects can be seen as a surface feature of Māori epistemology, and with the inclusion of Te Reo to the fore of modern education, Māori have not actually benefitted. In fact Māori achievement rates have remained consistently poor in comparison to their non-Māori counterparts. Cooper's approach uses the traditions of Tāwhaki and Māui to “provide social edicts that could be used to construct new ways of thinking about Māori students experiences in mainstream education”. He also uses these traditions to outline the contexts that they are set in, in the Māori world view as the social ‘norm’ of Māori. The identification of ‘norms’ leads him to confidently challenge "the long-tail of underachievement". An assertion of Cooper's (2008) in regards to “the long-tail” is that we need to look at the “norms” that the “tail” is situated in, that is, whose “norms” provoke the notion of a long tail. For Māori learners it appears that they are measured against factors that are traditionally alien to them. He also poses the question whether it could be “our current ideas about and measures of progress that are inadequate”.

Epistemology and pedagogy

Cooper (2008) also explores how Te Kotahitanga, has been a plan to challenge the schooling environment as the issue, as oppose to the individual students. Te Kotahitanga (Bishop & Berryman, 2009) begins to explore the deeper features of Māori epistemology by outlining a number of key Māori concepts that are important, but not necessarily 100% infallible, in forming positive teaching relationships with Māori students. It is written as a guide for teachers, so it can be said that it does not truly grab the essence from the perspective of the Māori learner. It also has a tendency to use Te Reo to highlight values that are important to Māori and non-Māori alike. There is a significant crossover of conceptual information between Te Kotahitanga and Kia Hiwa Ra! (Macfarlane, 2004) and in many respects Macfarlane highlights strategies for teachers who are working with Māori learners in a more Māori-epistemologically inclusive way. Returning back to Cooper (cited in Gilbert et al., 2005), he supplied a working model of how Māori epistemology can be incorporated into pedagogy by weaving narrative (in the form of traditions) into science and history topics.

Impacts on all learners

There are a number of items of literature that speak to the notion of ‘what works for Māori works for everyone’. Two of the aforementioned literature articles advocate this position. These are Te Kotahitanga and Kia Hiwa Ra! Both articles of literature achieve this by making it clear that the models aren't exclusively ‘Māori’ models. But could this cause the specific issues facing Māori students? Do Māori need a specific model that only works for them to inspire higher levels of achievement? Either way the inclusion of a more holistic Māori Epistemology in pedagogy is certain to inspire a higher level of interest. Waera-I-te-rangi Smith’s (2000) article, Māori Epistemologies inside the Curriculum, points out that at one time only universities taught Māori language and culture through anthropology streams. Then in the 1980s and 1990s there was a controversial push to include Te Reo and other Māori topics in school. Maybe it is time to follow the trends of the past and reassess and include other facets of Māori epistemology into our pedagogies. However, contrary to Smith (2000), Sayers (2015) writes that maybe we have already gone too far at the sacrifice of the equal expectations of all students. Macfarlane (2004), and Bishop, Berryman and Wearmouth (2014), insist on the need to maintain high expectations of students. Tony Sayers is of the opinion that through becoming overly ‘P.C.’, especially to the plight of Māori, Māori are still not achieving and have excuses to achieve even less. His article is written in a very cynical tone but his views echo many of those in wider society. Sayers starts explaining that as a teacher for many years he “had watched the tangible creep of Māori influence upon the NZ education system”.

Changes that have/have not occurred

Sayers (2015) believes that we have moved too quickly, while others believe that we haven't moved enough, and some hold the opinion the maybe we haven't moved in the right direction. But amongst all the literature reviewed one thing is certain, we have moved and there is now more Māori incorporated in the education system than ever before. But is this helping Māori to achieve? In this review it can be seen the bulk of the views are polarised in two separate camps: 1) It can be seen that, in some of the literature, the forced insertion of Te Reo (a surface feature) has only assisted in standards being lowered without the true issues of supporting Māori achievement being answered. 2) Others suggest that the use of Te Reo has assisted in other forms of Māori epistemology being incorporated into the education system. There is some consensus on the fact the Māori worldviews and concepts are equally, if not more, important to pedagogies that are considerate to, and promote, the raising of Māori achievement standards.

Conclusion

The importance of including Māori epistemologies into modern pedagogy is a controversial issue. It is a massive issue at that. Through this literature review it can be seen that there are differences in the approach towards including Māori epistemology into pedagogy, and each view needs to be considered before making a decision on how Māori epistemologies can be implemented in the in-class pedagogical practices. Through having a debate about what knowledge is important, and valuable to the education system with the desired
outcome on a model of embracing, a pedagogy that includes holistically Māori epistemologies seems achievable. Cooper explains to a high standard what Māori epistemologies are and how they can be best fitted into the pedagogy. While Macfarlane and, Bishop and Berryman have supplied models and plans that begin to look past the surface of features of Māori epistemologies (Te Reo). Depending on which side of the fence you sit, there are also those who believe that there are benefits of extending Māori epistemology into the pedagogy, while others believe that it has already gone too far. Either way it is safe to say from the research that has been conducted that there have been definite changes, for better or worse, to the levels of epistemologies that are able to be utilised in pedagogy.

My recommendations for future research would be:

- to include a range of students/learners in the research and formulation of non-Te Reo based, Māori epistemological pedagogical models
- to consider the use of alternative methods information promulgation traditionally used by Māori, to Māori in order to extend the pool of Māori epistemology to be looked at
- to include Pasifika learners, and incorporate concepts such as Fa’a Samoa as a Samoan epistemology with the potential to raise Pasifika achievement

References

Professional development and the impact of teacher relationships

Ethan Smith
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

Collegial relationships between teachers are very important within the school environment. They are essential to ensuring the school operates smoothly and within a positive atmosphere. Positive relationships between teachers benefit both students and teachers within the school. Professional Development is reliant on positive relationships between teaching staff, with it being an essential component of effective Professional Development courses. Many teachers have negative attitudes towards Professional Development due to it being very individual and irrelevant to their teaching practice. However, when it is based around collaboration and coaching with other colleagues, teachers are much more engaged and ultimately find it beneficial. Professional Development needs to be driven by senior leaders within schools, with them also responsible for pushing positive relationships. This literature review looks at a variety of literature regarding Professional Development and how teacher’s relationships are essential to successful execution.

Keywords: professional development, relationships, collaboration, teacher relationships

Introduction

Professional Development (PD) is a key function within school environments, and helps teachers develop into more effective educators. At its simplest form PD can be defined as the development of competence, and the acquiring of skills to improve performance (Ferrier-Kerr, Keown & Hume, 2009). Teachers need to be open to change and adapt their teaching pedagogy appropriately so that they can adapt to the changing nature of school environments and their student’s needs. 21st century schools are rapidly changing, with the emergence of Bring Your Own Device (BYOD), E-learning and other technology which are changing the face of education.

Teachers are required to learn new skills so that they can maximise their student’s learning opportunities, which places more importance on PD. When discussing PD it is important that we are aware of the pros and cons of the current system, the importance of a community of learning and the impact principals can have. By doing this we can have a greater understanding of PD and in turn how teachers can interact with it more effectively.

Why professional development?

There are a number of reasons why teachers should engage in effective PD, with the primary goal being to improve teacher and student performance. Harnett (2012) explores the idea that there is a growing importance on the teacher’s role in relation to student achievement. If teachers are able to effectively learn new skills and hone their profession we should see benefits for our students. Harnett (2012) explains through efficient PD teachers will learn new skills, become more effective, learn off other people’s experiences and develop a clearer teaching philosophy which suits their style. This will help create more confident teachers who are less afraid to take risks, which can only benefit both teachers and students in the long term. Another key reason for teachers to engage in PD is that it can be hugely important in helping support major educational reforms or changes within the education sector (Starkey et al., 2009). Starkey et al. (2009) look at how PD was essential in implementing key reforms to the NCEA system in New Zealand. Effective PD allowed teachers within schools and the wider teaching community to learn about the changes that would affect their teaching and in turn their student’s learning. Some PD courses allow for teachers to network with other teachers within their subject area outside of their own school environment. Chalmers and Keown (2006)
explore this within a secondary geography context in New Zealand, with them listing networking as one of the key benefits of PD. This was because it enabled teachers to learn from other teachers within varying environments and establish a number of effective support structures.

**Flaws in Professional Development**

Even though PD is recognised as having an important role in the continued development of teachers it is not always delivered in a way that is effective, or received well by teachers. Some PD programs are seen as lacking in certain areas, with teachers having a negative attitude towards them. Hill (2009) describes PD as being a broken system, with it not being delivered consistently, not reaching enough teachers and being ineffective at times. This is concerning, especially when considering the fact that effective PD can help develop teachers, and in turn benefit student’s achievement and schooling experience. Ferrier-Kerr et al. (2009) mention that teachers develop negative attitudes towards PD due to many courses being short half day sessions, which they believe hold no benefit for them. Teachers believe that these courses are removed from practice and do not consider the realities that occur within the classroom. The fact that many of these PD courses are taught by outside ‘experts’ does not help engage teachers with the learning. Ferrier-Kerr et al. (2009) indicate that PD is often centred on deficit discourse, and the idea that teachers require outside information to become ‘good teachers,” they are viewed as students in their own right. Poskitt and Taylor (2008) reinforce the idea of deficit discourse with them stating that a number of PD courses are based on the premise that intervention, or training, will in turn make an improvement to the teacher. PD programmes that adopt a deficit discourse do not help increase PD participation or buy-in. Lastly, Harnett (2012) states that many teachers believe PD can be too individual, with the emphasis being on how they can improve what they are doing by looking at current research and practice. It does not consider what teachers can learn from each other, through collaboration and reflection. Teachers enjoy PD that includes collaboration, and so for many it is seen as being a major flaw of many PD programmes.

**Learning Community**

It is acknowledged that teachers prefer PD which involves collaboration with other teachers and the development of a community of learning. Teachers enjoy the opportunity to work with other teachers, and learn from their experiences. Ferrier-Kerr et al. (2009) state that this is because it is shifting the primary objective of PD from ‘teaching’ to ‘learning.’ Teachers are able to learn from other teachers experiences within their own classroom, for many teachers this sort of learning is seen as more relevant. It also acknowledges that teachers participating in PD have their own knowledge and experiences, and that it is worth sharing (Ferrier-Kerr et al., 2009). Teachers view it as more practical learning which can make a difference on their teaching, as opposed to expert led lecture style teachings. This does not need to be limited to a school setting, but could be across a region, country or even the world, creating a community of learning. As with any community the people are very important, in this scenario the community could not exist without teacher relationships. Whitworth and Chiu (2015) mention that within this community of learning teachers are able to mentor and coach each other, which makes for very effective PD. Teachers are able to learn directly from other teachers who are at the same level as them, which for many is very beneficial. Starkey et al. (2009) stress how important this form of collegial feedback is within effective PD programmes. Positive relationships between teachers are hugely important when trying to implement collegial feedback and a community of learning approach to PD, but can be extremely beneficial. Ferrier-Kerr et al. (2009) also state that positive relationships between teachers can help develop the right atmosphere for reflective learning to occur within a PD context. For teachers to share their own experiences and open themselves up for criticism and assistance there needs to be a culture of trust established, which requires strong relationships. Collegial relationships are key to effective PD due to the simple fact that teachers enjoy PD more when they have the opportunity to learn from their peers, these relationships can then help develop a community of learning amongst teachers and the creation of more effective PD programmes.

**Conclusion**

Collegial relationships are hugely important within the local and international setting. They allow for teachers to develop and grow more effectively and offer outstanding support programs. One area where collegial relationships are highlighted is within PD. PD is an important tool to help teachers develop and in turn help improve students experience of school. PD can be ineffective however, with some courses focusing on the individual too much, or not acknowledging the vast amount of knowledge teachers already have. Collegial relationships help ensure that PD is of use to teachers. This is through coaching, collaboration, networking and reflection. Strong collegial relationships between teachers helps develop a community of learning and in turn effective PD, which teachers will be more willing to engage with.

**References**


Fostering inclusive relationships; students with special needs, whānau, teachers and allied health professionals

Nicole Hook
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
New Zealand Ministry of Education (MoE), has changed their policy for education of students with special needs from segregated to an ideal of inclusion where student are entitled to enrol at a school of their choice and to receive effective educational services. This literature review looks at how special education is viewed by society, how policy changes have affected the outcome of special education and how maintaining a professional relationship between whanau, teachers and allied health workers can ensure inclusive learning environments are developed and maintained.

Keywords: Special Education, Inclusive Education, Professional Development, Allied Health Professionals

Introduction
New Zealand’s educational system has undergone a combination of policy changes, from education providers, funding allocations, to classroom management and expectations from teachers of students with special needs. Within these changes, a common theme dominates the New Zealand educational system; that is a theme of inclusive education and equal opportunities to all children of New Zealand (Miles & Singal 2010; Slee 2011; as cited in Arthur-Kelly, Sutherland, Lyons, Macfarlane & Foreman, 2013). Students, who are identified as having special needs or who require aid with their learning, have been at the centre of these policy changes. With these ongoing modifications, MoE has concluded that it is vital for both the education and health services to work together to ensure there are inclusive learning environments for children of New Zealand.

Special Education
The concept of special needs education and what classifies learning disabilities is often in conflict with society and culture. How disabilities are perceived by society and diagnosed by science shape how people with disabilities are treated (Kingi & Bray 2000; as cited in Fortune, 2013). Mitchell (2001) in Shifts in Special Education in New Zealand (2001), comments on the continuous shift that special education has undergone within New Zealand. Special Education has been subjected to a wide range of policy changes, which whilst similar to international shifts changes have also been unique to New Zealand Government’s changing educational policies (Mitchell, 2001). Historically, students with disabilities were segregated from the educational system (for example, schools for children who were blind) or more often overlooked (Vaughan-Jones & Penman, 2004). Currently, Special Education provides a collection of support for individuals who are identified with a physical, learning or behaviour need and who require further support for individual learning (Mitchell, 2001). Individual students who require supported learning are assessed under different criteria, (i.e. Ongoing Resource Support, ORS) so that schools can obtain additional staffing allocation and resources to support learners (Fortune, 2013). Special education resources can range from low to high technology, environmental changes and interventions accessed through allied health workers, for example Occupational Therapists, Physiotherapists and Speech Language Therapist. In addition Resource Teachers, Learning and Behaviour (RTLB) and Teacher Aids collectively develop Individualized Educational Pathways (IEP) for identified students (Mitchell, 2001). Fortune (2013) highlights how the ongoing changes within special education and the incorporation of Māori culture within New Zealand educational model, has emphasized the importance of understanding and respecting students’ Mana and uniting whānau into individual educational plans. There is a lack of evidence from a Māori perspective on disability, even though a large percent of special education students are of Māori
descent (Fortune, 2013). Fortune (2013) also provides evidence on the limitations and lack of relevance of special education constructed by western societies has with Māori views and perspective. Special education is currently providing inadequate services that lack cultural relevance to individual students (Bevan-Brown, 2002).

**Policy changes (2000-2015)**

Special Education within the twenty first century is modelled on the concept of inclusive education, and the objective that all students ‘regardless of strengths or weaknesses’ will be educated alongside their peers (Meyen & Bui 2007, pg. 48, Selvaraj, 2015). Presently, Special Education within New Zealand is based under the policy Special Education 2000 (Ministry of Education, 1996), which underpins the theories of inclusive education to meet the needs of all learners (Selvaraj, 2015). The purpose and theory behind Special Education 2000 was to reflect positively on students with special needs in mainstream schools. Many conflicting arguments have risen throughout the past half-century as consequence from changing governments and development of policies. Selvaraj (2015) identifies that, while inclusive education dominates within the theoretical world of education, several changes and grey areas within Special Education 2000 have led to confusion and conflicts on special education philosophies from parents, teachers and specialist. However, limitations such as shortages of skilled professionals, contestable funding to adequate resource the teachers and classrooms have had negative effects in some schools. This, coupled with ineffective cultural and emotional support for at risk students, has caused whānau deliberation on what is vital and needed for these students to ensure that they can confidently learn within mainstream classrooms (Selvaraj, 2015).

Wills (2006) points out similar barriers that arose from Special Education 2000 policy change. Special Education 2000 changed the government’s roles from providing a direct service to schools, into a service that delivers advice and funding for special educational service within a cluster of schools (Wills, 2006). Wills (2006), highlights the important and forgotten aspect of Special Needs Education, that is, the involvement of whānau and notion that a student family/whanau knows best. Wills (2006) comments on how the move into Special Education 2000 encouraged schools to be aware of the responsibility they hold to their wider community, and provide whānau with the right to choose their child’s educational experience. Another policy reform was plans of providing training for principals and teachers, yet there are no mandatory obligations to complete such workshops (Wills, 2006). Other literature reviewed comments on how the lack of understanding from educators on students living with disabilities, causes difficulty with lesson planning, classroom management, as well as engaging their whānau (Arthur-Kelly, Sutherland, Lyons, Macfarlane & Foreman 2013; Twyford, 2009; Vaughan-Jones & Penman, 2004).

Moves within contemporary teacher training look at focusing and redefining individual attitudes/assumptions on diverse learners. Arthur-Kelly et al., (2013) reflects how pre service teachers are trained and exposed to special needs education was reviewed to locate areas that could emphasize the need of inclusive education. Evidence supports pre service teachers ability to develop skills that endorse positive teaching and learning behaviours for special needs students when they are positively exposed to special needs education early in their training. Strategies being developed combine a theoretical aspect of inclusive education with practical evidence based on teaching, to develop adaptive classroom practices that includes students with disabilities from different cultural backgrounds (Arthur-Kelly et al., 2013). Suggestions focusing on how teachers are trained within New Zealand is a fundamental step for special needs education within the twenty first century as this enable future teachers to better meet the needs of diverse learners in a practical and inclusive learning environments.

**Teachers and allied health professionals**

The evolving special needs education policy impacts on both education and health sectors within New Zealand society. The inclusion of special needs students within mainstream schools provided direct funding for allied health professionals to enter and work within a student’s classroom (Vaughan-Jones & Penman, 2004). Vaughan-Jones and Penman (2004) describe the history of special needs education from a health sector point of view. They identify that within the twenty first century, two individual sectors – that is health and education services, must work together to formulate effective, inclusive IEP and learning opportunities for students with special needs. Vaughan-Jones and Penman (2004) conclude that to generate an effective system for students, allied health therapists “must adjust their habits, skill, and practices in order to fit into the educational environments” (Vaughan-Jones & Penman, 2004, pg. 13). Supporting their conclusion they comment on the need of therapists to be a part of the educational setting. Evidence shows that providing in-service presentations to educational staff on their roles and services develops a cohesive team approach when cultivating inclusive education programs (Vaughan-Jones & Penman, 2004). Twyford (2009), supports a high level of communication and liaison between parents, RTLB, teacher aids, teaching staff and therapists, to provide a continuous level of positive achievement in an inclusive learning environment.

Vaughan-Jones and Penman (2004) and Twyford (2009) also identify that the integration of specialists within the mainstream educational sectors enables positive feedback on students with special needs. Yet to accomplish this, a greater understanding and acceptance is required from both sides (i.e. education and health sectors) with implementation nationwide. Parallel to an evolving history of New Zealand Special Education, it is vital to keep up to date and ‘be politically aware and active’ (Vaughan-Jones & Penman, 2004, pg.15) to ensure that both parties can successfully generate a constructive learning environment for students receiving special education services.

**Conclusion**

Looking at the range of literature written on Special Education within New Zealand, it is apparent that current teachers and educator providers need to understand special education policy and the overall needs of at risk students. With an overarching theme of inclusive education backing Special Education 2000 and the New Zealand Curriculum, there is evidence that students with special needs are successfully educated within mainstream schools when barriers such as inadequate resourcing, social assumptions and poor communication are removed (Arthur-Kelly et al., 2013; Twyford, 2009; Vaughan-Jones & Penman, 2004). To maintain an inclusive learning environment the relationship between teachers and allied health professionals
must be apparent when planning IEP’s and interacting with special needs students and their whānau. Incorporating an understanding of policies, embracing diverse cultures and abilities, will help future teachers to provide programs to engage all learners. This may inspire teachers to remain positive when interacting with special needs students, their whānau and range of support staff available to them.

References


Importance of teacher-student relationships in response to disaster trauma

Alice Foote
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

This literature review uses research informed by disasters including the Christchurch Earthquakes, Hurricane Katrina, Red River floods, War in Israel and natural disasters in Indonesia to identify key aspects within teacher-student relationships which result in an increase in the emotional stability of our students. These aspects include prior knowledge of students and their development, psycho-social interventions and incorporation of the disaster into the curriculum. Teacher-student relationships are highlighted as vital to a child’s healing and resilience after experiencing disaster trauma.

Keywords: disaster, teacher-student relationship, trauma, responses

Introduction

On February 22, 2011 Christchurch was rocked by a devastating Earthquake in which people died, homes were destroyed and lives would never be the same. Within the Christchurch education system schools were closed, and others site-shared. This time was and still remains a traumatic time for our children who were forced to deal with situations beyond their comprehension. As a result an additional dimension was added to the teaching profession as teachers navigate the emotional grey areas experienced by students and themselves and attempt to provide support in an environment often viewed as a pillar of the community.

Kilmer, Gil-Rivas and Macdonald (2010), discuss the effect disaster trauma has on students and it is evident that emotional instabilities, such as Post Traumatic Stress Disorder (PTSD), has a negative effect on students’ academic abilities through attention and concentration lapses brought on by anxiety and distress. Research into disaster trauma in areas such as those affected by hurricanes, earthquakes and war has shown the effect student-teacher relationships has on the mental healing of the students and the many facets that are involved (Buchanan, Casbergue & Baumgartner, 2010; Johnson & Ronan, 2014; Kilmer, Gil-Rivas & Macdonald, 2010; Seyle, Widyatmoko & Silver, 2013).

Evaluating the needs of the student

Schools represent a core area of stability when disaster strikes and are seen as a vitally important aspect of the community (Kilmer et al., 2010). Research suggests students react differently to disaster trauma based on numerous different factors such as family support, death of a loved one, and displacement (Johnson & Ronan, 2014). It is important as educators to be able to identify how students are coping. Teachers, with the exception to immediate family, often find themselves in the best environment to assess students’ need emotionally as they often knew the student before the event and can notice subtle differences in reactions, engagement and behaviour (Johnson & Ronan, 2014). Students develop through a range of overlapping contexts; home school and community as is recognised in Bronfenbrenner’s (2005) ecological model. It is also recognised that student development can be hindered as a result of disaster trauma (Buchanan et al., 2010). An unexpected disaster can impact some of these development contexts more than others, so it is vital the teachers remain as a stable support system for students who are struggling.

Teachers are seen as a trusted source of information and through their prior knowledge of the children and their development are able to adapt their practices to suit their students and they can fill a critical space in addressing the mental health needs of students (Johnson & Ronan, 2014). Ultimately teachers need to put the needs and emotional wellbeing of the students first as opposed to school policy which can relate to lessons, dispelling rumours.
which are causing anxieties and facilitating class discussions and peer interactions surrounding the topic of the disaster (Johnson & Ronan, 2014). It has been recognised that within some schooling contexts, teachers may struggle to support students emotionally as they feel they do not have the training and are therefore hesitant to address the situation as they do not want to inflict more pain onto the students (Johnson & Ronan, 2014). Research from Franklin, Kim, Ryan, Kelly and Montgomery (2012) has shown additional training for teachers does not have a significant impact on the level of support the students receive; the most important factor is the knowledge of the student and their trust in the teacher.

Interventions in the classroom

The relationships formed between teachers and students are vital when working with the third party organisations that are often employed post-disaster to ensure that students are getting the support they need (Kilmer et al., 2010). External assistance is often provided to alleviate the stress on teachers; however it is often the teachers who are able to recognize the students who are struggling. This can be seen through changes in mood, behaviour and attention span (Buchanan et al., 2010). Research has demonstrated that school-based psycho-social interventions by teacher can be successful in supporting the students, as the relationships formed within the classroom often exhibit an unparalleled level of trust compared to receiving treatment through an individual who has no history with the students (Seyle, Widyatmoko, & Silver, 2013). Classroom management techniques are seen as the most effective form of behaviour management intervention and they have been shown to significantly decrease the number of behaviour management issues as well as act as a preventative measure for behaviour issues. They also have positive implications for reducing the development of more serious developmental and emotional issues (Franklin et al., 2012). The line between counsellor and teacher often overlaps and as a result this can increase the workload of teachers. However, it is generally accepted that all teachers will have intervention methods in their classroom which involve positive behaviour management, clear rules, consequences and positive reinforcement (Franklin et al., 2012). Research into teacher interventions in a war-torn area in Israel showed protocol interventions which focussed on resilience enhancement was an effective method to grant students coping skill to deal with potentially traumatic events that occurred in their home and community life (Wolmer, Hamiel, & Laor, 2011). Resilience enhancement also focussed on the students’ ability to cope with daily stressors and transfer knowledge that would enable them to cope with severe life events, process them and recover to regain a normal routine quickly (Wolmer et al., 2011).

Using curriculum for students’ needs

Following disaster events teachers often find themselves torn between mentioning the event and changing their curriculum to relate or avoid the topic with the thought that additional information will exacerbate the symptoms of emotional distress (Johnson & Ronan, 2014). Following Hurricane Katrina it was found that many teachers continued with their planned curriculum without acknowledging the events surrounding them. However, when looking into responses following the Red River floods it was found that altering reading, writing and oral activities to incorporate students’ experiences proved beneficial in enabling students to process what they had been through (Johnson & Ronan, 2014). It is vital that teachers listen to what the students have experienced, through work and conversation. Teachers should then adjust accordingly while avoiding prejudice that can often been seen through the media in disasters such as the 9/11 terrorist attacks (Buchanan et al., 2010). In response to the Christchurch earthquakes, many teachers adjusted their curriculum to incorporate disaster-related lessons which included activities such as expressive writing and research into accounts of Christchurch living (Johnson & Ronan, 2014). It is important to note Johnson & Ronan’s (2014) research does not differentiate between primary and secondary education and it appears many of the curricular responses are aimed at a primary level. Within secondary education strict assessment guidelines and timelines may inhibit teachers incorporating disaster events formally into their lesson. Specific subjects such as the Social Sciences, English and Science can lend themselves to enabling students to better understand the experiences they went through (Johnson & Ronan, 2014).

Implications for Teachers

Teachers play a critical role in supporting the mental health of students, however when it comes to trauma experienced through disasters it is important to recognise the mental health of the teachers. Research conducted by Seyle et al. (2013) after earthquakes in Indonesia demonstrated that teachers who suffered from earthquake related trauma such as depression and PTSD, often brought these negative emotions into the classroom. Depression is often associated with lower levels of motivation which manifested itself in the classroom as the allowance of a higher level of negative behaviour from the students (Seyle et al., 2013). This is an example of a feed forward reaction where the increased level of negative behaviour from students contributes to an increased feeling of depression among teachers (Seyle et al., 2013). PTSD was shown to effect teacher’s belief of their own self efficacy in the classroom due to a decrease in the physiological arousal level of the teacher and students as a result. (Seyle et al., 2013). Seyle et al. (2013) were able to identify that there were low cost resources available to teachers which resulted in a significant drop in PTSD and depression symptoms. However this drop did not have an effect on the teacher’s belief of their own self efficacy in the classroom. This intervention can have a positive effect on the community and school environment and enable teachers to be better able to support their students (Seyle et al., 2013).

Conclusion

Disaster events such as the Christchurch Earthquakes of 2010 and 2011 have the huge potential to emotionally traumatisate students and their families. The effects of these events can be ongoing and result in developmental delays, behavioural issues and a decrease in academic achievement (Buchanan et al., 2010). Schools and their teachers are a source of stability in difficult times and the relationships formed between teachers and students prior to disasters can be utilised to heal emotional wounds as teachers are in a position of trust (Johnson & Ronan, 2014). Integration of disaster events into the curriculum and psychosocial intervention from teachers can work to allow
students to understand what has happened in their communities and to process the changes in their lives (Johnson & Ronan, 2014). It also provides students with coping mechanisms to deal with the instability they find themselves surrounded with (Wolmer et al., 2011). It is important within the education system that there are resources available to teachers to help them to deal with their own emotional trauma so they can support their students to the best of their abilities (Seyle et al., 2013). Teachers have the potential to play a major role in student recovery following disaster events and this should never be underestimated.

References
Extracurricular engagement and the effects on teacher-student educational relationship

Gareth Sutton
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
The literature reviews aims to investigate the effects that extracurricular activity engagement by teachers has on the teacher-student educational relationship. The review concludes that there are positives and negatives for the teacher-student educational relationship when teachers and students engage in extracurricular activity. It cautions about some of the commitments required for teachers to engage in extracurricular work.

Keywords: Teacher, Educational Relationships, Teacher-Student Relationship, Engagement.

Introduction
Time is a precious commodity for teachers. Often teachers are expected to spend more of their time outside of the classroom, engaging in extracurricular activities (Bailey & Colley, 2014). Teachers can at times be judged by the volume of extracurricular activities they engage in (Shulruf, Tumen, & Tolley, 2008). All of these activities come with additional time commitments. There are numerous relationships that sit within an educational context, all of which are complex. The teacher to teacher, teacher to student, and teacher to parent, are all examples of educational relationships teachers engage in (Griffiths, 2014). These relationships support a teacher’s ability to work within a collaborative space; within a profession that can be isolated. Extracurricular activity can be defined as undertakings that students participate in, that are removed from prescribed education related activities “such as hobbies, social groups, sporting, cultural or religious activities and voluntary or paid work” (Thompson, Clark, Walker, & Whyatt, 2013 p. 136). Teachers have to manage extracurricular education in schools with limited time availability. This can support stronger teacher – student relationships, but it can also create issues for the teacher.

The aim of the literature review is to investigate the effects that extracurricular activity engagement by teachers has on the teacher-student relationship. There has been limited literature on this topic within the New Zealand educational context, thus the majority of the literature will be drawn from an overseas context to parallel with the New Zealand education system.

Teachers as extracurricular participants
Whiteley and Richard (2012) suggest that there is a direct correlation between teachers’ access to preparation time for developing classes and teachers’ participation in extracurricular activities. They conducted a qualitative study investigating whether or not teachers who have a full teaching load were willing to volunteer to participate in extracurricular activities. The study concluded that over 70% of teachers did not have sufficient preparation time. This made their workloads unmanageable and thus they struggled to engage with extracurricular activities. The teachers wanted to engage in extra activities, but felt they were overloaded with time and work commitments.

Fredericks and Eccels (2006) established that students who participated in extracurricular activities were more academically successful than students who did not engage with extracurricular activities This finding has implications for teachers supporting students in their learning. It could be suggested that if teachers have time scheduled in the teaching programme to engage with and promote extracurricular activities with their students, then there would be two benefits. One, it could enhance the teacher student relationship. Two it could lead to enhanced academic achievement for all students (Camacho & Fuligni, 2015).

One effect that can come from teachers who engage with too much extracurricular activity is burnout syndrome (Saiiari, Moslehi, & Valizadeh, 2011; Whitely & Richard, 2012). Burnout syndrome has been defined as having three dimensions; physical, mental and emotional exhaustion, (Maslach & Pines, 1984 cited in Saiiari et al., 2011). Teachers
have a range of abilities to handle stress and heavy workloads. For those teachers who do not cope well with heavy workloads and stress, there can be negative impacts on their teacher-student relationship such as limiting their contact time with students (Saiiari et al., 2011). The authors also suggest that teachers who are able to control their emotions are less likely to suffer from burnout syndrome. They give the example of a sports teacher being one of the best equipped teachers at grappling with burnout syndrome (Saiiari et al., 2011). They suggest this is due to such teachers enjoying the benefits of employing different social skills when they are exposed to seeing many people within assorted contexts throughout their day. The authors did not make any comments in regards to the differing personalities and coping strategies of sports teachers.

How teachers cope with the workload of engaging in extracurricular activity directly affects the relationship they develop with their students (Saiiari et al., 2011; Whitely & Richard, 2012). An example is that student’s experience joy and happiness at seeing their sports teacher even before the class begins if they have engaged in or seen that teacher engaging in extracurricular activity with other students. In a New Zealand context Macfarlane (2004) explores this same notion in his work on manaakitanga and whanaungatanga. Manaakitanga is developing an ethic of care for students and whanaungatanga is sharing common interests and values (Macfarlane, 2004). Extracurricular activity provides a platform to establish meaningful relationships with students (Macfarlane, 2004). The literature suggests that if teachers are able to cope with the added time pressures that comes with engaging in extracurricular activity there can be positives for the teacher-student relationship such as leading to greater communication levels between teachers and students. Similarly, if they do not, it can have negative connotations for the teacher to student relationship such as teachers lacking the ability to build rapport with students which can be vital to learning (Eccles, Barber, Stone & Hunt, 2003; Saiiari et al, 2011; Whitely & Richard, 2012).

**Student educational outcomes**

Eccles et al., (2003) investigated the consequences of engaging in extracurricular activity for students. One key finding was that if students see teachers or know they are engaging in extracurricular activity, then those students can see that teacher engaging in extracurricular activity directly affects the relationship they develop with the teacher-student relationship. This has the effect of initiating better rapport and engagement with students. Macfarlane (2004) also recognises this as supporting a culturally responsive way of working. This engagement with students which can be vital to learning (Eccles, Barber, Stone & Hunt, 2003; Saiiari et al, 2011; Whitely & Richard, 2012).

**Teachers as relationship negotiators**

One of the professional relationships that teachers have to deal with when interacting with extracurricular activity is negotiating with parents. This educational relationship can have both negative and positive connotations for the teacher-student relationship dependent upon how the teacher reacts and interacts with the parents (Smoll, Cumming, & Smith, 2011). For example an effect of this is when teachers engage positively with parents in youth sport “It can provide an educational medium for the development of desirable physical and psychological characteristics, such as learning to cope with the realities that they will face in later life” (Horn, 2011, p 13). Parents can be a valuable resource to support the teacher-student educational relationship (Smoll et al., 2011). The sporting domain is where the interaction between parents and teachers takes place frequently. The more organised sport becomes, the more parental involvement increases (Smoll et al., 2011). Teachers need to have the skills to negotiate relationships with parents, the students and wider family members (Smoll et al., 2011).

**Conclusion**

There are ever increasing pressures on teachers to engage with activities that lie outside of their assigned teaching workload (Bailey & Colley, 2014). Teachers who engage in extracurricular activities and promote them to their students have strong relationships within student work; students feel like they belong to a community and are therefore more likely to open up and engage with their teachers. Higher engagement has been correlated to having higher academic achievement (Camacho & Fuligni, 2015). It could be suggested that if students are engaging in these extracurricular activities, then teachers who equally engage will also benefit because, like all educational relationships the process is a reciprocal learning process. There are three key findings that have come from the critical literature review. Students and teachers, both benefit from time spent in extracurricular activities. There are positive impacts on student learning and the relationships between the students and teachers. However, teachers are facing increased time pressures in their jobs. The more crammed teacher schedules become, the less time teachers have to engage in educational relationship building. Teacher burnout is recognised as a risk in expectations for extracurricular engagement.

**References**


Parental involvement in school benefits students and develops teacher-parent relationships

Lucy Brownlee
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
Parental involvement (PI) in student education is highly beneficial for student-parent and teacher-parent relationships. Based on literature review, the present study explores how PI in school-based activities enhances the learning journey of students and is a medium for teachers and parents to forge effective school-home partnerships. This review explores a varied scope of literature to determine why creating professional teacher-student and school-home partnerships is an especially important contemporary educational issue within New Zealand (NZ) today and how teachers need to take responsibility for and be proactive about PI in school-based activities.

Keywords: parental involvement, school-based, student benefits, teacher-parent relationships

Introduction
Parental involvement (PI) in the education of children has multi-dimensional benefits (Borgonovi & Montt, 2012; Dyk, Hancock & Jones, 2012; Goldberg & Tan, 2009; Graham-Clay, 2005; Hornby & Lafaele, 2011; Hornby & Witte, 2010). PI is not only extensively beneficial to the child, but a crucial tool in developing parent-teacher relationships. To avoid repetition, the present article will refer to students as children and as learners, the meaning behind these terms being that they receive schooling in an educational institution. This article uses the term PI to mean active commitment from parents in the academic lives and developmental areas of their children within a school context (Borgonovi & Montt, 2012; Dyk et al., 2012).

What does school PI consist of?
Consistent with Borgonovi and Montt’s (2012) cross-national analysis of PI in student’s life, Hornby & Lafaele (2011) divide PI into two main categories: home-based and school-based. Both are widespread in NZ (Borgonovi & Montt, 2012); indeed NZ’s school system is one of the most inclusive in the world (Hornby & Witte, 2012). Home-based PI involves parents taking an interest in their child’s education at home, such as through discussion, reading, and play (American Academy of Pediatrics (AAP), 2012). However, the focus of this review is on school-based PI. According to Borgonovi and Montt (2012) and Hornby and Lafaele (2011), school-based PI involves communication between parents, teachers and the school. They agree examples include parent-teacher meetings and parents volunteering within school events and extra-curricular activities (ECA).

Bronfenbrenner’s ecological systems model describes how individuals are nested in contextual layers, and how these layers influence and impact upon their development and lifestyle. Within this theory, the microsystem is the context for the child’s home life and the mesosystem for school-based PI as here there are linkages between the student’s home and school environments (Goldberg & Tan, 2009). Therefore, it is within the mesosystem where teachers have the opportunity to forge effective partnerships between school and home (Borgonovi & Montt, 2012).
How does school PI benefit students?

**Academic** - Throughout literature reviewed there is a correlation between PI and increased academic performance levels in students. Indeed, children whose parents are actively involved in school are likelier to gain higher grades, especially in reading, and have increased levels of engagement and motivation in school (Borgonovi & Montt, 2012; Hornby & Lafaele, 2011).

**Leadership Skill** - In Volume 11 of the Winter Journal of Leadership Education, Dyk et al. (2012) highlight adolescents’ perceive their leadership skills to be positively influenced by PI in ECA. Implications of this include students feeling supported by the mentoring adult-youth partnership and thus motivated to actively engage in leadership roles themselves (Dyk et al., 2012).

**Socio-emotional** - School-based activities are also an opportunity for students to develop socioemotional skills and prosocial interactions with adults through play (Dyk et al., 2012; Frederick & Eccles as cited in AAP, 2012). Research has evidenced that from early childhood onwards play helps to develop social, emotional and cognitive skills as well as being an opportunity for children to explore and develop resilience, co-operation and negotiation (AAP, 2012; Dyk et al., 2012). PI in school-based play also creates mentoring, protective and motivational parent-student relationships (AAP, 2012; Borgonovi & Montt, 2012; Dyk et al., 2012). Furthermore, research from Hong Kong states how ECA involvement increases self-esteem levels in children (Euji, 2011), and both Dyk et al. (2012) as well as Borgonovi and Montt (2012) agree that PI in the mesosystem is a clear example of social learning theory as it involves direct social interactions between parents, students and the school.

**School-home partnerships**

As well as school-based PI being highly beneficial to students and a recognised medium for parent-student mentoring relationships, research has also highlighted how PI in the student’s mesosystem is integral to teacher-parent relationships (Borgonovi & Montt, 2012; Dyk et al., 2012; Graham-Clay, 2005; Tan & Goldberg, 2009). Indeed, in 2005 Graham-Clay found that PI in school-based activities is fundamental to building a sense of community and collaboration between home and school. Graham-Clay’s research was echoed six years later by Hornby and Lafaele in 2011 in a portrayal of how PI in school-based activities is an opportunity to better teacher-parent relationships and improve school climate. Again this research was paralleled three years ago when Borgonovi and Montt (2012) published extensive data about how professional teacher-parent relationships enhances student performance as well as school-based collaboration. Graham-Clay (2005) also noted that teachers who encourage positive communication with parents will find an increased level of trust within the wider community; a finding later paralleled by Carrington and McArthur’s (2010) emphasis on building supporting positive relationships between schools and communities.

**Implications of Changing Demographic**

PI in school-based activities is a particularly contemporary educational issue in NZ because of the changing demographic. With 17% of primary school children not being born in NZ (Howard, 2015), teachers need to be respectful and inclusive of all cultures and families in the school community (Carrington & MacArthur, 2010; Fraser & McGee, 2008; Hornby & Lafaele, 2011).

Implications of NZ’s changing demographic include barriers between migrant families and PI in their child’s mesosystem. For example, migrant families new to the NZ education system are exposed to contrasting stimuli and schooling experiences (Lustig & Koester, 1996), and many suffer from a plethora of cultural and linguistic difficulties (Howard, 2015). These every day struggles generate feelings of culture shock and insecurity (Lustig & Koester, 1996). Indeed, the literature reviewed found that some migrant parents feel insecure about their ability to become involved in school-based activities because of these struggles, as well as having a lack of confidence in their own academic skills and negative experiences from their own schooling experiences (Hornby & Lafaele, 2011; Lustig & Koester, 1996).

**NZ Teacher Responsibilities**

NZ’s past is littered with reproductions of social inequalities in schools through acts of symbolic violence such as ignoring indigenous Māori values to reaffirm colonising Pākehā attitudes and beliefs (Bourdieu, 1977; Manning, 2015; Quintilvan, 2015). Therefore NZ teachers need to be aware of this history and of current national demographic changes in order to not leave any student’s culture outside of the classroom door like has happened in the past (Penetito, 2010). Thus it is the teacher’s responsibility to create a culture of belonging within the student’s mesosystem by accepting and celebrating all students and all parents (Fraser & McGee, 2008) so as to encourage and promote PI.

Research has found school-based activities to be structured and supervised by teachers (AAP, 2012; Borgonovi & Montt, 2012). Therefore it is the responsibility of educators to take action (Hornby & Witte, 2010), and to encourage parents to be actively involved for the benefit of parent-student relationships and the formation of teacher-parent relationships. Teachers need to increase parent engagement and ensure there is encouragement and reciprocal communication so parents feel involved and confident to help in their child’s learning journey (Graham-Clay, 2005; Hornby & Lafaele, 2011). Strategies could include teachers diversifying ECA, scheduling collaborative learner-progress conferences, and making use of available technology to engage parents in the learning process (Graham-Clay, 2005). Respecting parents as educational resources, for example inviting them to share skills and experiences with students in schools, is another practical way for teachers to encourage PI and demonstrate the value of all families in the school community (Macfarlane, 2004).

**Conclusion**

PI is evidently a significant and highly beneficial practice within educational institutions. The literature reviewed has clearly conveyed how PI in school-based activities is situated within the mesosystem as there are linkages between the student’s school and home environments. This review has drawn upon a range of sources to describe the benefits of school-based PI and was highlighted how PI in school-based activities is beneficial to the development of teacher-student relationships and collaborative school-home partnerships. The review also explored how
teachers are responsible for encouraging and promoting PI, a responsibility crucial in the navigation of NZ’s changing national and school demographic.

References


Implications of using restorative justice practices in schools to restore broken relationships

Veronica Noetzli
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
Restorative justice practices aim to deal with negatively impacting behaviours in a context of respect and understanding. This results in the peaceful resolution of conflict, the restoration of respectful relationships and the development of emotional literacy and social awareness. Based on this literature review, schools that use restorative practices nurture cultures of safety, respect and inclusion. It is also culturally responsive towards Māori learners and aligns with aspects of the Treaty of Waitangi. Schools that employ these practices are fertile sites for fostering a community and society that replicates these values. Challenges still remain around the correct implementation and use of these practices in schools and also, if, or how, restorative principles could be part of students’ formal education.

Keywords: restorative justice, restorative practice, restoring relationships

Introduction
Traditionally, school authorities have reacted to negative or anti-social behaviour through a punitive regulatory framework by exercising exclusionary practices (e.g. referrals, suspension and expulsions) (Morrison & Vaandering, 2012; Wearmouth, Mackinney, & Glynn, 2007; Varnham, 2005). Over the past decade however, with the increase of violence amongst students, schools are seeking an alternative to these ineffective and damaging exclusionary processes (Morrison & Vaandering, 2012). Many have turned to restorative practices. This approach draws on the concepts of restorative justice, which originated within the legal system and is defined by Zehr (2002) “as a response to wrongdoing and conflict that focuses on healing the resulting harm to relationships” (Cavanagh, 2007, p.31). This is achieved by shifting the focus from blame and punishment to responsibility, nurturance and restoration (Schumacher, 2014), within a relationship-based dialogue framework grounded in respect (Vaandering, 2014). The development of respectful and responsive relationships is fundamental to the establishment of an inclusive and engaging learning environment (Carrington & MacArthur, 2012; McGee & Fraser, 2012). Four of the most popular restorative practices include peer mediation, peer/accountability boards, conferencing, and circle time (Pavelka, 2013). The literature shows that adopting a restorative approach to relationships in a school environment has a numerous benefits for students, staff and the wider community. It enables students to learn social responsibility, is specifically responsive to Māori culture, and has the ability to transform the culture of a school. Challenges still remain around the correct implementation and use of restorative practices in schools and also if or how restorative principles could be part of students’ formal education.

Benefits for social development
Daily interactions in schools are all about human relationships, which Vygotsky (1986) regards as the key site of learning. Many researchers make the argument that schools are important contexts in which the citizens of tomorrow are to learn their ability to improve themselves and their relationships by developing their capacity to care (Carter, 2013; Drewery, 2014; Bruner, 1996). Schools that respond to the breakdown of relationships with restorative practices are fertile grounds for cultivating this kind of learning (Carter, 2013). As the literature shows it has often been thought that socially responsible behaviour is learnt through approaches that rely on a reward or punishment feedback system (Macready, 2009). This is where fear acts as a motivational leaver to prevent socially irresponsible behaviour resulting in ‘stigmatizing shaming’ (Braithwaite, 1989). This leads to the development of antisocial attitudes. Evidence that this method is effective in teaching...
social responsibility is not convincing. This is largely because it fails to engage with the offender and disallows them the opportunity to develop a social conscience (Macready, 2009; Varnham, 2005). Hence it robs students of the rich opportunity of learning, collective problem solving and growth (Morrison & Vaandering, 2012). Restorative practices, however, aim to deal with negatively impacting behaviours in a context of respect and understanding. It focuses on building empathy and interest while dismantling blame, humiliation and fear; following that, all members involved have a sense of agency and are treated as a valued members of the community (Drewery, 2014).

The key component for learning socially responsible behaviour and emotional literacy through restorative practices is emotional engagement. Engaging emotions gives participants the opportunity to nurture their human capacity for restitution, resolution and reconciliation, and growing a social conscience (Morrison & Vaandering, 2012). Specifically, participants learn important life skills of listening, cultivating empathy, managing anger, interpersonal sensitivity, self-efficacy and expressing genuine emotion (Schumacher, 2014). This supports the wellbeing of individuals and builds within them the capacity to better navigate difficult social situations to avoid or resolve conflict. Research shows that children who are taught social-emotional literacy are also more successful in schools and contribute positively to society (Schumacher, 2014). Long-term benefits include lower crime rates, with fewer re-offenses, and a more inclusive society (Varnham, 2005).

**Benefits for Māori students**

When it comes to discussing restorative justice within a Māori context, much of the literature turns to the flagship programme of the Ministry of Education, Te Kotahitanga (Berryman & Bateman, 2008; Drewery, 2014; Wearmouth et al., 2007). This programme recognises that student engagement with learning is enhanced when they are able to ‘bring their own culturally generated ways of knowing and learning’ to the classroom (Bishop & Berryman, 2006, p.5). In a Māori context, the maintenance of respectful relationships is encompassed in the idea of whanaungatanga and is considered “the basic element that holds all things Māori together” (Macfarlane, 2004, p.65). Above all, Māori students learn best when they have trusting relationships with their teachers (Drewery, 2014). Hence in order to increase the level of Māori achievement, teachers and schools need to adopt pedagogies that integrate Māori concepts and worldviews and restore broken relationships (Bishop & Berryman, 2007; McGee & Fraser, 2012).

The literature highlights the similarities of restorative practices with Hui whakatika, a meeting held within Māori cultural protocols (Berryman & Bateman, 2008; Wearmouth et al., 2007). The four concepts crucial for an effective Hui whakatika are reaching consensus, reconciliation, examination and restoration, all within the framework of the principals of tika (justice), pono (integrity) and aroha (love) (Macfarlane, 1998).

This is very similar to the framework that guides contemporary notions of restorative justice. Where they differ is that the Hui whakatika process is able to be determined by and for Māori, following specific traditional protocols (Berryman & Bateman, 2008). Even so, schools that adopt a restorative justice orientation to confront violence and amend broken relationships are able to provide a space for Māori students to bring their own ‘culturally generated ways of knowing and learning’ into the school environment. This gives Māori the capacity for self-determination in a culturally responsive context. The importance of this is developed further by authors in turning to the principles of partnership, protection and participation within the Treaty of Waitangi, indicating that they are brought to life in schools were restorative practices and Hui whakatika are implemented (Berryman & Bateman, 2008; Drewery, 2014).

**Benefits for school culture**

Schools that have whole-heartedly embraced a restorative justice approach to dealing with conflict and anti-social behaviour have noted a significant change in their school culture (Drewery, 2014; Cavanagh, 2007). By adopting restorative practices, schools create an atmosphere where daily student-staff, student peer, and school collegial interactions are built on mutual trust and respect (Cavanagh, 2007). As a result a culture of care and peace is permeated throughout the school and negative feelings of fear, anger, blame and exclusion are minimised (Morrison & Vaandering, 2012). This can have a significant impact on increasing the safety of schools and the well-being of all its members (Cavanagh, 2007).

Creating a school-wide focus on respectful relationships is also a powerful tool to establishing a culture of inclusion (Drewery, 2014). Firstly it removes exclusive punitive forms of punishment and in turn creates space for different perspectives to be shared and understood. This allows offenders to ‘walk in the shoes’ of those whom they have hurt. In doing so participants understand that people have different viewpoint and learn how to reconcile these differences (Drewery, 2014). These are crucial skills for living in a community that respects diversity and promotes inclusion. This is specifically important in a culturally diverse New Zealand society and in ensuring ‘a braided river’ approach between Māori and Pākehā cultures (Penetito, 2010).

Some have regarded this paradigm change in school culture as a shift away from a space that exercises social control and is governed by rules, to one that is relationship based and nurtures social engagement (Morrison & Vaandering, 2012). This is accounted to the breakdown of hierarchical power structures in schools. By using restorative practices, students who have caused some form of harm do not simply await punishment from a figure of authority, but rather they are able to exercise agency and participate in collaborative decision-making to find a solution. This creates a balance of power and is important for accurate citizen education and true representation of a democratic society (Varnham, 2005).

**Challenges**

One of the biggest challenges to restorative justice being implemented in schools is when the process is used in a behavioural management context, over one of engaged, inclusive pedagogies (Vaandering, 2014). Doing this simply results in the reinforcement of punitive, hierarchical power structures of schools. Hence, schools need to have a whole-hearted commitment to the implementation of restorative justice practices and provide the correct training for all staff members (Pavelka, 2013).

Secondly the challenge remains of how or if restorative practices and its principles should be taught as part of the formal curriculum (Carter, 2013). Students are able to learn aspects through informal settings simply by observing the way that their teachers, who uphold the values of restorative justice, interact...
with others or deal with difficult social situations (Carter, 2013). This may not be sufficient for students and there are suggestions for further research as to how teachers can best incorporate education around restorative practices as part of the formal curriculum.

Conclusion

A restorative justice orientation towards dealing with violence and anti-social behaviour in schools creates a culture of respect, care and inclusion. Students are able to nurture and develop a sense of personal agency and social responsibility, contributing positively to an inclusive and safe society (Schumacher, 2014; Wearmouth, et al., 2007). Māori students benefit largely from restorative practices as they align with the Hui whakatika process, allowing them the space to incorporate their ways of knowing and learning (Berryman & Bateman, 2008). Parallels are also seen with the principals upheld in the Treaty of Waitangi.

Challenges to restorative practices remain where the process is misused by applying it in the traditional punitive framework. Hence it is important that schools have a wholehearted commitment to correctly adopting the practices (Vaandering, 2014). It is also important that schools consider how education around restorative practices is undertaken. The question remains if or how it should be done as part of the formal curriculum (Carter, 2013).

References

Teaching controversial issues and developing citizenship among students

Olivia Proctor
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
The New Zealand Curriculum (2007) puts forward the goal of promoting lifelong learning. A teacher may work as mediator to facilitate this goal by providing students opportunities to explore issues which relate to society and real life experiences. Teaching and discussing controversial issues is an essential element for the development of citizenship education (Misco, 2012). Citizenship education may be defined as teaching students to be critical thinkers, engage and participate in matters concerning society (Chikoko, Gilmour, Harber & Serf, 2011). Simply discussing controversial issues in the classroom we can begin to develop these skills. However ‘what is a controversial issue’ is subject to change largely due to the wider context in which a school may lie (Misco, 2012). Teachers play a crucial role in citizenship education and how controversial issues may be addressed within the classroom (Moore, 2012). Recent studies have shown teachers understand the importance of teaching controversial issues. Yet, many feel uncomfortable and ill-equipped to effectively address these issues within the classroom (Byford, Lennon & Russell, 2009) resulting in a loss of opportunity to develop citizenship among students (Byford et al 2009).

Keywords: teaching, citizenship, controversial issues, education

Introduction
A controversial issue may be seen as an issue in which there is no universal or definite held point of view. These issues commonly divide groups, as one group may offer a conflicting explanation or conclusion. This could be regarding who is responsible for an issue or conflict arisen; how a problem may be resolved; what action should be taken (Chikoko et al., 2011). People may often feel personally connected with these issues and emotionally tied to such topics (Misco, 2012). The role a teacher plays when addressing issues such as these is pivotal. Conducting classroom discussions surrounding controversial issues is a skill that requires attention and practice (Chikoko et al., 2011). Chikoko et al. (2011), Byford et al. (2009), Barton and McCully (2007) speak to the value of teachers facilitating these conversations in a healthy way. Teachers need to be aware of the influential role they have (Hattie, 2013). Commonly it is seen that many teachers feel they lack the skills to conduct these types of discussions. In some cases teachers also fear the impact of addressing such issues may have upon their careers (Byford et al., 2009). In addition to this due to time constraints the demands of assessment and qualifications citizenship and addressing controversial issues effectively becomes side-lined (Byford et al., 2009).

Naturally Social Sciences tends to be the curriculum area that commonly addresses controversial issues. However controversial issues are not exclusive to the Social Sciences (Byford et al., 2009). Barton and McCully (2007) focus on teaching controversial issues in history. However the recommendations they provide for teachers when addressing controversial issues; dealing with emotion, mixing it up and finding support; may be applied to other curriculum areas (Barton & McCully, 2007). Moore (2012) also addresses the role in which a teacher plays. By creating a classroom environment based on trust and harmony it may better facilitate the process of addressing controversial issues (Moore, 2012). Therefore, how a classroom environment is set up may help facilitate the discussions of controversial topics (Moore, 2012). Teachers should set an example of the type of behaviour they expect and allowing the expression and safety to discuss such topics in a healthy way (Byford et al., 2009). Furthermore, it highlighted the importance of teachers having knowledge of their wider communities beliefs, values and history (Barton & McCully, 2007).
Schools role in citizenship

Citizenship education is seen as the providing young people with the skills, knowledge, and understanding that will allow them to participate in public life (Chikoko et al., 2011). Citizenship within school curriculum will provide students with opportunity to understand and learn their rights and responsibilities as active citizens (Chikoko et al., 2011). By incorporating controversial issues as a part of citizenship education, students are able to consider a wide range of political, social, ethical and moral problems related closely to real life and society (Chikoko et al., 2011). Much of the literature reviewed highlights the value of learning such skills and knowledge. If school places an importance on citizenship education it will make the implementation of such programmes in the classroom easier (Chikoko et al., 2011).

A school can often be seen as a reflection of society. Therefore encouraging students to be active participants at school can be highly beneficial (Barton & McCully, 2007). However addressing controversial issues and teaching citizenship cannot be up to the teacher and school alone. Chikoko et al., (2011) make note of a growing neo-liberal ideology that can greatly influence curriculum and pedagogy. A teacher must be aware of outside influences such as these before deciding to address controversial issues and citizenship. Misco (2012) puts forward the idea that schools should challenge local traditions. By developing skills such as critical thinking and decision making we are able to begin to challenge traditions, which may be viewed as controversial. However it is important that students are well informed and considerate.

Creating life-long learners

Life-long learners as defined by the New Zealand Curriculum are “literate and numerate critical and creative thinkers, active seekers, users, and creators of knowledge informed decision makers” (M.o.E, 2007). This is closely aligned with the concept of citizenship education. Barton and McCully (2007) suggest that students who regularly take part in classroom discussions about controversial issues are usually more likely to maintain an active role in discussion making throughout their life. Simply by discussing controversial issues citizenship becomes able to be implemented in schools. However as alluded to in much literature the community and wider societal influences can make this simple task difficult to execute successfully (Misco, 2012). Hence the importance of working alongside the community and having an understanding of their beliefs, may assist with the overall success of a citizenship programme in schools (Moore, 2012).

Experience and interactions can be a powerful and meaningful way to engage in education (Eisenstein, 1982). Working with the community with regard to controversial issues and citizenship can be a powerful and meaningful tool (Chikoko et al., 2011). Although it appears teachers may fear teaching controversial issues. By working in collaboration with parents and the wider community can be key in ensuring its success for developing citizenship. Eisenstein (1982) highlights the concept of teaching controversial topics could contribute to a change in education purposes and practices. This change has the potential to have a ripple like effect, as students will have the potential to be able to act as informed agents of change (Eisenstein, 1982). Addressing controversial issues can provide the much needed skills to make citizenship education meaningful (Barton & McCully, 2007).

Future areas of research

Future areas of research could include a New Zealand specific approach to controversial issues and effective pedagogy. A multi-cultural country such as New Zealand must take into account the diversity among students when addressing such topics. Although many teachers agree in the importance of citizenship and addressing controversial issues. There must be support for teachers through this process. Also we must create and maintaining strong community ties by addressing such issues effectively.

References

How much is too much? Partnerships and power relationships between parents and schools

Erin Smaill
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
Developing effective partnerships between parents and teachers are recognised as an effective way of supporting and maintaining student achievement. This critical literature review explores the power relationships that underpin such partnerships and greatly contribute to their success. It will begin by recapping the history of parent-teacher power relationships and looking at examples of the arguments both for and against more parental power in schools. It will then look at school board of trustees as a particularly New Zealand example of attempting to improve parental power and discuss why both these and parent-teacher interviews may fail to meet their projected goals. Finally it will elaborate on some of the suggestions that have been made on improving the power relationships between parents and teachers in order to support partnerships that benefit the student.

Keywords: Power-relations, Parent-school relationships, Spheres of influence, Parental involvement

Introduction
In a New Zealand Herald article published earlier this year, Linley Bilbey describes a growing problem facing schools across the country. Following the high profile legal case involving two rowers from St Bede’s College in Christchurch an increasing number of parents have threatened legal action against schools when their children are not selected for sporting, musical and academic teams that represent the school. According to Bilbey (2015), this threatens to undermine the authority of schools, principals and teachers. To me this speaks to a bigger issue at play in education, the power relationships that exist between, schools, teachers and parents. Who has the right to decide what happens at school and where do school and home spheres of influence begin and end?
Traditionally the power relationships between schools and families were particularly one sided. The attitude was that teachers as professionals knew best and that parents should accept their decisions; school and home were separate (Brooking, 2007; Nixon, Martin, McKeown & Ranson, 1997). However now it is widely accepted that home and school have a much more overlapping sphere of influence (Lightfoot, 1981) and that parent involvement in education leads to better social and academic outcomes for the student (DaRos-Voseles, Ede & Fillmore, 2014; Minke, Sheridan, Kim, Ryoo & Koziol, 2014; Mutch and Collins, 2012).

Concerns about parent involvement
Parental involvement in schools can take many forms, from participating in learning and volunteering for sport coaching to school decision making (Casanova, 1996, DaRos-Voseles, Ede and Fillmore, 2014). However, teachers tend to be more comfortable with parents having control of areas that exist outside of the classroom, such as fundraising (Todd and Higgins, 1998). Casanova (1996) expresses concern about the participation of parents in schools warning that parental involvement should not mean parental control of schools. Some parents wish to have a greater level of control over their child’s education experience, including what is taught and what grades their child gets. Such parents can have great influence when they are involved in school boards where they push for actions that support their own preferences rather than represent the desires of the school community. Casanova (1996) suggests that by choosing to send their child to school parents need to make a commitment to trusting the ability of teachers and school leaders to successfully manage their child’s education. It should be noted that this article is a meta-analysis which draws information from a range of other sources including research articles and opinion based web pages. Although Casanova’s article is now relatively outdated, being published in 1996, it still highlights some of the potential issues that may arise when
parents are over involved in schools and begin to control their operation.

**Emphasis on parent involvement**

While some authors are hesitant at the idea of increased power for parents in schools, others argue that parents need to have more power for the sake of their children. Both Bishop (2003) and Brooking (2007) describe the importance of parents having a greater influence in schooling for Māori and Pacifica students. Power imbalances are a major issue in both New Zealand’s education system, and society at large, due to our history of colonialism. This influence leads to Māori and Pacifica students feeling isolated from their education which causes them to devalue its worth (Bishop, 2003). In order for the current power status to change the first step needs to be taken by the dominant middle-class European culture to provide minority families with more information about their child’s education. Both parents and students need to have more say in the decision making of school and classroom, in a way that can be clearly understood (Bishop, 2003). Bishop’s credibility stems from his work which improves the achievement of Māori students in education. This analysis is based on a range of sources including studies on current practices at Māori-medium schools and his own earlier research (Bishop, 2003).

**Board of Trustees**

The structure of New Zealand’s education system shows the importance we place on parental involvement in schools. In October 1989 a new policy, dubbed “Tomorrow’s Schools”, was introduced to allow communities to create schools that better suited their needs and values (Robinson, Timperley, Parr & McNaughton, 1994). This led to the formation of the current system of a school board of trustees, elected to oversee and support the effective management of the school (Dyer, 1998).

Prior to this many parents felt powerless to influence what happened in their schools so this system was designed to facilitate a higher degree of partnership between teachers and the community (Robinson & Ward, 2004). Dyer (1998) points out that school boards are elected by the community, but specifically by the people who have a vested interest in the management of the school, parents. They are then responsible for upholding the school’s vision which expresses the vision the community holds for their children’s education (Fiske & Ladd, 2001). Despite these well considered goals for teacher and community partnership Robinson and Ward (2004) suggest there are some difficulties associated with the current way boards of trustees work.

Through interviews involving hypothetical situations that a school board might face Robinson and Ward (2004) found that successful management tends to take priority with little consideration given to how managerial decisions may affect the quality of education. They suggest that a contributing factor to this is the small number of trained educators that are included in school boards, which reduces the influence of educational ideas on decision making (Robinson & Ward, 2004). While successful management is important, school management and educational practices should be considered together rather than independently in order to best meet the needs of the students and the community.

**Power sharing**

Parent-teacher interviews are intended as a place where parents and teachers can collaborate to build the best possible outcome for their students. It is often the only opportunity that parents and teachers have for face to face communication, especially at secondary school level. However parent-teacher interviews also provide a good example of how parent-teacher power relationships function in schools. Although they are intended to be a productive exercise, very often parent-teacher interviews achieve little because of their ritualistic nature (Lightfoot, 1981, MacLure & Walker, 2000). MacLure and Walker (2000) describe the majority of parent-teacher interviews as being based around a “diagnosis” model where parents sit passively while the teacher informs them of the achievement of their child based off test scores and results. In this situation parents feel as though they have very little power compared to the teacher, who appears as the expert. Parents who feel powerless may attempt to reassert themselves by reminding the teacher of their professional or subject specific knowledge (MacLure & Walker, 2000). When parents finally get to discuss the issues they feel are important there are often conflicting viewpoints that arise (MacLure & Walker, 2000) which causes both sides to act defensively. MacLure and Walker based their study on recorded parent-teacher interviews from five different United Kingdom secondary schools which represented a range of sociocultural background, assessment type and parental attitude to education. In total they included 184 different consultations in their study and although students were present at some of these meeting they focused primarily on the parent and teacher contributions to the discussion. These sources indicate that while parent-teacher partnerships are fully espoused by schools, the follow-through tends to be poor because of the power relationships at play.

**What needs to change?**

In order to develop working partnerships between parents and teachers it is important to take power relationships into account. Minke, Sheridan, Kim, Ryoo and Koziol (2014) acknowledge that because of the personal and high stakes nature of education the relationships between parents and teachers can be highly emotional which adds to the complexity of such partnerships. Although teachers are often seen as imposing figures, MacLure and Walker (2000) point out that often parents and students help to construct teachers as authoritarian figures by conforming, and expecting teachers to conform, to social stereotypes. Regardless, equality and respect needs to be an integral part of the parent-teacher relationship (Todd & Higgins, 1998). For the partnership to work parents need to display a level of trust in the teacher as a trained and professional educator (Casanova, 1996). Moreover teachers need to respect the place of parents as complementary and valuable educators of their children, after all learning happens within the home as well as at school (Brooking, 2007; Garbacz & Sheridan, 2011; Nixon, Martin, McKeown & Ranson, 1997).

Following qualitative research into the way parents and teachers saw their own and each-others role in the parent teacher relationship, Ludicke and Kortman (2012) describe some guidelines for making it work. They suggest that firstly there needs to be an acknowledgement from both sides of their mutual goal, the best possible outcome for their student and that both have an important role to play in this. There then needs to be recognition that these roles are dynamic and there may be shared
responsibilities. Finally there needs to be a mutual decision made about the boundaries that exist within the partnership in order to more clearly define the rights and responsibilities of both parents and teachers (Ludicke & Kortman, 2012).

References


Homework and continued learning at home: How should parents be involved?

Aimee Gledhill
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract

Literature surrounding parental involvement and homework is controversial. This literature review considers how parents should be involved in homework, and reflects on initiatives implemented to support parental involvement. It is mostly agreed that parental involvement is more beneficial through a supporting role, as opposed to actively ‘helping’. Furthermore, this involvement is more beneficial to achievement when conducted in the home, as opposed to in the schooling environment. Initiatives such as Learning Platforms and various forms of school-organised parental involvement programs are found to be successful in building partnerships, but often do not allow complete input from parents. Future research suggestions focus on considering the results across ethnicities within the New Zealand context.

Keywords: Homework, Parental Involvement, Parent-Teacher Partnership, Achievement

Introduction

A contemporary education issue surrounds the topic of homework, particularly the impact of parental involvement on achievement. In general, research suggests homework to be a contributor to student achievement as it serves as a way to reinforce and continue learning from school at home (Hoover-Dempsey et al., 2001). Homework can also provide a method of opening the lines of communication between parents and their child in regards to stimulating learning conversations (Hoover-Dempsey et al., 2001). However, some research contradicts this theory and maintains that homework can lower social engagement and cause tension in the relationship between parents and their child (Cooper, Lindsay, & Nye, 2000).

Within the research it is evident that in some cases, parental involvement in homework is beneficial to achievement, yet in other cases it does not have an impact, or can in fact, be detrimental (Balli, Wedman, & Demo, 1997). These conflicting results strongly suggest that the question is not whether parents should be involved in their child’s homework, but instead ‘how should parents be involved?’ This idea is supported by Crozier (1999) who also suggests that there is a gap between the expectations of parents and teachers surrounding homework. Globally, education systems and schools have tried various methods to support parents to be involved in their child’s learning in a positive way.

Parental involvement in homework

While most parental involvement research focuses on the perspective of schools and parents, Clinton and Hattie (2013) researched New Zealand students’ perspectives of parental involvement. Results indicated that parents discussing the future, having high expectations, talking about school, and talking to teachers were strong factors in achievement. It was found that all of these factors led to a greater liking and self-efficacy of math and reading, and high expectations resulted in higher reading achievement. Results also indicated that parents talking to the teacher had a negative impact on reading achievement. However, this could also imply that the parents spoke to the teacher because their child had low achievement. Clinton and Hattie (2013) conclude by emphasising the use of parent involvement programs to teach parents schooling language so they can participate in learning conversations with their child at home.

These results were in line with Robinson, Hohepa, and Lloyd’s (2009) research, which found that homework surveillance and direct parent help with homework had a negative impact on children’s learning. Although they found that parent-child communication about learning, support for homework and parental encouragement had a positive impact. These studies imply that parental involvement in homework is most beneficial
through a support role, as opposed to physically sitting down and helping with homework. These ideas can be complemented by Pomerantz, Ng, and Wang's (2006) literature describing the implications of mothers’ mastery-oriented involvement on achievement in children. This type of involvement is very closely related to the factors of involvement that Clinton and Hattie (2013) describe, in that mastery-oriented practices involve emphasising the importance of effort, promoting positive emotions toward homework and learning, and encouraging their child to give difficult activities a go (Pomerantz et al., 2006). This involvement resulted in an achievement increase among children who initially had negative perceptions of their competencies.

Lange and Meaney (2011) draw upon Lange’s (2007) research of children’s experiences at school to demonstrate negative outcomes of direct homework involvement by parents. Within this, they focus on socio-culturally analysed narratives of two young girls describing the impact of direct parental involvement with their math homework. One girl’s description implied the relationship between her and her mother during homework was similar to that of a teacher and student. This resulted in a positive outcome. Conversely, the other child shared that her parents ‘helped’ her due to her low math achievement. This resulted in a tension between the parents and child, and frustration causing inability to complete the homework. As a result, the child only became competent in mathematics once her parents allowed her to work through it herself. This could suggest that the reason behind parent involvement and the student’s attitudes toward math, play a part in the outcome of direct parental involvement. Due to a small sample size, the validity of this research could be enhanced through further research of a more quantitative nature.

Harris & Goodall (2008) also consider the impact of parental involvement on student achievement. Similarly to Clinton and Hattie (2013), their research suggests that engaging parents in learning at home has beneficial impacts on achievement. Furthermore, results demonstrate this is more beneficial than parental involvement within the school. Also highlighted, is the difference in perspectives of parents and teachers - particularly around the idea of what ‘support’ should entail. While parents and children place value on parents providing moral support and a positive attitude toward education, teachers value parental involvement with the school, resulting in better behaviour. Harris and Goodall (2008) conclude by wondering if parents are aware of the influence they have in their child’s achievement and suggest that schools need to do more to support parental engagement in learning at home.

**Schools supporting parental involvement**

Globally, schools are utilising technology to provide access for parents to their child’s learning information. Selwyn, Banaji, Hadjithoma-Garstka and Clark (2011) discuss how learning platforms are being used to support parental involvement - predominantly through making home-school communication easier, sharing class learning, and informing parents about homework, grades and behaviour. However their results revealed mixed feelings from parents, with some parents feeling positively involved, but others unsure how to fully utilise the technology and viewing the platform as one-sided. Although a diverse range, with case study sample sizes of only six primary and six secondary schools, further research would be beneficial to strengthen outcomes. It is likely that as technology progresses, learning platforms could become a valuable tool in parental involvement, providing they promote equal partnership and relevant training is provided. Hornby and Witte (2010) agree with supporting parental involvement and communicating expectations through parental involvement programs to teach parents the best way to be involved in their child’s learning. They strongly advocate for school-organised programs and policies after findings suggested a severe lack of written policies around parental involvement programs. These programs would focus around involvement at home such as supervision of homework and discussing subject choices, as opposed to school involvement. Jeynes (2007) also supports the use of parental involvement programs and highlights that the effectiveness of these is relevant across ethnicity, gender and age. Crozier and Davies (2007) suggest that ethnicity is often ignored within parental involvement strategies. Therefore, Jeynes’ (2007) findings could warrant further research within the New Zealand context to see if this applies to New Zealand ethnicities.

However, it could also be argued that written policies may not be beneficial to parental involvement. An instance where this held true, was when the United Kingdom implemented home-school agreements in 1998 as a way to bridge the gap between parent and school expectations around parental involvement. Literature by Gibson (2013) investigating the impact of the agreements, expresses the idea that parents signed out of moral and social obligation but saw it predominantly as the school ‘ticking the box’. His findings also suggest that while the content of the agreement would lead to positive outcomes, the fact that it is presented as a contract takes away from the genuine intentions, making it a contract with little impact.

A parental involvement program that could be seen as more successful is the Ministry of Education’s Home-School Partnership: Literacy Programme. This is a partnership of teachers and families implemented to share and promote learning practices occurring at home, and at school, with meetings taken in ethnic groups’ first languages and involving community leaders (Brooking & Roberts, 2007). When evaluated by Brooking and Roberts (2007), the model was found to form effective partnerships, increase opportunities for children’s learning, and positively influence attitudes and achievements. However, the findings also expressed the view that the ‘partnership’ was very one-sided and did not offer enough opportunity for parents to provide input. Therefore, further development in this aspect of the program would be beneficial.

On the contrary, parents may not have to be directly involved to help their child achieve. Literature supports this by suggesting that homework help centres can lead to an increase in children’s achievement (Cosden, Morrison, Albanese, & Macias, 2001). Cosden et al. (2001) discussed how after-school homework programs can provide a safe environment with homework support for learners who are at risk of failing, or if English is not spoken in the home. However, it could also be argued that in enrolling their child in homework help, parents are expressing high expectations surrounding education, which according to Clinton and Hattie (2013) is a form of positive parental involvement.

**Conclusion**

Within the contemporary issue surrounding parental involvement in homework, it is questionable as to how parents should be involved. Relevant literature gives the impression that
parental involvement in homework is beneficial. However, this involvement is better conducted though high expectations, support, encouragement, and stimulating learning conversations, than by actively assisting directly with the homework. Active assistance could be detrimental to learners’ achievement and cause conflict within the parent-child relationship. For teachers and schools supporting parental involvement, expectations between parents and teachers must be clear to avoid a gap in expectations. Although, to go so far as making these expectations written policy can detract from the genuine intentions. Learning platforms and school-implemented parental involvement programs offer opportunities to bridge the gap between home and school learning. However these strategies must be a partnership, with parents encouraged to contribute equally with teachers and sufficient training provided where necessary.

Due to limited New Zealand-based research, it would be beneficial to conduct further research into how parents can best be involved at home in their child’s learning within the New Zealand context. Furthermore, it would be of use to look at these results across ethnicities to identify opportunities to increase achievement through parent-teacher partnerships of Māori, Pasifika and other priority learner groups.

References

Barriers to parental involvement in their children’s education

Heather Humphrey-Taylor
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
While parental involvement in students’ education has long been known to be effective and is encouraged by both the literature and policy, consistent parental involvement has not yet been achieved. This review investigates potential barriers to parental involvement, including those for minority and disabled parents, and offers suggestions to overcome these barriers. Moreover, differences between rhetoric and the reality of parental involvement, including contradictions at the political level, are challenges that are discussed. Finally, the different types of parental involvement (home-based and school-based) are evaluated for their effectiveness on student achievement.

Keywords: Parental Involvement, Parent-school Relationships, Minority parents, Parents with Disabilities

Introduction
Parental involvement in their children’s education has long been noted for its effectiveness in the child’s academic achievement (Fan & Chen, 2001; Hill & Taylor, 2004; Jeynes, 2003, 2005; Pomerantz, Grolnick, & Price, 2005) (although the extent to which involvement helps is debatable (Pomerantz, 2007). Generally parental involvement is broken down into two categories: school-based involvement (e.g. parent-teacher conferences and volunteering at the school) and home-based involvement (e.g. homework help and engaging their children in intellectual activities). Benefits go beyond students’ academic achievement, including improved teacher-parent relationships, attendance, parental confidence and parental interest in their own education (Pomerantz, 2007; Hornby & Lafaele, 2011). However, not all parents are equally involved in their child’s schooling, and this review seeks to clarify some of the barriers to parental involvement in their child’s education.

Parental Involvement
Mutch and Collins (2012) reviewed barriers to parental involvement in New Zealand based on six key factors found by the Education Review Office external evaluation of over two-hundred schools (Ministry of Education, 2006). They claim that historically parental involvement is well entrenched in the New Zealand schooling system, but that an increasing number of immigrants, changes in family structure, impacts of educational, social and economic reforms, and changes in technology have all influenced parental involvement. There is a general commitment in New Zealand to involving whānau in partnerships with schools, however there are still gaps in having consistent involvement of families in education. It is not just how the school went about engaging parents, but also the spirit in which that engagement was sought that led to successful engagement, including shared values and mutual respect, collaborative approaches and effective communication. Six factors were found to influence the contributions of parents to the school: Vision and commitment from school leaders, time and energy invested in building relationships, the clear expectation that partnership was in the child’s best interests, a positive school culture including a commitment to inclusiveness of diversity, networking with community groups, and effective communication strategies. Where these partnerships were fostered and working well, the report claims there were many benefits to students, including maximised learning time, and a positive atmosphere to the school. However, other than suggesting that school policy needs to reflect the desire to work within these key factors, the report does not suggest other methods of breaking down barriers to parental involvement.

Involvement of Minority Parents
Yanghee Kim (2009) investigated the lack of involvement of minority parents in their children’s schooling. Often viewed as being less interested in their children’s education, research
suggested that home-based involvement was no less for minority families than for other families, but that it was in the area of school-based involvement that participation was lacking. Individual variables were identified as contributing to why minority parents do not volunteer at their children’s schools, including language barriers, differences in child-rearing practices, and lack of social networks. However, Kim argues that these are all individual barriers and that it is the school system that creates a barrier for minority parents to become involved in schooling. Attitudes of the school are often a barrier, with Kim suggesting that negative attitudes towards the capacity of minority parents, a lack of positive communication, a lack of diversity of parental involvement programs and school policies and leadership all play a role in influencing the participation of minority parents. While individual barriers, such as language, definitely influence parental involvement, these barriers are time-consuming to break down and removing school barriers to parental involvement are more within the realm of what is achievable for the schools. The biggest change suggested by Kim is that of school policy, emphasising family involvement in the school and administrative support for teachers to implement parental involvement.

Involvement for Disabled Parents

Barriers also exist for parents with mental and/or physical disabilities. Stalker, Brunner, Maguire, and Mitchell (2009) conducted a study of 24 parents with disabilities in Britain, chronicling their experiences and both barriers and positive actions by their children’s schools to involve them in their children’s education. Perceptions of disabled parents were found to be the greatest barrier to involvement in their children’s education. Disabled parents involved in the study said they were often perceived as lacking parenting skills and often not consulted about policies or services, and that schools often did not see it as their duty to involve disabled parents. While physical accessibility was an issue for some parents, the overwhelming majority spoke of the perceptions of the school and its staff as being the biggest barrier. The investigation concluded that there was an “urgent need for local authorities to implement disability equality training, including information about anti-discrimination legislation” in schools for all staff. Knowledge of a parent’s disability was at the forefront of the solution, but no conclusion was made as to the best method of obtaining such information or how many within the school should or needed to know. Suggestion was also made for parents to inform the schools of support they would require in order to be involved in their child’s schooling (e.g. accessibility, Braille books sent home alongside reading books), and parents appreciated a flexible, pro-active approach on the schools part. The parents studied indicated that they were more likely to disclose their disability if doing so would have a positive impact on their child’s education.

School Policy vs Reality

Many of the other articles investigated determined that school policy is at the forefront of what needs to change in order to remove barriers to parental involvement but, as Hornby and Lafaele (2011) determine in their article, there is considerable variation between rhetoric and reality in parental involvement. Simply changing policy is unlikely to involve more parents in schools unless those policy changes are backed up with action. The gap between rhetoric and reality is due to factors at the parent and family, child, parent-teacher, and societal levels acting as barriers. Individual parent and family factors include parents’ beliefs about parental involvement; if parents believe their only responsibility is to get their child to school, they are unlikely to ever become involved in their child’s education. Similarly, if parents doubt their ability to help children, for example due to low-levels of parental education, they are also unlikely to involve themselves in the school community. Parents need to feel that their involvement is valued by schools, and therefore prefer to be invited to help rather than volunteer. More practical considerations such as parents who work full time or have large families may find time is a barrier to their involvement in the school community. Class, ethnicity and gender also can act as barriers, with white middle class values of many schools ignoring diversity. Schooling is also often considered a ‘mother’s world’.

As children age, involvement of parents tends to decline. This is in part due to children finding their independence and being less interested in having their parents involved in their lives, however at older ages children still desire their parents to be involved in things such as homework. Children who struggle with school are more likely to have their parents involved in their education as this is often sought by the school. Similarly, students who are doing well at school are likely to have more involved parents as their involvement is a pleasure. Conversely, those with children with behavioural challenges are less likely to be involved. Common goals and agendas between teachers and parents are more likely to result in parental involvement. However schools are more likely to be focused on parents as a method of reducing costs and addressing cultural disadvantage, while parents are more often focused on improving their children’s performance. Attitudes to the relationship between education and schooling also play a part, where parents who believe most of their child’s education comes from schooling being less likely to be involved in their child’s education. Historical attitudes to parental involvement, where it consisted mostly of fundraising activities, also form a barrier. At a political level contradicting information, such as a push for parental involvement while policy leans towards competition rather than collaboration, can hinder parental involvement. With little or no funding given to schools for the development of parental involvement, the political push for parental involvement appears to be nothing more than talk.

Effectiveness of Parental Involvement

Pomerantz and Moorman (2007) investigated the type of parental involvement that was effective in students’ education. While they acknowledge that educational policy has a key goal for increasing parental involvement, they focused on how effective parental involvement was in education. While Pomerantz and Moorman claim that school-based parental involvement is shown to have a positive effect on student achievement academically and often foreshadowed students achievements later in life, home-based parental involvement was a different matter. While indirect parental involvement at home (e.g. reading with their children) also had a positive effect, the outcome of parental involvement at home directly related to school based activities, such as homework, was less clear. Several studies actually concluded the more parents were involved in their children’s homework, the less well students were performing at school. However one study showed that
once the children’s performance was monitored, their level of achievement increased with persistent homework help. Other studies determined that there was no added benefit of parents helping with homework. That the usefulness of parental help in the home with school-based activities is doubtful is of concern, as this is where the majority of parents are involved in their children’s education, and warrants future investigation.

**Conclusion**

Overall, the articles reviewed agreed that school-based parental involvement in children’s education had a generally positive outcome for student achievement. However, while most indicated that it was school policy that needed to change in order to involve more parents, Hornby and Lafaele (2011) stress that school policy means nothing unless it is backed up by action on the school’s part to include parents and make them feel that their contributions are worthwhile.

**References**


The effects of family variables on school bullying

Graeme Jones
College of Education, Health and Human Development, University of Canterbury, New Zealand

Abstract
Bullies, victims and bully/victims were more likely to experience the authoritarian style of parenting. The authoritative parenting style was significant in creating non-bullies and non-victims. This critical analysis examines eight studies and considers the effects of family variables, including secure and insecure attachment, family disharmony, and socioeconomic status on school bullying.

Keywords: School bullying; families; parenting styles; socioeconomic status

Introduction
New Zealand has one of the highest rates of bullying in Primary schools compared with other countries. An international mathematics and science study reported that 68% of Year 5 students were victims of bullying either weekly or monthly at school (Caygill, Kirkham, & Marshall, 2013). Bullying is defined as threatening behaviour repeated over time and includes physical, verbal, and non-verbal harassment (Education Review Office, 2007), and more recently cyber bullying (Boyd & Barwick, 2011).

School-based interventions have proven to be moderately successful (Bowers, Smith, & Binney, 1994) however, there is a need to understand how children become bullies/victims and non-bullies/victims (Bowers et al., 1994). The family as a child’s primary social agent (Papanikolaou, Chatzikosma, & Kleio, 2011) provides some insight into students’ adoption of specific bullying and victim roles.

This literature review will discuss parenting styles with reference to cohesion of the family unit. It will critically analyse eight peer-reviewed studies from an overseas context, with a specific focus on the effects of family relationships on bullying roles. The community environment is discussed, and whether socioeconomic status (SES) is a determinant of bullying behaviour is addressed.

Types of Variables


Authoritative Parenting - supports children’s independence and autonomy (Ahmed & Braithwaite, 2004). This type of ‘responsiveness’ parenting makes provision for children’s needs and positive communication (Georgiou, 2008).

Attachment Theory - the type of interactions between the child and the caregiver that develop into either secure or insecure relationships (Bowers et al., 1994).

Family disharmony - relates to the lack of cohesion within the family environment. In less cohesive families, family members are ambivalent about supporting each other in relationships (Ahmed & Braithwaite, 2004).

Effects on Roles in Bullying
Studies have shown the two types of parenting styles discussed (authoritarian & authoritative) and attachment theory, impact on children’s development and the roles children take within peer relationships at school. In studies that examined parenting behaviours, Ahmed and Braithwaite (2004) found bullies were more likely to experience the authoritarian parenting style. Furthermore, these authors and Aslan (2011) found that authoritarian family environments also produced victims. This correlation between the authoritarian style and both bullying and victim roles is supported by Papanikolaou et al. (2011) and Aslan (2011) who noted that mothers who display authoritarian type punishment without justification increased the risk of their children becoming bullies at school. Moreover, the authoritarian parenting style produced a category of children who identified as bully/victims. These are children who engage in bullying behaviour and are the recipients of bullying (Ahmed & Braithwaite, 2004). This was supported by Shields and Cicchetti (2001) who reported that children who were abused by their caregivers had a greater chance of becoming bully/victims.
Studies found the authoritative style of parenting in which children experienced non-stigmatised shaming and had positive relationships with their parents meant children were less likely to become bullies (Ahmed & Braithwaite, 2004). This notion is discussed by Aslan (2011) who examined relationships between parenting behaviours and self-esteem and found that mothers’ positive relationship with their children resulted in higher self-esteem and self-confidence. Conversely, negative relationships existed between strict parental controls and self-esteem. Bowers et al. (1994) described both bullies and victims having low self-esteem and a correlation between low self-esteem and victimisation. The author implies that a positive relationship with parents has an impact on bullying behaviour, as students were less likely to become bullies and victims. While this is not directly stated the author alludes to this idea.

In a study by Finneegan, Hodges and Perry (1998) to test whether effects of parenting behaviours were different for boys and girls, they found that overprotective parents led to a greater risk for boys becoming victims. This correlation is supported by authors Bowers et al. (1994) and Georgiou (2008). Finneegan et al. (1998) also found girls were at greater risk of becoming victims if they felt rejection or hostility from their mothers. Alternatively, a lack of support and protection from parents meant a greater chance of children becoming bullies. The authors imply that the extreme ends of parenting styles (overprotective and under-protective) cause children to take on bullying roles. While no author directly states this, Finneegan et al. (1998), Georgiou (2008) and Bowers et al., (1994) allude to this idea. The findings suggest the authoritative parenting style set children up to do well socially at school (Georgiou, 2008).

When the variable of gender was accounted for in abusive families, Shields and Cicchetti (2001) found there was no significant difference and both sexes were at greater risk of becoming bullies as well as victims. Finneegan et al. (1998) examined how parenting behaviours which restricted children’s ‘gender normative’ development, described as autonomy for boys and connectedness for girls, placed children at greater risk of victimisation. They found overprotective mothers inhibited boys’ dispositional learning such as building courage and independence, and similarly mothers’ hostility and rejection limited girls’ chances of developing social skills relating to effective communication with their peer groups. A weakness of this study is that it was undertaken in the 1990s in a decade where gender roles were still accepted. Additionally, the absence of fathers was seen as significant. Authors Bowers et al. (1994) and Papanikolaou et al. (2011) reported that children without fathers in the home have a greater chance of becoming bullies, bully/victims or victims. In studies that investigated attachment behaviours, children who identified themselves as either victims or bullies had insecure attachments with their parent or family members (Ahmed & Braithwaite, 2004). This is supported by Bowers et al. (1994) who found that children who were independent of their caregiver both physically and emotionally were more likely to become bullies, and children who were anxious around their caregiver had a greater risk of becoming victims. Children with secure attachments were more likely to avoid bullying behaviour. In studies that looked at family disharmony, Bowers et al. (1994) found bullies exhibited low cohesion with family members, especially siblings, while surprisingly, victims’ demonstrated high cohesion with all family members. This research links with Finneegan et al. (1998) who found overprotective parents created victims. Similarly, they found children who identified as non-bullies and non-victims viewed their family environments as cohesive where the mother and father had equal power relationships and the level of parental involvement was low on neglect. This supports Georgiou’s (2008) assertion that authoritative parenting facilitates children becoming non-bullies and non-victims at school.

The Community Environment

A meta-analysis by Tippett and Wolke (2014) found a correlation between SES and its effects on children’s social roles. The strength of this study was that it reviewed 28 studies in total. It found in areas of low SES there was a greater chance of victimisation and children who identified as bully/victims. It identified lower SES areas using the authoritarian parenting style, involving harsher punishment and sibling violence. It described in high SES areas there was low victimisation. The authors acknowledged limitations of this study in that the results were weak statistically. The authors therefore alluded to the reasons for a direct relationship between low SES and victims including, coming from a lower SES environment or lack of disposable income for lifestyle goods, rather than individual characteristics. The same inference was made to children living in higher SES areas such as having ‘cultural capital’ to minimise bullying.

The authors imply that parenting styles are only partially a factor in bullying behaviour, in contrast to the evidence given by the authors earlier. This notion is supported by Boyd and Barwick (2011) who identified bullying in the contemporary New Zealand context as a ‘socio-ecological phenomenon’ where research has gone beyond the individual and family to a focus on the wider context. Tippett and Wolke (2014) highlighted that bullying could not be predicted by families’ SES, and bullying interventions should target children from all areas. Holism is the present focus for finding explanations for bullying in schools (Boyd & Barwick, 2011).

Conclusion

This literature review has critically examined the effects of family variables, focusing on authoritarian and authoritative parenting styles, attachment theory, and family disharmony. Consideration has been offered on the SES of families. The findings showed that children who identified as bullies and victims came from families where parents practised the authoritarian style. The parenting behaviour that resulted in children having positive experiences with peers at school and more likely to become non-bullies and non-victims was the authoritative style. The findings also suggest that children who develop insecure attachments with parents have a greater risk of becoming either bullies or victims. Furthermore, bully/victims and victims came from lower SES, but factors from living in those areas were attributed to the bullying behaviour and not the individual. This and current New Zealand research indicate it is the wider environment making a difference.

As a pre-service teacher I understand that consideration of family variables alone including family SES, does not solve bullying at school. It is a combination of family variables, peer relationships, school initiatives and the environment that will have the desired effect.
Further Research Questions

- What are parents’ perceptions and conceptualisations of bullying that construct family variables?
- How can teachers share information about the effects of family variables on bullying and advocate for the optimal authoritative style?
- Are the effects of family variables on school bullying the same in the New Zealand context? Due to a lack of New Zealand studies on family variables in discriminating bullying behaviour, more research is required.

References


